

California State University, San Bernardino CSUSB ScholarWorks

Electronic Theses, Projects, and Dissertations

Office of Graduate Studies

6-2022

SOCIAL WORKER STUDENT'S ANXIETY, AND ALCOHOL CONSUMPTION DURING THE COVID-19 PANDEMIC

David Adler

Follow this and additional works at: https://scholarworks.lib.csusb.edu/etd

Part of the Psychiatric and Mental Health Commons, Social Work Commons, and the Substance Abuse and Addiction Commons

Recommended Citation

Adler, David, "SOCIAL WORKER STUDENT'S ANXIETY, AND ALCOHOL CONSUMPTION DURING THE COVID-19 PANDEMIC" (2022). *Electronic Theses, Projects, and Dissertations*. 1417. https://scholarworks.lib.csusb.edu/etd/1417

This Project is brought to you for free and open access by the Office of Graduate Studies at CSUSB ScholarWorks. It has been accepted for inclusion in Electronic Theses, Projects, and Dissertations by an authorized administrator of CSUSB ScholarWorks. For more information, please contact scholarworks@csusb.edu.

SOCIAL WORKER STUDENT'S ANXIETY, AND ALCOHOL CONSUMPTION

DURING THE COVID-19 PANDEMIC

A Project

Presented to the

Faculty of

California State University,

San Bernardino

In Partial Fulfillment

of the Requirements for the Degree

Master of Social Work

by

David Adler

May 2022

SOCIAL WORKER STUDENT'S ANXIETY, AND ALCOHOL CONSUMPTION

DURING THE COVID-19 PANDEMIC

A Project

Presented to the

Faculty of

California State University,

San Bernardino

by

David Adler

May 2022

Approved by:

Thomas Davis, Faculty Supervisor, Social Work

Laurie Smith, M.S.W. Research Coordinator

© 2022 David Adler

ABSTRACT

The COVID-19 pandemic has been extremely impactful on a vast majority of the population, either from losing a possible loved one, or the pandemonium that arose in its wake. The purpose of this study is to better understand how much of an impact the COVID-19 pandemic has had on social worker students' mental health, specifically, how it has affected their levels of stress, anxiety, and levels of alcohol consumption. This study is significant because the pandemic has had a substantial impact on the mental health of so many individuals, and it is important to research just how large these effects are. The design of this study will be a one-shot case study, quantitative data will be collected through online surveys. Pearson's correlation coefficient will be used on the data to indicate if there are any correlations between stress, anxiety, and alcohol consumption. These findings are important for social work practice because it is imperative to understand the mental health state of the social worker if they are to give the utmost quality of care to their clients.

TABLE OF CONTENTS

ABSTRACTi	iii
LIST OF TABLES	⁄ii
CHAPTER ONE: PROBLEM FORMULATION	1
Introduction	1
Purpose of the Study	3
Significance of the Project for Social Work	5
CHAPTER TWO: LITERATURE REVIEW	6
Introduction	6
Mental Health Effects of COVID-19 Induced Stress	6
Alcohol Consumption Rates and COVID-191	1
Theories Guiding Conceptualization1	5
Summary1	7
CHAPTER THREE: METHODS1	9
Introduction1	9
Study Design1	9
Sampling2	1
Data Collection and Instruments2	1
Procedures2	3
Protection of Human Subjects2	4
Data Analysis2	5
Summary2	6
CHAPTER FOUR: RESULTS	7

Introduction	27
Presentation of the Findings	27
Summary	35
CHAPTER FIVE: DISCUSSION	36
Introduction	36
Discussion	36
Limitations	43
Recommendations for Social Work Practice, Policy, and Research	45
Conclusions	46
APPENDIX A: SURVEY QUESTIONS	48
APPENDIX B: INFORMED CONSENT	60
APPENDIX C: DEBRIEFING STATEMENT	63
APPENDIX D: IRB APPROVAL LETTER	65
REFERENCES	70

LIST OF TABLES

Table 1: Demographic Characteristics of Participants	30
Table 2: Descriptive Statistics of the Scales	31
Table 3: Correlations Between Scales	32
Table 4: Correlation Between Stress and Anxiety for Male Demographic	33
Table 5: Correlation Between Stress and Anxiety for Female Demographic	33
Table 6: Frequency Statistics of Improved or Worsened Feelings	34

CHAPTER ONE PROBLEM FORMULATION

Introduction

The coronavirus disease 2019 (COVID-19) pandemic is a traumatic event that has affected everyone's life in one way or another. The COVID-19 virus is an extremely contagious virus that threw the entire world on its side. COVID-19's first recorded cases date back to November 17th, 2019, with a couple of people that had died in Wuhan, China (Brahma, 2020). It was not until December 31st, 2019 when Chinese authorities reported the virus to the World Health Organization, but it was much too late by then. The United States had not made any significant policy changes at this time with some mask mandates being enacted and some social distancing rules being enforced loosely. Although these measurements were put into place the number of people that had been infected with COVID-19 had still been steadily rising; in the United States alone there were over 140,000 cases by the end of March (Brahma, 2020). It was around this time as well that the United States enacted a complete shutdown. This shutdown originally was only supposed to last for only two weeks, then after that, children would return to school, and everything would return to the way they were. As the lockdown continued on there was speculation that individuals' mental and physical health was being heavily affected by many different life-altering factors that the pandemic brought about. Now, a year and seven months later there is a

vaccine that is being widely distributed and it looks as if the lockdown is starting to slowly end. Stores and restaurants are opening back up, and schools are now back in session for the fall 2021 semester.

Way before the pandemic the rates of major depressive disorder and anxiety levels in America have been constantly increasing (National Institute of Mental Health, 2019). The National Institute of Mental Health (2019) stated that in 2017 an estimated 17.3 million adults in America experienced at least one major depressive episode; this was about 7.1% of the entire US population at the time. These numbers have increased dramatically since 2005, an article from the Columbia School of Public Health (2017) stated that rates of depression have significantly increased in adults from 6.6% in 2005 to 7.3% in 2017. Depression rates were already rising at a steady pace in America, to begin with, and if traumatic events occur in individuals' lives, which can put them at a much greater risk of worsening the severity of their depression. Depression has some serious side effects that can lead to lack of appetite, having trouble sleeping, irritability, lethargy, trouble with concentration and memory, feelings of worthlessness and helplessness, and even thoughts or actions of self-harm or suicide (American Psychiatric Association, 2013). The COVID-19 pandemic can be regarded as a traumatic event that has significantly altered so many people's lives. I suspect that depression levels have risen at an even higher rate than they normally would be during the COVID-19 pandemic due to stress and the trauma that the pandemic caused.

Conner et al. (2009) conducted a study that found that depression is also associated with concurrent alcohol use, and alcohol use rates have always been concerningly high in the United States. According to the Centers for Disease Control and Prevention (2020), in 2018, more than half of the U.S. adult population reported that they drank alcohol within the last 30 days, about 16% of the adult population reported "binge drinking", and 7% of the population reported "heavy drinking". Alcoholism can lead to many different, sometimes serious, problems including violent temperament, high blood pressure, heart disease, stroke, liver disease, digestive problems, learning and memory issues, as well as multiple types of cancer. Alcoholism also has an exceedingly high comorbidity rate with depression and anxiety issues (World Health Organization, 2019). While these numbers have not changed a lot since 2005, they have always been concerningly high. People that are isolated or alone tend to drink more often, the COVID-19 lockdown caused this type of isolation for many people. It is generally speculated that alcohol consumption rates in America have gone up significantly since the start of the lockdown in 2020.

Purpose of the Study

This quantitative study aims to evaluate a possible relationship between stress caused by the pandemic and levels of anxiety, and alcohol consumption among social work students during the COVID-19 pandemic. It has been well documented that levels of depression in the United States have been steadily on the rise since the turn of the century (Columbia School of Public Health, 2017). These trends look remarkably similar when you look at rates of anxiety in the United States as well (National Institute of Mental Health, 2019). It has also been found that there have been many predictions of psychological distress during the pandemic (McPhee et al., 2020). Arvidsdotter et al. (2016) describe psychological distress as "a state of emotional suffering associated with stressors and demands that are difficult to cope with in daily life". The more psychological distresses individuals experience the more likely they are to become susceptible to mental health disorders such as depression, or anxiety issues. These mental health disorders can leave individuals who don't have premier coping skills in a spot where they might gravitate towards a less healthy coping mechanism to assist them with their problems, such as alcohol.

The research design that I would like to employ that would be best for this type of research is a one-shot case study approach. This design would use quantitative data in the form of surveys that will query participants about their depressive symptoms, anxiety levels, and alcohol consumption rates, and also question them on if these numbers have increased or decreased since before the pandemic. I would utilize a convenience sample of social work students as this sample would be representative of the population I want to study.

Significance of the Project for Social Work

This project is important for the field of social work because it will emphasize just how much social work students' mental health has been affected by this traumatic event. The COVID-19 pandemic was an extremely traumatic period for all parties that were involved, and everyone involved should be entirely concerned about the fallout of a historical event such as this. Parties that should be concerned about this study are the participants themselves, the social worker students. The general population might also be interested in the results of this study as the mental well-being of social workers could have an impact on their lives as well. Knowing the results of this study can give a good measurement of how well or poorly social worker students can cope with adverse situations. Studying the prevalence of depression and anxiety as well as alcohol consumption can have a substantial impact in the future on how we might prepare, as social workers, for a similar catastrophic event. Also, because I am studying both depression and anxiety, and alcohol consumption rates I will aim to look into if there is any correlation between the two with this specific sample. If results show that there was a significant increase in depression and alcoholism, mental health reform may be necessary to help individuals decompress the trauma that they experienced. This study might make some social work students more careful in selecting their coping mechanisms during traumatic periods. The research question for this study is "How has the COVID-19 shut down affected social worker students' levels of depression, anxiety, and rates of alcohol use?

CHAPTER TWO

Introduction

This literature review will explore the various levels of depression and anxiety levels in the general population during the COVID-19 pandemic as well as a more specific population of college students and across other high-stress occupations and living situations. This literature review will also look into alcohol consumption rates concerning the COVID-19 pandemic in varying populations. This chapter will also go over the theory that guided the conceptualization of this project like Maslow's hierarchy of needs.

Mental Health Effects of COVID-19 Induced Stress

A survey study conducted by Ettman et al. (2020) aimed to decide what the burden of depression symptoms among adults during COVID-19 was, as well as certain risk factors that came along with these depression symptoms. The survey study was labeled "The COVID-19 and life stressors impact on mental health and well-being survey". A part of the survey was allocated for depression symptoms which were assessed using the patient health questionnaire-9. As for the stress score, this survey assessed 13 stressors based on prior studies conducted after traumatic events. Ettman's survey study concluded that depression symptom prevalence was three times higher during the pandemic than before the pandemic, 24% of people showed mild depression symptoms during versus 16.2% pre-pandemic, 14.8% of people showed moderate depressive symptoms during versus 5.7% pre-pandemic, and 5.1% of people showed severe depression symptoms during the pandemic versus 0.7% prepandemic (Ettman et al., 2020). They also found that the more stressors people were exposed to the more likely they would experience depression symptoms. This shows that there is a high burden of depression symptoms in the US stemming from the COVID-19 pandemic and this burden falls very heavily on people who are already in high-stress situations.

Wang et al. (2020) saw evidence that suggested that the COVID-19 pandemic caused increased levels of stress and depression in the general population. They then formulated a study that aimed to focus on a more specific population to see how the COVID-19 pandemic has impacted college students in the United States. Wang and his team conducted an online survey that was sent out to undergraduate and graduate students at Texas A&M University. This survey consisted of scales for depression and anxiety as well as some multiplechoice and open-ended questions that regarded stressors and certain coping mechanisms specific to COVID-19. Data collection was conducted from May 4th, 2020, to May 19th, 2020, in this time, they collected a total of 2,031 responses from college students. The results show that 48.14% of the students showed at least a moderate level of depression and 38.48% of participants showed at least

a moderate level of anxiety. A striking 18% percent of participants had suicidal thoughts. A vast majority of participants indicated that their stress and/or anxiety levels had increased during the pandemic. These numbers are extremely high and elevated way above the general population even during the pandemic (Ettman et al., 2020). The results also stated that only around 40% of the participants were able to sufficiently cope with stress related to the pandemic.

These numbers show how college students have been overwhelmingly impacted by the COVID-19 pandemic and how underprepared most students were in regard to being able to cope with such a traumatic event.

Li et al. (2020) conducted a study in 2020 where they stated that COVID-19 had been the catalyst for a significant amount of "psychological consequences". Li and her team's study concluded that negative emotions had increased after January 20th, 2020, and positive emotions and life satisfaction had decreased. They found that people were much more concerned about their health and family than leisure time and spending free time with friends after the COVID-19 outbreak was announced (Li et al., 2020). The methods of this study were interesting to me because of the way they collected their data as well as the type of data they used. Li and her team utilized a popular Chinese social media site called Weibo. She pulled a sample of 17,865 active Weibo users and utilized a technology called Online Ecological Recognition (OER) that grabbed all the participant's posts from two weeks before January 20th, 2020, and two weeks after January 20th, 2020 (Li et al., 2020). These posts were then analyzed by a

program for certain emotional and cognitive indicators to determine if the posts had positive or negative emotions correlating with them. This study showed that people had much more negative emotions after the COVID-19 outbreak was announced.

A limitation of this study could include people that were posting sarcastically online but aren't truly feeling the way that they are posting. This could trick the program into thinking that a post that looks negative at first was really either positive or meant to be comedic.

Another study conducted by Zhu et al. (2020) demonstrated how working in a high-stress environment can have a compounding negative impact on an individual's mental health, especially during a pandemic. The study's population consisted of doctors that were working as the front line of defense against COVID-19 in Gansu, China. These doctors would face the pressure of not only work overload but also the pressure of being much more prone to catching the virus as well. 165 doctors took an online survey through a program called questionnaire stars, the average age was 34, and the average amount of working days in the clinic or isolation ward was 15 days. The results state that 11.4% of doctors were considered to have anxiety symptoms, which is rather low considering around 18.1% of the US population suffers from an anxiety disorder every year (Anxiety and Depression Association of America, 2021). While the anxiety levels were relatively low, the depression levels were very high. Of the doctors that took part in this test, 45.6% were considered to have "depression

symptoms" (Zhu et al., 2020). The study went on to explain that doctors that practiced positive coping mechanisms helped improve their negative emotions (Zhu et al., 2020). These results show that being in extremely stressful situations can take a large toll on your mental health, especially during a time with so much uncertainty like a pandemic, and that being equipped with the right coping mechanisms like how most social workers are taught can be an immense help in combating negative emotions.

A limitation of this study is the lack of a control group or pre-test to compare the results to. The sample from this study, although unlikely, could have already had this degree of depression rates among their doctors before the pandemic and the pandemic could have had little to no effect on the rates of depression symptoms. Another limitation of this study is the sample size as it was relatively small at only 165 participants, this small sample size can cause issues with the reliability of the study. This low sample size might also contribute to the reason the rate of anxiety symptoms was so low.

Rudenstine et al. (2021) conducted a study that evaluated mental health disparities during the COVID-19 pandemic. They also looked into the protective role that socioeconomic status played, and continues to play, concerning stressors throughout the pandemic. Rudenstine and her team assessed the prevalence of depression and anxiety symptoms among under-resourced public university students during the pandemic. Data collection for the study was conducted between April 8th, 2020, and May 2nd, 2020, well into the lockdown

period of the pandemic, where 1,821 students took part in a study that aimed to assess mental health and socioeconomic factors, as well as exposure to COVID-19 related stressors. The data collected from the study showed that 40% of the sample met the criteria for poverty designation and 70% of the sample reported household incomes below-median income level. This data shows that a large majority of participants in the study could be labeled as "low-income". Rudenstine and her team's findings show that there is massive psychological distress among the participants from a lower socioeconomic group stemming from the COVID-19 pandemic. The data showed that the lower the household income was for a participant the more likely they were to have reported at least moderate depressive symptoms. There is a 12% difference in depression rates strictly based on income levels, and a 13% increase in anxiety rates among students with low income. This study shows that having a lower income, which can be a large stressor, can have a heavy impact on depression symptoms in general, especially during the pandemic.

Alcohol Consumption Rates and COVID-19

McPhee et al. (2020) found that there had been many predictions of psychological distress as well as a large alcohol consumption increase during the COVID-19 pandemic. They constructed a study where one of the goals was to examine self-reported changes in alcohol use post-COVID-19 social distancing

requirements. Participants completed a survey that queried them about demographic characteristics, past-year drinking history, and psychological distress attributed to COVID-19. The study was cross-sectional and utilized two different timeframes for the survey. These timeframes were 30 days before statemandated social distancing and 30 days after state-mandated social distancing. They were able to recruit 833 participants, after the complete screening for inattention, to participate in the study. The final sample was 64.7% male and had a substantial proportion of white individuals at 65.5% of the sample. The results show that there was indeed a large influx of drinking behaviors post-social distancing. The drinking behaviors that had a large influx included frequency of binge drinking and frequency of solitary drinking. The results also showed that depression severity was significantly greater post-social distancing. These results show that individuals might be more inclined to binge drink more often and drink alone when they are in a more stressful situation such as a pandemic. These results may also show a correlation between rates of alcohol consumption and rates or severity of depression during the COVID-19 pandemic because both depression symptoms and alcohol use increased. A limitation of this study could be that the majority of the sample were white males, this skewness in the sample could have caused the results to become skewed as well.

Another study conducted by Rossow et al. (2021) estimated how individual changes in alcohol consumption during the pandemic translated into changes in three distinct categories: mean consumption, dispersion of

consumption distribution, and prevalence of heavy drinkers. The collected data from two online surveys from a sample of adults. They utilized data from two different surveys that were collected at the height of the pandemic. The first survey data was collected from the end of April 2020 to the end of June 2020. The survey had a convenience sample of 17,092 participants. This survey was widely spread and was available in 20 languages; 21 different countries participated in this study. The second survey was conducted between June and July 2020 and had 1,328 participants. As for measures utilized in these surveys, they both used the alcohol use disorders identification test (AUDIT-C) questionnaire and they mainly focused on the first two items being: frequency of drinking and quantity of alcohol consumed per occasion. This data was used as a baseline for the participants. In both studies, any participant that reported alcohol use within the last year was asked to report if there was any perceived change in alcohol use during the months of the pandemic. The results of the first study show that about 50% of the participants showed no change at all in drinking frequency, 29% reported they drank less, with 22% claimed that they drank more often (Rossow et al., 2021). The majority (60%) of the participants from the first survey also reported that there was no change in the number of drinks they had when they would drink (Rossow et al., 2021). The results of the second survey were remarkably similar to the first survey. Rossow et al. (2021) found the most change was among the participants that had the highest baseline consumption, as they, on average, increased their consumption rates drastically. This

increased the proportion of heavy drinkers in the study dramatically. This study found that the average drinker really didn't increase their alcohol consumption during the pandemic, but if the participant was already a heavy drinker before the pandemic, they typically increased their drinking a lot more during the pandemic which made the number of heavy drinkers in the study go up markedly.

These findings conflict with McPhee and his team's findings in that McPhee et al. found that there was a much larger increase in drinking behaviors no matter what the baseline numbers were. The reasoning behind this could be where the sample population was taken from and the cultural differences between the two samples. It is more likely there were a lot more Europeans in Rossow's sample and could have distinctive styles of how they normally drink as opposed to McPhee's participants were all U.S. residents where drinking might be more widely accepted as a coping mechanism.

In the research that I conducted, there was only a small amount of research that aimed to find correlations between alcohol use and mental health status during the months of the pandemic. I found no research that was strictly related to social work students and how the pandemic has affected them specifically. This study will aim to find a correlation between the rate and amount of alcohol consumed and depression symptoms and levels of anxiety for social work students.

Theories Guiding Conceptualization

The theoretical perspective I will be examining that will help guide this research project is Maslow's hierarchy of needs theory. This theory of Maslow's is a needs hierarchy that motivates human behavior (Zastrow, Kirst-Ashman & Hessenauer, 2019). Maslow believes that humans will always strive for the top level of the hierarchy to try and achieve self-actualization. "When people fulfill the most elemental needs, they strive to meet those on the next level, and so forth, until the highest order of needs is reached." (Maslow, 1971). Maslow explains in his theory that there are five distinct levels of needs that humans will constantly strive to achieve. They are in ranked order, so an individual cannot skip levels to achieve a higher level until they have their more basic needs met first. The first level of the theory that needs to be met is psychological needs. These needs are extremely basic and include food, water, oxygen, and rest (Zastrow, Kirst-Ashman & Hessenauer, 2019).

Maslow states in this theory that it is impossible to climb to another level of the hierarchy without accomplishing the levels below it first starting from the bottom level as the individual builds their way to the top (Maslow, 1971). If an individual has made progress towards the top of the hierarchy and feels like one of their needs lower in the hierarchy is suddenly being challenged or not being met it is entirely possible for the individual to completely regress to that lower level on the hierarchy. As stress built throughout the pandemic it seemed like more people started to regress on Maslow's hierarchy of needs as they thought

their most basic needs were being challenged. Regression on the hierarchy can be incredibly stressful which in turn can cause an increase in depressive symptoms, and anxiety levels this could also increase levels of alcohol consumption.

At the beginning of the pandemic, people started to hoard food and water as they believed that their most basic needs were going to be in danger, so they did what they thought they needed to do to protect their most basic needs in the future. Individuals that cannot get this level of need met will generally be in extremely stressful situations and at worst will not even be able to sustain life. The second level of needs is the need for safety. These needs include security, stability, as well as freedom from fear, anxiety, threats, and chaos. A social structure greatly assists in the meeting of these needs for most individuals, and at the beginning of the pandemic, many people felt like this social structure was crumbling apart. People began to fear for their safety needs and society started to fall into chaos. The third level of needs is the need for belongingness and love. This need includes feelings of intimacy and affection provided by friends, family, and lovers. This level of need was not met for a lot of people throughout the entirety of 2020 with the mandated lockdown and stay inside orders; people were lacking a lot of social interaction with the people that they love and received affection from. The last two levels in the hierarchy are self-esteem needs and self-actualization needs, which are important but are not pertinent to this research study, for this reason, I will only be focusing on the first three needs.

Zastrow et al. (2019) emphasize that certain crises such as unemployment, prolonged illness, or a broken relationship can cause people to switch their emphasis to a lower level of need. This sudden pandemic could have caused many people to switch their emphasis from an elevated level of need such as self-actualization needs or self-esteem needs to a much lower level of need, even as low as physiological needs. A sudden change to a physiological level would probably have massive effects on an individual's mood and affect and could even cause an increase in depression symptoms and cause high levels of stress, increasing anxiety levels. These higher levels of depression symptoms and anxiety levels could lead an individual to self-medicate with alcohol or other substances.

Summary

The research in this chapter showed that COVID-19 has had a large to moderate impact on the levels of anxiety, and alcohol consumption among the general population and some other more specific populations. It also showed how rates of alcohol consumption differ during COVID as compared to nonpandemic times. These findings demonstrated that rates of depression and anxiety have markedly gone up throughout the pandemic. The amount of alcohol consumed throughout the pandemic followed similar trends in a few different populations. Maslow's hierarchy of needs theory shows and suggests that once an individual's current livelihood is at stake, they may regress to a level they may

have progressed out of previously. Findings in this study will aim to show how impactful the COVID-19 pandemic was and continues to be on students' lives.

CHAPTER THREE METHODS

Introduction

This study will look to explore the various levels of depression and anxiety as well as their alcohol consumption levels in student populations during the COVID-19 pandemic. This chapter contains details on how this research will be conducted. It will also discuss the study design, the sample involved and the recruitment process, how the data was collected and the specific instruments that will be utilized, the procedures, how the human subjects will be protected, and an analysis of the data.

Study Design

This quantitative study will aim to evaluate survey data to determine if the COVID-19 pandemic influenced students' levels of anxiety, depression, and consumption of alcohol. A one-shot case study that focuses on instruments that determine levels of depression, anxiety, and consumption of alcohol will be an effective study design with current resources.

Many strengths stem from using a quantitative study as the study design. Utilizing standardized surveys for data collection is a strength for this study as it will increase reliability and validity as the instruments that will be utilized in this study have been shown in previous studies to be valid and reliable. Collecting participants can be a hassle with qualitative studies as it can be hard to convince individuals to participate through phone or personal interviews. Since this oneshot case study's data will be collected through an online survey, participants will be much more likely to participate in the study which will lead to higher sample sizes.

While a one-shot case study can be effective with multiple different applications that does not mean they have no faults. A limitation of this study is that the data will be assuming that all of these depressive symptoms were caused by stress from the COVID-19 lockdown, which does not account for the participants having other impactful events happen in their lives that weren't COVID-19 that happened during the lockdown period that could have positively or negatively affected their anxiety levels, depressive symptoms, or rates of alcohol consumption. Another limitation of one-shot case studies is that there is no control group to compare your results to, this control group would be exceedingly difficult to find however as it could be difficult finding people who were not impacted by any COVID-19 stress. A common limitation that occurs when utilizing survey data is the participants rushing through the questions to finish the survey as quickly as possible, which may also skew the results.

Sampling

The sample for this study will consist of a convenience sample consisting of master and bachelor level students of social work. The only inclusion criteria for the study are to be a social work student. An exclusion criterion for this study is being under the age of 18. A convenience type sample was chosen because it is an efficient way to collect participants with limited resources. The number of participants in this study will be dependent on how many people participate in the surveys that are set out. The study will aim to have at least 50 participants at a minimum, but the goal is to have as big of a sample size as possible to increase the validity of the study.

Data Collection and Instruments

As this is a quantitative study, the study will be capturing both independent and dependent variables. The data will be collected through online surveys. Some of the major constructs of this study include stress, anxiety, and alcohol consumption. The independent variable in this study is COVID-19 incurred stress. The dependent variables from this study include anxiety and alcohol consumption. These variables will all be measured utilizing different standardized instruments.

Demographic information will be collected before the survey begins to gain some general knowledge about the participants. The demographics questions

will ask the participants about their age, gender, race, ethnicity, and annual income.

The instrument that will be utilized to measure the independent variable, COVID-19 incurred stress, is the Peritraumatic Distress Inventory (PDI). There are 13 items on this Likert-type ordinal scale, and they are rated 1-5 with one being "not true at all" and five being "extremely true". The items on the scale can also be changed to target the pandemic more specifically as the traumatic event. The domains that this scale aims to target are negative emotions, from items 1, 2, 3, 5, 6, 8, and 10, and perceived life threat and body arousal from items 4, 7, 9, 11, 12, and 13 (Bunnell et al., 2018). Some examples of the items from the scales are "I felt helpless.", "I felt afraid for my own safety." and, "I thought I might die". This instrument has been shown in previous studies to have a good internal consistency. In a study by Bunnell et al. (2018), they showed that the internal consistency in the study they conducted that reviewed the PDI was 0.83.

The instrument that will be used in this study to measure anxiety is the General Anxiety Disorder-7 (GAD-7). The GAD-7 is utilized for rapid screening of anxiety disorder for participants, this instrument is another 4-point Likert scale measurement ranging from 0 to 3. Response categories range from "not at all" to "nearly every day". Domains from this scale include nervousness, inability to stop worrying, excessive worry, restlessness, difficulty in relaxing, easy irritation, and fear of something awful happening (Zhong, 2015). Total scores from this scale range from 0 to 21 where the higher the participant scores the more likely they

are to have General Anxiety Disorder. A study conducted in 2015 by Zhong et al. that utilized the GAD-7 reported that it had a very respectable internal consistency of 0.89.

The instrument that will be utilized for alcohol consumption is the Alcohol Use Disorders Identification Test-Concise (AUDIT-C). The AUDIT-C is a threequestion Likert-type scale whose answers range from 0 to 4. Domains of the survey are frequency of consumption, the number of standard drinks consumed on a typical day, and the frequency of drinking six or more drinks on a single occasion (Roche, 2020). The questions are "How often did you have a drink containing alcohol in the past year?", "How many drinks containing alcohol did you have on a typical day when you were drinking in the past year?", and "How often did you have six or more drinks on one occasion in the past year?". With this particular instrument the higher the score you have the more likely it is that the individual indicates at-risk drinking. A study conducted by Osaki (2012), shows that this scale had a good internal consistency of 0.91. This test can give an adequate reading on how much alcohol an individual consumes.

Procedures

Participants will be collected by sending emails to the potential participants. The participants' emails will be collected by asking the director of social work for said information. Potential participants will receive an email requesting them to take the survey and that their participation is voluntary, but greatly appreciated. The data will be collected through a survey website called Qualtrics. The participants will click on the link of the survey provided in the email sent to them. After they click on the link there will be a quick section on how their confidentiality and anonymity will be protected throughout this process, the survey will also ask for the participant's informed consent at this time. Then the participants will answer all of the demographic items, then supply answers for the PDI scale, then answer the GAD-7 scale, then proceed to answer the AUDIT-C scale. After the survey has been completed the participants will be thanked and given a debriefing statement. Data will be collected over a few months from students who decide they want to participate. This data will then be downloaded from Qualtrics and imported into SPSS for analysis.

Protection of Human Subjects

The identity of the participants can be kept anonymous as it will not be requested in the demographic data. Before the start of the survey, the process begins for the participant they will be asked to read over an informed consent section and will have to agree that they understand their rights about their confidentiality. A debriefing statement after the survey will also be offered after the survey has been completed. The data from the surveys will be kept on my university account's google drive as it will be a password and two-way authenticator protected. As this study is dealing with levels of anxiety the debriefing statement will include resources for participants who feel the need for such resources to seek out help. Although risk will be kept as low as possible there is always a possibility that participants' data may get leaked, this small risk is worth taking because the data that will be collected through this survey is important to advance our knowledge on how many specific groups of people have been affected by one of the most impactful events of the century. Three years after the completion of this study all the data from this study will be deleted from the previously mentioned google drive account.

Data Analysis

All of the data that will be collected for this study will be quantitative data. The data will be collected for this study from a Qualtrics survey. The data will be downloaded from the Qualtrics website after the data collection has been completed. This quantitative data will be analyzed entirely with the program SPSS.

The demographic data will be collected and analyzed mostly as descriptive data. The independent and dependent variables from this study will be compared and correlated with the other. The data will be analyzed for correlations between the independent variable of COVID-19 incurred stress, and the other dependent variables anxiety, and alcohol consumption. The data will also be split between certain demographics to test the effect of the independent

variable, COVID-19 incurred stress, on the dependent variables while controlling for different demographic variables to see if the demographic data shows different correlational strengths based on differing demographic variables. Frequency data will also be used to analyze if the participant's feelings, about stress, anxiety, and alcohol consumption, have gotten better or worse since the start of the pandemic.

Summary

This study will aim to examine if COVID-19 induced stress affected students. Utilizing a one-shot case study design this study will assess the changes in the levels of stress, anxiety, and alcohol consumption during the pandemic as an effective way of investigating if such an effect exists. Previously tested and valid scales such as the PDI, GAD-7, and AUDIT-C will be used to represent these variables. Invites to take the survey will be sent out to social work students via email. Results from the study will be run through multiple different tests to assess if there are any correlations between the variables.

CHAPTER FOUR RESULTS

Introduction

Included in chapter four is a presentation of the results of the study. This will include a summary of the participant demographics. It will show bivariate correlations between stress and anxiety as well as stress and alcohol consumption. The results will also show how some demographic groups had stronger correlations in regard to other demographic groups. Mean scores for all three of the scales utilized in the study will be included in this chapter as well. There will also be correlations between stress and certain demographics.

Presentation of the Findings

All of the survey data was collected during one time period. The survey was open, and emails were sent out to possible participants on February 7th, 2022, data was collected until the survey was closed on February 18th, 2022.

A total of 77 responses were collected originally, twelve surveys were removed completely before data analysis began as they were mostly incomplete, leaving a total of 65 surveys (N = 65). Table 1 below represents the demographic collected from the participants. The age of the participants ranged from 21-55 with the mean age being 32.51 years and a standard deviation of 7.86 years. Age was split into three groups: 21-29, 30-39, and 40-55. The largest age group was the 21-29 age group taking up 44.6% of the total sample. The second-

largest group was the 30-39 age group with 38.5% of the sample size and the smallest age group was the 40-55 age group taking up 16.9% of the sample.

A vast majority of the participants reported that they were female with 57 participants (87.7%) reporting they were female, while only 7 participants (10.8%) reported they were male. There was also 1 participant (1.5%) that reported they were non-binary or third gender.

The race demographic data that was collected shows that a considerable proportion of the sample size was Hispanic Latino with 35 of the respondents (54.7%) recording that they were. The second-largest category for race demographics was White with 18 respondents (28.1%), followed by African American or Black with 7 respondents (10.9%), with Asian and Other both at 2 respondents (3.1%).

Ethnicity demographics show that 42 of the respondents identify as Hispanic or Latino or of Spanish origin (65.6%) while 22 respondents reported that they were not Hispanic or Latino or of Spanish origin (34.4%).

The income demographic data showed that the largest group of participants makes less than \$10,000 annually with 17 participants (26.2%). The data also shows that 60% of participants make less than \$39,999 annually while 40% of the participants make more than \$40,000.

Table 2 shows the mean of the sums of each of the three scales utilized to collect data. The Peritraumatic Distress Inventory (PDI) scale had a range of 1-36 with a mean of 16.23 and a standard deviation of 8.52, the General Anxiety

Disorder-7 (GAD-7) scale had a range of 0-21 with a mean score of 6.95 and a standard deviation of 4.52, and finally, the Alcohol Use Disorders Identification Test-Concise (AUDIT-C) had a range of 0-7, a mean score of .91, and a standard deviation of 1.62.

		Frequency (n)	Percentage (%)
Age (N = 65)	21-29	29	44.6%
	30-39	25	38.5%
	40-55	11	16.9%
Sex (N = 65)	Male	7	10.8%
	Female	57	87.7%
	Non-binary / third gender	1	1.5%
	Other	0	0.0%
	Prefer not to say	0	0.0%
Race (N = 64)	African American or Black	7	10.9%
	American Indian	0	0.0%
	Asian	2	3.1%
	Hispanic Latino	35	54.7%
	Middle Eastern	0	0.0%
	Native Hawaiian or other Pacific Islander	0	0.0%
	White	18	28.1%
	Other	2	3.1%
Ethnicity (N = 64)	Hispanic or Latino or Spanish Origin	42	65.6%
	Not Hispanic or Latino or Spanish Origin	22	34.4%
	Unknown	0	0.0%
Income (N = 65)	Less than \$10,000	17	26.2%
	\$10,000 - \$19,999	9	13.8%
	\$20,000 - \$29,999	4	6.2%
	\$30,000 - \$39,999	9	13.8%
	\$40,000 - \$49,999	6	9.2%
	\$50,000 - \$59,999	7	10.8%
	\$60,000 - \$69,999	3	4.6%
	\$70,000 - \$79,999	1	1.5%
	\$80,000 - \$89,999	5	7.7%
	\$90,000 - \$99,999	1	1.5%
	\$100,000 - \$149,999	3	4.6%
	More than \$150,000	0	0.0%

Table 1: Demographic Characteristics of Participants

	N	Minimum	Maximum	Mean	Std. Deviation
PDI Total	65	1.00	36.00	16.2308	8.51610
GAD-7 Total	65	.00	21.00	6.9538	4.51536
AUDIT-C Total	65	.00	7.00	.9077	1.62714
Valid N (listwise)	65				

Table 2: Descriptive Statistics of the Scales

The relationship between stress, which was measured by utilizing the peritraumatic distress inventory (PDI), anxiety, which was measured by utilizing the General Anxiety Disorder-7 (GAD-7), and alcohol consumption, which was measured using the Alcohol Use Disorders Identification Test-Concise (AUDIT-C) were investigated using the Person correlation coefficient.

Table 3 indicates that there is a strong, significant, positive correlation between COVID-19 induced stress and anxiety [r = .609, n = 65, p < .001]. Table 3 also shows that there is no significant correlation between COVID-19 induced stress and alcohol consumption [r = .177, n = 65, p = .157]. There is no significant correlation between anxiety and alcohol consumption within this study [r = .227, n = 65, p = .069].

Table 3: Correlations Between Scales

		PDI	GAD-7	AUDIT-C
PDI	Pearson Correlation	1	.609**	.177
	Sig. (2-tailed)		<.001	.157
	N	65	65	65
GAD7	Pearson Correlation	.609**	1	.227
	Sig. (2-tailed)	<.001		.069
	Ν	65	65	65
AUDIT-C	Pearson Correlation	.177	.227	1
	Sig. (2-tailed)	.157	.069	
	N	65	65	65

**. Correlation is significant at the 0.01 level (2-tailed).

Results from the study show in table 4 that there is an even stronger correlation between COVID-19 induced stress and anxiety within the male demographic [r = .934, n = 7, p = .002]. While the results from participants who identified as female in table 5 show that there is a slightly smaller positive correlation between COVID-19 induced stress and anxiety [r = .585, n = 57, p < .001].

		PDI	GAD-7
PDI	Pearson Correlation	1	.934**
	Sig. (2-tailed)		.002
	Ν	7	7
GAD-7	Pearson Correlation	.934**	1
	Sig. (2-tailed)	.002	
	Ν	7	7

Table 4: Correlation Between Stress and Anxiety for Male Demographic

**. Correlation is significant at the 0.01 level (2tailed).

 Table 5: Correlation Between Stress and Anxiety for Female Demographic

		PDI	GAD-7
PDI	Pearson Correlation	1	.585**
	Sig. (2-tailed)		<.001
	Ν	57	57
GAD-7	Pearson Correlation	.585**	1
	Sig. (2-tailed)	<.001	
	Ν	57	57

**. Correlation is significant at the 0.01 level (2tailed).

Table 6 represents the frequency statistics on how the participants felt their stress, anxiety, and alcohol consumption has improved or worsened since the beginning of the pandemic. The table shows that 58.7% of participants have at least somewhat improved feelings of stress since the start of the pandemic while only 18.4% of the participants reported that their feelings of stress have at least worsened somewhat. The table also shows that 40% of the participants that responded felt that their feelings of anxiety have neither improved nor gotten better since the start of the pandemic. Table 6 also includes the responses on if the participants believed they had consumed more or less alcohol since the start of the pandemic. The table indicates that over 50% of the participants felt like the amount of alcohol they consumed had neither increased nor decreased since the start of the pandemic.

		Count	Column N %
Have these feelings (of stress) improved or worsened since the start of the pandemic? (n = 65)	Improved drastically	20	30.8%
	Improved somewhat	18	27.7%
	Neither improved nor worsened	15	23.1%
	Worsened somewhat	11	16.9%
	Worsened drastically	1	1.5%
Have these feelings (of anxiety) improved or worsened since the start of the pandemic? (n = 65)	Improved drastically	7	10.8%
	Improved somewhat	17	26.2%
	Neither improved nor worsened	26	40.0%
	Worsened somewhat	9	13.8%
	Worsened drastically	6	9.2%
Has the amount of	Increased drastically	4	6.2%
alcohol increased or decreased since the start of the pandemic? (n = 65)	Increased somewhat	11	16.9%
	Neither increased nor decreased	33	50.8%
	Decreased somewhat	10	15.4%
	Decreased drastically	7	10.8%

Table 6: Frequency Statistics of Improved or Worsened Feelings

Summary

Chapter four reviewed the research findings from the data that was collected from the participants who took part in this survey. The results included a summary of the demographic data including age, sex, race, ethnicity, and income. Pearson's correlation coefficient was utilized to analyze if there were any significant correlations between the participant's levels of stress, anxiety, and alcohol consumption. Descriptive statistics were used to find the means and standard deviations for the sum of the scores for the peritraumatic distress inventory (PDI), the General Anxiety Disorder-7 (GAD-7), and the Alcohol Use Disorders Identification Test-Concise (AUDIT-C). Later in the chapter frequency statistics were utilized to show how the feelings of the participants have changed or possibly stayed the same since the start of the pandemic.

CHAPTER FIVE

Introduction

This chapter will include a discussion about the previous chapter of the results drawn from the data, and what these results mean. Correlations between stress and anxiety levels will be considered and specified for male and female populations. Correlations or lack thereof between stress and alcohol consumption will be considered as well. Frequency data that shows if participants' feelings have improved or gotten worse since the beginning of the pandemic will also be discussed as well as the mean scores of the different scales of the participants. Limitations that apply to the research and project, in general, are addressed and recommendations for social work practice are presented that are then followed by a concluding statement.

Discussion

The data that was collected produced many interesting results, some of which were expected, while others were quite unexpected. The main purpose of this study was designed to investigate whether or not there was a correlation between stress induced by the COVID-19 pandemic and levels of anxiety. It was also designed to investigate if there was a correlation between stress-induced by

COVID-19 and levels of alcohol consumption in the social work student population.

The findings from the survey showed that there was a significant strong positive correlation between the student's results on their Peritraumatic Distress Inventory (PDI) scales results and their General Anxiety Disorder-7 (GAD-7) scale results. These findings were expected and might suggest that there could be a possible correlation between levels of stress and levels of anxiety within the social worker student population. One could imply, based on this data, that when levels of stress increase there will generally be an increase in an individual's levels of anxiety as well. The results might prompt further research into whether or not COVID-19 induced stress and anxiety have significant correlations in other specific populations as well. These results demonstrate that there was a significant level of stress and anxiety that was felt by social work students throughout the pandemic.

When the data was split between the demographics of sex an even stronger correlation was discovered. The correlation found that the people that identified as a male that took the study had an even stronger correlation between their PDI scores and GAD-7 scores compared to the correlation of scores of the general sample. While the correlation between their PDI and GAD-7 score for the demographic sample that identified as female was found to be weaker than the correlation of scores of the general sample. These findings could imply that the men from this sample have had a harder time coping with the stress that the

COVID-19 pandemic has created than the females in this study have. These findings might suggest that women are more readily available and are more capable of dealing with substantial amounts of stress than men typically can handle. It underscores the importance of attempting to help out the male population receive the mental help services that they may be lacking, and also might be a call to understand why the correlation between stress and anxiety was so much stronger with the male demographic than the female demographic.

Another possible correlation that was analyzed as a potential correlation between the Peritraumatic Distress Inventory (PDI) and the Alcohol Use Disorders Identification Test-Concise (AUDIT-C). The data showed that there was little to no significant correlation between these two variables within the general sample. This lack of correlation between these two variables might suggest that social work students may not utilize alcohol to help them cope with stressful situations. This could indicate that social work students have already been equipped with the necessary coping mechanisms and tools to be able to deal with extremely stressful situations and environments. These results could underscore the importance of educating populations on the importance of selfcare and mindfulness as social work students are frequently taught to practice these.

When analyzing the means of the sum of the scores for each different scale that was utilized in the survey some interesting results occurred. Previous research has recommended that trauma survivors with PDI scores between 7

and 28 be monitored for the following weeks (Guardia et al, 2013). The mean PDI score from the participants was 16.2 and a standard deviation of 8.5, the scale has a total range from 0 to 39. Based on this research this means most of the participants in this survey would qualify for the recommendation to at least be monitored. These results demonstrate that this particular sample of social work students had a significant level of stress regarding the COVID-19 pandemic. It might also imply that social work students or even students, in general, are more likely to be stressed out than the general population due to increased demands and workload especially social work students who generally already work in such stressful environments.

The mean GAD-7 scores from the participants were 6.95 with a standard deviation of 4.51, this scale has a total range from 0 to 21. Based on previous research, scores recorded between 5 and 9 were considered to be mild and may just need to be monitored, while scores between 10 and 14 could be a clinically significant condition (Lowe et al., 2008). While the respondent's scores were well below the range of their scores for anxiety to reach a "possibility to be a clinically significant condition", these scores were well within the confines for a recommendation of monitoring. Different research conducted by Spitzer et al. in 2006 reported a sample size of 2739 participants to have a mean GAD-7 score of 5.35. This mean score was lower than the results from this study so it can be assumed the participants from this study have elevated levels of anxiety. These results might be a call to better understand and research further the effects and

aftermath of the COVID-19 pandemic has left on social work students as well as the general population.

The results showed that the mean score from the AUDIT-C was .907 with a standard deviation of 1.63 and had a range from 0 to 7. Previous studies have shown that males who score a four or higher and women who score a three or higher suggest possible alcohol misuse (Bradley et al., 2007). These results clearly show that this sample size has no issues with alcohol misuse at all, even when adding a whole standard deviation to the mean it would still be below the threshold needed to suggest possible alcohol misuse. These results might indicate that social work students have extraordinarily strong healthy coping mechanisms as well as very polished and practiced methods of self-care and mindfulness. These results also suggest the importance of educating the general population about self-care and healthier coping mechanisms.

Frequency statistics were utilized to analyze the few questions that were asked of the participants about whether they felt like their feelings or levels of stress, anxiety, and rates of alcohol consumption had increased or decreased since the beginning of the pandemic. It was believed before data collection began that most of the participants would have felt like their levels of stress and anxiety had increased a significant amount since the start of the pandemic. It was also thought that levels of alcohol consumption would have at least increased somewhat from the start of the pandemic.

Despite what was believed the results were going to show the frequency tables show the opposite. When the survey asked the participants "Have these feelings [of stress] improved or worsened since the start of the pandemic?" 27.7% of the participants responded that these feelings of stress had improved at least somewhat, and 30.8% of the respondents reported that these feelings of stress had improved drastically since the start of the pandemic. Only a single person reported that their feelings of stress had worsened drastically since the start of the pandemic. These results could imply that people are feeling relief that they are feeling that the pandemic may be ending with mask mandates being lifted. This also might suggest that the participants have just become accustomed to this pandemic lifestyle that has been thrown at them so the intense stress that they felt at the beginning of the pandemic has become second nature to them.

There were comparable results when it came to asking the participants "Have these feelings [of anxiety] improved or worsened since the start of the pandemic?" concurrent to the beliefs that were held before the data collection began. The results show that 10.8% of the sample found that their feelings of anxiety had drastically improved and that 40% of the sample found that their feelings of anxiety had neither increased nor decreased. While 23% of the sample felt like their feelings of anxiety had at least worsened somewhat, 9.2% of them felt like they had worsened drastically. These results hold slightly truer to the original belief that the feelings of anxiety would be much worse compared to what they were at the start of the pandemic compared to the results from the

stress question. These results might imply that the participants are still anxious that the pandemic is not ending anytime soon, and possibly still anxious that it could get worse at any time. This might be a call to understand better if these feelings of anxiety had any other causes to them, such as anxiety caused by school or problems with their home life.

The final question that was asked of the participants was "Has the amount of alcohol [you consumed] increased or decreased since the start of the pandemic?". The belief for this question is that the amount of alcohol would have increased at least somewhat in a large portion of the participants, but alcohol consumption had only increased somewhat or increased drastically in 23.1% of the participants. Much like the anxiety frequencies, there is a large population of the sample that feels like their levels of alcohol consumption had neither increased nor decreased since the start of the pandemic. As spoken about previously these results might prompt further research into the possibility that social workers have superior coping skills and stress-reducing techniques compared to the general population.

Limitations

The results of this study as well as this study in general had many limitations that need to be addressed. The sample size was small when compared to other studies that utilize quantitative methods. With a sample size of only 65 participants, the results may not be truly representative of the population, and statistical significance could be affected. There was also a significant difference in some of the demographic characteristics within the sample population. There was an overwhelming percentage of females that participated in the study encompassing 87.7% of the entire sample with 57 females, while the male demographic was only 10.8% of the sample with 7 males. While the sample could be considered more representative of the general social work student population as there are, in most cases, more female social work students than male social work students, the entire sample size was rather small it could raise flags about the validity or significance of the results when isolating for the male demographic.

When the study was originally thought up, in early 2021, the pandemic was still causing extreme stress and pandemonium within many populations and across several different media outlets. If the survey was conducted when stress induced by the pandemic was at its peak one might suggest that the results of this study would have been marginally different. As the study was conducted when the pandemic was in a decently normalized state this definitely could have affected the participant's answers throughout the questionnaire. These results

were also based solely on self-reports on how the participant's feelings might have changed within the last two years, this is a long time for participants to think through to try to come to a concise answer when considering if they are more or less stressed or have more or less anxiety from the start of the pandemic.

A limitation from one of the scales itself comes from the AUDIT-C. Specifically, there was a question from the scales that asked the participants "How many drinks containing alcohol did you have on a typical day when you were drinking in the past year?". The participants were allowed to select from five different options when answering the question: 1 or 2 drinks, 3 or 4, 5 or 6, 7 or 9, and 10 or more. Out of all of the questions throughout the entire survey, this was the question that was left blank the most, I believe it was left blank by many people because it did not leave the option for people to say that they had not had any alcoholic beverages within the past year, and rather than put 1 or 2 drinks they decided they thought it best to leave the question entirely blank. This may have had an impact on the results section when analyzing the descriptive data from the sum of the scales.

Recommendations for Social Work Practice, Policy, and Research

The COVID-19 pandemic was a worldwide event that affected everyone in some capacity or another. Being able to more fully understand just how much impact this event had on differing populations should be considered particularly important within the realm of social work practice, policy, and research as social workers tend to work with a plethora of differing populations. Policymakers and advocates alike should already be aware of how much of an impact that the COVID-19 pandemic has had on the entire population in general and especially in certain demographics such as demographics with lower income, and demographics who are already exposed to multiple stressors previous to when the pandemic struck. Advocates for COVID-19 relief could utilize this information and future information made available from future studies to better know what populations have been the most impacted by the pandemic to better allocate resources to those who truly need it the most. Policymakers can also utilize this data to compare to other populations for future research when deciding the effectiveness of having access to healthier coping mechanisms during periods of extreme stress.

Programs can be developed by social workers to get the general population as well as specific minority groups better access to the resources that they need to better cope with COVID-19 stressors. As this study suggests that even social work students who have had self-care practices and healthy coping

mechanisms taught extensively to them are still showing a strong positive correlation between stress and anxiety. These results can also be impactful on how social workers may look at other social workers and come to a better understanding of how this pandemic may have affected other social workers just like it has affected the general population.

Future research about this topic could utilize more variables to compare COVID-19 induced stress with such as depression, other types of drug abuse, or the effects of positive coping mechanisms. This research can also be applied to numerous different impoverished or minority populations that may also have been more negatively affected by the COVID-19 pandemic than the sample population that was utilized within this study.

Conclusions

The findings from this study indicated many different things. They showed a strong positive correlation between COVID-19 induced stress with levels of anxiety among social work students. While there was unexpectedly no correlation between COVID-19 induced stress with levels of alcohol consumption. Mean scores of the individual scales suggest that the participants may need to be monitored based on how they rated their anxiety and stress scales. The mean scores also showed that this population does not have any issues with alcoholism and does not need to be monitored for this. These findings are all

relevant to increasing the knowledge and understanding of how much the COVID-19 pandemic has affected certain populations. Further research could dive deeper into other minority populations by utilizing other variables that might have more of a focus on depression, as stress has been shown to have a significant effect on an individual's depressive symptoms. APPENDIX A

AUTHOR CREATED QUESTIONNAIRE

I understand that I must be 18 years of age or older to participate in your study, have read and understood the consent document, and agree to participate in this study.

I understand and agree to participate (1)

I refuse to participate in this study (2)

Demographics

What is your age?

What is your sex?

Male (1)

Female (2)

Non-binary / third gender (3)

Other (4)

Prefer not to say (5)

What is your race?

African American or Black (1)

American Indian (2)

Asian (3)

Hispanic Latino (4)

Middle Eastern (5)

Native Hawaiian or other Pacific Islander (6)

White (7)

Other (8)

What is your ethnicity?

Hispanic or Latino or Spanish Origin (1) Not Hispanic or Latino or Spanish Origin (2) Unknown (3)

What is your expected annual income?

- Less than \$10,000 (1)
- \$10,000 \$19,999 (2)
- \$20,000 \$29,999 (3)
- \$30,000 \$39,999 (4)
- \$40,000 \$49,999 (5)
- \$50,000 \$59,999 (6)
- \$60,000 \$69,999 (7)
- \$70,000 \$79,999 (8)
- \$80,000 \$89,999 (9)
- \$90,000 \$99,999 (10)

\$100,000 - \$149,999 (11)

More than \$150,000 (12)

Peritraumatic Distress Inventory (PDI)

Consider your feelings about the COVID-19 pandemic as a stressor for the following 13 questions.

I felt helpless

Not at All True (1) Slightly True (2) Somewhat True (3) Very True (4) Extremely True (5)

I felt sadness and grief

- Not at All True (1)
- Slightly True (2)
- Somewhat True (3)
- Very True (4)
- Extremely True (5)

I felt frustrated or angry

Not at All True (1) Slightly True (2) Somewhat True (3) Very True (4)

Extremely True (5)

I felt afraid for my own safety

- Not at All True (1)
- Slightly True (2)
- Somewhat True (3)

Very True (4)

Extremely True (5)

I felt guilty

Not at All True (1) Slightly True (2) Somewhat True (3) Very True (4) Extremely True (5)

I felt ashamed of my emotional reactions

Not at All True (1) Slightly True (2) Somewhat True (3) Very True (4) Extremely True (5)

I felt worried about the safety of others

Not at All True (1) Slightly True (2) Somewhat True (3) Very True (4) Extremely True (5)

I had the feeling I was about to lose control of my emotions

Not at All True (1) Slightly True (2) Somewhat True (3) Very True (4) Extremely True (5)

I had difficulty controlling my bowel and bladder

Not at All True (1)

Slightly True (2)

Somewhat True (3)

Very True (4)

Extremely True (5)

I was horrified by what I saw

Not at All True (1) Slightly True (2) Somewhat True (3) Very True (4) Extremely True (5)

I had physical reactions like sweating, shaking, and my heart pounding

Not at All True (1) Slightly True (2) Somewhat True (3) Very True (4) Extremely True (5)

I felt I might pass out

Not at All True (1)

Slightly True (2)

Somewhat True (3)

Very True (4)

Extremely True (5)

I thought I might die

Not at All True (1) Slightly True (2) Somewhat True (3) Very True (4) Extremely True (5)

Have these feelings improved or worsened since the start of the pandemic?

Improved drastically (1)

Improved somewhat (2)

Neither improved nor worsened (3)

Worsened somewhat (4)

Worsened drastically (5)

Generalized Anxiety Disorder-7 (GAD-7)

How often have you been bothered by the following over the past 2 weeks?

Feeling nervous, anxious, or on edge

Not at all (1) Several days (2) More than half the days (3) Nearly everyday (4)

Not being able to stop or control worrying

Not at all (1)

Several days (2)

More than half the days (3)

Nearly everyday (4)

Worrying too much about different things

Not at all (1) Several days (2) More than half the days (3) Nearly everyday (4)

Trouble relaxing

Not at all (1)

Several days (2)

More than half the days (3)

Nearly everyday (4)

Being so restless that it's hard to sit still

Not at all (1) Several days (2) More than half the days (3) Nearly everyday (4)

Becoming easily annoyed or irritable

Not at all (1)

Several days (2)

More than half the days (3)

Nearly everyday (4)

Feeling afraid as if something awful might happen

Not at all (1)

Several days (2)

More than half the days (3)

Nearly everyday (4)

Have these feelings improved or worsened since the start of the pandemic?

Improved drastically (1)

Improved somewhat (2)

Neither improved nor worsened (3)

Worsened somewhat (4)

Worsened drastically (5)

Alcohol Use Disorder Identification Test (AUDIT-C)

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

Never (1) Monthly or less (2) Two to four times a month (3) Two to three times per week (4) Four or more times a week (5)

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

1 or 2 drinks (1) 3 or 4 drinks (2) 5 or 6 drinks (3) 7 or 9 drinks (4) 10 or more drinks (5) How often did you have six or more drinks on one occasion in the past year?

Never (1) Less than monthly (2) Monthly (3) Weekly (4) Daily or almost daily (5)

Has the amount of alcohol increased or decreased since the start of the

pandemic?

- Increased drastically (1)
- Increased somewhat (2)
- Neither increased nor decreased (3)
- Decreased somewhat (4)
- Decreased drastically (5)
- Survey questions compiled from Peritraumatic Distress Inventory (PDI) (Brunet et al. 2001); Generalized Anxiety Disorder-7 (GAD-7) (Spitzer et al., 2006); Alcohol Use Disorder Identification Test (AUDIT-C) (Bush et al., 1998); Demographic and other assorted questions by David Adler, 2022.

APPENDIX B

INFORMED CONSENT

INFORMED CONSENT

The study in which you are asked to participate is designed to examine possible relationships between a change in levels of anxiety, and levels of alcohol consumption among social work students during the COVID-19 pandemic. The study is being conducted by David Adler, a graduate student, under the supervision of Dr. Tom Davis, Professor in the School of Social Work at California State University, San Bernardino (CSUSB). The study has been approved by the Institutional Review Board at CSUSB.

PURPOSE: The purpose of this study is to examine possible relationships between a change in levels of anxiety, and levels of alcohol consumption among social work students during the COVID-19 pandemic.

DESCRIPTION: Participants will be asked a few questions about their levels of stress, anxiety, and frequency of alcohol consumption.

PARTICIPATION: Your participation in the study is totally voluntary. You can refuse to participate in the study or discontinue your participation at any time without any consequences.

CONFIDENTIALITY: The identity of the participants will be kept anonymous,

and data will be reported in group form only.

DURATION: Your participation in this survey will only take around 5-10 minutes of your time.

RISKS: Although not anticipated, there may be some discomfort in answering some of the questions. You are not required to answer and can skip the question or end your participation

BENEFITS: There will not be any direct benefits to the participants. However, findings from the study will contribute to our knowledge in this area of research.

CONTACT: Should the participant have any questions regarding the research, Tom Davis, the principal investigator, by email or phone at tomdavis@csusb.edu, or (909) 537-3839.

RESULTS: Results of the study can be obtained from the Pfau Library ScholarWorks database (http://scholarworks.lib.csusb.edu/) at California State University, San Bernardino after July 2022. APPENDIX C

DEBRIEFING STATEMENT

Social Worker Student's Depression, Anxiety, and Alcohol

Consumption During the COVID-19 Pandemic

Debriefing Statement

This study you have just completed was designed to explore the different levels of depression and anxiety as well as their alcohol consumption levels in student populations during the COVID-19 pandemic. In this study, stress, depression, anxiety, and alcohol consumption were explored. It is understood that these are subjects that can be triggering to certain individuals and could possibly cause adverse thoughts or feelings for certain individuals. These subjects were necessary to bring up for this study in order to investigate the relationships and explore any between these subjects. If you find yourself going through these scales and have thought you might have depression or general anxiety disorder you may want to seek help. There is on-campus counseling offered at CSUSB to set up an appointment call (909) 537-5040.

Thank you for your participation and for not discussing the contents of the study with other students. If you have any questions about the study, please feel free to contact David Adler or Professor Davis at (909) 537-3839. Results of the study can be obtained from the Pfau Library ScholarWorks database (http://scholarworks.lib.csusb.edu/) at California State University, San Bernardino after July 2021.

APPENDIX D

IRB APPROVAL LETTER

January 14, 2022

CSUSB INSTITUTIONAL REVIEW BOARD

Administrative/Exempt Review Determination

Status: Determined Exempt

IRB-FY2022-100

Thomas Davis David Adler

CSBS - Social Work

California State University, San Bernardino

5500 University Parkway

San Bernardino, California 92407

Dear Thomas Davis David Adler:

Your application to use human subjects, titled "The Effects of the COVID-19 Pandemic on Social Worker Student's Anxiety and Alcohol Consumption." has been reviewed and determined exempt by the Chair of the Institutional Review Board (IRB) of CSU, San Bernardino. An exempt determination means your study had met the federal requirements for exempt status under 45 CFR 46.104. The CSUSB IRB has weighed the risks and benefits of the study to ensure the protection of human participants. This approval notice does not replace any departmental or additional campus approvals which may be required including access to CSUSB campus facilities and affiliate campuses. Investigators should consider the changing COVID-19 circumstances based on current CDC, California Department of Public Health, and campus guidance and submit appropriate protocol modifications to the IRB as needed. CSUSB campus and affiliate health screenings should be completed for all campus human research related activities. Human research activities conducted at off-campus sites should follow CDC, California Department of Public Health, and local guidance. See CSUSB's <u>COVID-19 Prevention Plan</u> for more information regarding campus requirements.

You are required to notify the IRB of the following as mandated by the Office of Human Research Protections (OHRP) federal regulations 45 CFR 46 and CSUSB IRB policy. The forms (modification, renewal, unanticipated/adverse event, study closure) are located in the Cayuse IRB System with instructions provided on the IRB Applications, Forms, and Submission webpage. Failure to notify the IRB of the following requirements may result in disciplinary action. The Cayuse IRB system will notify you when your protocol is due for renewal. Ensure you file your protocol renewal and continuing review form through the Cayuse IRB system to keep your protocol current and active unless you have completed your study.

Ensure your CITI Human Subjects Training is kept up-to-date and current throughout the study.

Submit a protocol modification (change) if any changes (no matter how minor) are proposed in your study for review and approval by the IRB before being implemented in your study.

Notify the IRB within 5 days of any unanticipated or adverse events are experienced by subjects during your research.

Submit a study closure through the Cayuse IRB submission system once your study has ended.

If you have any questions regarding the IRB decision, please contact Michael Gillespie, the Research Compliance Officer. Mr. Michael Gillespie can be reached by phone at (909) 537-7588, by fax at (909) 537-7028, or by email at <u>mgillesp@csusb.edu</u>. Please include your application approval number IRB-FY2022-100 in all correspondence. Any complaints you receive from participants and/or others related to your research may be directed to Mr. Gillespie.

Best of luck with your research.

Sincerely,

Nicole Dabbs

Nicole Dabbs, Ph.D., IRB Chair

CSUSB Institutional Review Board

ND/MG

REFERENCES

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders: DSM-5*. (5th ed.). American Psychiatric Association.

Anxiety and Depression Association of America. (2021, April 21). Facts &

Statistics. https://adaa.org/understanding-anxiety/facts-statistics

Arvidsdotter, T., Marklund, B., Kylén, S., Taft, C., & Ekman, I. (2016).

Understanding persons with psychological distress in primary health care.

Scandinavian Journal of Caring Sciences, 30(4), 687–694.

https://doi.org/10.1111/scs.12289

Bradley, DeBenedetti, A. F., Volk, R. J., Williams, E. C., Frank, D., & Kivlahan, D.
R. (2007). AUDIT-C as a Brief Screen for Alcohol Misuse in Primary Care.
Alcoholism, *Clinical and Experimental Research*, *31*(7), 1208–1217.
https://doi.org/10.1111/j.1530-0277.2007.00403.x

Brahma, D. S. C. (2020, April 2). The early days of a global pandemic: A timeline of COVID-19 spread and government interventions. Brookings. https://www.brookings.edu/2020/04/02/the-early-days-of-a-globalpandemic-a-timeline-of-COVID-19-spread-and-governmentinterventions/#:%7E:text=The%20COVID-

19%20pandemic%20has,case%20on%20November%2017%2C%202019

Brunet, Weiss, D. S., Metzler, T. J., Best, S. R., Neylan, T. C., Rogers, C.,Fagan, J., & Marmar, C. R. (2001). The Peritraumatic Distress Inventory:A Proposed Measure of PTSD Criterion A2. *The American Journal of*

Psychiatry, 158(9), 1480–1485.

https://doi.org/10.1176/appi.ajp.158.9.1480

- Bunnell, B. E., Davidson, T. M., & Ruggiero, K. J. (2018). The Peritraumatic
 Distress Inventory: Factor structure and predictive validity in traumatically
 injured patients admitted through a Level I trauma center. *Journal of Anxiety Disorders, 55, 8–13.* https://doi.org/10.1016/j.janxdis.2018.03.002
- Bush, Kivlahan, D. R., McDonell, M. B., Fihn, S. D., & Bradley, K. A. (1998).
 The AUDIT alcohol consumption questions (AUDIT-C): an effective brief screening test for problem drinking. Ambulatory Care Quality Improvement Project (ACQUIP). Alcohol Use Disorders Identification Test. *Archives of Internal Medicine (1960), 158*(16), 1789–.
- Centers for Disease Control and Prevention. (2021, May). *Drinking too much alcohol can harm your health.* https://www.cdc.gov/alcohol/factsheets/alcohol-use.htm

Centers for Disease Control and Prevention. (2020, September 3). *Data on Excessive Drinking*. https://www.cdc.gov/alcohol/datastats.htm#:%7E:text=According%20to%20the%20Behavioral%20Risk,and %207%25%20reported%20heavy%20drinking

Conner, K. R., Pinquart, M., & Gamble, S. A. (2009). Meta-analysis of depression and substance use among individuals with alcohol use disorders. *Journal* of Substance Abuse Treatment, 37(2), 127–137. https://doi.org/10.1016/j.jsat.2008.11.007 Ettman, Catherine K, Abdalla, Salma M, Cohen, Gregory H, Sampson, Laura, Vivier, Patrick M, & Galea, Sandro. (2020). Prevalence of Depression Symptoms in US Adults Before and During the COVID-19 Pandemic. *JAMA Network Open, 3*(9), e2019686–e2019686.

https://doi.org/10.1001/jamanetworkopen.2020.19686

- Guardia, Brunet, A., Duhamel, A., Ducrocq, F., Demarty, A.-L., & Vaiva, G.
 (2013). Prediction of trauma-related disorders: a proposed cutoff score for the peritraumatic distress inventory. *Primary Care Companion for CNS Disorders, 15*(1). https://doi.org/10.4088/PCC.12I01406
- Kim, Y. E., & Lee, B. (2019). The Psychometric Properties of the Patient Health Questionnaire-9 in a Sample of Korean University Students. *Psychiatry Investigation, 16*(12), 904–910. https://doi.org/10.30773/pi.2019.0226
- Li, Sijia, Wang, Yilin, Xue, Jia, Zhao, Nan, & Zhu, Tingshao. (2020). The Impact of COVID-19 Epidemic Declaration on Psychological Consequences: A Study on Active Weibo Users. *International Journal of Environmental Research and Public Health*, *17*(6), 2032. https://doi.org/10.3390/ijerph17062032

Löwe, Decker, O., Müller, S., Brähler, E., Schellberg, D., Herzog, W., & Herzberg, P. Y. (2008). Validation and Standardization of the Generalized Anxiety Disorder Screener (GAD-7) in the General Population. *Medical Care, 4*6(3), 266–274. https://doi.org/10.1097/MLR.0b013e318160d093
Maslow, A. H. (1971). *The farther reaches of human nature*. New York: Viking. McPhee, M. D., Keough, M. T., Rundle, S., Heath, L. M., Wardell, J. D., &
Hendershot, C. S. (2020). Depression, Environmental Reward, Coping
Motives and Alcohol Consumption During the COVID-19 Pandemic. *Frontiers in psychiatry*, *11*, 574676.

https://doi.org/10.3389/fpsyt.2020.574676

- Osaki, Y., Ino, A., Matsushita, S., Higuchi, S., Kondo, Y., & Kinjo, A. (2014).
 Reliability and validity of the alcohol use disorders identification test consumption in screening for adults with alcohol use disorders and risky drinking in Japan. *Asian Pacific Journal of Cancer Prevention : APJCP, 15*(16), 6571–6574. https://doi.org/10.7314/APJCP.2014.15.16.6571
- Roche, A. M., Chapman, J., Duraisingam, V., Phillips, B., Finnane, J., & Pidd, K. (2020). Construction workers' alcohol use, knowledge, perceptions of risk and workplace norms. *Drug and Alcohol Review, 39*(7), 941–949. https://doi.org/10.1111/dar.13075
- Rossow, I., Bye, E. K., Moan, I. S., Kilian, C., & Bramness, J. G. (2021).
 Changes in Alcohol Consumption during the COVID-19 Pandemic-Small
 Change in Total Consumption, but Increase in Proportion of Heavy
 Drinkers. *International journal of environmental research and public health*, *18*(8), 4231. https://doi.org/10.3390/ijerph18084231
- Rudenstine, Sasha, McNeal, Kat, Schulder, Talia, Ettman, Catherine K, Hernandez, Michelle, Gvozdieva, Kseniia, & Galea, Sandro. (2021). Depression and Anxiety During the COVID-19 Pandemic in an Urban,

Low-Income Public University Sample. *Journal of Traumatic Stress, 34*(1), 12–22. https://doi.org/10.1002/jts.22600

Spitzer, Kroenke, K., Williams, J. B. W., & Löwe, B. (2006). A Brief Measure for Assessing Generalized Anxiety Disorder: The GAD-7. *Archives of Internal Medicine (1960), 166*(10), 1092–1097.

https://doi.org/10.1001/archinte.166.10.1092

Wang, Xiaomei, Hegde, Sudeep, Son, Changwon, Keller, Bruce, Smith, Alec, & Sasangohar, Farzan. (2020). Investigating Mental Health of US College Students During the COVID-19 Pandemic: Cross-Sectional Survey Study. *Journal of Medical Internet Research*, 22(9), e22817–e22817. https://doi.org/10.2196/22817

Weinberger, A. (2017, October 30). Depression Is on the Rise in the U.S.,

Especially Among Young Teens. Columbia Public Health.

https://www.publichealth.columbia.edu/public-health-

now/news/depression-rise-us-especially-among-young-

teens#:%7E:text=The%20results%20show%20that%20depression,to%20

12.7%20percent%20in%202015

World Health Organization. (2019). *Global Status Report on Alcohol and Health* 2018 (1st ed.) [E-book]. World Health Organization.

https://www.who.int/publications/i/item/9789241565639

Zastrow, C., Kirst-Ashman, K. K., & Hessenauer, S. L. (2019). *Empowerment* Series: Understanding Human Behavior and the Social Environment (11th ed.). Cengage Learning.

Zhong, Q.-Y., Gelaye, B., Zaslavsky, A. M., Fann, J. R., Rondon, M. B., Sánchez,
S. E., & Williams, M. A. (2015). Diagnostic Validity of the Generalized
Anxiety Disorder - 7 (GAD-7) among Pregnant Women. *PloS One, 10*(4),
e0125096–e0125096. https://doi.org/10.1371/journal.pone.0125096

Zhu, Juhong, Sun, Lin, Zhang, Lan, Wang, Huan, Fan, Ajiao, Yang, Bin, Li, Wei,& Xiao, Shifu. (2020). Prevalence and Influencing Factors of Anxiety and Depression Symptoms in the First-Line Medical Staff Fighting Against COVID-19 in Gansu. *Frontiers in Psychiatry*, 11, 386–386. https://doi.org/10.3389/fpsyt.2020.00386