

A Psychological Study Exploring Mental Health Concerns, Alcohol Consumption, and Changes in Social Support Following College Closures during the COVID-19 Pandemic

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Received: 10- June -2023

Revised: 02- July -2023

Accepted: 01- August -2023

Abstract

Introduction: Mental health, social support, and consumption of alcohol are just some of the areas where people's lives have been significantly impacted by the COVID-19 pandemic.

Objective: The purpose of this research was to examine how students' mental health, alcohol use, and social support changed as a result of college suspensions during this pandemic.

Methods: Analysis was performed on data collected from 1,958 learners who admitted to drinking within the preceding 30 days. To measure shifts in alcohol intake over time, the researchers used a follow-back timeline design. There were assessments of participants' alcohol use both before and after the campus shutdown. Standardized scales were also used to evaluate the presence of depressive and anxious symptoms. Participants also reported how much social support they felt they received from others.

Results: The data showed that once the campus was closed, alcohol consumption rose in both quantity and frequency. Increased alcohol use was more common among students who indicated high levels of despair and anxiety disorders. In addition, those who stated experiencing more social support also reported drinking less.

Conclusion: These findings highlight the critical role that universities play in preventing and reducing alcohol addiction during the pandemic by developing services and programs that target risk variables and strengthen protective factors.

Keywords: Covid-19, mental health, alcohol consumption, social support, students

1. Introduction

The COVID-19 epidemic has had a significant impact on society as a whole, affecting social welfare and other aspects of society in addition to people's physical health. The pandemic and related actions had a significant effect on a particular group, which included college students. Campus closures and the rapid switch to online education have irreparably altered their lives. This study aims to analyze the changes in social support that college students experienced after their institutions were shut down due to the COVID-19 outbreak, along with the mental health difficulties, alcohol use habits, and those changes (Graupensperger et al., 2020, Miller et al., 2022). Students faced particular difficulties as a result of the shutdown of institutions and universities in reaction to the COVID-19 pandemic. A variety of mental health problems may have been exacerbated by the abrupt change to their academic routines as well as the loss of social connections and support systems. College students are a vulnerable demographic with a higher risk of mental health issues, thus it is crucial to understand how these closures would affect their mental health (Adams et al., 2022, Griffin et al., 2023). Investigation of alcohol intake patterns is also necessary to identify potential coping mechanisms for tension and uncertainty. The pandemic-related closures might have had an impact on students' drinking habits, possibly causing them to drink more or to drink in dangerous ways. Developing focused interventions and support techniques requires an

understanding of the connections between college closures, mental health, and alcohol use (Hamza et al., 2021, Campbell et al., 2020). Social support is also essential for reducing the harmful impacts of stressful situations. The change to remote learning and the abrupt end of in-person encounters may have disturbed students' social support systems. Understanding the changes in social support that college students went through throughout the pandemic can therefore help to illuminate the potential effects on their mental health (Mauer et al., 2022, Zhang et al., 2022).

Researchers predicted that because of the pandemic, there would be a rise in alcohol use (reported retroactively, standard drinks drank), which would be related to symptoms of despair and anxiety. In addition, we predicted that a lack of social support would be linked to an increase in alcohol consumption and that greater social support would improve the relationship between emotional distress and rising alcohol consumption so that people with significant social assistance would not show increased drinking as a sign of poorer mental health. Additionally, we looked at the frequency (number of drinking days) of these theories.

The remainder of the paper is divided into subsequent parts. Part 3 contains the proposed method explained. Part 4 contains the results and analysis. Part 5 contains related discussions, while Part 6 discusses the conclusions.

2. Literature Review

Holmes et al., 2020 described all facets of society—including the physical and mental well-being of the population—are being significantly impacted by the coronavirus infection 2019 (COVID-19) pandemic. They investigate COVID-19's emotional, sociological, and neurological effects and outline both the short-term goals and long-term research plans for this field. In the early stages of the pandemic in the UK in March 2020, polls of the general people and a panel of experts were consulted to help determine these priorities. Laham et al., 2021 stated little is known about the long-term effects of the COVID-19 pandemic on social support and loneliness, and how this may help anticipate future mental health issues. Determine the long-term trajectory of social assistance and isolation in the French population in general over the initial yr of the COVID-19 pandemic, and investigate whether changes in this trajectory are linked to depressive and anxious symptoms. Hailey et al., 2022 explained the COVID-19 lockdown created significant obstacles to a workout, creating a special "natural experiment" to study the social dynamics connected to long-term physical activity. The research aimed to estimate the proportion of individuals who were capable of and able to maintain their physical activity throughout the COVID-19 lockdown and to investigate whether support from others, isolation, and isolation from society was related to this ability. Dawes et al., 2021 examined the pandemic of the 2019 coronavirus infection has presented parents with several particular difficulties, including limited mobility, separation regulations work from home, and the closing of daycare centers and schools. There are currently few comprehensive qualitative studies examining how these developments have impacted parents' psychological well-being and mental health. Ghafari et al., 2021 determined the COVID-19 situation continues to have substantial psychologically detrimental consequences on human mental health, which is crucial to every community's effectiveness. those who are exposed to pressures caused by COVID experience increased stress, especially those in the medical sciences. Therefore, it is crucial to assess the mental health of medical science students throughout the COVID pandemic and how it relates to social support. Akbar et al., 2021 described the COVID-19 epidemic has been a burden for the entire world for the past year, and According to a Chinese study, the sickness made teenagers and college students more anxious about failing their classes and experienced greater psychological pain overall, financial consequences, and implications on their daily lives. Sheridan Rains et al., 2021 explained the COVID-19 pandemic could have a variety of implications on persons who have mental health disorders and on mental health services, including direct health repercussions from infection, indirect effects from infection control measures, and long-term societal changes. Our goal was to map the early effects of the pandemic on persons who already had mental health disorders and the services they used, as well as to identify both individual and system-level management options.

3. Methodology

1,958 students who had admitted to drinking in the 30 days before the survey at a sizable public university in Northeast Ohio made up the participants. The study's cross-sectional data collection methods included cross-

sectional evaluations of the usage of drugs during two weeks in the timeline and retrospective self-report measures. Participants were recruited for the study via email. On March 26, 2020, an email announcing the recruitment process was issued to every student enrolled in the spring semester at the time. Those who hadn't responded received after the initial invitation, four days later, a follow-up email; between March 26 and March 31, 97.7 percent of the sample finished the survey. 4,276 people in total replied to the survey. The sample included a mean age of 24.94 years, 79.97% females, and 86.41% non-Hispanic white people. Participants were informed that the survey's results would remain private and that it aimed to provide a comprehensive picture of student welfare.

3.1. Measures

The Time Line Follow-Back Interview in both weeks from the 4th of March to the seventeenth, alcohol consumption was tracked using, a highly verified calendar-assisted assessment. The week immediately prior and the week after the news of the campus closure was taken into consideration while choosing this time frame. The past two weeks' worth of signs of depression were evaluated using the Patient Health Questionnaire-9 (PHQ-9) tool. The scale has nine categories, one for every one of the major diagnostic standards for depression. Good criteria were discovered in the PHQ-9, construct, and external validity, and adequate diagnostic characteristics for identifying major depressive disorder. This scale has a top score of 27, which is. Six categories from the seven-item scale for generalized anxiety disorder were used to gauge symptoms of the condition over the previous two weeks. When utilized with separate mental health professional diagnoses, The Gad-7 exhibits strong construct validity, the validity of criteria, and accuracy and functional status indicators including disability days and utilization of medical services. The survey's items ranged from 1 to 6, with a maximum score of 18 possible. The Multidimensional Scale of Perceived Social Support (MSPSS) is used to assess the individual's impression of the social support they received from friends, family, and important others. The construct validity of the MSPSS is moderate, and its internal consistency is good.

3.2. Analytical approach

An exchangeable working correlation matrix, a binomial distribution with a negative value for alcohol consumption amount, and a binomial distribution for frequency (drinking days) were all used in generalized estimating equations (GEE) to analyze the alcohol intake indicated over an evaluation period of two weeks. The modeling process started with the primary impacts and two-way interactions. In the following section, a 3-way omnibus test was looked at. A model for sadness and another for anxiety, both of which had five components, were tested. Due to the significant observed connection between these dimensions, a priori predictions regarding their relationship with the dependent variables, and subsequent worries regarding multicollinearity, depression, and anxiety were modeled independently Emotional distress, perceived support from others, and time were all independent variables in the models. They also included a three-way interaction as well as 3 collaborative connections: emotional distress and a period of assistance by time, as well as psychological distress by support. According to our predictions, there would be a 3-way connection between Emotional anguish, Social assistance, and time, with bigger increases in alcohol consumption being connected with greater psychological distress if they reported having insufficient social support.

4. Result and Analysis

In the first week of the evaluation period, participants drank anywhere between 0 and 63 standard drinks and anywhere between 0 and 8 drinking days. In the second week, participants drank anywhere between 0 and 98 standard beverages and anywhere between 0 and 8 drinking days. The mean PHQ-9 score was 9.69, and the mean GAD-7 score was 6.33. The Multidimensional Support Scale had an average score of 69.2. As a starting point, throughout the two-week observation period, we investigated the main effects and reciprocal relationships of psychological anguish and interaction with others' symptoms, as well as the effects of time on alcohol use. Alcohol intake increased over time, according to a primary impact for the time that was statistically significant. Significant primary consequences for symptoms of anxiety ($p < .001$), depression, and depression indicated a relationship between higher psychological distress and higher alcohol use overall. A significant adverse effect of

support from others was observed, demonstrating that individuals with higher levels of social assistance typically consumed less alcohol. According to Figure 1's duration by mental health interactions, persons with greater signs of anxiety and depression reported longer-lasting increases in alcohol consumption than those with less severe symptoms. Time did not significantly interact with social support. The associations among mental health issues, social support, and the amount of time spent experiencing anxiety and depression were then investigated using an omnibus test. Both three-way interactions failed to reach significance, suggesting that the alleged benefits of interaction with others do not lessen the correlation between indicators of mental illness and drinking more alcohol over time. The same set of hypotheses was put to the test in exploratory analyses to see whether any variations would show up between associations that looked at the frequency (the number of drinking days) as the variable that was dependent. As shown in Figure 2, the total quantity of drinking days maintained the same pattern of results as the amount of alcohol consumed. The number of drinks consumed during week 1 and where alcohol consumption served as the dependent variable, 2, was also considered.

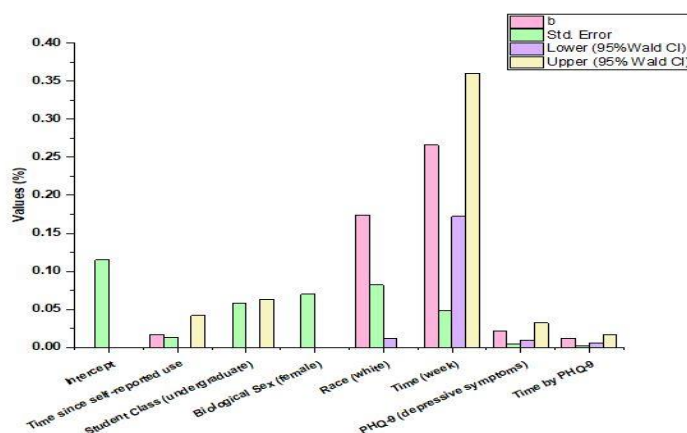


Figure 1: Time and depression connections in relation to common beverages

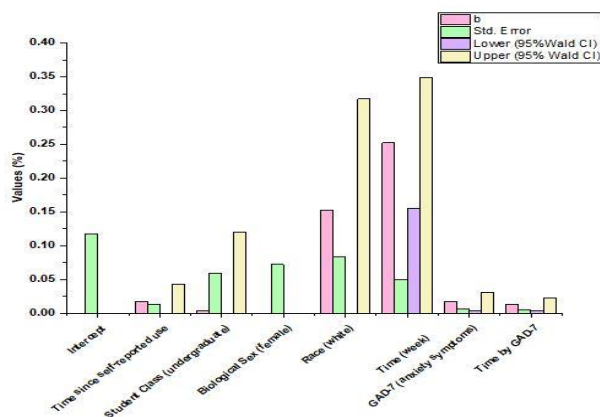


Figure 2: Time and anxiety associations and interactions with common beverages

5. Discussions

The epidemic that occurred during the current investigation had severe and unheard-of impacts. Alcohol consumption before and after the publicizing of the closure of a major public university was examined to better understand these effects. After the news of the campus closing spread, a rise in alcohol use was noted. Additionally, as predicted and in line with prior research, Students who felt more depressed and anxious reported longer-lasting increases in alcohol use than those with a lower degree of discomfort. Overall, reduced alcohol usage was linked to perceived social support. The consequences of psychological discomfort on rising alcohol use, however, were not mitigated by social support over time. Both the consumption of alcohol

(standard drinks) and the frequency of alcohol usage (drinking days) showed the same pattern of findings. Furthermore, a model analyzing alcohol consumption that covariates for the amount of drinking days was developed to determine whether frequent alcohol usage was what led to the observed increases in reported alcohol use over time. The findings showed that there was still a strong link between time and psychological suffering. Together, these findings show that individuals reported both more frequent drinking occasions and higher alcohol consumption during those times. These findings highlight the opportunity for colleges to take action during this shutdown to either curtail or stop alcohol misuse. Research from the past has shown that multicomponent and virtual approaches to alcohol avoidance for college students are effective, despite the unmatched nature of the current environment. Internet-based therapies are scalable, affordable, and capable of reducing problem drinking. eCHUG and AlcholEdu are two programs it can be offered online and focuses on vulnerable people and kids to prevent drinking. Additionally, studies have shown encouraging outcomes when it comes to the advantages of employing online therapies to treat young people's depression and the advantages of social networking sites as a contemporary form of social support. It may be helpful to spread the word about helplines, such as the free helpline provided by the Drug and Mental Health Service Administration for people and families dealing with mental or substance use problems. It is unclear how broadly the current findings apply to different groups and events. University students were surveyed for data for the current study right after the COVID-19 pandemic began to seriously affect Americans' daily lives. Different demographics and situations—such as moving to a new city alone—that are not COVID-19-related but stressful and socially isolating could have different effects. Additionally, a causal interpretation of correlations is impossible given how cross-sectional the existing data are. Additionally, there were differences in the individuals' reporting of psychological symptoms and the chronology follow-back data on alcohol usage. Although the current analysis included a covariate that accounted for this variance, long-term designs are required to corroborate the associations found. An analysis of how individuals' living circumstances altered as an outcome of the global epidemic and how that might affect alcohol consumption and mental health is another aspect that could be very important. Despite biological sex covariation, the reaction rate (15.8%) and a high percentage of female students limit the generality of these findings. Future studies are required to detect and monitor alcohol usage as the epidemic spreads and to investigate the value of remote technology for boosting social support and reducing social isolation.

6. Conclusion

The COVID-19 epidemic had a substantial impact on college students' well-being, as shown by the study looking at mental health issues, alcohol use, and changes in social support after college closures. The results offer some crucial insights. First off, the data shows a clear rise in mental health issues among college students after schools were shut down because of the COVID-19 outbreak. Increased levels of stress, anxiety, and depression among this demographic are a result of the disturbance of regular routines, loss of social relationships, and uncertainty about the future. Second, the study shows a link between changes in alcohol use trends and college closures. To cope with stressful feelings and pandemic-related emotions, many students have turned to alcohol. However, drinking too much alcohol can make mental health problems worse, creating a worrying cycle of self-medication and worsening disorders. The study also highlights the need for social support in times of need. Students have seen a sharp decline in in-person social connections as a result of campus closures and the shift to online study. Their mental health has suffered as a result of the loss of their social support systems. To lessen the harmful effects of social isolation, it is essential to give priority to the creation of alternative forms of social support, such as online communities, counselling services, and peer support networks. These results highlight the critical need for focused treatments and support mechanisms for college students both during and after the COVID-19 pandemic. It is important for universities and mental health organizations to work together to offer student access to mental health treatments, healthy coping strategies, and social connections. We can better support college students' mental health and lessen the pandemic's long-term consequences on their lives by addressing these issues.

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