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The Effects of COVID-19 Social Isolation on Binge-Drinking Behaviors in College Students



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Background

- Binge-Drinking is consuming five or more (males) and four or more drinks (females) within a short period of time (Fillamore and Jude, 2011)
- 25% of young adults engage in binges once a month (Center for Disease Control).
- Young adults tend to engage in risk-taking coping behaviors to cope with loneliness (Courtney & Polich, 2009; Copeland et al, 2018).
- People use virtual resources significantly more due to COVID-19 (Meldrum and Clark 2015)
- Social isolation increases when people use virtual technology to communicate (Meldrum & Clark, 2015).
- Major lifestyle changes may result in stress which leads people to engage in coping behaviors like drinking alcohol (Rehm et al, 2020)
- Alcohol sales during COVID-19 have increased drastically (Rehm et al, 2020)
- People are drinking nearly 2-3 more drinks than their previous habits during the pandemic (Lechner et al, 2020)
- In the pandemic, people drink alone, not socially (Dumas et al, 2020)

Research Question

- Does social isolation stemming from the COVID-19 associate with an increase in binge-drinking behaviors in college students?
- Predicted a strong negative correlation

Methods

Participants

- 40 total participants (seven males, 31 females, one Non-Binary, one did not specify)
- Participants' ages ranged from 18-24 (M = 20.34, SD = 1.55)
- 8 participants were excluded from final data analysis due to incomplete surveys or no drinking habits

Procedure

- Participants completed a 10-minute survey on SurveyMonkey
- Participants answered questions on:
 - Drinking habits before pandemic (March/early April)
 - Drinking habits during pandemic
 - Drinking habits in the past year
 - Alcohol misuse questionnaires
 - Number of social contacts
 - Demographic Information

Materials

- Participants took the survey through SurveyMonkey
- **Drinking Habits**
 - Participants were first asked six sub-questions about drinking habits before and during the COVID-19 quarantine
 - Rated via Lichert Scale (Strongly Disagree-Strongly Agree)
 - Participants took the AUDIT-C questionnaire in its entirety (Figure 1)
 - Participants took the CAGE-4 questionnaire in its entirety
- **Demographic and Close Associates**
 - Participants were asked about their age, gender identity, and race
 - Participants recorded the number of close associates they have

3. How often did you have a drink containing alcohol in the past year?

Never Two to three times per week

Monthly or less Four or more times a week

Two to four times a month

4. How many drinks containing alcohol did you have on a typical day when you were drinking in the past year?

1 or 2 drinks 7 to 9 drinks

3 or 4 drinks 10 or more drinks

5 or 6 drinks

5. How often did you have six or more drinks on one occasion in the past year?

Never Weekly

Less than monthly Daily or almost daily

Monthly

Figure 2. The AUDIT-C Questionnaire

Results

- The strength of the relationship was very weak
- No significant correlation present, $r(1, 32) = .264, p = .131$.
- There was an insignificant, weak positive trend.

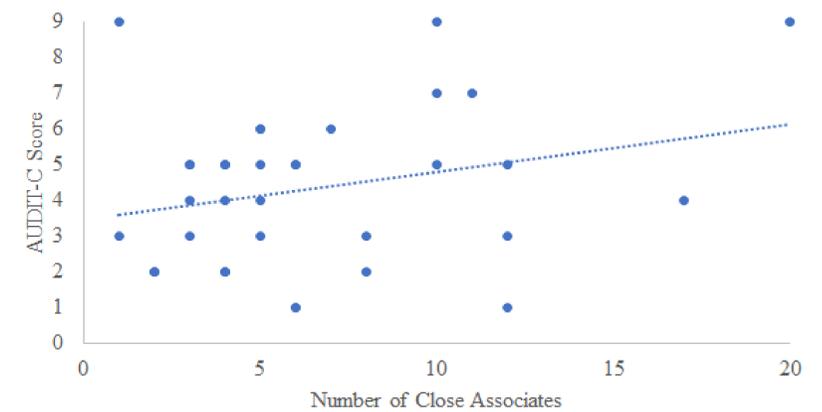


Figure 3. Correlative scatter plot including a trendline

Discussion

- No significant correlation between social contacts and binge-drinking
- The sample size was low (40 participants) and does not contain enough power (85 participants needed)
- 37.8% of the participants felt guilty about drinking alcohol specifically during the pandemic
- More power is needed to ensure these results are not inaccurate
- Wording needs to be needed to ensure self-reported numbers are accurate

Conclusions

- Further research is needed to make generalizable conclusions
- There is no relationship between binge-drinking and social isolation
- People have felt stress and guilt about their habits during the pandemic

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