



How COVID-19 Pandemic Experiences Influence College Students' Mental Health and Drinking Habits

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Abstract

The COVID-19 pandemic disrupted many people's lives in markedly negative ways. Colleges encouraged social distancing with many students moving back home. The COVID-19 pandemic is linked with worsening mental health for many, as well as changes in drinking. This study sought to identify how COVID-19 pandemic stressors affected mental health and drinking among college students. *N* = 469 college drinkers completed an online survey, including questions about pandemic-related stressors, drinking behaviors, and mental health symptoms. Associations among these constructs were examined. Taking care of someone during the pandemic linked to significantly more stress, anxiety, and depression. Financial stressors linked to significantly more stress, anxiety, depression, COVID stress, and drinking frequency. Switching to telework led to drinking more frequently, whereas changed living situation led to drinking less frequently. Contracting COVID-19 (themselves or someone in their household) led to more COVID-specific stress. Taking care of others and experiencing financial stressors were linked to drinking more often during the pandemic. Changes in living situation were linked to drinking less than usual, whereas contracting COVID-19 was linked to drinking more than usual or about the same. Practicing social distancing was correlated with greater stress, anxiety, depression, COVID-specific stress, and drinking quantity. Taken together, pandemic-related stressors were associated with elevated symptoms of mental health issues and had varying associations with college drinking. Future research should examine lasting effects the pandemic may have on students, and understanding the needs of those living through a prolonged period of acute stress.

Introduction

- The COVID-19 pandemic began January 2020 and disrupted many people's lives in markedly negative ways.¹
- College campus lifestyles changed to encourage social distancing, with many students moving back home.
- The COVID-19 pandemic is linked with worsening mental health for many, as well as a change in drinking behavior.²⁻⁴
- This study seeks to identify how COVID-19 pandemic experiences affected mental health and drinking patterns among college students.**

Method

Participants

- N*=469 college students
- Mean age =24.28, *SD*=7.61, Median=21
- 77.8% Female
- Consumed 1+ drinks in the previous month, current student at host institution
- Ethnicity: 57.9 % White, 26.2% African American/Black, 5.4% Asian, 0.2%Native Hawaiian/ Other Pacific Islander, 1.9% Other, 8.6% Multi (participants could select more than one race)

Materials

Pandemic Stressor Questions (created by the researchers)

- 8 items: taking care of someone, lost job, financial stressors, telework, essential worker, someone in household/self had COVID-19, changed living situation

Changes in Drinking during Pandemic (created by researchers)

- 2 items: change in quantity and frequency
- Response options: more, less, the same
- E.g., "Compared to before the pandemic, when you drink, would you say your quantity (number of drinks) is..."

Daily Drinking Questionnaire (Collins et al., 1985)

- Measured number of drinks and drinking days per week

Center for Epidemiological Studies Depression Scale; Andresen et al., 1994)

- 10 items; 4-point scale ranging from 1 (rarely or none of the time) to 4 (mostly or all of the time)

Generalized Anxiety Disorder 7 (Spitzer et al., 2006)

- 7 items; 4-point scale ranging from 0 (not at all) to 3 (nearly everyday)

Perceived Stress Scale-Revised (Wickrama et al., 2013)

- 7 items; 5-point scale ranging from 0 (never) to 4 (very often)

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

- 8 items; 4-point scale ranging from 1 (not at all) to 4 (very much)

	General Stress	Depression	Anxiety	COVID-19 Pandemic Stress	Drinking Quantity	Drinking Frequency
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
Taking care of someone						
Yes	17.06 (6.78)	14.13 (7.03)	9.93 (6.39)	2.68 (0.60)	8.16 (8.98)	3.00 (1.91)
No	15.56 (6.59)	12.59 (6.82)	8.33 (6.12)	2.57 (0.61)	7.80 (8.32)	2.68 (1.77)
Losing a job						
Yes	16.69 (6.83)	13.48 (7.44)	9.01 (6.93)	2.62 (0.68)	7.95 (6.69)	2.92 (1.67)
No	15.66 (6.63)	12.76 (6.70)	8.59 (6.00)	2.58 (0.59)	7.52 (8.42)	2.67 (1.82)
Financial stressor						
Yes	16.77 (6.74)	14.11 (7.00)	9.47 (6.26)	2.69 (0.62)	8.44 (8.26)	2.94 (1.85)
No	15.12 (6.50)	11.77 (6.64)	7.89 (6.02)	2.50 (0.58)	7.25 (8.67)	2.59 (1.75)
Telework						
Yes	15.80 (6.39)	13.02 (6.40)	8.44 (5.47)	2.60 (.059)	7.81 (9.39)	3.01 (1.98)
No	15.58 (6.76)	12.63 (6.86)	8.67 (6.29)	2.56 (0.59)	7.37 (7.88)	2.49 (1.71)
Essential worker						
Yes	15.11 (6.80)	12.27 (6.81)	8.47 (6.33)	2.54 (0.62)	8.28 (9.30)	2.82 (1.80)
No	16.02 (6.49)	13.09 (6.62)	8.67 (5.78)	2.62 (0.57)	7.02 (7.76)	2.58 (1.84)
Household COVID						
Yes	16.20 (6.82)	13.46 (6.84)	9.00 (6.51)	2.73 (0.68)	7.83 (7.45)	2.58 (1.78)
No	15.91 (6.64)	12.91 (6.94)	8.68 (6.16)	2.58 (0.59)	7.85 (8.64)	2.80 (1.82)
Self COVID						
Yes	17.02 (6.46)	13.61 (6.60)	9.64 (6.07)	2.76 (0.58)	8.85 (7.95)	2.92 (1.67)
No	15.80 (6.68)	12.90 (6.97)	8.59 (6.23)	2.58 (0.61)	7.70 (8.54)	2.74 (1.83)
Living situation						
Yes	16.69 (6.88)	13.65 (6.69)	9.14 (6.48)	2.68 (0.62)	7.81 (9.20)	2.47 (1.56)
No	15.74 (6.58)	12.79 (6.98)	8.60 (6.13)	2.57 (0.61)	7.86 (8.24)	2.85 (1.87)

Table 1. Means and standard deviations for independent sample *t*-tests. Bold, underlined means and standard deviations within a Yes/No pair are significantly different from each other at *p* < .05.

Method, cont.

Procedure

- Participants were recruited via the host institution psychology research pool and daily announcements sent to students
- Data were collected via online survey Oct. through Dec. 2020

Analyses

- Independent sample *t*-tests and correlations (for continuous outcomes [mental health, current drinking]), χ^2 tests of independence (for categorical outcomes [perceived changes in pandemic drinking]) were conducted in SPSS v. 27

Results

See Table 1 for mean differences via *t*-tests. Significant correlations and χ^2 include:

- Practicing social distancing was significantly correlated with stress ($r = .11$, $p = .014$), anxiety ($r = .12$, $p = .012$), depression ($r = .09$, $p = .042$), COVID-19 specific stress ($r = .19$, $p < .001$), drinking quantity ($r = -.15$, $p = .002$), but not drinking frequency ($r = -.02$, $p = .627$)
- 35.6% of people reporting drinking *more often* reported taking care of others, as opposed to 22.1% of those drinking *less often* and 23.5% of those drinking *about the same*.
- 40.5% of people drinking *more often* reported experiencing financial stressors due to the pandemic, as opposed to 21.1% of those drinking *less often* and 38.4% of those drinking *about the same*.
- 32.7% of people drinking *more often* reported changes in living situation due to the pandemic, as opposed to 30.9% of those drinking *less often* and 36.4% of those drinking *about the same*.
- 20.0% of people drinking *more than usual* reported changes in living situation due to the pandemic, as opposed to 29.1% of those drinking *less than usual* and 50.9% of those drinking *about the same*.
- 36.1% of people drinking *more than usual* reported contracting COVID-19, as opposed to 9.8% of those drinking *less than usual* and 54.1% of those drinking *about the same*.
- All other associations were not significant.

Discussion

- Select COVID-19 pandemic-related stressors were associated with elevated symptoms of mental health issues and had varying associations with drinking behaviors among college students.
- Further research may aid in the understanding of needs for those living through a similarly prolonged period of acute stress.
- This period of stress and isolation during COVID-19 may have a lifelong impact for those who were in college during that time (among others).
- Limitations included single-site recruitment (hindering generalizability), self-report data, and the cross-sectional study design (cannot support causation).

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