

Background

- An increase in poor grocery choices among college students can lead to an increased risk of obesity in the future, which can lead to an increased risk of chronic diseases in the future (CDC, 2021).
- In 2017-2018, 42.4% of the US population had obesity and the financial burden of obesity is \$147 billion annually (CDC, 2021).
- Healthy eating habits are correlated with higher academic performance while negative eating habits are correlated with lower academic performance (Whatnall et al., 2019).
- There is limited research that focuses on the effects of COVID-19 and grocery habits, including the choice of grocery store, frequency of grocery shopping, and categories of groceries purchased.

Objective

To determine if COVID-19 influenced shifts in grocery habits, defined as choice of grocery store, frequency of grocery shopping, and categories of food purchased, of UCSD students.

Methods

We conducted an online cross-sectional survey through Google Forms aimed at UCSD students open from April-May, 2021 and received 58 responses. The survey was posted on multiple UCSD affiliated class pages and club pages on Facebook and sent out to individuals using Discord, iMessage, Messenger, and Instagram.

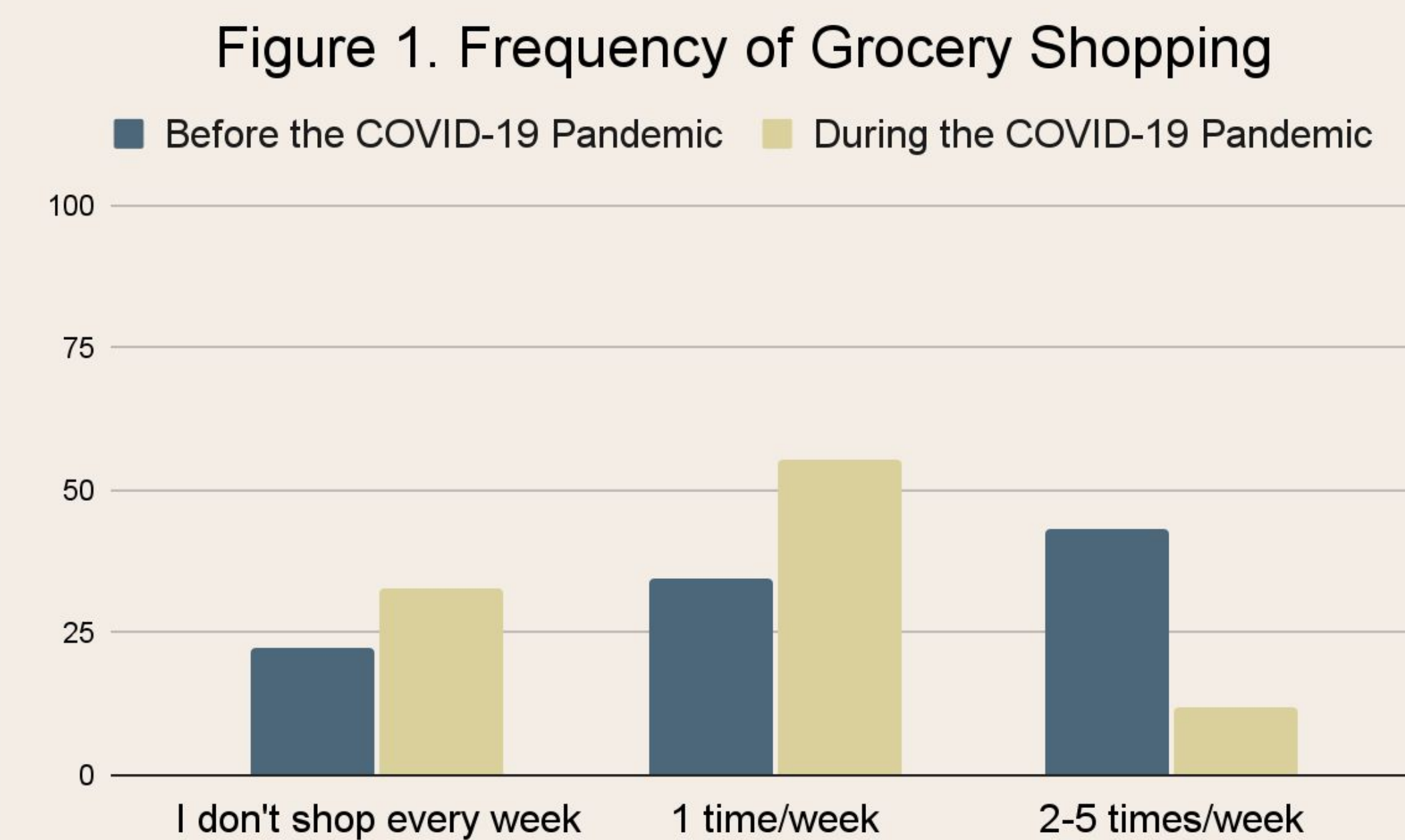
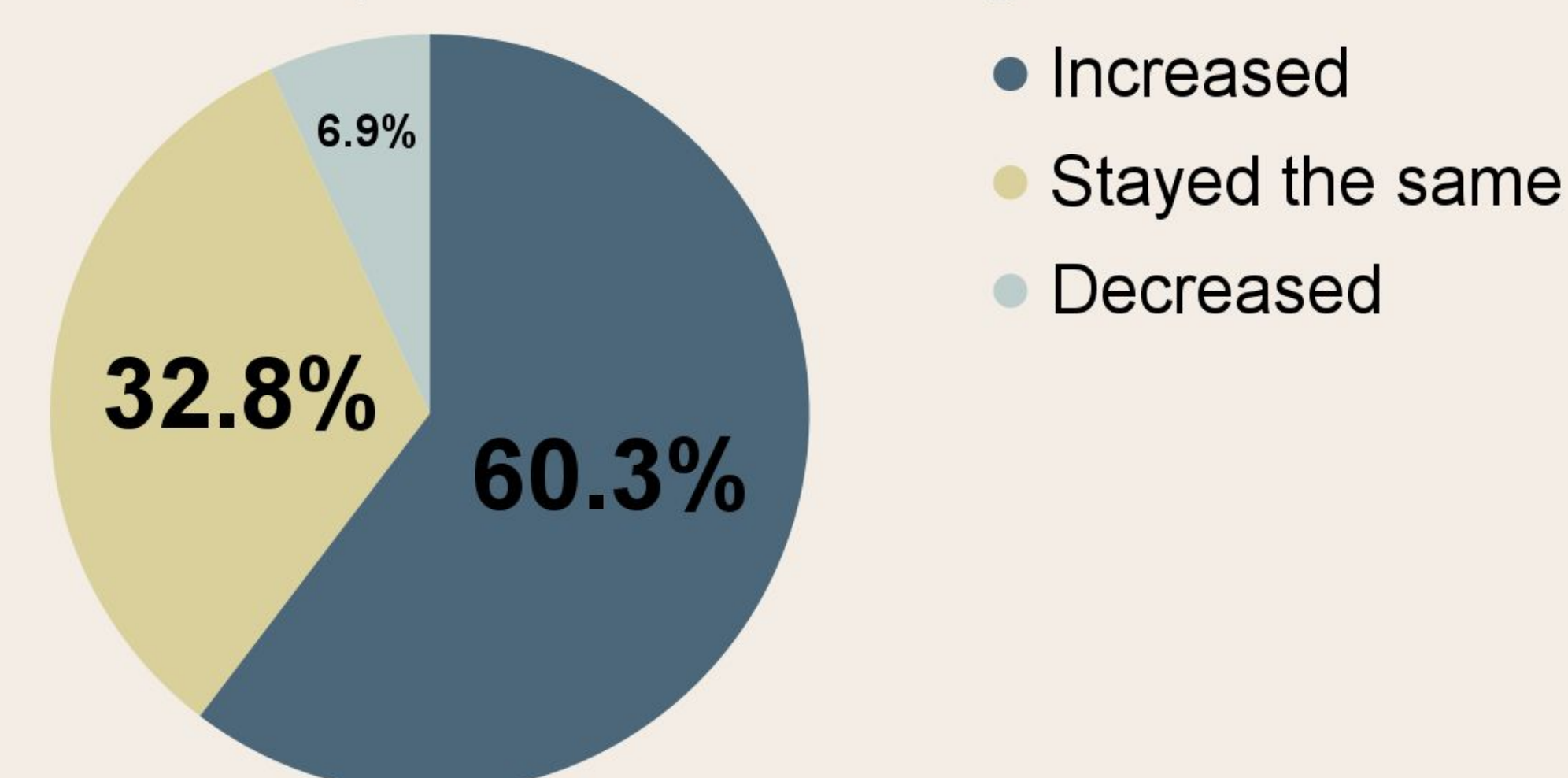
The survey asked questions about the effects of COVID-19, the exposure, on UCSD students' grocery habits, the outcomes.

Results

Table 1. Student Characteristics	(N=58)
College Year	
Undergraduate - First Year	5.2%
Undergraduate - Second Year	8.6%
Undergraduate - Third Year	39.7%
Undergraduate - Fourth Year	34.5%
Graduates	8.6%
Age Range	
18-20	31.0%
21-23	58.6%
24-26	8.6%
≥ 27	1.7%
Race	
White	22.4%
Asian	74.1%
Other	8.6%
Housing Status	
On Campus	8.6%
Off Campus	48.3%
Living with Family	43.1%
Living Area	
Rural/Suburban	22.4%
Urban	75.9%

Demographics (college year, age range, race) and characteristics (housing status and living area) were not associated with changes in grocery habits ($p > 0.05$ for all variables).

Figure 3. Average Cost of Groceries During the COVID-19 Pandemic Compared to Normal Average Cost of Groceries



There is a difference between the frequency of grocery shopping before and during COVID-19 pandemic ($p < 0.01$).

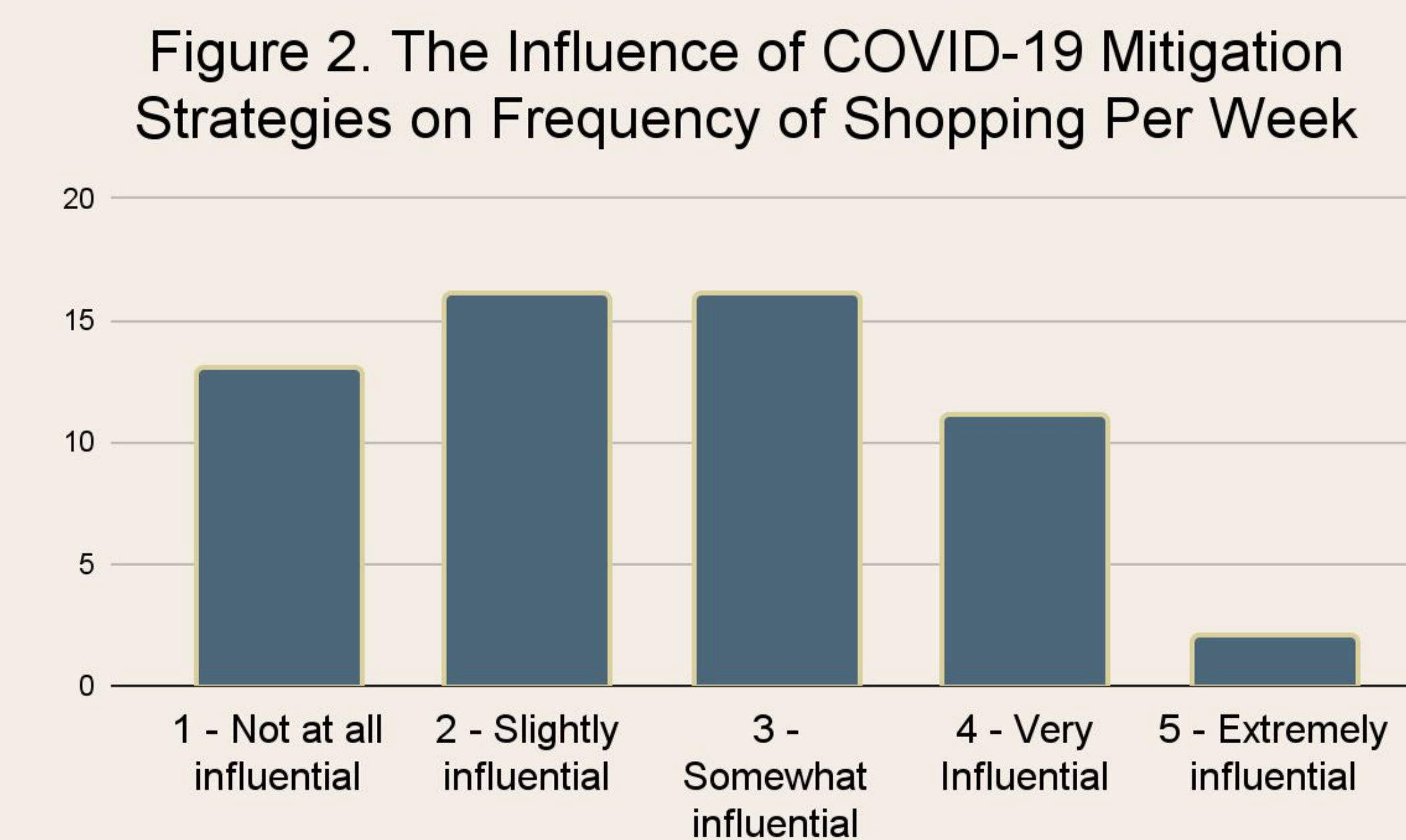
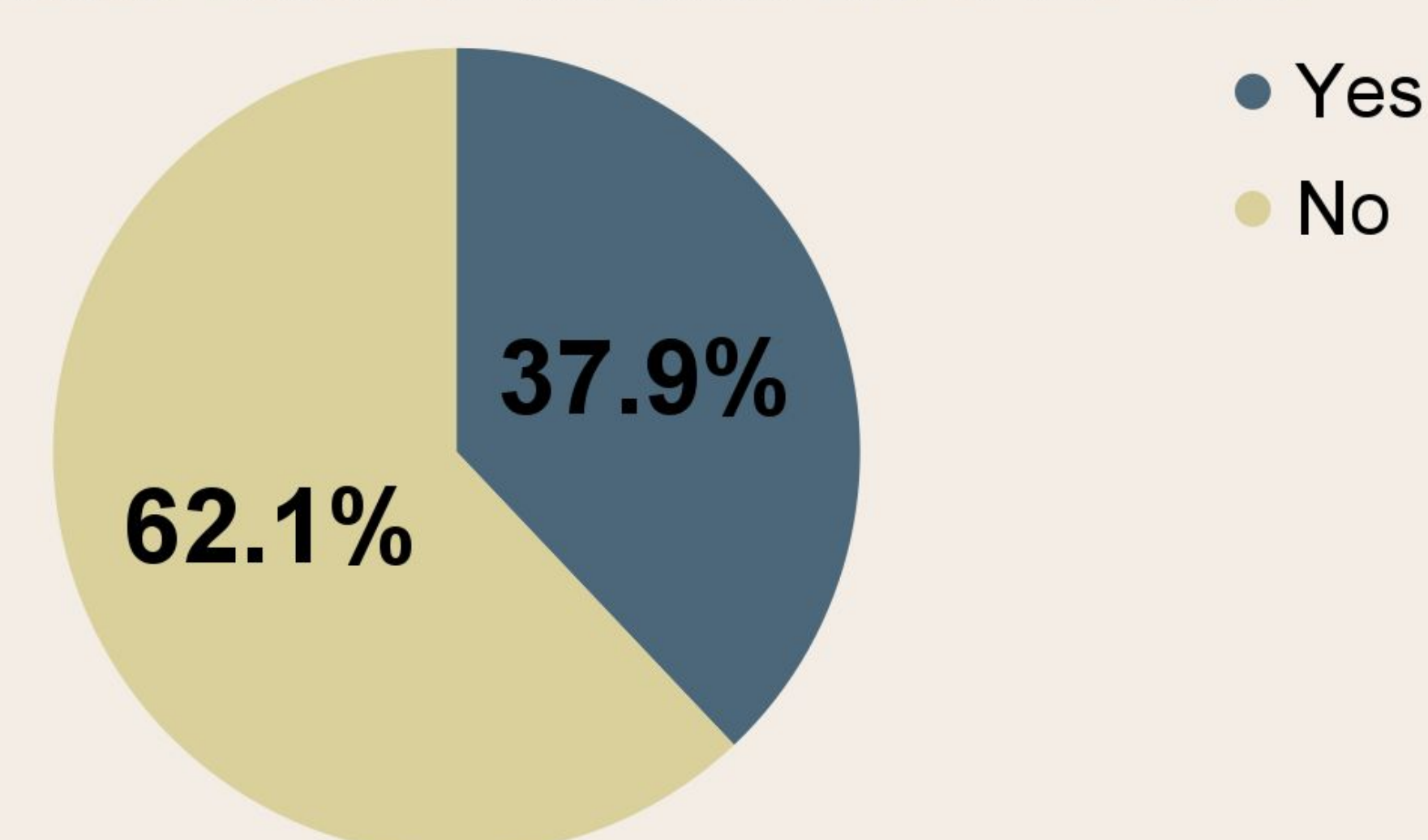


Figure 4. Change in the Types of Groceries Purchased Based on the Shelf Life of the Items



Conclusion

There is a negative association between frequency of grocery shopping before COVID-19 and during COVID-19 and a possible association between COVID-19 mitigation strategies and frequency of grocery shopping. Number of customers in a store and shelf life of items may also have associations with grocery habits of UCSD students.

Policy Implications

Therefore, state and local governments should implement grocery store policies with stricter enforcements of proper mitigation strategies and adherence to the maximum capacity guidelines.

Acknowledgements

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References

Centers for Disease Control and Prevention. (2021, February 11). Adult Obesity Causes & Consequences. Retrieved from <https://www.cdc.gov/obesity/data/adult.html>

Whatnall, M. C., Patterson, A. J., Burrows, T. L., & Hutchesson, M. J. (2019). Higher diet quality in university students is associated with higher academic achievement: a cross-sectional study. *Journal of Human Nutrition and Dietetics*, 32(3), 321-328.