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Introduction

Very little is known of the possible effects that disease contaminant strategies have had on the mental states and well-being of the American people (Rodriguez et al, 2020). However, researchers are beginning to learn about the impacts of broad societal changes such as isolation measures and COVID-19 related stress on mental health. Depression and anxiety in college students were associated with an increase in drinking levels after their college was closed due to the COVID-19 pandemic (Lechner et al., 2020). Pandemic-related stress appears to be associated with drinking more frequently for both men and women, but associated with drinking more heavily for women only (Rodriguez et al., 2020). The goal of the current study is to examine the influence of COVID-19 stress levels on changes in college student drinking habits across gender and race.

Method

Participants

- Must have consumed at least one alcoholic drink in the past month, been 18+ years of age, and attended the host institution
- $N = 518$; $M_{Age} = 24.17$, $SD = 7.77$; 77.6% Female
- 60.4% White, 33.7% African American/Black, 7.7% Asian, 1.3% Native Hawaiian/other Pacific Islander, 1.9% Native American, 2.7% Other, 7.7% multiracial (participants could choose more than one option)

Materials

Pandemic Drinking Behaviors (Created by the Researchers)

- Two items measuring changes in drinking frequency and quantity
- 1) "Compared to before the pandemic, would you say you are drinking... (*More often, About the same, Less often*)"
- 2) "Compared to before the pandemic, when you drink, would you say your quantity (# of drinks) is... (*More than usual, About the same, Less than usual*)"

COVID-19 Stress Measure (Ellis et al., 2020)

- 8 items; Measuring COVID-19 related stress
- E.g., "To what extent are you worried about how COVID-19 will impact your school year?"
- 4-point scale ranging from 1 (*not at all*) to 4 (*very much*)
- Average of scores = Stress Level (*Low 0-2.25, Medium 2.26-2.75, High 2.76-4.00*)

Procedure

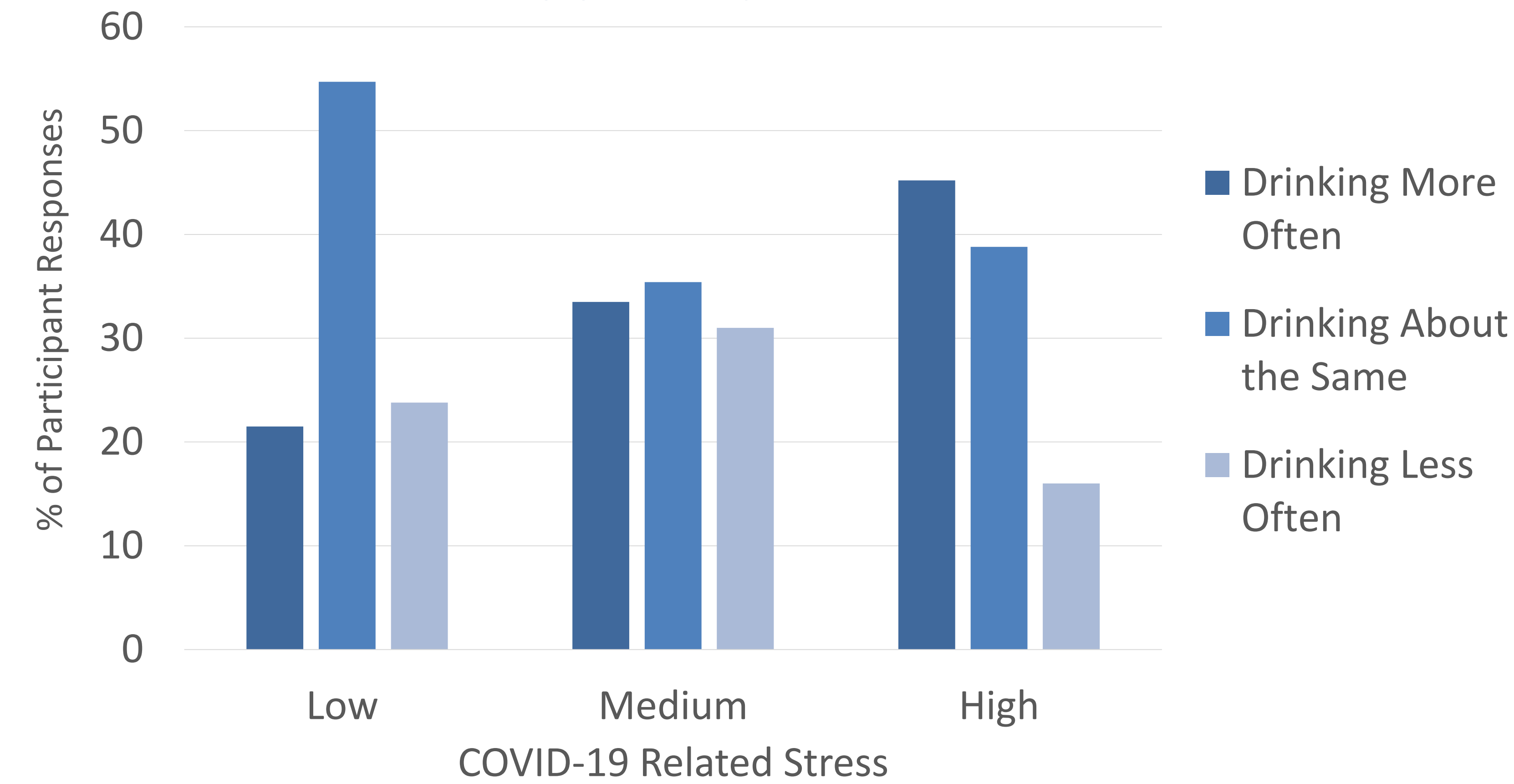
- Participants were recruited through student announcements and the university's psychology department research pool
- Online survey was available from October to December 2020

Analyses

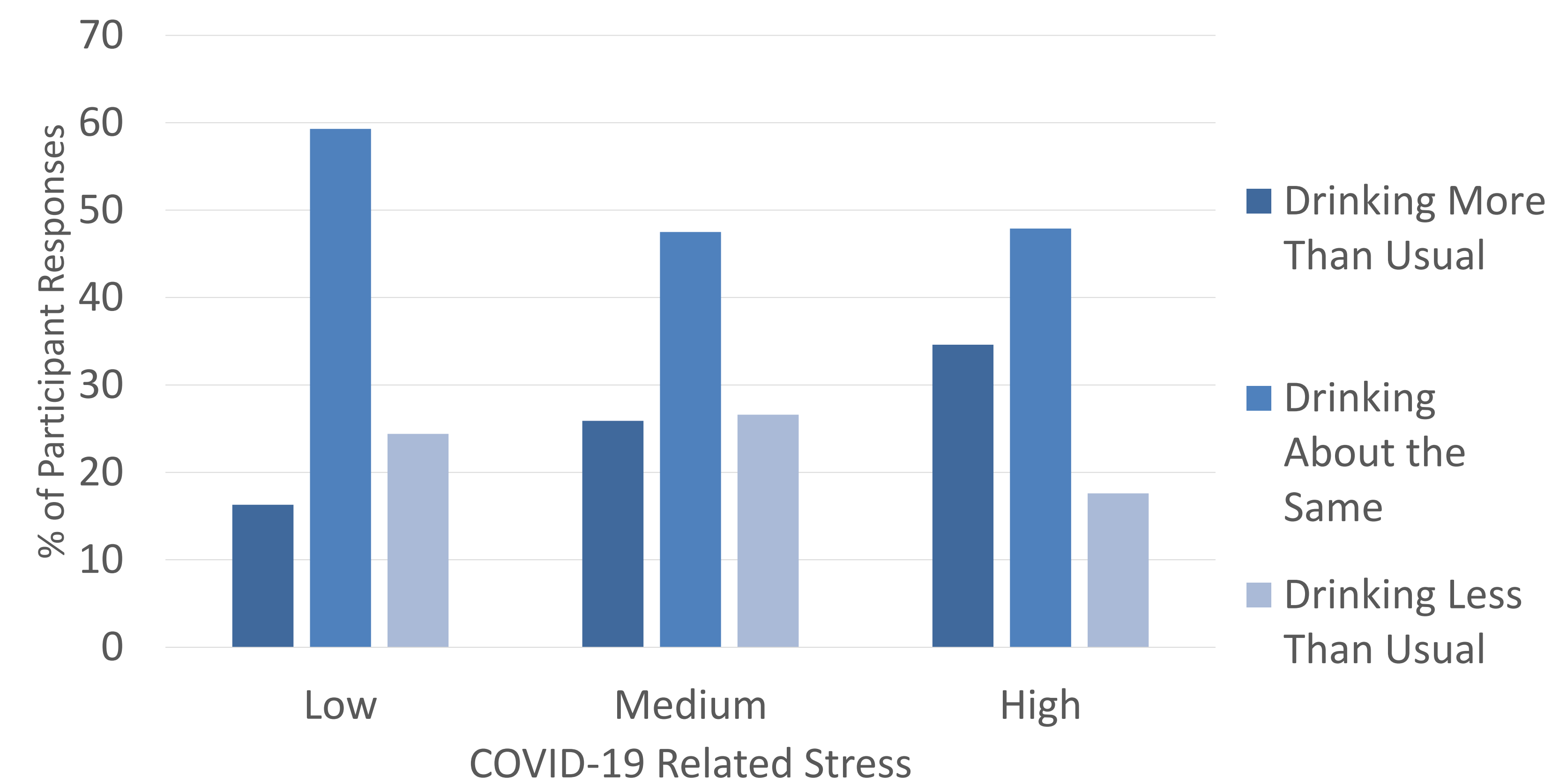
- Chi-square tests of independence were conducted in SPSS v. 27

Results

Reported Stress Levels and Changes in Drinking Frequency During COVID-19 Pandemic



Reported Stress Levels and Changes in Drinking Quantity During COVID-19 Pandemic



- Significantly more Asian participants reported drinking less than usual when compared to non-Asian participants, $\chi^2 = 7.42$, $p = .024$
- Significantly fewer White participants reported drinking less than usual when compared to non-White participants, $\chi^2 = 11.94$, $p = .003$
- There was no significant differences found across other races, and no significant differences in drinking frequency or quantity across gender

Reported Stress Levels and Changes in Drinking Frequency during COVID-19 Pandemic

Stress	Drinking Frequency						χ^2
	More Often		About the Same		Less Often		
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	31.69*
Low	37	21.5	94	54.7	41	23.8	
Medium	53	33.5	56	35.4	49	31.0	
High	85	45.2	73	38.8	30	16.0	

Reported Stress Levels and Changes in Drinking Quantity during COVID-19 Pandemic

Stress	Drinking Quantity						χ^2
	More Than Usual		About the Same		Less Than Usual		
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	18.11*
Low	28	16.3	102	59.3	42	24.4	
Medium	41	25.9	75	47.5	42	26.6	
High	65	34.6	90	47.9	33	17.6	

Note: * $p < .001$

Discussion

- The current study examined the influence of COVID-19 related stress on college students' drinking habits by examining changes in both drinking quantity and frequency across the factors of gender and race
- Previous researchers have found differences in drinking quantity across gender (Rodriguez et al., 2020). These findings were not replicated in this study
- Current findings indicate differences in drinking quantity across race
- College students drink significantly more frequently and at a higher quantity, under the stress of the pandemic

Implications:

- Further studies should examine cultural determinants that may be responsible for the reported differences in drinking behaviors across race during the stress of the pandemic
- As COVID-19 related stress increased, there was a significant increase in drinking frequency and quantity across both genders, which could suggest a general lack of coping mechanisms for high stress situations amongst the university population

Limitations:

- Population limitations, including age and race, due to university student demographics
- Relied on openness and accuracy of recall in participant feedback (i.e., self report)
- Cross-sectional examination