

Diet, Physical Activity, and Weight Gain among Undergraduate Students in the United States during COVID-19 Pandemic

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BACKGROUND

- > Diet, physical activity, and tobacco lead to cancer, heart disease & stroke, type 2 diabetes, and lung disease, which result in 50% of deaths in globally.
- > In the U.S., 39.8% of adults are struggling with obesity.¹
- > The COVID-19 pandemic has significantly increased students' sedentary behavior, reduced their level of physical activity, negatively affecting their nutrient and caloric intake.^{2,3}

OBJECTIVE

To identify behavior change in diet, physical activity and weight gain before and during the pandemic among undergraduate students across the U.S.

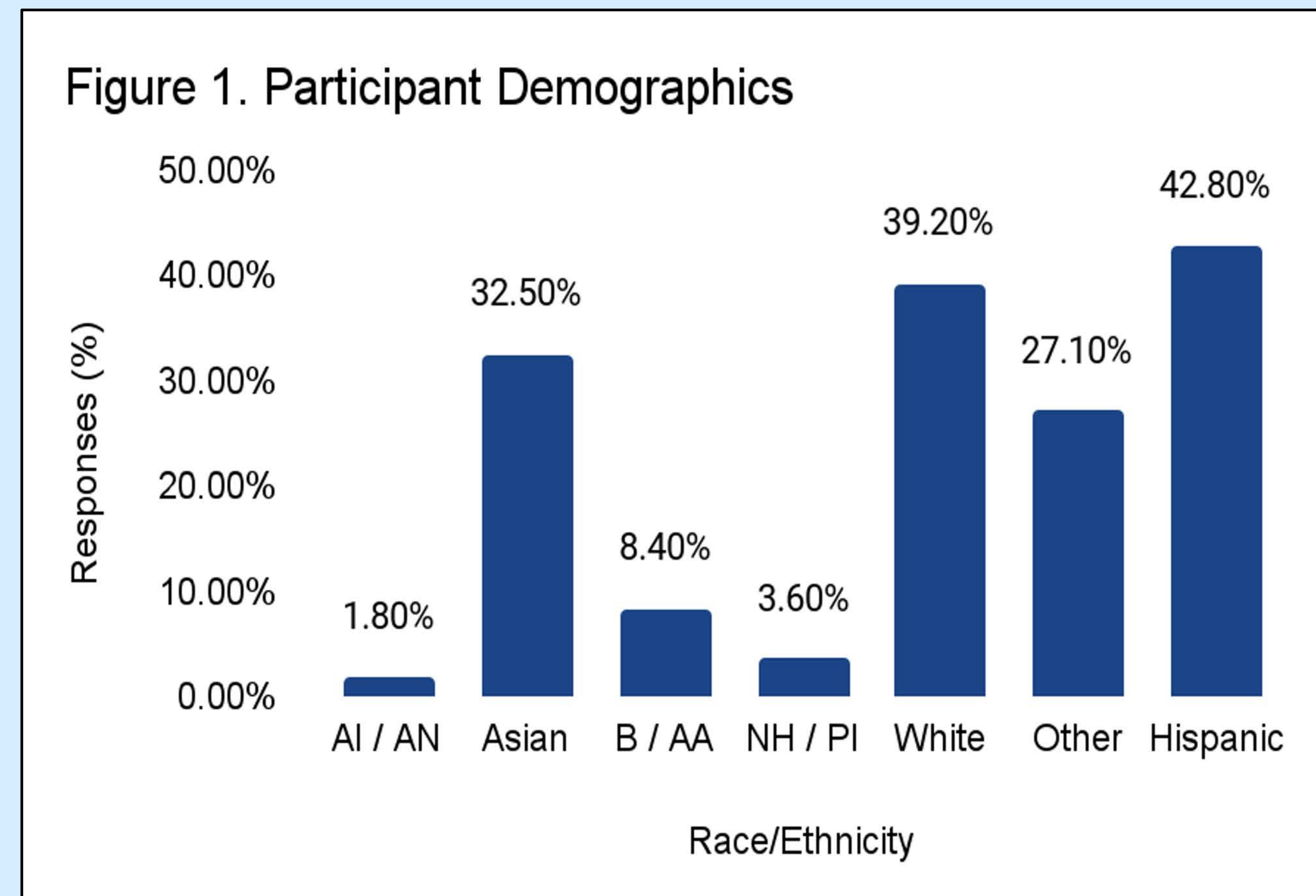
METHODS

- > A cross-sectional study was conducted among undergraduate students (n=166) across the U.S.
- > In April 2021, the anonymous 21-item online survey was distributed to students through diverse social media platforms (Facebook, Instagram, Reddit).
- > The Godin Leisure-Time Exercise Questionnaire was used to score a person's leisure time and classify active status based on score.⁴
- > Additionally, survey assessed their diet, physical activity and weight gain

RESULTS

- > 91% CA
 - > 1.2% AZ
 - > 1.2% TX
 - > 3.6% Other (AR, CHI, TN, VA, WA, WI)
- 62% 35.5%
- > Before/During COVID-19:
 - > 62% Off-campus
 - > 22.9% On/Off-Campus

RESULTS



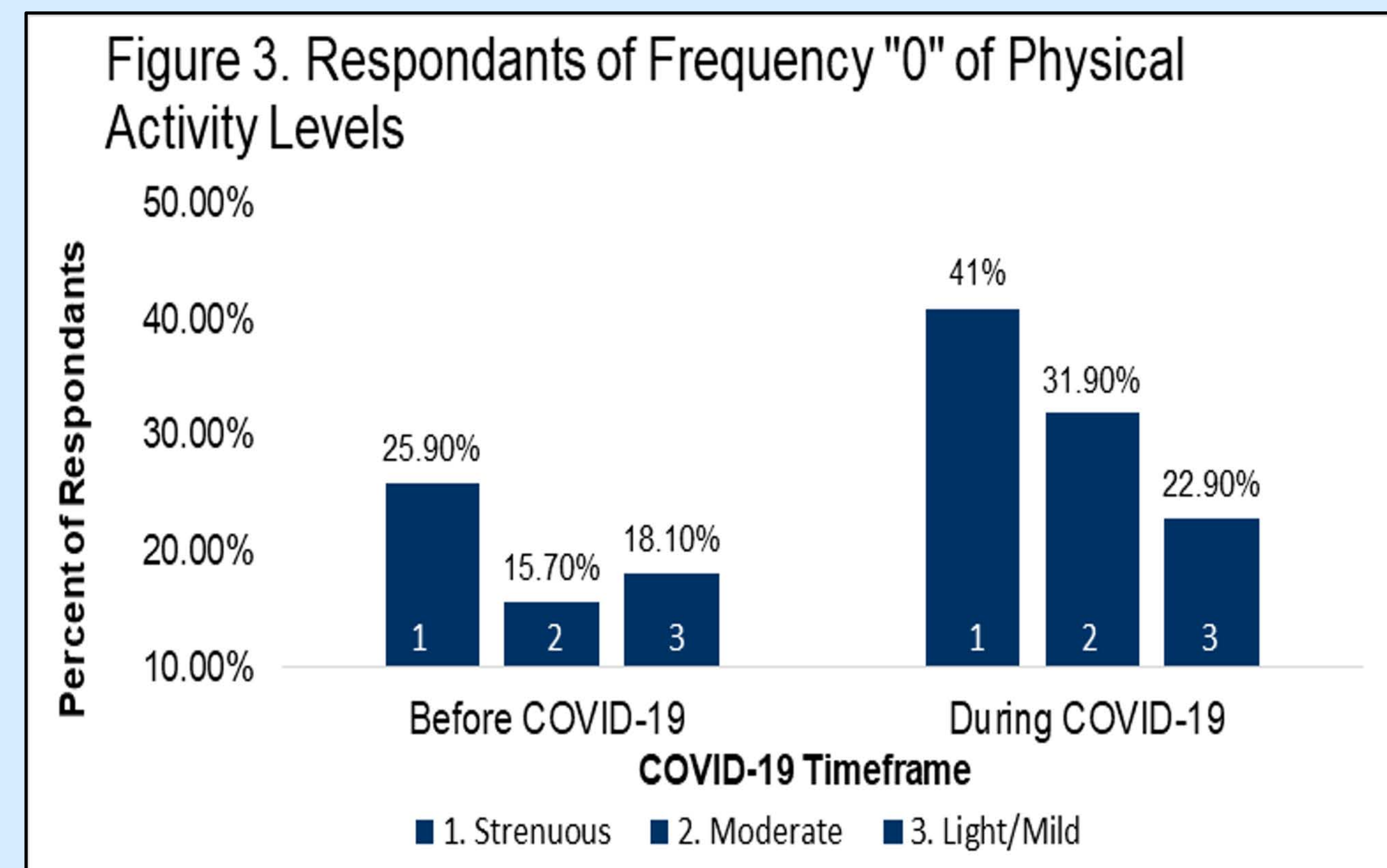
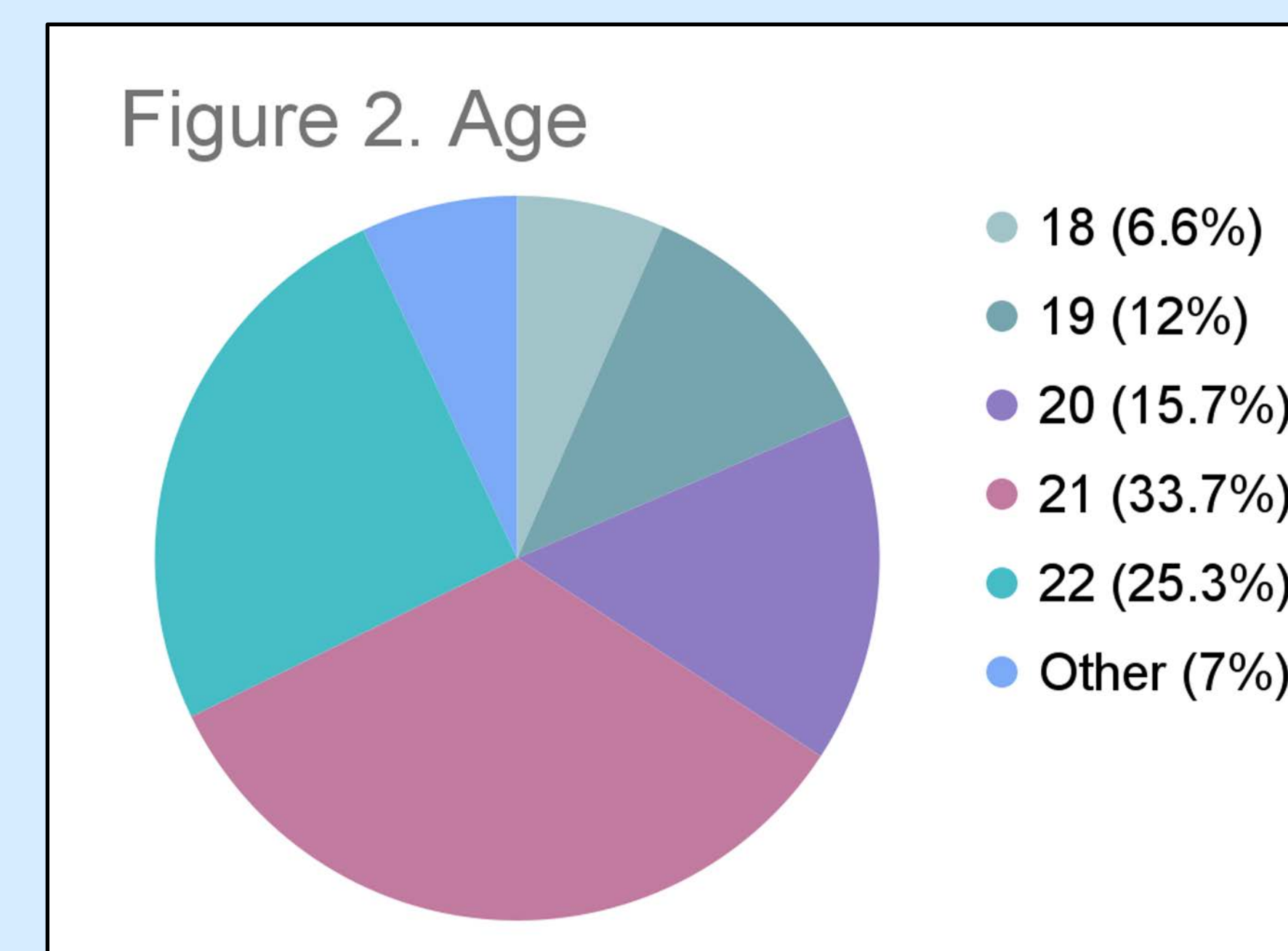
- > AI/AN = American Indian or Alaska Native
- > B/AA = Black or African American
- > NH/PI = Native Hawaiian/Other Pacific Islander
- > Other = Latino/Hispanic, Armenian, Middle Eastern, Mutli, and Sri Lankan

Table 1. Change in weight since the start of COVID-19 pandemic

Responses (%)	Answers
83 (50%)	I've gained weight
41 (24.7%)	I've lost weight
41 (24.7%)	I have maintained my weight

Table 2. Diet Change since the start of the COVID-19 pandemic

Questions	Answers	Responses
How often do you snack on a typical day?	Less	37 (22.3%)
	More	74 (44.6%)
	Same amount	54 (32.5%)



- > 71.70% maintained college and high school sports through the pandemic
- > The average Godin Leisure Time Exercise Score dropped from 60 to 46 showing an increase of inactivity

CONCLUSIONS

- > These results highlight why it is important to consider multiple factors besides physical activity and diet that play a role on weight gain such as race/ethnicity, gender, age, culture, and geographical location.
- > Based on the responses to zero frequency across all levels indicates an increase in physical inactivity behavior due to the COVID-19 pandemic.
- > Participant feedback demonstrates a shift in students' dietary patterns. Results display an increase in snack intake since the start of the COVID-19 pandemic supporting responses of gained weight.

POLICY IMPLICATIONS

- > Implementing a policy that requires universities to redirect part their gym facility funds into financing a virtual health community.
- > The online program would intel fitness videos and nutritional diet plans/recipes.

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