



## Background

- In the summer of 2020, US SARS-CoV-2 infection rates among young adults exceeded other age groups, with largest increases occurring in southern US
- University lifestyles may present risks for infection transmission including congregate living settings (dorms, apartments, fraternity/sorority houses) social gatherings, necessity to access services in public settings (libraries, dining halls, student unions)
- Lifestyle features of university setting can pose challenges when trying to slow transmission

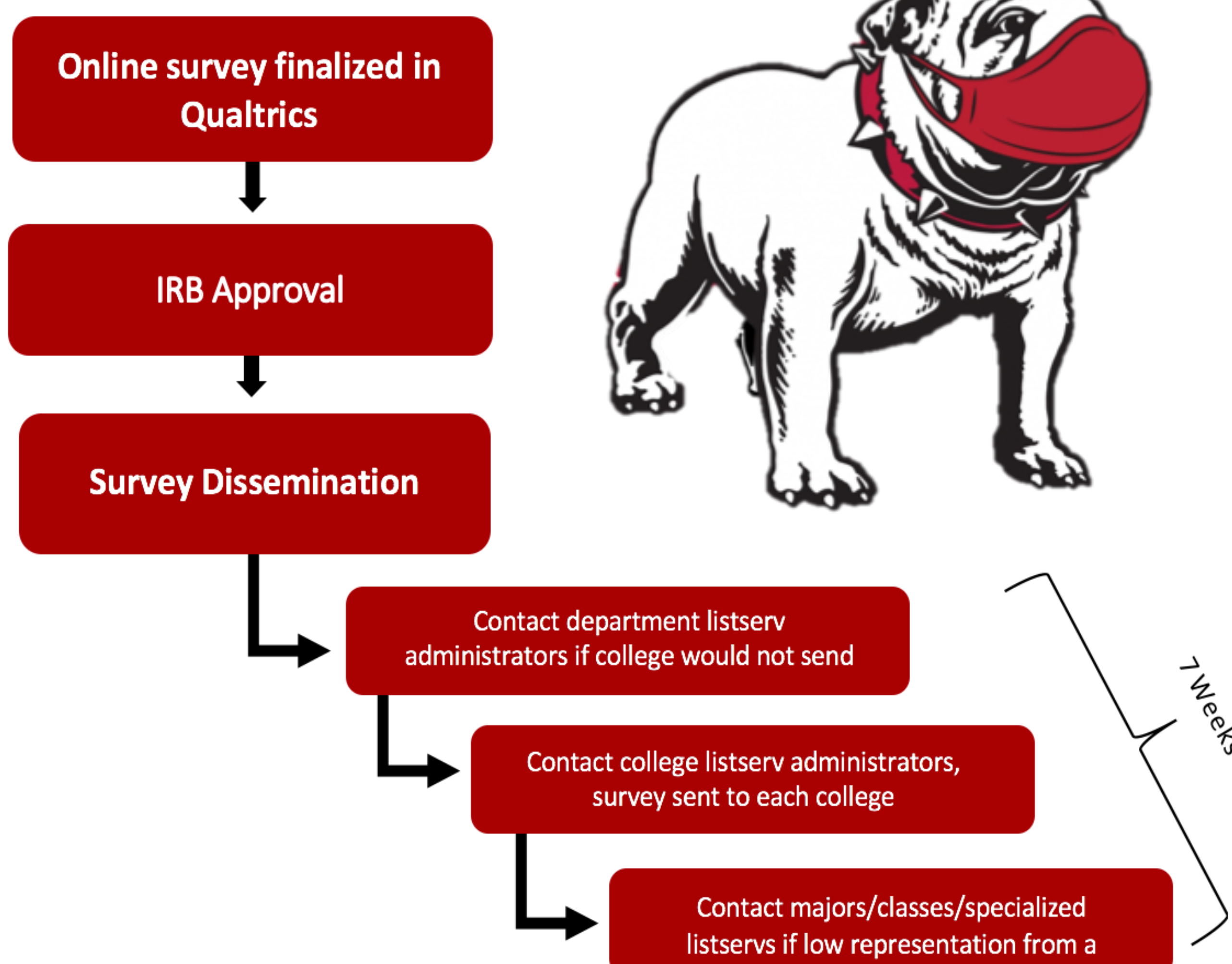
### Objective

- Using data from a survey administered to students at a southern university in the US, our study aimed to identify students' characteristics (demographic and behavioral) associated with SARS-CoV-2 infection among college students

## Methods

- Data for this study was obtained from an online health survey conveniently sampled from students enrolled at the university during the fall semester, 2020
- Survey included students' demographics and academic characteristics, and students' health habits: ENDS use; cigarette smoking; alcohol consumption; exercise intensity and duration; influenza vaccination; SARS-CoV-2 infection occurrence
- SARS-CoV-2 infection was considered the primary outcome of interest

**Figure 1: Workflow**

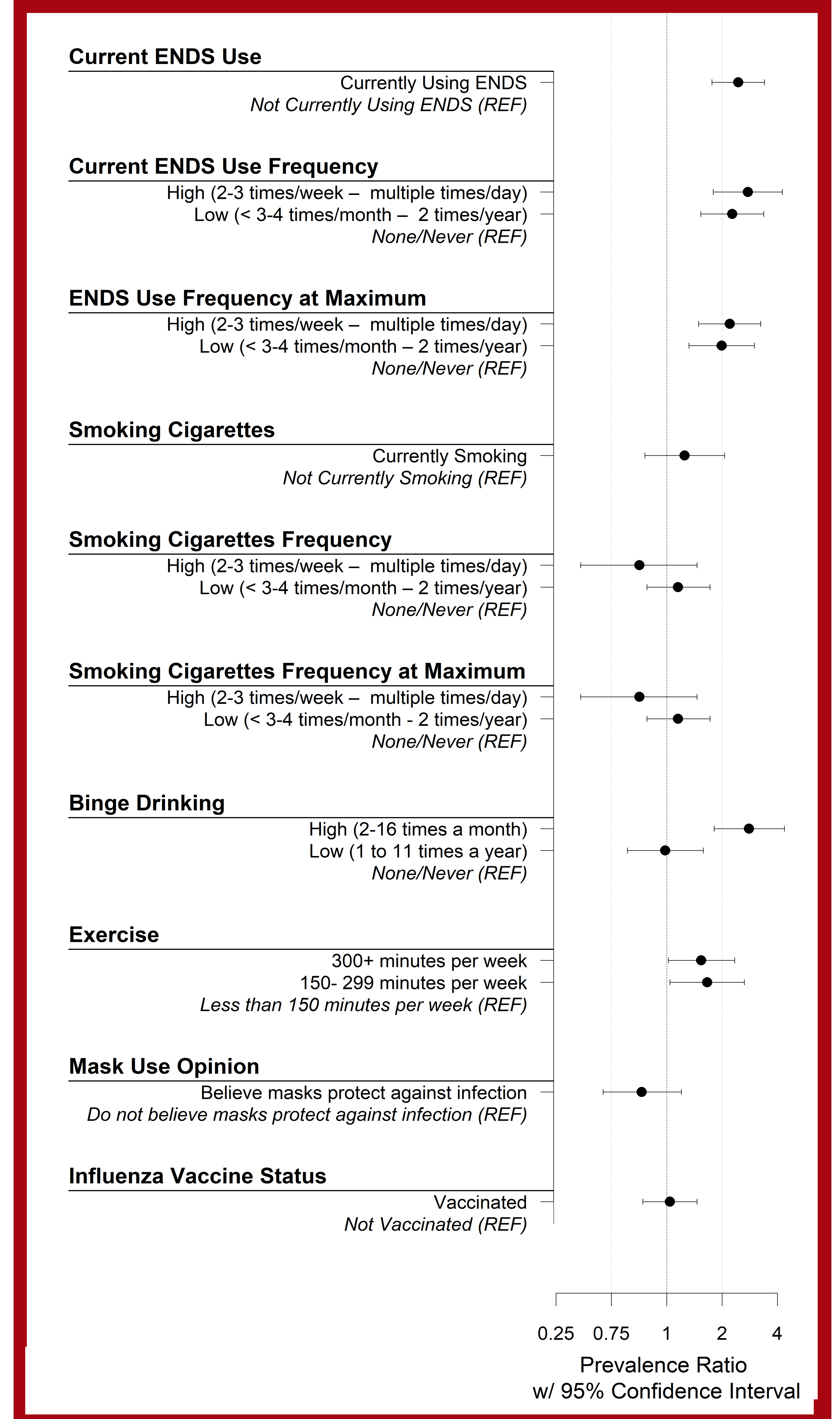


## Key Findings

**Table 1: Demographic Risk Factors and COVID-19**

Characteristic	Total (n=679)	COVID-19 Reported (n=115)	No COVID-19 (n=564)	Prevalence Ratio (95% CI)
Total	679	115 (16.9)	564 (83.1)	
Sex				
Female	534 (78.6)	100 (87.0)	434 (77.0)	1.74 (1.04-2.89)
Male	139 (20.5)	15 (13.0)	124 (22.0)	Ref
Missing	6 (0.9)	0 (0.0)	6 (1.1)	
Age Group				
18-19 years	149 (21.9)	41 (35.7)	108 (19.1)	3.99 (2.08-7.66)
20-21 years	196 (28.9)	35 (30.4)	161 (28.5)	2.59 (1.33-5.06)
22-23 years	103 (15.2)	19 (16.5)	84 (14.9)	2.67 (1.30-5.51)
24-25 years	77 (11.3)	7 (6.1)	70 (12.4)	1.32 (0.52-3.33)
26 years and higher	145 (21.4)	10 (8.7)	135 (23.9)	Ref
Missing	9 (1.3)	3 (2.6)	6 (1.1)	
Race/Ethnicity				
White (Non-Hispanic)	541 (79.7)	104 (90.4)	437 (77.5)	2.71 (1.41-5.21)
Other Races (Combined)	127 (18.7)	9 (7.8)	118 (20.9)	Ref
Missing	11 (1.6)	2 (1.7)	9 (1.6)	
Level of Study				
Undergraduate	378 (55.7)	81 (70.4)	297 (52.7)	1.9 (1.31-2.75)
Graduate	301 (44.3)	34 (29.6)	267 (47.3)	Ref
Housing				
On-campus dorms	133 (19.6)	28 (24.3)	105 (18.6)	1.31 (0.9-1.92)
Off-campus housing	542 (79.8)	87 (75.7)	455 (80.7)	Ref
Missing	4 (0.6)	4 (0.7)	0 (0)	

**Figure 2: Behavioral Risk Factors and COVID-19**



## Conclusions

- Elevated prevalence of COVID-19 among non-Hispanic whites, females, and undergraduate students
- Associations with binge drinking, ENDS use, exercise
- Students who binge drink/use ENDS may be less likely to follow pandemic guidelines
- Undergrads more likely to live with roommates + engage in social events compared to grad students
- Higher transmission may occur in gyms
- Females may be more likely to get tested
- Findings may assist in providing guidance on policies and as a stepping-stone for future research

## Acknowledgement

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