

Research Article

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Impact of the COVID-19 pandemic on mental health, relationship satisfaction, and socioeconomic status: United States

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Abstract

Background – The coronavirus disease 2019 pandemic disproportionately impacted mental health and relationship satisfaction, particularly among individuals from lower socioeconomic status (SES) backgrounds.

Aim – The aim of this study is to examine the relationship between the pandemic and mental health outcomes (depression, anxiety, substance use, and psychological distress) using a mediated moderation analysis.

Method – Secondary data analysis was conducted using data from a state-wide screening, brief intervention, and referral to treatment project, with 1,718 participants throughout Rhode Island, United States. The Client Outcome Measures for Discretionary Programs tool was administered during interviews. A mediated moderation model assessed the pandemic's

impact (independent variable), relationship satisfaction (mediator), and SES (moderator) on five outcomes: alcohol use, cannabis use, anxiety, depression, and psychological distress. Generalized Linear Mixed Effects Models estimated associations, adjusting for participant and regional variations.

Results – While no significant total mediated effects were found ($p > 0.05$), higher relationship satisfaction was associated with lower anxiety ($\beta = -0.13$, $p < 0.0001$), depression ($\beta = -0.18$, $p < 0.0001$), and psychological distress ($\beta = -0.16$, $p < 0.0001$). A small positive association with alcohol use was found ($\beta = 0.04$, $p = 0.0938$) with relationship satisfaction. SES moderated mental health outcomes, with low-income participants experiencing greater depression ($\beta = -0.09$, $p = 0.0015$) and psychological distress ($\beta = -0.12$, $p = 0.0015$).

Conclusion – Findings underscore the role of SES and relationship satisfaction in mental health during crises. Targeted interventions and policies addressing SES disparities, and relationship-based services are recommended.

Keywords: mental health, socioeconomic status, relationship satisfaction, COVID-19 pandemic, alcohol use

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1 Introduction

The coronavirus disease 2019 (COVID-19) pandemic has had widespread effects on public health, social relationships, and economic stability. While its effects have lessened over time, mortality rates continue to remain higher than those of seasonal influenza [1]. Experts agree that future pandemics are inevitable, underscoring the need for improved prevention, preparedness, and crisis management [2]. Research emphasizes that to better handle future crises, it is critical to invest in healthcare, ensure robust governance, and advance technological solutions that can enhance community resilience and response efforts [3]. Understanding the pandemic's impact on social relationships, income, work, education, and health is essential for shaping policies

and public health interventions that will strengthen future crises response.

The pandemic and the implementation of prevention measures (e.g., social distancing and isolation) have impacted social relationships, income, work/school interactions, and health [4]. Social distancing and financial concerns can impact mental health by promoting feelings of isolation, hopelessness, and anxiety [5]. Wang *et al.* [6] found that one in three adults among the global population experienced psychological distress during the COVID-19 pandemic, often as a result of coping with emotional responses during the pandemic and related prevention measures implemented [7–9]. Furthermore, the pandemic has presented significant characteristics of a traumatic event, including prolonged exposure to the social stressor, unpredictability, and threat to health or life [10]. Individuals who experience trauma have a higher likelihood of developing adverse mental or behavioral health conditions, such as substance use, depressive or anxiety disorders, impairment in daily and/or social functioning, and physical conditions [11]. Given this increased risk of mental health concerns, early access to mental health services is critical to prevent the progression of these issues and avoid negative outcomes related to social, occupational, and educational functioning.

Several factors have been proposed to influence the relationship between the pandemic and mental health outcomes, including social relationships and socioeconomic status (SES). SES reflects the extent to which individuals hold socially and economically valued resources [12]. While social relationships can serve as protective factors against deleterious post-traumatic responses, the relationships can also be strained during major stressful events [13,14]. Social support theory [15] suggests that social support – whether emotional, instrumental, or informational – can buffer individuals against the adverse effects of stress, including those caused by the pandemic. The social determinants of health theory suggests that social and economic conditions, including SES and social relationships, significantly shape individuals' health outcomes, especially during crises like the pandemic [16]. For example, Luk *et al.* [17] highlighted the intersection of race/ethnicity, socioeconomic status, and mental health during the pandemic, emphasizing the need for culturally sensitive interventions to address medical mistrust and improve engagement with mental health and addiction treatment, especially among racial/ethnic minorities and those with a history of alcohol use disorder (AUD). Additionally, Kim *et al.* [18] found that both minimal changes and complete disruptions in daily life during the pandemic were linked to higher rates of depression and suicidal thoughts. Unexpectedly, positive

changes like increased income or improved work conditions were also associated with worse mental health outcomes, likely due to added stress and burnout, especially among frontline workers [18]. Other research also highlights significant mental health challenges following the pandemic, with elevated rates of depression, anxiety, and stress strongly associated with lower quality of life [19]. Key risk factors included older age, marital status, unemployment, excessive social media use, smoking, and the loss of family members to COVID-19 [19].

Relationship satisfaction refers to an individual's overall evaluation of their social relationships, including emotional support, communication, and fulfillment [20–22]. Satisfaction among social relationships has been found to be positively correlated with psychological well-being, and the disruption of these relationships during crises, such as the pandemic, can significantly exacerbate mental health challenges [23]. Conversely, a lack of social support during a health crisis may increase feelings of loneliness and isolation, leading to poorer mental health outcomes [24]. Relationship satisfaction may be impacted by factors such as SES [25–28]. Social relationships, particularly during times of crisis, serve both as protective factors and as sources of stress, depending on the context [23,29]. The disruption of social relationships during the pandemic has highlighted the vital role of social support in fostering mental health resilience, making it essential to understand how this disruption interacts with SES factors to identify pathways to resilience [23]. Given that social relationships can be affected by crises, which in turn impacts mental health outcomes, it is important to understand whether and how relationships mediate the association between the pandemic and mental health.

During the pandemic restrictions, requests for substance use service significantly decreased, likely due to reduced social opportunities and access to treatment, while requests for mental health-services increased, reflecting heightened psychological distress from isolation, fear, and financial challenges [30]. After restrictions were lifted, requests for substance use services rose, requests for alcohol services resumed their pre-pandemic decline, and mental health-related continued to decrease [30]. Ogeil *et al.* [31] found that pandemics and disasters, including lockdowns, contributed to increased alcohol consumption and related harms, particularly among those with pre-existing mental health conditions. This placed additional strain on emergency services, leading to significant rises in alcohol-related issues for those with comorbid conditions. Similarly, while youth alcohol consumption decreased overall, particularly among social drinkers, it increased among high-risk users, highlighting the need to address

high-risk drinking in disaster planning and to intervene early to reduce the global burden of alcohol consumption [32].

Since the early stages of the pandemic, vulnerable populations have been disproportionately impacted by COVID-19 [33]. Vulnerable populations are identified based on factors, such as financial strains, place of residence, race and ethnicity, age, and chronic health conditions [34]. Individuals from racial/ethnic minoritized groups, with low SES or who have pre-existing mental health conditions, are more likely to face barriers in accessing community health resources, including COVID-19 testing/treatment and mental health services [33,35–37]. These barriers increase the likelihood of experiencing poor mental health outcomes [38]. A systematic review that examined the prevalence of psychological distress among participants from 19 countries found individuals residing in areas of lower SES strata to be associated with higher odds of depression and anxiety during the COVID-19 pandemic [6].

While much is known about the individual impacts of relationship satisfaction and SES on mental health during past global health emergencies, no studies have simultaneously explored these factors as mediators and moderators within the context of the pandemic [39].

1.1 Purpose of this study

While numerous studies have examined the relationship between the pandemic and mental health, the mechanisms underlying these associations remain unclear. Relationship satisfaction and SES have been identified as key factors in mental health outcomes during previous global health crises; however, research remains limited on how relationship satisfaction functions as a mediator and SES as a moderator in the link between the pandemic and mental health. This study is guided by the following research questions:

1. Does relationship satisfaction mediate the association between the pandemic and mental health outcomes (i.e., anxiety, depression, substance use, and psychological distress)?
2. Does SES moderate the mediating effect of relationship satisfaction on mental health outcomes?

Using a large state-wide database from healthcare settings directly impacted by the pandemic, this study tests two key hypotheses: (1) relationship satisfaction mediates the relationship between the pandemic and mental health outcomes, and (2) SES moderates the mediating effect of relationship satisfaction, shaping its influence on mental health outcomes.

2 Methodology

2.1 Sample and data

This study utilized secondary data from multiple organizations cooperating with the Rhode Island Department of Behavioral Healthcare, Developmental Disabilities, & Hospital (RI-BHDDH) for a state-wide implementation of screening, brief intervention, and referral to treatment (SBIRT) as funded by Substance Abuse and Mental Health Services Administration (SAMHSA; TI-16-007). Organizations included primary care clinics, behavioral health centers, inpatient units, critical care sites, outreach community programs, and the Department of Corrections. Many of these sites served low-income and historically minoritized populations. Institutional Review Board approval was obtained for de-identified data to be used for this study.

SBIRT targeted adults at risk of substance misuse or diagnosed with substance use disorders. Using the Client Outcome Measures for Discretionary Programs (COM; [40]), data were collected as stipulated by the Government performance and results act (GPRA; [41]) and entered into the SAMHSA Performance Accountability and Reporting System by the organizations. Data collection included patient intake screenings, informed consent, demographic data, emotional and social functioning, and substance use. Depending on screening results, patients received brief interventions, brief therapy, or referral treatment, with appropriate COM sections administered at intake, discharge, and 6 months post-treatment. Follow-up efforts included outreach, patient satisfaction surveys, and a \$20 gift card incentive for participation. Ten percent of clients in each intervention group were tracked for follow-up as mandated by SAMHSA. To maximize participants available for model-building, baseline data were utilized in analyses (i.e., only 10% mandated for follow-up tracking at 6 months and discharge).

Informed consent was obtained from participants during initial data collection. Participants were included in this study if they were screened prior to the first COVID-19 case reported in the state (i.e., March 1, 2020) and screened after the first case was reported. Clients in the study were screened from October 1, 2019 to May 31, 2020. This yielded a subsample of $N = 1,718$ available for analyses (pre-pandemic $n = 1,625$; during the pandemic $n = 93$). See Section 2.3 for consideration of balanced groups. Participants, on average, were 40 years old and endorsed the following identities: 45% female, 12.8% Hispanic/Latinx, 67.3% White, 12.4% Black, 2.5% American Indian, 1% Asian, and 0.3% Hawaiian or Pacific Islander.

Ethical approval: This study was approved by the Institutional Review Board of the University of Rhode Island, Kingston, RI 02881. All procedures in this study were conducted in accordance with the Institutional Review Board of the University of Rhode Island, Kingston, RI 02881.

Informed consent: All study participants, or their legal guardian(s), provided informed written consent prior to study enrollment.

2.2 Measures

The COM [40] collects client data as stipulated by the GPRA [41]. It is based on standardized and validated instruments such as the AUDs Identity Test-10 [42] and the Drug Abuse Screening Test-10 [43]. COM is required by SAMHSA for program monitoring and client outcomes, and is delivered through structured interview by trained and supervised staff from each organization. From COM, the below constructs were collected.

2.2.1 Demographics

Variables in this section included age (in years), gender (male, female, transgender, and other), ethnicity (Hispanic or Latino), and race (Black or African American, Asian, Native Hawaiian, or other Pacific Islander, Alaska Native, White, and American Indian). Employment status was also asked and coded as 0 (unemployed), 0.5 (part-time employed), and 1 (full-time employed).

2.2.2 Substance use

Variables in this section included frequency of substance use (e.g., alcohol, marijuana, crack/cocaine, opioids, etc.) in the past 30 days. A sample item includes: During the past 30 days, how many days have you used alcohol?

2.2.3 Family and living conditions

Variables in this section included: (1) Client's satisfaction with their living situation (e.g., How satisfied are you with the conditions of your living space?) measured on a 5-point Likert scale (1 = *very dissatisfied* to 5 = *very satisfied*); and (2) number of children participants endorsed having (e.g., How many children do you have?). Higher scores suggest greater satisfaction with living situation.

2.2.4 Mental and physical health problems

Clients were asked to rate their overall health status on a 5-point Likert scale (1 = *poor* to 5 = *excellent*). Higher scores suggest better overall health. Additionally, they reported their daily experience of anxiety (In the past 30 days, not due to your use of alcohol or drugs, how many days have you experienced serious anxiety or tension?) and depression (In the past 30 days, not due to your use of alcohol or drugs, how many days have you experienced serious depression?). Finally, clients rated how much they have been bothered by psychological or emotional problems in the past 30 days on a 5-point Likert scale (1 = *not at all* to 5 = *extremely*). This item was referred to as psychological distress for this study. Lower scores suggest less psychological distress.

2.2.5 Relationship satisfaction

Clients reported how satisfied they were with their personal relationships, rated on a 5-point Likert scale of (1 = *very dissatisfied* to 5 = *very satisfied*). Higher scores suggest higher relationship satisfaction.

2.2.6 SES

SES was measured as median income of the zip-code where the clients received health services.

2.3 Analytical plan

The analysis focused on mediated moderation [44]. We hypothesized that the pandemic would adversely impact mental health and substance outcomes; however, we believed that social relations could either exacerbate or mitigate this relationship. Further, we reasoned that pandemic lock-down restrictions may allow for more enjoyable time together, or conversely strain relations due to being in constant close quarters. Finally, as the burden of daily life disruptions were disproportionately felt in low income communities (CITE) [45,46], we hypothesized that the magnitude of association would be stronger for people from lower SES backgrounds.

Generalized linear mixed effects modeling was used to estimate the mediational relationships [47]. The impact of the pandemic was estimated as a linear spline, measured in days before or after March 1, 2020. This allowed us to model how attitudes about personal relationships and

Table 1: Descriptive statistics for mediated moderation, covariates, and outcome variables

Variable	Mean	SD	Skew	Kurtosis
Mediated moderation				
Days into pandemic	-499.52	287.06	0.62	-0.27
Median income (US Dollars)	79386.6	15699.48	1.00	1.07
Relationship satisfaction	3.34	1.23	-0.40	-0.85
Covariates				
Age (years)	40.04	12.07	0.45	-0.4
Living condition	3.19	1.32	0.05	-1.3
Number of children	0.7	0.52	-0.4	-1.33
Employment	4.42	2.25	-0.27	-1.1
Health status	3.69	1.25	-0.13	-0.38
Outcomes				
Alcohol use	7.76	10.9	-0.30	0.26
Cannabis use	4.83	9.99	1.85	1.85
Anxiety	20.13	11.57	-0.63	-1.02
Depression	16.73	12.06	-0.12	-1.6
Psychological distress	3.81	1.22	-0.77	-0.41

Note. SD = standard deviation.

mental health outcomes changed going into the pandemic. The following covariate confounding variables were included to control for possible extraneous variation in the outcome: age, living condition, number of children, employment, and health status. Finally, random intercepts were included to account for variation attributable to participant characteristics (i.e., treatment recommendations by screener) and regional nesting (i.e., screening location).

Separate models of the same design were estimated for each outcome, specifically: alcohol use, cannabis use, anxiety, depression, and difficulties with psychological distress.

Evidence of mediated moderation can be tested in the total mediated effect, which means multiplying the regression coefficient from the first leg of the hypothesized series of events (changes in average ratings of relationship satisfaction during the pandemic) by the regression coefficient

for the second leg of the hypothesized series of events (relationship satisfaction prevent poor mental health outcomes). Bootstrapping was used to infer the standard error to test the total mediated effect, and address missing data by multiple imputation (e.g., ~5–10% per variable) [48]. Refer Supplemental Materials for more information regarding bootstrapping.

3 Results

Distributions of the variables included in the analysis are presented in Table 1.

Covariate associations are presented in the supplementary data. Female-identifying respondents experienced more negative mental health outcomes (anxiety, $\beta = 0.12$, $p < 0.0001$; depression, $\beta = 0.08$, $p = 0.0029$; psychological distress, $\beta = 0.11$, $p < 0.0001$). People with more children ($\beta = 0.10$, $p = 0.0001$) and better living conditions ($\beta = -0.22$, $p < 0.0001$) reported more relationship satisfaction.

Our hypothesis was mediated moderation. That is, as the pandemic endured, relationships became strained, resulting in exacerbated problems with mental health, especially for persons from low SES backgrounds. A conceptual diagram of the analysis is presented in Figure 1. Tests of the total mediated effect are reported in Table 2 (full model results are available in the supplemental material). There was no mediation.

Across all outcomes, all tests of mediated moderation were nonsignificant ($p > 0.05$), with total mediated effects close to zero. When examining individual path coefficients, this was likely because there were not large changes in relationship satisfaction during the pandemic ($p = 0.2482$). Relationship satisfaction increased slightly during the pandemic, though only a small amount ($\beta = 0.05$). Meaningful associations were identified between relationship satisfaction and mental health outcomes (anxiety,

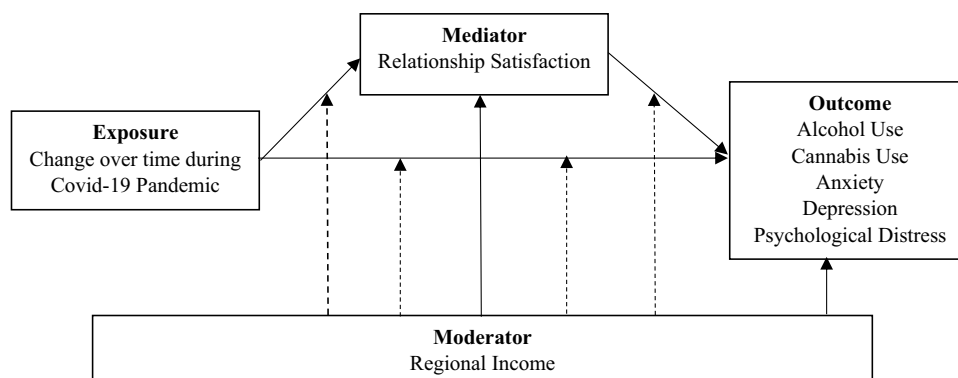
**Figure 1:** Analysis framework.

Table 2: Tests of the total mediated effect

Outcome	Total mediated effect	Z	p
Alcohol	0.00	-0.16	0.8753
Cannabis	0.00	-0.05	0.9629
Anxiety	0.01	0.17	0.8652
Depression	0.01	0.15	0.8838
Psychological distress	0.01	0.17	0.8611

Note. The primary reason the total mediated effect is small is because there were minimal changes identified in average ratings of relationship satisfaction going into the pandemic ($\beta = 0.05$, $p = 0.2482$).

depression, and psychological distress, $p < 0.0001$). Respondents who reported greater relationship satisfaction tended toward moderately better mental health outcomes (anxiety, $\beta = -0.13$; depression, $\beta = -0.18$; psychological distress, $\beta = -0.16$). The association between relationship satisfaction and drinking evidenced marginal non-significance ($p = 0.0938$, $\beta = 0.04$, a small effect). There was some evidence of moderation by SES. While most respondents did not show large changes in average levels of the outcome variables going into the pandemic ($|\beta| < 0.05$, $p > 0.05$), this was not the case for respondents in low SES areas for depression ($p = 0.0015$) and psychological distress outcomes ($p = 0.0015$). Specifically, participants from low-income areas showed increases in depression ($\beta = -0.09$) and psychological distress ($\beta = -0.12$) as the pandemic bore on.

4 Discussion

The pandemic disrupted daily life, affecting living conditions, social relationships, and income, which in turn impacted mental health [49]. This study explored whether relationship satisfaction and SES influenced the link between the pandemic and mental health outcomes (depression, anxiety, substance use, and psychological distress). While no direct effects of the pandemic on mental health or relationship satisfaction were found, relationship satisfaction was found to correlate with anxiety, depression, and psychological distress. A small non-significant mediation effect emerged for alcohol use, with higher relationship satisfaction associated with slightly increased alcohol consumption. SES did not moderate the pandemic's impact on substance use and anxiety, but did for depression and psychological distress. These findings underscore the complexity of pandemic-related stressors, suggesting that while direct pandemic effects were not observed, social and economic factors continued to influence individuals' mental health and substance use patterns.

Specifically, participants from low-income areas tended toward faster increases in depression and psychological distress as the pandemic continued. This finding was consistent with global research findings, which found individuals residing in areas of lower SES strata to be associated with higher odds of psychological distress (e.g., depression) during the pandemic [6]. Limited research has focused on the impact of the pandemic on psychological distress among individuals with low SES. This study highlights the need to better understand how economic hardship contributes to emotional and cognitive coping challenges, particularly in crisis situations. Individuals facing financial strain may have access to resources, such as mental health services, which can limit opportunities to learn adaptive coping mechanisms. This lack of resources may increase their vulnerability to emotional distress, maladaptive coping mechanisms, and long-term psychological consequences. Results suggest the importance of not only mobilizing outreach for financially vulnerable communities, but doing so in a timely manner to mitigate the effects of the pandemic, particularly in areas with limited access to mental health services.

Whereas prior studies have provided support for separate pathways examined in this study, the current study examined a well-powered, single model in its entirety with all paths included. Although most studies found that individuals were more likely to report declines in relationship satisfaction during stressful external events [50–52], several studies found that relationship satisfaction increased for some individuals during the pandemic [51]. The current study did not find a significant association between days into the pandemic and relationship satisfaction, which may explain the lack of mediating effect found for relationship satisfaction. This suggests that the impact of the pandemic on relationships may be more individualized, with some relationships strengthening due to increased time together, while others may deteriorate under stress. Future research should explore the factors that determine whether relationship satisfaction improves or declines in times of crisis.

As stated earlier, individuals with higher relationship satisfaction were more likely to report experiencing better mental health outcomes. Several studies have found evidence for the influence of relationship satisfaction on mental health outcomes during external stressful events [13,14,51,53]. Findings in the current study are consistent with prior literature demonstrating an association between intimate relationship satisfaction and mental health [13]. Since past studies have examined relationship satisfaction with respect to intimate relationships and this study measured relationship satisfaction more broadly (i.e., any relationship), this finding is particularly

noteworthy. This indicates that support from any type of close relationship – whether romantic, familial, or platonic – may serve as a protective factor against mental health deterioration. Future interventions should consider utilizing social support networks beyond intimate partners during crises.

Participants with better relationship satisfaction tended to use slightly more alcohol during the pandemic (marginal effects). Participants on average were found to increase their drinking days per month by 28% from before to during the pandemic. Our finding that alcohol consumption increased during the pandemic aligns with studies conducted within the United States, as well as the United Kingdom and Ireland [54,55]. A large review of drinking during the pandemic [56] suggested increased drinking was associated with restricted social rewards and the ability to drink in isolation, thus avoiding judgment from others; however, the current study suggests a more nuanced approach may be needed to fully understand the association between alcohol, the pandemic, and mediating social relationships (i.e., relationship satisfaction may offer rewards and mitigate isolation). While relationship satisfaction is typically protective of mental health, it may not necessarily lead to reduced alcohol consumption. Instead, individuals with strong social bonds may engage in drinking as a shared activity, using alcohol as a way to connect or manage stress together [57]. This highlights the need for targeted messaging about alcohol use in social contexts, particularly during crises.

As noted above, SES moderated the relationship between the pandemic and mental health outcomes (i.e., depression and psychological distress). Specifically, individuals with low SES were more likely to experience increased symptoms of depression and psychological distress as the pandemic progressed. Similar to this finding, prior research has found that individuals who experienced income instability during the pandemic were more likely to report higher rates of depression and other adverse mental health outcomes compared to individuals not experiencing income instability [58]. This may be explained by the lack of control and increased distressful emotions that individuals with low SES may experience due to external stressors [59]. This suggests that economic disparities not only impact financial security but also shape individuals' emotional resilience. Given that those with lower SES may face higher chronic stress and reduced access to mental health care, policies addressing financial relief and accessible mental health interventions should be prioritized in future crisis responses.

This study also found that respondents with more children and better living conditions were more likely to

report experiencing more relationship satisfaction. Consistent with this finding, prior research found parent–child relationships to be positively impacted by having more than one child during the pandemic [60]. This suggests that having multiple children may provide built-in socialization opportunities that ease parental stress, while better living conditions may buffer against pandemic-related relationship strain. Future studies should explore how housing and family dynamics interact to shape well-being during the times of crisis.

4.1 Limitations and future directions

The biggest limitation of the study is the timeframe. This was a study on the psychological and social impacts of living through a pandemic. We examined changing clients needs at intake from an agency's perspective starting with the first case of COVID-19 because it represented a tipping point for stress related to the pandemic [61]. Although it is difficult to know which may cause more distress (initial reports of a deadly pandemic vs lockdown to prevent spread), the process likely unfolds over time, which is why we looked at clients pre- and post- pandemic to understand this. This analysis accounted for the longitudinal changes in the pandemic, however, it was still an early pandemic sample. At the time of study, prioritization was set on better understanding the role of the ongoing pandemic on mental health and health behavior. Future studies may wish to examine longer term impacts of the COVID-19 pandemic. Another consideration for timing is that the data were cross-sectional with respect to the client. To maximize data availability for analyses, client baseline data were used as the funding agency required only 10% of the sample followed at 6 months and at discharge. Future studies can expand follow-up samples to use longitudinal data for mediated moderation.

Another limitation is the reliance on self-reported evaluations, which, while valuable for capturing subjective experiences and covert behaviors, such as substance use [62,63], can be influenced by social desirability bias, particularly when addressing sensitive and stigmatized topics [64].

Finally, reduced clinical contact during the pandemic may have introduced bias, as individuals who maintained contact with clinical services may have been either more resilient or in greater need of care than those who did not. Future research should investigate this potential bias and explore the role of clinical engagement in mitigating pandemic-related mental health effects.

5 Conclusion

5.1 Implications

This study contributes to the understanding of clinical care during community disasters. While the study found that individuals of lower SES experienced more adverse mental health outcomes as the pandemic progressed, there was no evidence associating these outcomes with personal relationships. Although marginally non-significant, the findings suggest that, individuals who reported higher satisfaction with their relationships tended to drink 28% more during the pandemic. This raises the question of whether increased alcohol consumption might represent a form of social bonding, rather than an escape from strained family dynamics. Although mediated moderation was not observed in this study, the results offer an important step in examining a model of the pandemic's impact, and factors that may be more or less important to outcomes. Further research is needed to determine whether relationship satisfaction influences alcohol use behaviors in pandemic contexts.

5.2 Policy implications

The findings of this study have important implications for mental health practice, particularly in understanding the impact of SES disparities on mental health during crises. Given the heightened vulnerability of individuals with low SES to adverse mental health outcomes during the pandemic, mental health professionals should integrate SES considerations into clinical assessment and treatment planning. This includes screening for financial stressors and providing tailored interventions, such as referrals to supportive resources or therapies addressing economic-related distress.

This study also underscores the role of relationship satisfaction in mental health outcomes. Given its strong association with psychological well-being, mental health care should consider relational factors in treatment approaches. Integrating couples counseling, family therapy, or interpersonal interventions may enhance overall mental health outcomes.

Finally, the study suggests a complex relationship between relationship satisfaction and alcohol use during the pandemic, with higher satisfaction linked to increased drinking, albeit marginally non-significant. Future mental health research should further explore the interplay

between social relationships, substance use, and mental health, informing targeted interventions for alcohol misuse, particularly during periods of societal stress.

5.3 Future research

Future research should focus on the long-term mental health effects of the pandemic, particularly for individuals with low SES and varying relationship satisfaction. Studies should explore the complex links between relationship satisfaction, alcohol use, and psychological distress, while also considering gendered stressors and caregiving burdens. Additionally, examining outcomes for persons who do not outreach to mental health would be important for crisis planning.

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