An Exploration of Binge Drinking and Coping Behaviour During COVID-19 among Students in a Major Tertiary Institution in KwaZulu-Natal

A Thesis Submitted to the School of Nursing and Public Health, College of Health Sciences, University of KwaZulu-Natal in Fulfilment of the Requirement for the Degree of Master of Medical Science

By

Faborode Joy Adebowale

221065579

Supervisor: Dr Tasneem Kathree

Co-supervisor: Dr Andre J van Rensburg

2023

Declarations

I, Faborode Joy Adebowale, declare that "an exploration of binge drinking and coping behaviour during COVID-19 among students in a major tertiary institution in KwaZulu-Natal" is my original work and that it has not been previously submitted for any degree at any institution and all sources have been acknowledged in the thesis.

<u>7 March 2023</u>

Faborode Joy Adebowale

Date

Student number: 221065579

Supervisors' approval of this thesis for submission:

As the candidate's supervisor I have approved this thesis for submission.

Signed:

_____

30 August 2023

Dr Tasneem Kathree

Date

Supervisor

30 August 2023___

Dr Andre J van Rensburg

Date

Co-supervisor

Dedication

I dedicate this study to the almighty God for sustaining and seeing me through this academic journey. Thank you, Lord, for making the impossible possible.

Acknowledgements

I sincerely appreciate my supervisor Dr Kathree Tasneem and co-supervisor Dr Van Rensburg for their tutelage and mentorship throughout my research. I consider it an honour to have worked with you both.

I want to express my sincere gratitude and appreciation to the following people who contributed immensely towards the completion of this thesis:

Thanks to my amazing husband, Dr Faborode Oluwaseun Samuel, for your tireless support and encouragement throughout my studies.

Ireoluwa, thank you, son, for behaving well while I was busy with my write-up.

My profound gratitude goes to my parents, Mr and Mrs Olurotimi Ajisafe, who have always supported me.

I also appreciate my siblings, Modupeoluwa and Ebunoluwa, for their constant support during my study.

To in-laws, friends and relatives, I appreciate your encouragement and support in cash and kind.

Table of Contents

List of Tables

Abstract

Background: The COVID-19 pandemic has profoundly impacted human lives. At the emergence of the novel disease, several restrictive measures, including lockdowns, were implemented to mitigate the spread of COVID-19. These measures created stressful challenges that affected people's mental wellbeing, including that of tertiary students. There is a dearth of information on the strategies students use to cope with COVID-19-related stress. This study aimed to understand how students experienced and coped with changes attributed to the lockdowns in South Africa, including factors that influenced alcohol use among students at a major tertiary institution in KwaZulu Natal during the COVID-19 lockdown.

Method: A qualitative approach was used. Twenty students were recruited from two campuses at the University of KwaZulu-Natal (UKZN), Durban, South Africa, using purposive sampling. Individual in-depth interviews were conducted using a semi-structured interview guide comprising open-ended questions. The NVivo software program was used for analysis.

Results: The majority (60%) of participants were male and ranged from 20 to 36 years old. The results of this study indicate drinking patterns among the study sample. Results indicate that despite implementing an alcohol sale ban during the COVID-19 lockdowns, alcohol use was not eliminated, but there was some reduction in the intake of alcohol. Apart from alcohol restrictions, some factors influencing drinking included drinking location and people with whom participants consumed alcohol. Many participants also indicated that they preferred to consume alcohol with friends because it helped them to bond with their friends and improved their social interactions.

In addition, over 50% of the students stated that they drank alcohol because they felt happy, socialized with others, had fun, and that they enjoyed the taste. In contrast, only a few (four) reported drinking as a coping mechanism. Respondents were also aware of the negative consequences of drinking alcohol, especially when it is in large quantities. Results also indicate that half of the participants felt stressed, depressed, anxious and sad during the lock down. In addition, they also experienced problems related to eating and sleeping. The study highlighted the various coping mechanisms participants used to deal with stress. These included emotion-based coping strategies such as social support, sleeping, exercise, reading, watching television, listening to music, and maintaining a positive attitude, problem-based coping strategies (e.g., positive thinking and planning), as well as avoidance forms of coping (such as ignoring the situation).

Conclusion: This study found that alcohol misuse was common in this sample of university students prior to the onset of COVID-19, and they experienced some distress during the COVID-19 lockdown. Factors that influenced alcohol use were also identified in this study sample which provided insight into how they experienced and coped with changes directly caused by the lockdowns in South Africa.

Despite these findings, sampling students from only one tertiary institution in KwaZulu Natal and being unable to interview students in their home language or the language of fluency if this was not English are identified as limitations. This study recommends that health promotion and education on alcohol use and coping strategies should be encouraged at tertiary institutions to curb alcohol misuse and improve students' wellbeing.

1   Chapter One

1.1   A brief introduction to the study

The infectious coronavirus disease, COVID-19, is caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), which affects mainly the respiratory system (Li & Ma, 2020; Sangeeta & Deepjyoti, 2020; Vanderbruggen et al., 2020), identified in December 2019 in Wuhan, Hubei Province, China. This virus rapidly spread across countries leading to widespread international public health concerns, and eventually was considered a pandemic (Mahase, 2020). A pandemic is a disease outbreak that spreads worldwide (Grennan, 2019). Health authorities advised at the inception of the pandemic that there were no scientifically tested and proven therapies (Sanders et al., 2020). Therefore, preventive measures in response to the pandemic were implemented worldwide, including in South Africa. These included lockdowns, quarantine, and social distancing (Sheng, 2020; Vanderbruggen et al., 2020). A lockdown is a collection of mandated, indiscriminately implemented COVID-19 transmission prevention measures that impose some limitations on the ordinary course of social and economic activity (Haider et al., 2020). Social distancing is maintaining a safe space, such as six feet or more, between people to curb contact and reduce the spread of the infection (CDC, 2020). Quarantine is separating and restricting the movement of people exposed to an infectious virus to check if they become ill to decrease the likelihood of passing the infection to others (Brooks et al., 2020). Studies have revealed that lockdowns, social distancing and quarantining were highly effective in reducing the spread of COVID-19 (Gonzalez et al., 2021; Huang et al., 2021; Lewnard & Lo, 2020). However, these measures have created stressful impacts and challenges that significantly affected individuals' mental wellbeing and, in some instances, promoted substance use to cope (Fegert et al., 2020; Song, 2020; Vanderbruggen et al., 2020; Zaami et al., 2020). This study focussed on the coping mechanisms used by students at one university in South Africa.

1.2   Definition of COVID-19

Coronaviruses (CoVs) are a family of viruses infecting humans, leading to respiratory diseases. These diseases can be common cold or a more severe disease like pneumonia, SARS, or even death (Ashour et al., 2020; Docea et al., 2020; Rogers et al., 2020). The virus that causes COVID-19 (coronavirus disease 2019) is known as severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (Vanderbruggen et al., 2020). COVID-19 is an infectious disease that has affected many countries worldwide. Globally, 6,817,478 deaths and more than 754 million verified cases of COVID-19 have been documented as of 3 February 2023. (WHO, 2023b).

1.3   Epidemiology of COVID-19

Coronavirus disease is transmitted through respiratory droplets and contact routes (McIntosh, 2022; Tabatabaeizadeh, 2021; Vanderbruggen et al., 2020). This virus can be transmitted in various ways from an infected person through coughing, sneezing, breathing, singing or talking loudly. These respiratory droplets can be inhaled or have direct contact with the person's mouth, nose, or eyes, depending on their proximity to an infected person (World Health Organization, 2020). Early evidence also indicated that infection could be contracted when a person touches virus-contaminated surfaces and touches parts of their face prior to handwashing (World Health Organization, 2020). However, recent evidence shows that the possibility of infection from contaminated surfaces (fomites) is low. Fomites are usually unlikely to represent the primary SARS-CoV-2 transmission channel (CDC, 2021; Goldman, 2020; Harvey et al., 2021). Furthermore, studies have shown that SARS-CoV-2 can potentially spread over longer distances by airborne route (by inhalation of particles that linger in the air over time and distance) (Tabatabaeizadeh, 2021). However, it is unclear to what extent this method of transmission has contributed to the epidemic (McIntosh, 2022).

1.4   Symptoms of COVID-19

COVID-19 symptomology ranges from mild to severe and may be observed 2 to 14 days after a person is exposed to the virus (CDC, 2022; Singhal, 2020). The time between infection and the onset of the sickness is known as the incubation period. In COVID-19, the incubation period will most likely be approximately five days on average (Linton et al., 2020; Park et al., 2020). The duration needed to monitor and restrict the mobility of healthy people depends on how long an infectious disease that is directly transmitted takes to develop (Linton et al., 2020). Additionally, the incubation period contributes to understanding COVID-19's relative infectiousness and can be used to calculate the extent of the epidemic (Nishiura et al., 2020). These symptoms often include fever, chills, headaches, cough, sore throat, myalgia, breathlessness, fatigue, nausea and vomiting (Docea et al., 2020; Salari et al., 2020; Singhal, 2020). Other aggravated signs and symptoms, such as unresolved chest pain or pressure, insomnia, breathing difficulty, discolouration on the skin, lips and nail bed, often suggest emergency medical attention (CDC, 2022). There is a high mortality rate among the elderly with co-morbidities, including hypertension, cancer, diabetes, and breathing difficulties (Fang et al., 2020; Liang et al., 2020; Sanyaolu et al., 2020).

1.5   COVID-19 in the South African context

Since the first COVID-19 case was detected in South Africa on March 5th, 2020, the COVID-19 virus has substantially impacted day-to-day living in South Africa. In response to the pandemic, the South African government announced a national lockdown effective March 27, 2020. At the time of writing, there had been five waves of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infections

in South Africa. Different lockdown measures were implemented depending on the severity of the waves (Haider et al., 2020; Schröder et al., 2021; Sguazzin, 2022). To restart the economy after a national lockdown, the South African government established a risk-adjusted strategy comprising five coronavirus levels (Alert level 1-5) (South African Government, 2023). The level of infections and the pace of transmission, the capacity of medical facilities, the extent of the execution of public health initiatives, and the economic and social effects of prolonged restrictions are some of the criteria that lead to this risk-adjusted strategy (South African Government, 2023).

In South Africa, 4,055,656 verified cases of COVID-19, with 102,595 deaths, were recorded between 3rd January 2020 and 6th February 2023 (WHO, 2023a). Reports also indicated that 3,946,943 (97.3%) people recovered, and 38 405,045 received COVID-19 vaccinations (National Department of Health, 2023).

1.6 COVID-19 and its influence on mental health

An examination of prior epidemics, such as the Ebola and SARS outbreaks, demonstrates the adverse psychological effects of quarantine and lockdown procedures (Brooks et al., 2020), as well as COVID-19 (Cao et al., 2020; Idowu et al., 2020; Jehi et al., 2022; Rudenstine et al., 2021; Visser & Law-van Wyk, 2021; Wang & Zhao, 2020). Specifically, increased levels of anxiety, depression and stress were associated with the COVID-19 pandemic (Cao et al., 2020; Dominguez-Rodriguez et al., 2022; Jehi et al., 2022; Savitsky et al., 2020). Similarly, from the initial phase of the pandemic, evidence from high-income countries shows that distress associated with COVID-19 has led to an increase in alcohol consumption as a coping mechanism (Calina et al., 2021; Canadian Centre on Substance Use and Addiction, 2020; Koopmann et al., 2020; Pollard et al., 2020; Schmits & Glowacz, 2021). According to a study from the United States, 60% of binge drinkers increased their alcohol consumption during the pandemic. The study also found that, compared to binge drinkers who reported no signs of depression, those who had previously been diagnosed with depression and were currently experiencing symptoms of depression were more likely to do so (Weerakoon et al., 2021). The reasons associated with adverse psychological symptoms during the pandemic included disruptions of routines, uncertainty about employment and finances, lack of physical activity, feelings of vulnerability to COVID-19 infection, loneliness, weakened social interactions, fears for the safety and wellbeing of loved ones and information about the related harms of the disease (Chew et al., 2020; Jehi et al., 2022). According to a study conducted in Iraqi Kurdistan (Ahmad & Murad, 2020), social media significantly contributed to the transmission of fear and panic surrounding the COVID-19 outbreak and may have had a detrimental effect on people's mental health and psychological wellbeing. The authors also reported that a large number of 18-35 year olds in the study experienced psychological anxiety (Ahmad & Murad, 2020). Similar findings were made by Lee et al., (2022) who discovered that spending too much time on social media increased the risk of developing anxiety and depressive symptoms.

The clinical and political effects of COVID-19 have been extensively studied, as well as the effects of the pandemic and its associated lockdowns on population mental health (Naser et al., 2020; Nguse & Wassenaar, 2021). However, there is a dearth of studies on the impact of COVID-19 on university students (Tasso et al., 2021). Prior to the COVID-19 pandemic, university students were identified as vulnerable to mental health issues as a result of academic challenges and other psychosocial stressors they experience. This remains a public health concern (Browning et al., 2021; Holm-Hadulla & Koutsoukou-Argyraki, 2015). Beyond the usual economic, social and health stressors that affected virtually everyone, university students faced additional stressors during COVID-19. One-on-one meetings between lecturers and students were replaced with virtual ones, and face-to-face interviews and internship programs were suspended shortly as the pandemic started. All these changes substantially hampered university teaching.

Furthermore, students were forced to leave their university residences globally due to social distancing restrictions. Students also became worried about the effects the pandemic would have on their future careers. (Tasso et al., 2021). Similarly, a recent study conducted among adolescents in Indonesia during the COVID-19 pandemic found that more than half of the participants experienced psychological problems in the form of psychological distress and social dysfunction such as not being able to enjoy daily activities, feeling unable to concentrate, and feeling under pressure (Sitohang, 2023). In addition, psychosocial stressors can lead to negative emotions, reduce coping skills, and increase social pressure, all of which can increase the risk of alcohol use (Farrer et al., 2016; Russell et al., 2017).

Thus, lessons from the experiences and coping strategies adopted among university students during the pandemic are essential for developing and implementing support programmes that will mitigate sudden interruptions to academic programmes and support students' wellbeing.

1.7 COVID-19 and its influence on alcohol consumption

In addition to risk-taking behaviours, mental health issues and violence associated with alcohol consumption, COVID-19 infection was flagged as aggravating susceptibility to ill health (Bantounou, 2023; Calina et al., 2021). As a result, some governments enforced measures to limit alcohol consumption (Neufeld et al., 2020; WHO, 2020). In South Africa, the sale of alcoholic beverages was banned four times since the first lockdown started in March 2020 until the last lockdown ended on 25 July 2021 (Sikuka et al., 2021; Theron et al., 2022). Several studies conducted in South Africa during COVID-19 on the restriction placed on alcohol consumption discovered that although alcohol use was not eliminated, there was some reduction in the intake of alcohol which had positive effects on the health service (Myers et al., 2021; Reuter et al., 2020; Van Hoving et al., 2021). Also, some studies in high–income countries indicated that alcohol consumption may have declined at the early stages of the COVID-19 pandemic (Kilian et al., 2021; Manthey et al., 2020). A study in Greece during the COVID-

19 lockdown examined the general population's changes in alcohol use habits and found that 34.9% drank less alcohol during the lockdown. Possible explanations for the reduction in alcohol consumption include reduced alcohol accessibility, financial difficulties, routine changes, reduced social gatherings and opportunities to socialize (Canadian Centre on Substance Use and Addiction, 2020; Panagiotidis et al., 2020; Rehm et al., 2020). Another possibility could be COVID-19 is a matter relating to health, hence a need to be conscious of one's wellbeing, leading to reduced alcohol consumption (Panagiotidis et al., 2020).

1.8 **Problem statement and motivation**

Excessive drinking and alcohol consumption are often expected as part of the university experience (Herrero-Montes et al., 2019; Lategan et al., 2017). Higher rates of anxiety, depression, and substance misuse are among the characteristics that make university students more vulnerable than the general population. (Browning et al., 2021; Hamaideh et al., 2022; Saeed et al., 2021). Universities around the globe, including in South Africa, closed their campuses and switched to distance learning because of the COVID-19 pandemic (Lechner et al., 2020), which contributed to increased anxiety and depression associated with academic delays and economic stress (Cao et al., 2020; Lechner et al., 2020; Visser & Law-van Wyk, 2021). The abrupt closure of universities in some developed countries during the pandemic also increased alcohol consumption and other psychological symptoms among students (Lechner et al., 2020; Zysset et al., 2022). Furthermore, limited access to social support has been correlated with increased alcohol consumption (Lechner et al., 2020). Longer-term implications for increased alcohol misuse during the COVID-19 pandemic are possible, as the extent of the problem and its ripple effects are unknown.

1.9 **Significance of the study**

Although many adverse effects of the COVID-19 pandemic have been shown (LaRosa et al., 2022; Tasso et al., 2021), the extent of its effects on the academic performance, mental health, and drinking behaviour of South African students is unclear. This study provided insight into alcohol consumption and coping strategies used by a sample of tertiary students in a major institution in KwaZulu-Natal during the COVID-19 pandemic. The findings on how students cope during severe events such as global health crises, including pandemics and lockdowns, can add to the evidence base to develop interventions and support services to enhance students' wellbeing.

1.10 **Aims and objectives**

This study aimed to explore students' experiences and coping strategies employed during COVID-19 lockdown periods, as well as to identify factors that influenced drinking among students at a major tertiary institution in KwaZulu Natal during COVID-19 pandemic lockdowns.

1.10.1 Research questions

1. How did students at a university in KwaZulu-Natal experience and cope with change due to the lockdown during the COVID-19 pandemic?

2. What was the experience of alcohol consumption among students in the context of the COVID-19 pandemic at a university in KwaZulu Natal?

3. What are the factors that influenced drinking among university students in KwaZulu-Natal during the COVID-19 lockdown?

1.10.2 Research objectives

Objective 1: A qualitative investigation of a sample of tertiary students' experiences and coping strategies associated with the COVID-19 pandemic lockdown at a university in KwaZulu-Natal.

Objective 2: A qualitative investigation of alcohol use among students studying at a university in KwaZulu Natal during the COVID-19 pandemic.

Objective 3: A qualitative investigation of the factors that influenced drinking among students studying at a university in KwaZulu- Natal during COVID-19.

1.11 Organization of chapters

The first chapter is a collection of the study background, statement of the problem, the significance of the study, aim and objectives, and research questions. Chapter two reviewed national and international literature on alcohol consumption and coping strategies. This chapter also emphasized the theoretical frameworks that support the study. Chapter three discusses the research methods, the design used to address the study objectives, ethics and data analyses used in the study. Chapter four contained the results of the study. These findings were grouped into themes and subthemes determined during the researcher's thematic analysis. Chapter five discusses the research findings, implications, limitations and recommendations of the study.

2 Chapter Two

Literature Review

2.1 Introduction

This study employed a traditional literature review which is also known as narrative review. Narrative review is a comprehensive summary of existing research on a particular topic (Baethge et al., 2019). However, it is a less structured and systematic approach than a systematic review (Baethge et al., 2019). It involves defining the research topic, conducting a literature search, screening the studies, extracting data, summarizing the findings, evaluating the findings, and writing the narrative review.

This chapter reviewed existing literature on alcohol use and misuse, prevalence and consequences worldwide, specifically focusing on university contexts. A discussion on students' experiences during COVID-19 and their coping strategies followed. Legislations and policies on alcohol use concerning reducing alcohol-related harm were outlined. The chapter also outlined the theoretical frameworks used.

2.2 Alcohol misuse: a public health concern

Alcohol misuse is an important global health issue. The misuse of alcohol occurs when an individual consumes alcohol in an unsafe manner or becomes dependent on it (National Health Service, 2022). Worldwide, alcohol misuse was the seventh-leading risk factor for premature death and disability in 2016 (World Health Organization, 2018a). Globally, 43% of the world's population consumes some alcoholic beverage, while 5.1% of drinkers depend on and misuse alcohol (World Health Organization, 2018a). In 2016, the overall alcohol per person consumption of the global populace over 15 years of age amounted to an average of 6.4 litres of pure alcohol per year, which converts into 13.9 grams of pure alcohol per day (World Health Organization, 2018a). Currently, 26.5% and 40.7% of the global population between 15-19 years and 20-24 years consume alcohol (World Health Organization, 2018a). These figures are of concern because alcohol abuse is a risk factor for over 200 diseases and injuries, leading to 3 million deaths annually (Shield et al., 2020; World Health Organization, 2018a). Approximately 8% and 9% of deaths among people aged 15-19 years and 20-24 years are alcohol-attributed globally (World Health Organization, 2018a). Alcohol (ethyl alcohol or ethanol) is produced when a fungus, yeast, causes the fermentation of sugars into ethanol and carbon dioxide. Alcoholic drinks mostly contain alcohol, water, small amounts of vitamins, minerals, and others (Hendriks, 2020). The quantity of pure alcohol consumption is taken as a percentage of the alcoholic drinks consumed. Pure ethanol (ethyl alcohol) is the only type of alcohol safe for human consumption (Wilson et al., 2013). Ethanol is the primary active ingredient in alcoholic drinks and is regarded as a psychoactive compound (Wilson et al., 2013).

No global standard exists for safe or harmful alcohol use (Stockley et al., 2019). Several studies have concluded that alcohol consumption has been a paramount public health concern that often begins early in adulthood. Alcohol misuse is a significant risky behaviour among tertiary students. Although it is used for relaxation, social engagement, and bonding for many, it is often linked with many adverse outcomes when consumed in excess (Ritchie & Roser, 2018). It could lead to devastating consequences for individuals, families and societies. Consumption levels of alcohol differ significantly among countries. However, developed countries consume the most alcohol. While the highest level of alcohol consumption is in European countries, African countries carry the enormous burden of disease and injury ascribed to alcohol as a result of excess consumption of alcohol (World Health Organization, 2018a).

Alcohol consumption levels vary by gender, race, and ethnicity. Males tend to view alcohol usage as more socially acceptable than females. Around the world, males drink more alcohol than females, and females in developed countries drink more than females in developing countries (Rehm et al., 2009). Studies elucidating alcohol consumption levels between males and females found a higher prevalence in males than females, including in South Africa (Ajayi et al., 2019; Pengpid, Peltzer, & Van Der Heever, 2013; Rashied, 2021). However, some studies have shown that the gap between the patterns of alcohol consumption between males and females is markedly narrow (Ajayi et al., 2019; Bratberg et al., 2016; A. M. White, 2019).

2.3   Patterns of drinking

Alcohol use is categorized as current, binge, and high-intensity drinking (Dorji et al., 2020; Patrick & Azar, 2018). According to WHO, current drinking is defined as the consumption of a minimum of one standard drink of an alcoholic beverage during the past 12 months (World Health Organization, 2018a). The acceptable definition of one drink differs between countries, but in South Africa, a typical drink contains 12 grams of pure alcohol, while the guideline for safe consumption standard unit per day is 24 grams for both men and women (Kalinowski & Humphreys, 2016). Binge drinking refers to drinking a large amount of alcohol (over 60 grams of pure ethanol on a single occasion, resulting in a blood alcohol concentration level of at least 0.08%) within a short period (National Institute on Alcohol Abuse and Alcoholism, 2004; World Health Organization, 2018a). Although binge drinking is commonly referred to as having four or more drinks by women and five or more alcoholic drinks by men over two hours (National Institute on Alcohol Abuse and Alcoholism, 2004), binge drinking for both men and women is defined as taking of 6 or more drinks in one occasion, according to the WHO Alcohol Use Disorders Identification Test (AUDIT) (Babor et al., 2001).

High-intensity drinking, also known as extreme binge drinking, refers to drinking beyond the binge threshold, causing blood alcohol concentrations to reach their highest peak (National Institute on

Alcohol Abuse and Alcoholism, 2018). This pattern of alcohol consumption could be two or more times the binge threshold, which may or may not be gender-specific (Dash et al., 2020; National Institute on Alcohol Abuse and Alcoholism, 2018). High-intensity drinking is most common among young binge drinkers related to weekends, and special events, including sporting events, holidays, and birthdays particularly 21st birthdays (Patrick & Azar, 2018). The amount and the pattern of alcohol consumption is proportional to health deterioration, particularly binge or high-intensity drinking (Toornstra et al., 2020). Binge drinking and high-intensity behaviours are the two main drinking behaviours that affect young people (Dorji et al., 2020; Patrick & Azar, 2018).

There are various types of alcohol sales outlets categorized as off-premises and on-premises. Off-premises outlets are own homes, someone else's home, motor vehicles, outdoors, liquor and convenience stores, while on-premises outlets are restaurants, nightclubs, sports clubs, sports events, shebeens, pubs, bars, taverns, special events, planes, theatres, and hotels (Chinman et al., 2011; Londani et al., 2021). Londani et al. (2021) also report that most drinking occurs in places that are not licensed since they are convenient, alcohol is cheaper to purchase, and it reduces the chances of driving while intoxicated. Furthermore, alcohol consumption at off-licensed places reduces the chances of consuming large amounts of alcohol compared to on-licensed venues (Londani et al., 2021). Some drinkers may not drive while intoxicated because they have another means of returning home (Alonso et al., 2015). According to the study by Londani et al. (2021), there was a decreased likelihood of heavy drinking at off-licensed establishments among individuals who were married and who consumed other drinks (Londani et al., 2021).

2.4   Alcohol use in South Africa

In South Africa, alcohol is the major substance of abuse (DSD, 2019). Drinking in South Africa is categorised by abstinence from alcohol usage on one end of the spectrum compared with heavy episodic drinking on the other (World Health Organization, 2018a). From a global view, 53.5% of South Africans aged 15 years and older refrain from alcohol during their lifetime, 15.5 % are previous drinkers, and 69% have refrained from consuming alcohol during the previous 12 months. In all categories of abstinence, females abstain more than males (World Health Organization, 2018a). However, South Africa is regarded as one of the heaviest drinkers in Africa. (DSD, 2019; Seggie, 2012). In 2016, South Africans over 15 years consumed 9.3 litres of pure alcohol each 16.2 litres for men and 2.7 litres for women (World Health Organization, 2018a), while in 2019, the per-capita alcohol consumption increased to 11 litres (DSD, 2019).

There are pronounced differences among South Africans concerning drinking, most notably by gender, province and race (Morojele & Ramsoomar, 2016). Men tend to drink more than women. One in four women (26%) and six out of ten males (61%) who are at least 15 years old have used alcohol. (National

Department of Health (NDoH) et al., 2019). Likewise, in a self-reported SA study, 33.1% of the population consumed alcohol; 47.7% were males, and 20.2% were females (Vellios & van Walbeek, 2018). Additionally, problematic drinking among current drinkers was reported as 43% (48.2% among males and 32.4% among females) (Vellios & van Walbeek, 2018). Another South African survey indicated that 28% of men and 5% of women exhibit risky drinking behaviour, while 16% of men and 3% of women are at risk of alcohol abuse (National Department of Health (NDoH) et al., 2019). Urban dwellers tend to consume more alcohol than people living in rural settlements (Peltzer et al., 2011; Vellios & van Walbeek, 2018). In South Africa, more than half of the death on the highways result from alcohol use (DSD, 2019). Therefore, South Africans' drinking patterns significantly impact public health.

The most prevalent pattern of drinking among South African alcohol consumers is heavy episodic drinking. Despite high levels of abstinence, about 59% of the drinking population consumes more than 60 grams or more of pure alcohol in one instance over 30 days (World Health Organization, 2018a). A recent province-wide study among South Africans above 15 years found that factors associated with binge drinking for males include depression, exercise, frequent alcohol and drug abuse in the neighbourhood, while female students who exercised more than thrice a week were more likely to binge drink (Rashied, 2021). In addition, a study on youth in South Africa found that living in a multigenerational household and having more access to financial resources increases the likelihood of binge drinking (De Wet-Billings & Mataboge, 2021).

2.5 Alcohol use and misuse in tertiary institutions

University students represent a specific sector of society and are at an opportune stage to experience increased liberty in personal choices about their wellbeing (Chu et al., 2016). Alcohol use is predominant among university students compared to their folks in the general population (Chu et al., 2016; Kim et al., 2009; Kypri et al., 2005; White et al., 2017). Across the world, including in South Africa, drinking is a common activity among university students. Most university students in New Zealand (81%) drank alcohol, and among those who did, more than half (68%) engaged in risky drinking, according to a national web-based survey conducted in 2009 (Kypri et al., 2009). In a similar vein, recent research among Australian university students reveals that 82% of students drank alcohol, and 50% of them exceeded the recommended limit. (Tanudjaja et al., 2021). In Australia, men and women are advised not to exceed ten standard drinks per week or four on a single occasion. This was designed to averse the diseases and injuries that arise due to alcohol abuse (Conigrave et al., 2021).

In a study Several studies carried out on alcohol use among South African tertiary students reported a prevalence ranging between 20% to 88%, and prevalence for excessive alcohol use ranges between 6% to 49% (Chauke et al., 2015; Kyei & Ramagoma, 2013; Mandeya & Ter Goon, 2019; Nyandu & Ross,

2020; Pengpid, Peltzer, Van der Heever, et al., 2013; Young & De Klerk, 2009). Alcohol was one of the most widely used substances among students, according to a survey by the University of KwaZulu-Natal (UKZN). More than half the students (57%) reported that they consumed alcohol in the three months before the study, and 17.5% were identified as engaging in risky alcohol use (Aron, 2016). There is also evidence that students just entering the university are more likely to consume large amounts of alcohol because they are free from parental restraints and also due to their lack of experience with alcohol (Osberg et al., 2011). Previous research has shown that specific drinking environments, such as parties, restaurants and bars, are associated with higher alcohol consumption among tertiary students (Braitman et al., 2017; Ehlke et al., 2021). Student populations at risk of binge drinking are males, living in rented accommodations, engaging in regular sports practice, and other risky behaviours such as tobacco and cannabis (Tavolacci et al., 2016). These behaviours rise with the recurrence rate of binge drinking (Tavolacci et al., 2016).

Based on previous research, the contributing factors associated with alcohol use include socio-demographic factors such as age, gender, religion, education level, parent alcohol use, peer influence, stress relief, curiosity, relatives and friends drinking alcohol (Ajayi et al., 2019; Atwoli et al., 2011; Chauke et al., 2015; Kurui, 2020; Mupara et al., 2021). Studies have shown a link between alcohol use or excessive alcohol consumption and absences from school, poor academic performance, risky sexual behaviour, sexual assault, injuries, fights, use of other harmful substances, cognitive deficits, and death. (Htet et al., 2020; Mekonen et al., 2017; A. White & Hingson, 2013).

The reasons for alcohol use among this age group include easy accessibility, uninformed of the associated damage, friends' influence, poor home environment, boredom, relaxation, and experimentation (Kawaida et al., 2018; Seggie, 2012). Factors influencing binge drinking among tertiary students include gender, age (Nkoana et al., 2016), lack of knowledge of alcohol, unconscious of their health status, use of illicit substances, persuasive advertising, depressive symptoms, high-level physical activity, living in rented accommodation, access to more allowance and higher family alcohol consumption (Holligan et al., 2020; Pengpid, Peltzer, & Van Der Heever, 2013; Vargas-Martínez et al., 2020; White et al., 2017; Yi et al., 2017).

Regarding the COVID-19 pandemic, a recent study showed a decline in alcohol consumption in the middle of the pandemic compared to the pre-pandemic levels among university students. Similarly, binge drinking reduced from 35.5% to 24.6%, but the days of use were not affected (Fruehwirth et al., 2021). Students may have consumed less alcohol because of campus closures and social distancing measures since they had fewer opportunities to drink socially (Fruehwirth et al., 2021). Another explanation for reducing alcohol usage during COVID-19 is that there was also a change in university students' social settings and drinking locations (White et al., 2020). In contrast, a study among university students in the United States during the COVID-19 lockdown found an increase in alcohol consumption,

and this was attributed to boredom, more leisure time, and stress, especially among students already drinking before the pandemic (Fruehwirth et al., 2021; Jackson et al., 2021).

2.6 Consequences of alcohol misuse

A person's reaction to alcohol consumption varies, depending on the volume and frequency of alcohol consumed, health status, intake of other drugs, and metabolic and functional tolerance of the drinker (National Institute on Alcohol Abuse and Alcoholism, 2015).

Risky drinking can lead to liver diseases, tuberculosis, cancers, cardiovascular diseases, and road injuries (World Health Organization, 2018a). Liver disease due to alcohol abuse includes cirrhosis, fibrosis, steatohepatitis, and alcoholic hepatitis. Women have a higher risk of liver cirrhosis than men, notwithstanding lower alcohol consumption (Roerecke et al., 2019). In Greece, a seven-year study (2011–2017) indicated that alcohol intake was linked to 40.7% of fatal traffic accidents, with 87.3% of casualties being men (Papalimperi et al., 2019). Similarly, research indicated that 58% of road traffic deaths in South Africa are related to alcohol consumption (World Health Organization, 2018b). Furthermore, excessive alcohol consumption can be a risk factor for contracting HIV/AIDS because it is linked with risky sexual behaviours such as sexual intercourse with multiple partners, early-age sexual activities, and unprotected sex (Kassa et al., 2016; Odii et al., 2020; Rehm et al., 2017; Yi et al., 2018). Additionally, when considering the impact of alcohol consumption on HIV/AIDS, alcohol use in Africa in 2012 was responsible for 6.4% of mortality and 4.7% of DALYs (Ferreira-Borges et al., 2016). Alcohol use contributed to almost 30 000 adult HIV/AIDS deaths in South Africa in 2012, of which about 26 000 were among people from low socioeconomic backgrounds. (Probst, Parry, & Rehm, 2018). Probst et al. (2018) found that alcohol use substantially impacted the socioeconomic inequalities in HIV/AIDS mortality. Their comparative risk assessment determined that for men of high and low socioeconomic class, the age-standardised HIV/AIDS mortality rate attributed to alcohol was 31.0 and 229.6 deaths per 100 000 persons, respectively (Probst, Parry, & Rehm, 2018). The corresponding figures for women were 10.8 and 75.5. At high socioeconomic status compared to low socioeconomic status, the age-standardised rate of HIV/AIDS mortality attributable to alcohol was 7.4 in men and 7.0 in women (Probst, Parry, & Rehm, 2018).

The social effects of alcohol consumption, also known as alcohol-related harm, are negative consequences that affect the drinker's behaviour and their social environment (Strizek, 2020). Alcohol-related harm includes various events, such as motor vehicle accidents caused by a drunk driver, which may kill passengers, the driver, the driver and/or passengers in other vehicles involved in the accident or pedestrians. Family members may also be affected by a drunk family member. Heavy alcohol consumption during pregnancy may cause foetal harm (Room et al., 2010), and binge and high-intensity

patterns of alcohol use result in interpersonal violence, losing consciousness, and long-term damage to academic or occupational status (Patrick & Azar, 2018; World Health Organization, 2010).

There are several negative economic effects of alcohol abuse. Alcoholism has several labour expenses, including unemployment, poor labour productivity, work-related accidents, high employee turnover, health issues linked to alcohol, workplace absenteeism, early retirement, premature mortality and morbidity (Matzopoulos et al., 2014). According to Matzopoulos et al. (2014), the tangible financial cost of alcohol abuse was calculated to be R37.9bn or 1.6% of South Africa's 2009 GDP. The total cost (tangible and intangible) of unhealthy alcohol use in South Africa was estimated to be between R245bn and R280bn (Matzopoulos et al., 2014). In 2000, 7.1% of deaths and 7% of disabilities were associated with alcohol use in South Africa (Peltzer et al., 2011). Similarly, in 2015, alcohol-related causes of mortality claimed the lives of almost 62,300 adults (Probst, Parry, Wittchen, et al., 2018). Given that alcohol-related harm hinders socio-economic development, breaks social connections and destroys lives, targeted interventions are needed, particularly at the point of initiation of alcohol use.

2.6.1 The psychological consequences of alcohol misuse

Alcohol use especially when consumed excessively harms an individual's mental and emotional wellbeing by causing impaired working memory, cognitive impairment, impulsivity, neuropsychiatric conditions, and weakened emotional learning (Lechner et al., 2016; Rashied, 2021; Rehm et al., 2019; Risi et al., 2019; Schneider et al., 2007).

Alcohol can impair working memory, which is the ability to hold information in mind and manipulate it. This can lead to problems with concentration, problem-solving, and decision-making (Lechner et al., 2016). A study conducted by Lechner et al., (2016) found that individuals who experienced poorer working memory after alcohol administration were more likely to drink more alcohol on a drinking day. This suggests that alcohol may impair working memory, which can lead to people drinking more alcohol to improve their cognitive function. (Lechner et al., 2016).

Research has shown that impulsivity is associated with alcohol misuse (Bo et al., 2016; Risi et al., 2019). Impulsivity is the tendency to act without thinking about the consequences of one's actions (Guillot et al., 2014). People who are impulsive are more likely to take risks, even if those risks are harmful to them or others. Impulsivity can make it harder to manage how much alcohol is consumed, how often it is drunk, and how a person act while drunk, all of which can affect one's capacity to control alcohol usage (Risi et al., 2019). A study on college students showed that depression, anxiety, and stress were linked with greater impulsivity following alcohol misuse (Risi et al., 2019). This means that people who are struggling with these mental health conditions are more likely to engage in impulsive behaviours after drinking alcohol.

Cognitive impairment is a condition that causes a decline in memory, language, and other cognitive functions. However, the decline is not severe enough to interfere with daily activities (Yen et al., 2022).In the context of alcohol use, studies have shown that alcohol use among young people is associated with poorer cognitive performance, including deficits in learning, memory, attention, executive function, and impulse control (Lees et al., 2020).

2.7   Legislation and policies addressing alcohol use

Worldwide, alcohol intake accounts for a substantial disease burden, leading to increased social and economic costs (Fontes Marx et al., 2019). Several policies were designed to deal with this burden and decrease alcohol-related harm. In 2010, the WHO and other member nations developed a strategy to limit the damages associated with alcohol use. This strategy targeted ten main areas, including leadership awareness and commitment, community action, health services' response, pricing policies, availability of alcohol, marketing of alcoholic beverages, drink-driving policies and countermeasures, reducing the public health impact of illicit alcohol, reducing the deleterious consequences of alcohol intoxication and informally produced alcohol, monitoring, and surveillance (World Health Organization, 2010). Assessment has been undertaken in some WHO member states or countries to evaluate the progress in implementing policies related to the global strategy. Evidence shows that though some progress has been made, further action is needed, especially in African countries (Abiona et al., 2019; Ferreira-Borges et al., 2017; Giesbrecht & Esa, 2013; Parry, 2013).

2.7.1   The South African context

South Africa is categorized as an upper-middle-income country and has implemented some policies to curb alcohol misuse. One of the measures is the inclusion of an excise tax on alcoholic beverages. In the past, the estimated excise tax burdens for wine, beer and spirits were 23%, 35% and 48%, respectively, of the weighted average retail price (National Treasury Republic of South Africa, 2014). Recently, the South African government proposed raising the excise duty on alcohol between 4.5% to 6.5%. This is due to the estimated excise tax burdens for wine, beer and spirits, which are 11%, 23% and 36%, respectively, of the weighted average retail sale price (Petr Erasmus, 2022).

Another policy implemented is that the minimum legal age to buy alcohol is 18 years (World Health Organization, 2018a). Meanwhile, an amendment law is being considered to raise the age limit to 21 and require alcohol retailers to be at least 500 meters away from other retailers or delicate areas such as schools and places of worship (Liquor Amendment Bill, 2016).

The South African maximum legal blood alcohol concentration (BAC) when driving a vehicle is 0.05% (World Health Organization, 2018a), although an attempt was made to reduce the concentration to 0%

(Kempen, 2021). It is also legally required that alcohol containers display health warning labels (World Health Organization, 2018a).

Additionally, those who produce alcohol and provide it to unauthorized bars and clubs are responsible for any harm caused by using their products. The negative consequences of alcohol consumption must be depicted in the liquor advertisement. Moreover, it was also proposed that the alcohol content in informal and illegally produced alcoholic beverages should be reduced from 1.0% to 0.5% (Liquor Amendment Bill, 2016). Despite the attempt made by the government to implement some strategies mentioned earlier, it has not been effective for some reasons, and South Africa has seen a rise in alcohol misuse and problems associated with alcohol over the years (Probst et al., 2017; Vellios & van Walbeek, 2018).

2.8   Students' experiences during COVID -19 lockdown

Although academic-related stress is a normal aspect of university life, how students handle it significantly influences their actions and health. The COVID-19 pandemic had a significant impact on Africa and other continents, disrupting people's lives in many ways, from freedom of movement to working conditions. The educational sector has also been significantly disrupted, affecting students' learning and relationships with peers and staff due to the global strategies adopted to curb the COVID-19 pandemic (Laher et al., 2021; Prieto et al., 2021). Several universities reported a complete switch to online or distant learning during the early stages of the pandemic, either done synchronously or asynchronously to ensure uninterrupted learning (Aristovnik et al., 2020; Bao, 2020; Bergdahl & Nouri, 2021; Gumede & Badriparsad, 2022; Jun et al., 2021; Kedraka & Kaltsidis, 2020). Lecturers conducted video discussions, presentations, online experiments, and virtual examinations for students (Jun et al., 2021). These teaching and learning methods allowed students to learn and connect via several devices like laptops, computers, tablets, and mobile phones with internet access to their lecturers from any location. Similarly, the video lessons used for lectures were always available for reference.

However, a range of novel challenges was presented to lecturers and students across different contexts due to the rapid transition into online learning (Burns et al., 2020). The challenges identified were network coverage issues, lack of accessibility to e-learning resources, low computer literacy, teachers having little or no knowledge, skills and experience in the implementation of online teaching, feelings of isolation, students having no proper gadgets, increased academic workload, low motivation, lack of online education training for students, financial constraints, lack of parental support and unconducive home environments for teaching and learning (Anwar et al., 2020; Dube, 2021; Haron et al., 2021; Kaisara & Bwalya, 2020). The main issues mentioned in a study of Pakistani institutions included a lack of internet access, improper engagement and communication between students and professors, and inadequate technology (Anwar et al., 2020). The absence of learning discipline, appropriate learning

resources, or conducive learning settings during isolation is among the difficulties linked with the move to online learning in China (Bao, 2020). Students in South Africa faced technical and operational challenges, including low connectivity and data limitations and concerns connected to unsuitable home settings (Govender et al., 2021). The utilization of virtual learning persisted after a vaccine for COVID-19 was rolled out. Moreover, a hybrid teaching method was introduced later as COVID-19 cases declined (Potra et al., 2021).

University students can experience increased stress during their studies under normal circumstances. Stress is a "state in which internal demands, external demands, or both, are appraised as taxing or exceeding an individual's or group's adaptive or coping resources" (Labrague et al., 2017). The stressors linked to academia include "heavy" workloads, including assignment loads and examinations (Labrague et al., 2017). Given the disruptions to tertiary education caused by COVID-19, research has revealed that university students are at risk of developing psychological disorders (Dodd et al., 2021; C. Liu et al., 2021). A study among Chinese college students showed that 25% experienced anxiety during the COVID-19 pandemic (Fu et al., 2021). Factors influencing college students' anxiety during the pandemic were associated with gender (Dangal & Bajracharya, 2020), parental income, their place of residence, and whether they were living with parents, a relative or an acquaintance who was infected with COVID-19 (Cao et al., 2020; Salman et al., 2020). Furthermore, a study by Dodd et al. (2021) shows that worries associated with COVID-19 significantly impact female university students compared to their male counterparts. Also, postgraduate students' wellbeing was substantially higher than undergraduate students' (Dodd et al., 2021).

In addition, a study by Majrashi et al. (2021) highlighted anxiety from learning remotely, the fear of the COVID-19 virus, clinical training, assignments, and academic workloads as stressors among students during COVID-19 pandemic. They sought advice and consulted with others to cope, maintaining optimism and transferring their attention to other things (Majrashi et al., 2021). Despite the increasing prevalence of psychological distress in university students during COVID-19, little is known about coping strategies adopted amongst university students in South Africa.

2.9   **Coping behaviour**

According to Pearlin, stress arises with an experience, an urgent demand or need that people face and what they perceive about the demand as threatening (Pearlin, 1989). Most stressful experiences can be traced back to peoples' surrounding social structure and their locations within this structure. In other words, interrelated social networks such as social stratification, social institutions, and interpersonal relationships build and structure individuals' experiences, which may lead to stress (Pearlin, 1989). Globally, university students have been found to have a high prevalence of psychological stress (Stallman et al., 2020). University students manage various stressors and problems they face daily using

several coping behaviours, including the (mis)use of alcohol (Ham & Hope, 2003; Pittman et al., 2019). Coping refers to a conscious mechanism used to decrease unpleasant emotions. Research has revealed that people who use alcohol as a coping mechanism frequently exhibit more problematic drinking behaviours (Choi et al., 2014; Ham & Hope, 2003). Other coping mechanisms include self-distraction, emotional support, active coping or problem-solving, substance use, denial, behavioural changes and relying on others for advice and information (Fluharty & Fancourt, 2021). These coping strategies are often categorised into different groups. Approach strategies are a type of coping method that entails dealing directly with the stressor. This can be done by seeking emotional support, making plans to resolve and reduce stressors, or using other active coping mechanisms. (Aspinwall & Taylor, 1997), while avoidant coping techniques like substance abuse, social withdrawal, and denial of the stressor's existence attempt to avoid the stressor and one's reaction to it (Rippetoe & Rogers, 1987; Skinner et al., 2003). Other classifications emphasize whether an activity is problem-focused (efforts to change the current situation, such as informational assistance, active coping) or emotion-focused means of managing emotional discomfort, e.g. denial, venting, and emotional support (Baker & Berenbaum, 2007).

Furthermore, according to a recent study, problem-focused and emotion-focused coping are frequently used by women, educated individuals, and students (Fluharty & Fancourt, 2021). Women, younger persons, those with less education, those in adverse socioeconomic positions, those who share a home, those with psychological disorders, and those who seclude themselves utilized avoidant coping mechanisms more frequently (Fluharty & Fancourt, 2021). Similarly, students who experienced forms of psychological stress used emotion-focused coping behaviours such as acceptance, venting, self-blame, religion, substance use, and avoidant coping behaviours (self-distraction, denial, behavioural disengagement) (Mishra et al., 2021). Additionally, problem-solving techniques such as having an insight into the consequences of stressful events, creating ideas and developing ways to solve issues have also been adopted by university students. (Labrague et al., 2017). A qualitative study by Mason (2017) conducted among South African students highlighted meaning-making, problem-focused coping and emotion-focused as common coping methods adopted, which may yield positive results (Mason, 2017).

Studies have shown that various strategies were adopted to cope during the pandemic. The common healthy coping strategies adopted during COVID-19 to adjust to stressors were seeking social support, following a routine, religious beliefs and practices, engaging in physical activity, mental disengagement and keeping in contact with family and friends (Fullana et al., 2020; Ogueji et al., 2021; Prowse et al., 2021; Salman et al., 2020; Shanahan et al., 2020). Unhealthy coping strategies people engaged in were problematic use of alcohol, online gaming and increased use of drugs, vaping, and cannabis (Prowse et al., 2021; Taylor et al., 2021; Xu et al., 2021).

This study sought to explore the specific experience and coping strategies employed by students studying at a tertiary institution during the COVID-19 pandemic lockdown to understand the various factors associated with COVID-19-related lockdown stress and how students coped with the stress, to add to the body of evidence to inform strategic interventions to support the wellbeing of students at university.

2.10 Theoretical framework

Lazarus and Folkman's transactional theory of stress and coping is a psychological theory that explains stress as a complex transaction between the individual and the environment. This model described students' experiences and coping with change due to the COVID-19 pandemic lockdown. The second objective of this study was guided by social learning theory, social control theory and the motivational model of alcohol use.

2.10.1 Lazarus and Folkman's transactional theory of stress and coping

According to Lazarus and Folkman's transactional model of stress and coping, exposure to what is seen as a stressor and beyond one's capacity to deal with it is referred to as stress (Biggs et al., 2017; Lazarus & Folkman, 1984). According to this perspective, individuals are regularly appraising stimuli within their environment. This appraisal process produces emotions, and when stimuli are evaluated as stressors, the subsequent distress initiates coping strategies to manage emotions or address the stressor itself directly. The interaction between the individual and their environment is altered by this coping mechanism and assessed as favourable, unfavourable, or unresolved (Biggs et al., 2017). When stressors are favourably resolved, it generates helpful emotions, while unfavourable or unresolved stressors produce distress, provoking the person to consider more coping choices to resolve the stressor (Biggs et al., 2017; Lazarus & Folkman, 1984). The Transactional Model of Stress and Coping is the continuous cognitive and behavioural efforts to control, reduce, or tolerate a particular stressor that is judged to be greater than the person's resources and capacity(Lazarus & Folkman, 1984). Coping is described as a dynamic process involving deliberate acts when a person perceives a situation as stressful (Lazarus & Folkman, 1984). However, coping mechanisms are referred to in this model as the intermediary step between stresses and health consequences (Dardas & Ahmad, 2015; Lazarus & Folkman, 1984).

Coping is believed to be crucial in deciding whether a stressful event leads to adaptive or maladaptive effects (Dardas & Ahmad, 2015). This theory categorizes coping into problem-focused and emotion-focused coping. Problem-focused coping (PFC) techniques refer to actions taken to change the circumstance and remove the danger, or they try to address the stressor directly (Chen et al., 2022). Focusing on the issue, developing a strategy, and acting on it proactively entails problem-focused coping. This may involve accumulating resources, reaching out for support from others, or acting to

alter or eliminate troublesome circumstances (Bhattacharjee & Ghosh, 2022). While emotion-focused coping (EFC) manages feelings that arise from the stressful experience or is defined as measures taken to reduce emotional discomfort caused by the circumstance (Chen et al., 2022). Emotion-focused coping involves concentrating more on emotions while handling and managing the emotions brought on by stress. Meditation, yoga, expressing frustration, and focusing on the positive are all effective ways to manage emotions (Bhattacharjee & Ghosh, 2022). In the transactional theory of stress and coping, the effectiveness of a particular coping mechanism depends on how effectively the coping strategy is aligned with assessments and situational circumstances (Lazarus & Folkman, 1984). Earlier studies have demonstrated a positive correlation between PFC and wellbeing measures, including reduced anxiety and psychological discomfort (Wong et al., 2016). Still, EFC has produced more conflicting results about its connection to mental health. (Lorente et al., 2021).Commonly, personal experiences, educational attainment, and resources accessible to people in a social setting individually shape and influence coping mechanisms (Zhao et al., 2021).

The COVID-19 lockdown can be considered a stressful event for university students. Numerous limitations on students' lives resulted from the lockdown, including social isolation, disruption to academic studies, and financial hardship. These restrictions can be appraised as threatening or challenging, depending on the individual student's circumstances. Lazarus and Folkman's Transactional Theory of Stress and Coping was applied to understand the life course impact of a stressor, such as the COVID-19 pandemic, on students' wellbeing. This study also examined the coping mechanism individuals adopted that minimized the stressors.

2.10.2 Social learning theory

According to Albert Bandura's social learning theory, developed in 1977, people can learn from one another via imitating, observing, and modelling (Bandura, 1977; Mcleod, 2016; Nabavi, 2012). This process is known as observational learning. Bandura further elaborated that individuals decide to imitate or not imitate actions observed based on whether the outcome is desirable (Nabavi, 2012). Many fundamental ideas from conventional learning theory are the foundation of social learning theory. Due to its incorporation of both behavioural characteristics like reinforcement and extinction of behaviour and mental constructs like attention, memory, and motivation, this theory has frequently been referred to as a link between behaviourist and cognitive learning theories (Bandura, 1977; Mcleod, 2016; Muro & Jeffrey, 2008). Bandura, however, believed that not all forms of learning could be explained by direct reinforcement. He introduced a social component as a result, contending that people can learn new facts and behaviours by observing others (Nabavi, 2012). There are four necessary conditions to encourage learning for social learning to occur, these include (Johnson, 2014):

Attention: For learning to occur, observers must pay attention to learning behaviour.

Retention: The ability to retain information is also vital to learning. Therefore, a learner must be able to recall what was observed.

Reproduction: The third requirement is replicating the observed behaviour after the observer has focused on the model and retained the knowledge.

Motivation: The ability to demonstrate what one has learnt is a requirement for learners. Additionally, motivation is greatly influenced by rewards and penalties.

Social learning theory emphasizes observing and modelling behaviours, attitudes and emotional reactions. It explains that individuals do not just observe the behaviour of a model and imitate it immediately. Instead, there would have been some thought process preceding imitation, known as meditational processes, to decide whether or not the novel behaviour will be learned (Mcleod, 2016). Social learning theory states that learning can happen without changing behaviour in response to observation, imitation, and modelling (Nabavi, 2012).

This theory was used as a framework to understand the specific social forces that shape drinking behaviour and which was also used in this study of binge drinking among university students. Evidence indicates that binge drinkers, whom students sometimes look up to as role models, such as relatives or peers, can influence their binge drinking behaviour by imitation (Nyandu & Ross, 2020). Also, when they relate to others who commit risky drinking behaviour like binge drinking, the possibility that these students will engage in such dangerous behaviour increases.

2.10.3 Social control theory

In 1969, Hirschi developed the social control theory, sometimes called the social bond theory (Chriss, 2007; Costello & Laub, 2020; Hirschi, 1969). According to this theory, people's behaviour is influenced by their connections to their family, friends, academic institutions, and other aspects of society (Nyandu & Ross, 2020). When individuals are detached from people or social networks that prohibit deviant behaviour, such as excessive drinking, this could increase their likelihood of being involved in such activity (Siegel, 2010). Hirsch depicts four elements of bonds to society: attachment, commitment, involvement, and belief. Attachment refers to an individual's level of perceptiveness to and interest in others which influences the decision of a person not to engage in risky behaviours. Commitment involves the time, energy and effort an individual invests in a task or to achieve a goal, such as attaining an education (Chriss, 2007; Han et al., 2016; Nyandu & Ross, 2020). The third type of bond is involvement, which means the time and effort people invest in regular pursuits like employment, education, and hobbies. People who are actively engaged in conventional tasks are less likely to have the time or opportunity to engage in criminal or deviant activity. Belief is the last element of social bond identified by Hirschi, and refers to the values or morals individuals learn from their society and adhere

to (Pratt et al., 2008). However, weakening these beliefs promotes the likelihood of engaging in unlawful activities (Siegel, 2010). This theory posits that the more robust these bonds to society, the less likely the individual is to engage in deviant behaviour, which we propose in this study to be binge drinking.

Social control theory focuses on what prevents an individual from engaging in deviance, as this theory asserts that people are pleasure-seeking and are naturally motivated to engage in deviant behaviour (Hirschi, 1969). The likelihood of students engaging in harmful behaviour, such as binge drinking, is reduced when they are more engaged in academic and physical activities, are more dedicated to achieving their educational and career goals and have stronger relationships with their significant others. This is because they do not want to jeopardize their life goals (Treleaven, 2015). Therefore, social control theory was an appropriate framework to explore factors contributing to binge drinking among students during COVID-19 and how they cope with or experience change due to lockdown.

2.10.4 Motivational model of alcohol use

According to Cox and Klinger (1998) numerous factors influence drinking, such as historical, personality, socio-cultural, situational, also current characteristics. However, motivation is the last common point in deciding whether to consume alcohol or not. Motives are an individual's reasons for drinking or the particular results they achieve by drinking (Collins & Bradizza, 2001). According to the motivational model of alcohol use, an individual's decision to consume any alcoholic drink depends on whether the positive benefits outweigh those of not drinking (Cox & Klinger, 1988). In other words, drinking is a personal choice, and the motives behind drinking are centred on the belief that individuals consume alcohol to achieve specific valued results, which can be regarded as the reason people consume alcohol.

Cox and Klinger (1998) proposed that drinking motive can be categorized under two significant dimensions: valence and source. Valence is drinking to achieve a favourable outcome or avoid a negative one. The source of motivation can be either internal or external, i.e. whether an individual's motive comes from within, such as the management or manipulation of one's emotional state or from the social environment, such as social approval (Cooper, 1994).

Furthermore, a four-factor model was hypothesized by Cooper (1994) based on the conceptual model proposed by Cox and Klinger (Cox & Klinger, 1988). This model suggests the existence of four distinctive motives that influence an individual's decision: enhancement, social, coping and conformity motives (Cooper, 1994). Enhancement motives are internally created positive reinforcement reasons, such as drinking, to raise or maintain a positive mood or state of wellbeing, such as excitement. (Cooper, 1994). Social reasons are externally generated positive reinforcement that promotes social rewards such as enjoying social gatherings or drinking to ease socialization (Cooper, 1994; Sjödin et al., 2021).

Coping motives are internally generated negative reinforcement motives which involve the consumption of alcohol to limit or control undesirable affective situations such as anxiety, stress, loneliness and depression. Conformity motives are externally created undesirable reinforcement, including drinking, to avoid being socially rejected (Cooper, 1994).

These four drinking motives are distinct predictors of alcohol usage and misuse behaviour. Unhealthy drinking and problems associated with alcohol intake are often linked to individuals drinking mainly for coping and enhancement reasons (Cooper, 1994; Kuntsche et al., 2005). Moreover, coping motives are more likely to predict problematic drinking, while enhancement motives are more likely to influence heavy alcohol use (Cooper, 1994). However, social and conformity drinking motives are often associated with moderate, lower alcohol use and non-problematic alcohol intake (Cooper, 1994; Kuntsche et al., 2015). Studies suggest that social motives are the most commonly mentioned reasons for alcohol consumption, especially among young adults, followed by enhancement, conformity and coping motives (Cooper, 1994; Grant et al., 2007; Kuntsche et al., 2015; Sjödin et al., 2021). This model of drinking motives guided the study to explore the reasons that motivate students to consume alcohol.

2.11 Strengths and weakness of the theories

The major strength of social learning theory is that it explains how behaviour is learned. It has been empirically tested (Akers & Sellers, 2008; Siegel, 2010). This theory stresses the role of societal influences individuals are exposed to, such as family structures and peer pressure. The theory focuses on modelling others, including parents, teachers, or peers, on influencing their decision-making strategies (Siegel, 2010). Although it explains many behaviours and considers how cognitive processes are involved in learning (Mcleod, 2016; Nabavi, 2012), social learning theory cannot sufficiently describe how we develop a whole range of behaviour, including thoughts and emotional states, or why some individuals engage in deviant behaviours like binge drinking but choose not to imitate it (Mcleod, 2016). Another constraint of this theory is that it describes behaviour exclusively shaped by the environment. Nevertheless, behaviour is more likely to develop due to an interaction between nature and the environment (Mcleod, 2016).

Some critiques of social control theory are that some deviances are more likely to be committed by people with strong social connections, which is against its basic assumption. Thus, attachment to deviant family members, peers, and acquaintances may influence young people to engage in deviant activities and antisocial acts (Siegel, 2010). Another supposed weakness of the theory is that the four elements identified are limited and exclude additional bonding elements. Also, some social bond elements, such as involvement and beliefs, are assumed to slightly influence behaviour patterns (Cauffman et al., 2005). Moreover, Hirschi did not consider how these elements were affected by forces

external to the proximity of the individual and only. There was also no clarification for forming social bonds at a larger scale within society (Hirschi, 1969; McArthur, 2011).

The motivational model of alcohol use describes the valence and source of the results an individual wants to accomplish by drinking (Cox & Klinger, 1988). Though this theoretical model was developed initially to explain alcohol use motives amongst young people, it also offers a valuable context for understanding motivations for using different substances (Cooper et al., 2015). However, aside from the significant motives (social, conformity, enhancement, and coping) mentioned in this model, additional reasons may trigger drinking in certain situations or among certain groups (Glavak Tkalić et al., 2013).

Social learning theory, social control theory and motivational model of alcohol use explain why some persons engage in alcohol consumption, especially binge drinking and why others do not, though from different perspectives. These three theories focused significantly on younger populations and assumed all individuals are motivated toward deviance through natural tendencies or other external social factors. Social learning theory stresses that deviant behaviour is learnt through human interaction; social control theory maintains that human behaviour is controlled through a close relationship with people and institutions (Siegel, 2010). In contrast, the motivational model of alcohol use explains the different reasons people drink. Social learning theory and the motivation model of alcohol use posit that an individual could decide to consume alcohol if the observed rewards outweigh the perceived costs (Cox & Klinger, 1988; Johnson, 2014). Also, social control theory explores reasons preventing an individual from engaging in deviant behaviour such as binge drinking.

These three theories are based on environmental, psychological and social factors. Therefore, variables emphasized in social learning and control theories will complement the motivational model of alcohol use. Social learning theory does not describe why some individuals relate to binge drinkers or deviant groups (Krohn et al., 2016). Social control theory and the motivational model of alcohol use have the perspective to fill this gap. These theories gave insight into how students' relationships influence their drinking behaviour and their reasons for drinking. Similarly, these theories provided the opportunity for a more wide-ranging understanding of the motivation for and use of alcohol.

3   Chapter Three

General Methodology

3.1   **Introduction**

This study employed qualitative methods to achieve the objectives to a) explore students' experiences and coping strategies associated with COVID-19 pandemic lockdown. b) to describe alcohol use among university students studying at a tertiary institution in KwaZulu Natal during the COVID-19 pandemic. This study entailed conducting cross-sectional qualitative research among university students. This section provided a comprehensive discussion of the methodology of enquiry relating to the qualitative research in terms of sampling procedure, selection criteria, and data collection methods, as well as addressed concepts of trustworthiness, and ethical considerations, followed by a description of the analyses of the study.

3.2   **Research design**

According to Creswell, research designs are strategies and methods for research that extend through the decisions from wide-ranging assumptions to comprehensive procedures of data collection and analysis (Creswell, 2014). Since this research focuses on students' experience and drinking during COVID-19, the research paradigm was qualitative, the approach was phenomenological while the design was an exploratory case study which consist of students in UKZN. This qualitative approach seeks to understand personal lived experience through the lens of their own individual meanings (Tuohy et al., 2013). In qualitative research, the complex reality people generate within their daily lives is explored holistically by qualitative research methodologies (Erlingsson & Brysiewicz, 2013). Qualitative research is intended to achieve a depth of understanding of a specific experience or phenomenon in a particular group (Queirós et al., 2017). Observations, detailed notes, audio-visual recordings, interviews, one-on-one discussions, fieldwork in its natural context, and other data-gathering methods can be used in qualitative research to understand patterns, similitudes and variances in the representations of participants' life worlds (Erlingsson & Brysiewicz, 2013). This study focussed on people's subjective experiences, so the qualitative research technique was most appropriate. Qualitative interviewing allowed participants to interact verbally with the researcher and promoted dialogue between the participant and researcher, allowing the participant and the researcher to ask questions to acquire clarification during the data collection and analysis.

This study was set in South Africa, classified as an upper-middle-income country by the World Bank (The World Bank, 2022).

3.3 Study population

The study population comprised twenty University of KwaZulu Natal (UKZN) students aged 18 years and above registered before the COVID-19 pandemic from the Howard and Westville campuses.

3.4 Inclusion and exclusion criteria

To be included in the study, participants had to be18 years and above, be registered as students at UKZN prior to the COVID-19 pandemic, who consumed alcohol, could provide consent, and were willing to be interviewed in English as the researcher was not fluent in other local South African languages. Out of the twenty-one potential participants approached, twenty participants consented. One person did not consent as she was unwilling to be interviewed in English.

3.5 Sampling strategy

Purposive sampling was employed in this study. The sample comprised 20 University of KwaZulu Natal (UKZN) students. The study design required individuals who shared a specific feature (i.e., students who consume alcohol hence this sampling method was appropriate. A purposive sampling technique is a non-probability sampling most effective when studying a particular domain (Tongco, 2007). It is a method that deliberately chooses participants due to their qualities, which do not need underlying theories or a set number of participants (Etikan, 2016).

In qualitative research, purposive sampling is widely used for identifying and selecting rich information cases associated with the interested phenomenon (Palinkas et al., 2015). The reason for adopting purposive sampling is based on the assumption that it is better used for matching the sample to the aims and objectives of the research, thus improving the study's rigour and the trustworthiness of the data and results (Campbell et al., 2020). Participants were selected expecting each respondent to provide rich and unique information.

There is frequent debate about the question of "how many" when choosing a sample size for qualitative enquiry. Dworkin recommends that five to fifty participants are adequate for a qualitative study (Dworkin, 2012). Furthermore, a survey by Guest et al. (2020) described a simple method for assessing and reporting thematic saturation in qualitative research. Their findings indicated that 6–7 interviews would capture most themes in a homogenous sample, while 12 interviews are typically required to reach higher degrees of saturation (Guest et al., 2020). Fusch and Ness explained that data saturation is attained when sufficient information is available to repeat the research. Further coding is no longer necessary, as indicated by the repetition of themes (Fusch & Ness, 2015).

3.6   Number and recruitment strategy

In this study, in-depth interviews were conducted with 20 students from UKZN aged 18 years and above. Participants were recruited using advertisements on a students' WhatsApp group platform. The researcher also approached some students on the Howard and Westville college campus to explain the study and invite them to participate. These campuses are close to each other, making it easier for the researcher to access students in different fields of study.

Two strategies were used to recruit participants. Firstly, the researcher circulated the call for students to participate in the study via a student WhatsApp group for those who reside in Howard college. One of the researcher's colleagues helped advertise the study on this WhatsApp group because she is a member of that residence. Interested students contacted the researcher on WhatsApp, where she described the aim of the research to them. Interested participants were asked to give a convenient time they would be free for the interview. Eight participants were interviewed via Zoom, and three WhatsApp call interviews were conducted.

Due to the poor response of students on WhatsApp and the limited study time frame, the researcher randomly approached students at Howard and Westville college. The researcher introduced herself and explained the reason for approaching each student. She described the aim of the research, the significance of participating in the research, and the anticipated time frame for the interview. Interested participants were provided with consent forms. After the participants read and consented, the researcher asked if she could start the interview immediately. Eight participants agreed to be interviewed immediately, but a participant gave the researcher her contact number and arranged when she would be free for the interview.

WhatsApp recruitment can introduce bias into qualitative studies because WhatsApp users are not a representative sample of the population, and the convenience and self-selection of WhatsApp could have introduced bias into this study (Gelinas et al., 2017).

3.7   Study setting

The research was conducted at UKZN, Howard College and Westville campuses. UKZN is located in the province of KwaZulu-Natal in South Africa. KwaZulu-Natal is the second-most populous province, with an estimated 11.5 million people in southeast South Africa (Statistics South Africa, 2021). UKZN occupies 719.744km^2 across five campuses (UKZN, 2016): Westville campus, Pietermaritzburg campus, Edgewood campus in Pinetown, Howard College, and the Nelson Mandela Medical School, which are both situated in Durban. The student population numbers 44 068 students (UKZN, 2021). In 2004, UKZN was established due to the merger of the former University of Natal and the former University of Durban-Westville (UKZN, 2017). The campuses are multiracial and include Black,

Indian, Coloured and White students from South Africa, other African countries, and students from other continents (UKZN, 2016). The proportion of African students enrolled in 2021 was 81%, while 59% of the total population was female (UKZN, 2021). Some students live at home, others on campus, and some live in rented accommodation off-campus (Given, 2015). The two major languages for communication at UKZN are English and isiZulu (UKZN, 2016).

3.8   Data collection procedures

Approval for the research was given by the Biomedical Research Ethics Committee (BREC) at UKZN. The study adhered to all the required ethical procedures approved by BREC prior to data collection. Data collection started in mid-September 2022, immediately after the ethical approval was granted, and ended in the first week of December 2022.

Participants were provided with three options for the mode of interview. The interviews were conducted in person and via a commonly used online platform called Zoom and a popular messaging and call platform called WhatsApp. Depending on the mode of interview selected, participants confirmed a preferred date and time. All the interview sessions were conducted in English and varied from 20 to 40 minutes. All participants approved the audio recording of their interviews, and the researcher also made some notes during the interview sessions.

As COVID-19 cases declined, face-to-face interviews were permitted by the ethics board. During such interviews, the conduct, including recording permission and how the data collected would be utilized, was explained to the participant. The researcher had the opportunity to observe the participant during the interview, allowing for the elaboration of questions without being distracted by having to write down all responses because the conversation was audio recorded. In addition, during the interview, the researcher observed the participant's body language and any discomfort to put them at ease, allowing for engagement between participant and researcher and clarification of questions and responses by both parties. The recorded interviews were saved on the researcher's passworded device. The researcher ensured that each interview session was conducted in a quiet and private place within the university environment.

Furthermore, participants who preferred to be interviewed via Zoom were sent a Zoom link before the interview. After the introductory exchange, the researcher reiterated the aim of the research and estimated the length of interaction and the assurance of data privacy. The interviewer established rapport with participants before the interview to make them feel more comfortable, which helped generate more insightful responses. In the Zoom room, the researcher restricted access so that no one else from the participant could join the meeting. Also, the participants had to be let into the Zoom room by the host (the researcher). A passworded laptop was used for the Zoom interview, and participants' videos were switched off. These interviews were audio recorded on the Zoom platform and saved on the laptop,

which the researcher could only access. The researcher kept all the recordings which were referred to for clarifications. The Zoom recordings allowed the researcher to listen to the participant's voice variations. The Zoom interviews were conducted in a private room which outsiders could not access.

Participants who agreed to be interviewed on WhatsApp were called on an audio call. Before the researcher proceeded to the research questions, she sent the informed consent out to the participant, which was signed. Once the participant agreed, the interview continued. While the researcher used her phone to converse with the participants, a passworded laptop was used to record and save the interview. Each interview session was conducted in a private and quiet place without being accessed by outsiders. Using a recorder during the interviews helped the researcher get a more thorough account of the interview while also interacting with the participants and focusing on its content. This technology helped the researcher to go back and listen to the recordings to clarify if needed.

3.9   **Research instrument**

An in-depth interview is one of the most suitable qualitative research data collection instruments. The main benefit is that it provides considerably more extensive information than is available and that participants may feel more at ease conversing with a researcher than completing a survey (Boyce & Neale, 2006). Most in-depth interviews are semi-structured or unstructured; rather than closed questions, the interviewer has subjects and open-ended questions to centre the discussion (Allmark et al., 2009). Typically, in-depth interviewing is conducted one-on-one. Preparation for the in-depth interview entails defining the purpose of the interview, structuring the interview, scripting the interview and preparing the respondent. Effective interviewing relies on a carefully thought-out interview guide that is adequate to cover all the topics of interest to the researcher, avoids extraneous questions, and offers some flexibility to facilitate the discovery of unexpected opportunities (Coleman, 2019). Furthermore, effective interviewing depends on building a connection with respondents that allows them to open up and be honest while also allowing them to relax and see the interview as a collaborative effort (Coleman, 2019; Gray, 2018).

This study employed a semi-structured interview schedule. This research instrument allowed the researcher to acquire rich data by asking follow-up questions and probing for additional information to explore beyond the initial response to questions to get a deeper meaning of the discussion. This method allowed for the gathering of additional relevant information. The researcher took notes on additional observations and audio-recorded the conversation to ensure consideration during the interview. The researcher observed the tone and changes in inflexion during the interview. Before the interview, the researcher thoroughly reviewed the literature and drew on the expertise of two other researchers in developing the interview questions, which were adopted as a guide during the interview. The interview schedule comprised three sections (see Appendix 4).

- Socio-demographic profile, six questions to obtain background information such as age, study program

- Stress and coping questions during the COVID-19 pandemic, which is in line with objective 1

- Factors associated with drinking before, during and after the COVID-19 lockdown, which is in line with objectives 2 and 3.

3.10 Data management and storage

The researcher ensured that all the data collected were stored safely on a data recovery device that requires a password to access any information. All written copies of the information collected were filed and stored in a locked cupboard at the Centre for Rural Health (CRH) offices. This study's written and electronic data will be stored for five years. The interview audio recordings will be deleted once the researcher's thesis is approved.

3.11 Data analysis

The qualitative data from the in-depth interviews were analysed using thematic analysis. Thematic analysis is a technique for analyzing qualitative data in which patterns are found, examined, and reported by searching throughout the data (Braun & Clarke, 2006). Although it is a technique for summarizing data, it also incorporates interpretation when choosing codes and developing themes (Kiger & Varpio, 2020). When trying to understand a set of experiences, thoughts, or behaviours across a data set, thematic analysis is a suitable method. Themes are patterned responses or meanings obtained from data that answer a research question (Braun & Clarke, 2006). The significance of a theme is not necessarily reflective of the number of times it is reflected within the data (Kiger & Varpio, 2020). Thematic analysis is theoretically flexible and accessible and can be used with various approaches (Kiger & Varpio, 2020). The researcher identified themes that addressed the research question.

3.11.1 Steps for thematic analysis

The researcher used the six steps proposed by Braun and Clarke to conduct the study's thematic analysis (Braun & Clarke, 2006). The steps are outlined below:

Step 1: Familiarizing with the data

 The first step to obtaining insightful responses to the research questions is organizing the data into a format that can be used (Castleberry & Nolen, 2018). Data was transcribed, read, and reread to familiarize the researcher with the data.

Step 2: Generate initial codes

The initial codes were generated from the data at this stage by the researcher. According to Austin and Sutton (Austin & Sutton, 2014), coding is the process of changing data from the raw form into usable

information by recognizing extracts, concepts, or related ideas. The coding process involves researchers identifying similarities and differences in the data. This study employed the NVivo software program (NVivo release 1.6.1) for the coding. After the data was transcribed, it was uploaded to the NVivo software program. The researcher identified meaningful, and potential sentences further analyzed in subsequent coding. Specific terms or phrases used by different participants were grouped to provide a more relevant emphasis on the data. Following this process, the researcher assigned meaningful titles to the words and phrases representing the participants' words.

Step 3: Searching for themes

According to Braun and Clarke (Braun & Clarke, 2006) the third stage carefully analyses all relevant data extracts related to the selected themes after organizing the numerous codes into probable themes. The researcher scrutinized all the coded data on the NVivo software to extract potential themes for the study. The researcher reviewed the data that had been coded to look for sections where the codes matched and overlapped. To represent and depict a comprehensible and significant data pattern, the researcher collapsed codes that appeared to share common characteristics.

Step 4: Reviewing themes

At this stage, the researcher went through the emerging themes considering the coded information and the whole dataset and reviewed every piece of information repeatedly to ensure the themes accurately represented the study's goals and the overall dataset. According to Braun and Clarke (Braun & Clarke, 2006), additional information discovered within previously left-out themes is coded and included at this point.

Step 5: Defining and naming themes

During this phase of analysis, the researcher defined and restructured the themes. To ensure the data was interpreted and connected with the research questions, the researcher carefully selected extracts from the whole data set to quote and analyze each theme. According to Braun and Clarke (Braun & Clarke, 2006) this step entails determining the importance of each construct and identifying the particular area each theme represents in the data.

Step 6: Producing the report

Finally, the researcher changed the analysis into an explainable write-up using quotes from the participants' actual statements to support each theme. Illustrative quotes were used to link the themes back to the data. The researcher provided an analytic narrative based on the collected data.

3.12 Trustworthiness

Reliability and validity form the cornerstones of good research in any research study. The issues of reliability and validity address how realistic the findings are. In quantitative research, reliability and validity are frequently used; however, the qualitative research paradigm has revaluated their usage. Validity and reliability in research can be traced to the positivist paradigm, and their application has

been redefined from a naturalistic perspective (Golafshani, 2003). Naturalistic researchers emphasize the importance of understanding human behaviour in its natural context, and they believe that validity and reliability can be achieved by using multiple methods of data collection and by conducting research in real-world settings (Golafshani, 2003). Validity evaluates the accuracy of the research findings or if the study genuinely achieves its intended objectives (Golafshani, 2003). The success rate of this study's transferability will be assessed by the researcher of a subsequent study related to this one to determine the study's genuine validity.   The term "reliability" relates to the accuracy of a measurement, which describes the degree to which a research instrument constantly generates the same outcomes when continually employed in a similar circumstance (Heale & Twycross, 2015; Leung, 2015). Within a qualitative investigation, reliability is occasionally referred to as dependability (Erlingsson & Brysiewicz, 2013; Tobin & Begley, 2004). In qualitative research, the relevance of the instruments, methods, and data refers to validity (Leung, 2015). The design, sampling and data analysis must be valid for the methodology, while the results and conclusions must be valid for the sample and context. These conditions must be met for the methodology to be appropriate and for the research question to be satisfactorily answered. (Leung, 2015).

The qualitative paradigm conceptualizes reliability and validity as trustworthiness, rigour, and quality (Golafshani, 2003). Rigour is how one shows integrity and competence in research (Tobin & Begley, 2004). The criteria for determining rigour in qualitative research is trustworthiness which comprises four aspects – credibility, transferability, dependability, and confirmability (Le Roux, 2017). These criteria can be achieved through triangulation, peer-reviewing or debriefing, member checking, rich/thick description of research, clarification of bias, extended engagement and continuous observation in the field (Creswell, 2013). To ensure trustworthiness, Creswell recommends that qualitative research should use at least two strategies in any given study (Creswell, 2013). In this study, the researcher engaged in member checking, rich/thick description of the research and clarification of bias.

Member checking: is also called participant validation (Birt et al., 2016). This process involves sending the data and the interpretation back to the participants so that they can assess it for correctness. (Creswell, 2013). The researcher used WhatsApp to share the participants' transcribed data with each participant to ensure that their comments were accurately recorded, and their words were not misrepresented. Participants were free to edit and add to their data. WhatsApp messages were encrypted so that other people could not access them.

Thick description of research: This is a process whereby the researcher makes a comprehensive report of observed behaviour or action within its particular situation (Ponterotto, 2015). It thoroughly describes the participants or environment of the study, enabling readers to repeat the method in different situations and decide if the results can be referred to due to common qualities (Creswell, 2013). Participants'

feelings, thoughts, and, frequently, the intricate web of interactions are represented (Ponterotto, 2015). The thick description involves a broad explanation of the research process, which informs the investigators, participants, and the report's intended audience about the study findings (Ponterotto, 2015).

This study result described the participant's socio-demographic profiles, experiences, coping strategies and alcohol use during the pandemic, ensuring that identities were protected, anonymised and confidential. The setting and procedures in this study were described in as much detail as possible to provide a background for comprehending the study's results. This study's discussion section effectively combines the participants' accounts of their experiences with the researcher's explanations of these accounts. This will enable the reader to interpret the findings from this account and determine whether they would have derived similar interpretive assumptions. The researcher ensured that she provided a faithful and accurate account of the results.

Clarification of bias: Reflexivity, according to Olmos-Vega et al. (2022), is a collection of ongoing, complex behaviours that enable researchers to critically assess, analyse, and self-reflect on how their opinion and circumstances affected the research procedures (Olmos-Vega et al., 2022). Reflexivity encouraged researchers to recognize their biases, assumptions and beliefs (Creswell, 2013). Reflexivity has become more acknowledged in generating knowledge through qualitative research as a critical technique (Berger, 2015). The researcher must reflect on the entire phase of the research process, including developing a research topic, gathering and analysing data, and drawing conclusions (Berger, 2015).

The reflexivity process in this study helped the researcher reflect on her experiences during this study in the context of COVID-19, the difficulties encountered in obtaining ethical approval and the adaptation of data collection techniques. Self-reflection while interviewing aided the researcher in recognizing issues and questions that she preferred to highlight or avoid, a heightened awareness of her responses to interviews, thoughts, emotions, and causes, and identifying with some experiences related by participants. Reflecting on the research procedures allowed the researcher to recognize the participants' contributions and her supervisor's and co-supervisor's roles, which was crucial to the study. It also assisted the researcher in identifying unconscious editing due to personal sensitivities during the thematic analysis and reporting, enabling more interaction with the data and a more thorough, in-depth analysis.

3.13 **Informed consent procedures**

Before the commencement of the interview, the researcher contacted potential individual participants via an online platform called WhatsApp, while some were randomly approached on Howard and Westville campuses. Potential participants were allowed to ask questions, and any concerns raised were

addressed. A participant's information sheet (appendix 3) was sent to potential participants via WhatsApp to explain the research further, and they were given two to four days to read the information sheet and to decide and indicate via WhatsApp, such as text message, whether they wanted to take part in the study. The researcher sent the informed consent form to the potential participants, who indicated their willingness to proceed. They had to sign the form before the interview to confirm their permission to participate in the study. The researcher confirmed the participants' signatures before the interview session. Participants approached on campus were also given the informed consent form to read and acknowledge their consent before they were interviewed. This form outlined in detail the title, aim and benefit of the research, name as well as contact details of the primary investigator (PI) and her supervisor, voluntary participation, assurance of confidentiality, estimated time for the interview as well as contact details of BREC ethics office in case of any queries.

3.14 Ethical Considerations

Approval for the research was given by the Biomedical Research Ethics Committee (BREC) at UKZN (protocol reference number BREC/00004173/2022). The registrar provided gatekeeper authorization to conduct research among UKZN students across all campuses. Ethical principles were observed at all study phases, including voluntary participation, anonymity, informed consent, privacy during interview sessions, and safe data storage. Partaking in the research was entirely voluntary. Participants were informed that they were allowed to discontinue at any point during the interview session. The anonymity and privacy of the participants were preserved by concealing their names and identifying information. During the data transcription process, the researcher used a private room and an earphone to avoid the possibility of recordings being overheard by other people outside the room. The researcher also removed the participants' identities, including their names and other identifying information, from the written transcripts. When reporting the study findings, the participants were referred to by pseudonyms in the verbatim quotes.

4   Chapter Four

Findings

4.1   Introduction

This chapter presents findings from the in-depth interviews. The results were analyzed in broad themes and subthemes based on the data and the study's theoretical framework. Extracts from the interviews gave authenticity, detail, and support for the topics. The different views about students' experience during the COVID-19 lockdown and the role of alcohol consumption among university students were examined in terms of stress and coping mechanisms adopted during the lockdown, consumption of alcohol before, during, and after COVID-19, factors that influenced alcohol use and misuse among students, as well as the consequences associated with alcohol use.

4.2   Socio-demographic characteristics

The demographic characteristic of participants in this study is presented in the table below. A total of 20 students from UKZN were interviewed for the study. Most participants (60%) were male, while the remaining (40%) were females. The table below shows the participants' ages, ranging from 20 to 36 years, indicating that the sample consisted of participants above the legal drinking age of 18. The participants were South Africans except for one Nigerian student. Half the participants were single, while the remaining were in a relationship.

Thirteen participants were currently enrolled for their bachelor's degree. One participant was registered for an honours degree, while the remaining were Master and PhD students. Refer to Table 1. Most of the undergraduate participants were in their third year of study, followed by those in their second year and fourth year. Two participants were in the first year of their current degree, having concluded a previous degree at UKZN in the past year/2 years. Most of the participant's parents had some formal education, mostly at the secondary school level.

Table 1: Socio-demographic characteristics of participants (N=20)

	Frequency	Percent
Gender		
Female	8	40
Male	12	60
Age		
20-24	14	70
25-29	4	20
30-34	1	5

35-39	1	5
Study Program		
Undergraduate	13	65
Honors	1	5
Masters	2	10
PhD	4	20
Undergraduate Field of Study		
Chemistry	2	
Occupational Therapy	2	
Accounting	1	
Environmental Science	1	
Sport Science	1	
Psychology	1	
Biological Science	1	
Computer Science	1	
Microbiology and biochemistry	1	
Public administration	1	
Education	1	
Survey	1	
Postgraduate Field of Study		
Chemistry	3	
Microbiology	1	
Clinical Anatomy	1	
Gender studies	1	
Year of Study for Undergraduate		
Third Year	9	69
Fourth Year	4	31
Year of Study for Postgraduate		
First Year	3	43
Second Year	3	43
Fourth Year	1	14
First Year	2	10
Second Year	5	25
Third Year	8	40
Fourth Year	5	25

Relationship Status		
Single	10	50
In a relationship	10	50
Father's highest level of education		
No formal education	3	15
Primary	1	5
High school	8	40
Diploma	2	10
BSc	4	20
Masters	1	5
PhD	1	5
Mother's highest level of education		
No formal education	3	15
Primary	1	5
High school	8	40
Diploma	1	5
BSc	5	25
Masters	2	10
Nationality		
Nigerian	1	5
South African	19	95

4.3   Findings

The six themes identified through thematic analyses are presented in Table 2. These include experiences of transitioning to remote study during the COVID-19 lockdown, fear of contracting the COVID-19 virus, manifestations of stress during the COVID-19 lockdown, coping strategies used during the COVID-19 lockdown, alcohol consumption among university students and consequences of excessive drinking. Sub-themes were further discovered within themes. Specific quotes from the participants identified by pseudonyms supported each theme.

Table 2: Themes and sub-themes

	Themes	Sub-theme
1.	Experiences of transitioning to remote study during the COVID-19 lockdown	• Online learning experience Positive experience (Effective, convenient)

		• Negative experience (Difficulty adapting and familiarizing with online learning, increased study workloads, internet issues, lack of interaction and motivation).
		• Personal experience (Boredom)
2.	Fear of contracting the COVID-19 virus	• Fear of the participant contracting the virus
		• Fear of loved ones contracting the virus
3.	Manifestations of stress during the COVID-19 lockdown	• Physical signs of stress
		• Psychological signs of stress
4.	Coping strategies used by university students during the COVID-19 lockdown	• Emotion-based coping
		• Avoidant coping mechanisms
		• Problem-based coping
5.	Alcohol consumption among university students	• Drinking Context (Environmental and social drinking context)
		• Drinking Pattern (Frequency of drinking, number of drinks consumed, types of alcoholic beverages usually consumed)
		• Reasons for drinking (enhancement, social, and coping motive)
		• Change in participants' drinking pattern
6.	Perceptions and experiences of the consequences of excessive drinking	• Health-related issues
		• Overspending and waste of time
		• Domestic Abuse
		• Assaults and accidents

4.4 Experiences of transitioning to remote study lockdown

Participants shared their experiences of transitioning to remote study during the COVID-19 lockdown when the lockdown restriction was first introduced in South Africa to prevent the COVID-19 pandemic from spreading. The related experiences were differentiated according to the category of students, i.e., undergraduate students who had online learning during the pandemic or were conducting post-graduate studies. Before COVID-19, undergraduate and some postgraduate studies, such as Master's degrees by coursework in UKZN, were conducted in person. However, some postgraduate students studied remotely, some conducted fieldwork, and others researched in the laboratory.

4.4.1 Online learning during the COVID-19 pandemic

Educational institutions ceased face-to-face teaching and learning and transitioned to online study to accommodate the restrictions. The transition to online study was perceived differently by participants. In this study, a few participants (4) preferred online instruction over face-to-face instruction, indicating that virtual teaching and learning were convenient and effective.

"I think it was a positive experience because you could learn at your own pace." IDI 20 Male

"I'd say it was ok because everything was done online. So, I feel like it was easier because, before the lockdown, I did have a few lessons that I attended here on campus and comparing those few lessons I had with online learning, I prefer online learning. So yeah, I feel like it's more efficient because you can sit in a lecture hall for maybe a 2-hour lecture, and you'd get out, not even understanding what was being said during the lecture, but when it's online, the lecturer is here. You can hear everything correctly, like in a good way, and ask questions." IDI 12 Female

While some participants reported that they had a favourable experience, others indicated that they faced some challenges adapting and familiarizing themselves with online learning during the early phase of the pandemic. However, as time passed, they adapted to the new learning environment. Participants also reported that practical classes were suspended during this period.

"COVID did us bad. Looking at how we were learning, we were not exposed to online learning (previously). It was exhausting. It was just bad, and we couldn't attend practical sessions." IDI 15 Male

And

"School-wise, it was just confusing because I had to learn how to utilize or adapt to this new form of learning. So, at first, it was, uh, cringe, but now it's a little bit ok. I feel like we're used to it by now." IDI 9 Male

Some of the participants indicated that the abrupt shift to remote learning due to COVID-19 led to a demanding study workload, a lack of interaction with lecturers, and decreased motivation. Online learning can often have more deadlines and assignments than face-to-face courses, which can be overwhelming for students who are not used to working at this pace. Additionally, online learning can make it difficult to interact with classmates and lecturers, which can make it challenging to get help when you need it and to stay motivated. Online learning can also be disrupted by technical difficulties, such as slow internet connections or malfunctioning computers.

"It's quite difficult because it shifted from face-to-face to online. We had more deadlines because they gave us more work. So, we had more deadlines and tests, and having to write online, not seeing lecturers, and inability to communicate effectively with them affected my schoolwork and stuff. And no

motivation to study because you don't know if you are on the right track. I don't think it was good." IDI 13 Female

And

"Having to adapt to online learning, at first, it was hard not being able to consult anytime. I had to write an email which can take two weeks for the lecturer to respond to your questions." IDI 1 Female

Another challenge of online learning during the pandemic was poor internet connectivity which one of the participants mentioned. This could be dependent on the environment where students live. Student who resides in rural area are more likely to experience this challenge.

"Since we went from physical learning to online learning, it is quite a big challenge, and yeah, it was quite stressful because some of us were even struggling with the data and internet connection since we were living in a different environment, some live in the rural areas we did not get the internet access quite clear, so it is quite challenging." IDI 18 Female

Four participants who were postgraduate students also mentioned some challenges they faced with their academic activities during the first phase of the lockdown. These challenges include limited access to resources, difficulty communicating with instructors and classmates, and changes in the learning environment.

"Basically, it affected my academic life more especially. By that time, I was doing my Master's. There was limited time to go to school, so I could not finish my lab work in time. I had to add another year to finish my last degree." IDI 2 Male

And

"It was a terrible experience at that point because my Ph.D. supervisor then was not willing to supervise me again, so it was a horrific moment for me." IDI 10 Male

4.4.2   Personal experience

Data indicated that the COVID-19 pandemic did affect not only participants' academic lives but also their personal lives. Participants reported they struggled with various emotions, such as frustration, boredom, depression, and tiredness.

Three participants mentioned that household chores were an added burden for them. Likewise, the distraction of a house full of people was not an appropriate environment for learning.

"It wasn't great because there were many more responsibilities, like in the house and everything. Like you have to take on more chores because you don't have that liberty of being away from the house, so

it gets like a lot just being at home with a lot of, like with a full house, being around people all the time." IDI 11 Female

Boredom and difficulty adjusting to social isolation resulted from the restriction placed on movement outside the home, and social interaction with people who were not living in the same home was a common experience.

"My life was boring. It was boring because I was always indoors. it was boring and kind of depressing. Not having to see people for a long time because we had to adhere to the regulations, of course." IDI 12 Female

"It was very hard because I'm so outgoing and couldn't do some activities. I was not allowed to visit some people I wanted to visit. I was not allowed to be outside at a certain time. It was just difficult." IDI 17 Male

"I couldn't travel to visit my relatives because I had to be indoors." IDI 1 Female

"It was very difficult because we were not used to just sitting at home all day or every day. Yeah, it was suppressive. It's felt like a prison." IDI 5 Male

The COVID-19 pandemic has led to increased stress and tension in family relationships. This is due to factors such as lockdown, less social interaction, and spending more time together in close proximity. Two participants also discussed how the COVID-19 pandemic altered their interaction with friends and family.

One of the participants related an increase in domestic squabbles.

"There was more fighting between my parents and me and my sister. There was less going out, so we were all under pressure. We were all indoors seeing the same face(s)." IDI 13 Female

How the COVID-19 lockdown affected participant's personal life differs; some saw it as a boring experience or time because they could not go out to visit. Others saw it as an opportunity to bond with their families, especially those whose family members live apart from one another due to their work and university studies. Social connection and family support is important during difficult times. The pandemic forced many people to spend more time with their families, which was a positive experience for some participants.

"Because I'm like this antisocial person, it didn't really affect me even though I missed, like, going out, you know? But I was happy that I was in my room most of the time watching series, I was just happy cooking and playing games with my family. It was like a holiday that we needed as a family because

most of my siblings were working. Because I'm a student, I wasn't affected that much. I have nothing else to do but study. I was happy because we bonded with my family." IDI 7 Female

And

"Outside of schooling, I'd say I have nothing to complain about because I was with family. Got a chance to spend time with family." IDI 20 Male

4.4.3 Fear of contracting COVID-19 virus

The COVID-19 pandemic was accompanied by many fears, especially at the beginning of the lockdown. Apart from the online learning and boredom challenges most participants reported as causing their stress, other causes mentioned were the fear of themselves or their loved ones contracting the virus. The participants reports are listed below.

"Not being able to go to shops because of being afraid of contracting it." IDI 1 Female

And

"A bit cooped up, but at the same time, I did not want to get sick, so I was cautious. I was a little scared because of the spread of the COVID-19 virus." IDI 16 Female

The COVID-19 pandemic caused uncertainty and fear for many people, as they were worried about the health of themselves and their loved ones. This uncertainty made it difficult for people who care for elderly or vulnerable family members, as they were at higher risk of serious illness from COVID-19. Three participants were concerned about their loved ones, especially the older people in their families (considered a vulnerable group) contracting COVID-19.

One of the participants mentioned:

"Not knowing who gets sick. Not knowing if someone I care about got sick and didn't recover." IDI 16 Female

And

"When COVID started, we were very worried about my grandparents not getting COVID." IDI 18 Female

Even though the participant was not living in the same home as their grandparents, whenever they went to visit them, they made sure they created social distance.

"My grandparents were quite depressed during that time because we were not spending a lot of time with them, and we had to sometimes when they insisted on us staying longer, so we had to sit outside in the veranda because we didn't want to get close contact with them." IDI 18 Female

4.5 Manifestations of stress during the COVID-19 lockdown

Ten participants reported feeling stressed during the pandemic. The signs and symptoms they reported were either physical or psychological stress, and a few experienced both symptoms.

4.5.1 Physical and psychological signs of stress

Some participants indicated that when they felt stressed during the pandemic, they exhibited some physical symptoms like difficulty sleeping or oversleeping, not eating well or overeating, and being aggressive, and psychological signs such as anxiety, depression, and sadness. These emotional changes can be attributed to the stress and isolation of the pandemic, as well as the uncertainty and fear that it caused.

A participant described his reaction whenever he was under stress during the lockdown.

"I would say I became a bit angrier, I'm a bit more aggressive in the sense of could be physical, verbal like if I'm in a bad mood and you shake my hand, you can feel like it's a bit tighter than it usually is, in my tone, how I speak seems aggressive." IDI 9 Male

"I was more irritable. I was more moody. I was anxious a lot." IDI 13 Female

And

"I had anxiety. I was not happy. And I lost much confidence in myself." IDI 10 Male

Three participants reported that the restrictions during the COVID-19 lockdown measures negatively affected their mental health, and other issues during this period complicated their situations. One participant reported experiencing feelings of depression.

One of the participants said:

"Uh, it is quite depressing. It was something new like for everyone. For me, it was like I would say I was kind of depressed in a way with the conditions that we were living under like those COVID uh, restrictions and everything. It is just quite hard to cope with everything that was going on so. It was a bit depressing." IDI 18 Female

Apart from participants experiencing mood swings, being aggressive, and exhibiting emotional distress, two participants mentioned they had difficulty sleeping. One participant explained that she was more reserved and ate more.

"I ate more, and I could not sleep. It was hard to sleep. Also got a bit more reserved under stress like talk less." IDI 16 Female

And

"I oversleep or under sleep, and I either like to get too much or too less." IDI 11 Female

A participant mentioned that the impact of the lockdown continued to influence her daily life after the lockdown.

"I was sleeping a lot and not eating much like I was just down. It actually affects me afterward because that is why I do not go out. I got used to staying indoors so much that I do not find it fun going out." IDI 12 Female

4.6 Coping mechanisms among students during COVID-19 lockdown

Coping mechanisms are the strategies individuals often use in the face of stress to help manage difficult emotions. The pandemic posed many difficulties for people generally; therefore, it was important to know how students coped during this situation. This section highlighted various forms of coping university students employed when faced with stress amidst the COVID-19 lockdown. The coping strategies used by university students include emotion-based coping, problem-based coping, as well as avoidant coping. This study found that thirteen participants used emotion-based coping, four used problem-based coping, two used avoidance coping, four participants used the combination of problem-based coping and emotion-based coping.

4.6.1 Emotion-based coping

Participants were asked about the specific things they did that helped them cope with the stress during the lockdown. The current study's findings reflect that the participants used different emotion-based coping strategies to deal with stress. The mechanisms that emerged from emotion-based coping include social support, sleeping, exercise, reading, watching television, listening to music, and maintaining a positive attitude.

One of the participants said:

"Most of the time I will be listening to music, I also do read books sometimes as well as maybe watch TV. The most fun was spending time with my family." IDI 8 Male

Two participants mentioned how physical activities helped them cope.

"I go to the gym, I do push-ups, lift weights, go shoot it out, boxing, tiptoe, heart pumping, get the body sweating and just doing something like that, the blood flow, let those dopamine's, you know, flow out. I also meditate. Meditation is key. I began to read a bit more." IDI 9 Male

And

"I would just like to exercise and take my dog for a walk." IDI 11 Female

4.6.2 Problem-based coping

Problem-based coping mechanism entails identifying a problem that triggers stress and then developing and implementing some possible solutions for effectively dealing with it. Some participants also utilized problem-based/cognitive coping strategies (e.g., positive thinking and planning) to deal with their stressors.

Journaling and planning helped some participant cope with the stress of the pandemic. It was also helpful to express their thoughts and feelings, and to create a sense of structure and control in their lives.

"I try to write down all my thoughts and, you know, like everything going through my head. Yes, and then I try to find other ways to deal with everything. I also try not to think about all those negative thoughts, so I focus more on the positive." IDI 18 Female

Another participant said:

"Had to plan everything, write it down and have a timetable of when to do the house chores at home and schoolwork." IDI 1 Female

4.6.3 Avoidance coping mechanism.

Avoidance coping strategies entail avoiding or minimizing stressful and difficult situations, experiences, thoughts, and feelings to cope. Two of the participants said they tried to stay away from stressful situations.

It was found that a few participants coped with the stress of the pandemic by focusing on their schoolwork and keeping themselves busy. They also distracted themselves from the situation and stay productive.

"I just ignored it (COVID) and carried on with my deadlines and test and all of that. I just did what was required of me." IDI 13 Female

And

'I take my mind off the situation and keep myself busy with stuffs at home' IDI 16 Female

4.7   **Alcohol consumption**

4.7.1   **Drinking context of participants**

Participants were asked whether their family members drank alcohol, to what extent, and if their family members' drinking patterns influenced their drinking patterns. Nine participants indicated that their family members were heavy drinkers, and seven mentioned that they were low to moderate drinkers. Two participants reported that their parents did not consume alcohol, while another two mentioned that only one of their parents drank.

"Some members of my family members do drink. My male cousins drink a lot and drink every weekend." IDI 20 Male

The participant mentioned above was an occasional drinker who drank twice a month and consumed four or five bottles of beer whenever he drank. The participant's drinking pattern did not appear to be influenced by his cousins because they did not drink together.

"I don't drink with my cousins, and their pattern of drinking doesn't influence me" IDI 20 Male

Similarly, another participant also reported:

"They also drink a lot like my uncles and my sister, but my dad does not drink anymore. My mum does not drink at all. But extended family drinks, so if there is a family event, there is a lot of alcohol, and everyone gets to drink." IDI 13 Female

All the participants in this study consumed alcohol with friends. However, some of the participants' friends who consumed alcohol drank more than the recommended upper limit. Their drinking patterns influenced these participants more than their family members because they reported consuming alcohol with their friends.

"We would not be friends if they are not drinking." IDI 6 Male

"In most cases, when they start drinking, they always call me to check my whereabouts, always to come and join them." IDI 5 Male

"Yeah, I think in the last relationship with my friends, it affected me because, even if I'm busy, they used to call me like, hey, let's go out. I will stop what I was doing, but I decided to stop that because it disturbed my schoolwork." IDI 2 Male

One participant reported that his drinking was influenced by the number of friends he drank with.

"Before COVID, when I'm alone, six bottles of alcohol is ok, and then when I'm with friends, at least if maybe we are two, we take at least 12 bottles of beers, but if we are many, like four it becomes unlimited, I cannot even tell." IDI 2 Male

Furthermore, participants explained why they preferred to drink with friends than to drink alone.

"I tend not to drink alone, I will always drink with friends. Drinking alone is not good. It's depressing." IDI 9 Male

"I drink with friends because it is just nice. We have fun together." IDI 13 Female

4.7.2 Drinking location

Most (17) participants reported going out to drink, including to parties, taverns, clubs, bars, and restaurants. Some participants mentioned that they tended to drink more when they went out or spent time with friends than when they drank alone at home.

"I go out, drinking at home is boring, I do go to the taverns." IDI 15 Male

"I go out more after COVID and drink less in my residence. I go out a lot, we go to restaurants and attend parties." IDI 13 Female

Different preferences for socializing were identified in the study. These different preferences may reflect different personality types or comfort levels with social situations. While some participants reported going out to drink with friends, a few indicated that they drank indoors and sometimes invited their friends to their place or visited them.

"We stay indoors and do not necessarily go to a restaurant. It depends on the day. Sometimes, they come over, sometimes, we go out to the club, bar, or restaurant, or I go to visit them." IDI 17 Male

"I do not go out. My friends come to my place or I go to them sometimes. I do not know, and maybe I am not too fond of the environment like clubs. I do not like crowded spaces." IDI 12 Female

Another participant commented:

"I drink at home or family homes. I do not really go out to public spaces." IDI 16 Female

4.8   Drinking patterns of participants

4.8.1 Frequency of drinking

The findings show that fourteen participants drank alcohol more frequently on weekends before and after the lockdown. This could be because students were occupied with classes during the week.

Participants also reported that they consume alcohol during special occasions such as birthday parties and festive periods.

"I drink only when I think I have time. I can sacrifice a day in a week or maybe a day in two weeks. But I have to pick a day where I see that I am actually free, maybe Friday, Saturday, or maybe Sunday." IDI 15 Male

"Drinking is not an everyday thing for me, but I'd say maybe on Saturdays when I watch soccer." IDI 8 Male

And

"I will say twice a week and maybe on Friday and Saturday" IDI 18 Female

Drinking frequency of individual sometimes could depend on their financial situation. Thirteen participants mentioned drinking three times or more weekly, while seven participants reported consuming alcohol once a month or in two months.

"If I had money, I'd probably drink every three days, two days. But if I don't, I'll probably drink on weekends." IDI 13 Female

And

"I wouldn't say in a week like I drink maybe once a month or once in two months." IDI 12 Female

4.8.2   Number of drinks usually consumed

Thirteen participants reported that they drank five or more units of alcohol on one occasion, which is considered binge drinking in males, whereas consuming four units or more in one sitting is considered binge drinking in females.

"I do take six packs of 330ml Stella Artois." IDI 8 Male

"If it's ciders, I will drink until I pass out… more than six. Vodka, I will dash more than four glasses." IDI 13 Female

"If like I wanna like go like heavy drinking I'll take maybe two and a half bottles of wine." IDI 18 Female

"Currently, I take only 12 cans of beer." IDI 5 Male

One participant used an estimate of a quarter of a glass per serving of gin which is usually quantified in terms of 44ml per measured serving. However, estimates can be deceptive as the person consuming the alcohol may not have an exact measure to calculate or track their consumption accurately.

58

"It's just like quarters of each glass, like four glasses of gin." IDI 17 Male

4.8.3   Type of alcohol preferred

The alcoholic beverages consumed by participants included cider, wine, beer, gin, whiskey, tequila, vodka, cognac, brandy, scotch, and cocktails. However, the majority (thirteen) of the participants preferred beer. Seven of the participants reported wine as their preferred alcoholic beverage, while twelve participants mentioned they consume some spirits.

Table 3: Alcohol preference of participants

Participant	Alcohol preference
1	Beer
2	Beer, whiskey
3	Beer
4	Wine
5	Beer
6	Vodka, beer
7	Wine, whiskey
8	Beer
9	Beer, whiskey, scotch, vodka
10	Wine, beer, gin
11	Ciders, vodka, gin, tequila
12	Wine, ciders
13	Vodka, cider, beer, wine, tequila, gin, cognac, whiskey, brandy
14	Beer
15	Beer, cognac
16	Gin, beer, cocktail
17	Ciders, gin, and wine
18	Wine
19	Vodka or gin
20	Beer

4.9   Reasons for drinking

Most (eighteen) participants reported drinking for enjoyment (fun, taste), some (eight) indicated social reasons (spending with friends), and a few (four) also reported coping motives. Over 50% of the

students stated that the reasons they drank alcohol included feeling happy, socializing with others, having fun, and enjoying the taste. Participants mentioned the following:

"I just want to feel happy, enjoying the company of the people." IDI 8

"I drink just for fun." IDI 7 Female

"It is for quenching of thirst because there's a particular taste that is not similar to the water taste or soft drink." IDI 5 Male

"There are some alcohols I enjoy consuming just for this sense of how it tastes. And then there are some I enjoy for how it feels." IDI 9 Male

Participants further mentioned that consuming alcohol with friends helped them bond with friends and improved their social interactions. These factors may offer some benefits, including buffering against mental and physical illness. The social interaction and bonding when drinking allowed participants to express their feelings and the issues bothering them.

"It's also a thing that brings me and my friends together. I won't say that like without alcohol, we don't come together. It's always nice to share a glass of whiskey, Scotch, or whatever it is with your friends every now and then. Then we tell stories, talk, express, and discuss things. Like life has been like this for me lately. We get to spend time together, relax and talk because, as men, we usually don't have the opportunity to speak and express ourselves." IDI 9 Male

Alcohol is a beverage that helps individuals network and feels comfortable at social events (Fairbairn & Sayette, 2014). Findings in this study suggest that some men use alcohol as a social tool to connect with one another.

4.9.1 Using alcohol to cope

Alcohol is a depressant that can temporarily reduce stress, anxiety, and other negative emotions. As a result, some people may turn to alcohol to cope with difficult or challenging situations. However, using alcohol as a coping mechanism can be harmful in the long run. The results show that alcohol consumption was one of the mechanisms used to cope with stress.

A participant mentioned the effect of alcohol restrictions on him in terms of managing stress during the COVID-19 lockdown.

"It did affect us even mentally because the drinking does reduce some of the stresses we experience in life." IDI 5 Male

And

"Sometimes when I am stressed, it helps calm me down, and to some degree, it releases those dopamine's, whatever hormones for that period, to be able to calm my nerves for that moment." IDI 9 Male

4.10 Changes in alcohol drinking behaviour during the lockdown

This study observed a reduction in the frequency and amount of alcohol consumed during the COVID-19 lockdown. This reduction is mainly because the drinking outlets were shut during these periods. Almost half (nine) of the participants mentioned that they did not drink during the initial phase of the lockdown.

One participant said:

"I did not drink during the first phase of the lockdown. We were not able to get some drinks." IDI 18 Female

And

"During lockdown like Level 5 lockdown, I didn't drink anything. There's no reason to drink at all." IDI 16 Female

Findings from the study show that regardless of circumstances such as unavailability of alcohol, banning of alcohol sales, illegal sales of alcohol, high prices, or serious events such as health-related epidemics, including COVID-19, some university students continued to drink. Participants shared their drinking experiences before and during the COVID-19 lockdown.

"I used to drink three times or more in a week before COVID-19, and during weekends I would drink more than 18 cans of beer. During the lockdown, when there was the restriction on alcohol at first, it was very difficult to stay without drinking, but until some of them started selling illegally, some of us who had access to buy alcohol bought it, but it was not the same. The rate of drinking was not the same because of the prices. Some of them were 200% increase. Some of them were 300% increase, so we had to cut down the drinking; sometimes, the month would go by without drinking." IDI 5 Male

"I drink every day, and sometimes I wouldn't sleep for the whole weekend, so it's really hard to count how many bottles I consume. During the lockdown, when the restriction was very strict, and we could not get alcohol, and then we did have to then buy like counterfeit drinks." IDI 6 Male

After the COVID-19 lockdown ended, a few (four) participants that drank more than before COVID-19 mentioned that the alcohol restriction during the lockdown helped them to control their drinking.

"It's more controlled now. I drink less, so maybe I drink six, not more, not less." IDI 13 Female

And

"Before COVID-19, it was very, very bad because I drank almost every day from Wednesday to Sunday. But after COVID-19, I think I restructured myself properly, and I stopped that habit. I was partying a lot, so that was why I was drinking a lot. And COVID-19 came in, and there was nowhere to go. So, I could not do that again. So, that actually helped me in a way to restructure the way I drink." IDI 10 Male

4.11 Consequences of drinking

All the participants were aware of the consequences of drinking too much alcohol. Participants freely discussed a range of harmful effects associated with alcohol use, especially excessive drinking, such as experiencing a hangover, vomiting, waste of time, health-related issues, overspending/ excess spending on alcohol, domestic abuse, alcohol dependence, domestic abuse, rape, violence, and unintended pregnancy. Participants shared their experiences relating to these consequences and how alcohol abuse affected others and the community.

"I vomit and have (a) hangover the following day." IDI 1 Female

"It does make me like kind of late. It helps me procrastinate sometimes. Drinking affects my studying or doing some schoolwork." IDI 13 Female

"I'll wake up tired sometimes. And it's hard to run errands when you are tired." IDI 17 Male

"You end up doing something you will regret in the morning, that is what happened to me before. I can sleep the whole day sometimes when I eat, I vomit. I also realize that I waste a lot of money on alcohol." IDI 2 Male

4.11.1 Health-related issues

Alcohol use, while a risk factor for several health outcomes, often has more significant effects when consumed in large quantities. Participants indicated that health issues are one of the results of excessive drinking amongst people.

"If you consume it (alcohol) too much you end up having health problems like your liver being unable to function well. The outcome of drinking too much alcohol is becoming sick another thing you become too much addicted in such a way of that you feel like your body needs alcohol every day." IDI 1 Female

Similarly, another participant also stated

"I think excessive consumption of alcohol has an effect on my grandmother because now she's having difficulty eating. she is a very heavy drinker; sometimes, she will cough or throw out blood. I think it has to do with the internal damage at this point." IDI 17 Male

4.11.2 Overspending

Wasting time and overspending money on what they perceive to be a worthless activity emerged as one of the effects of drinking too much, as reflected in the quotes below. Excessive spending on alcohol limits them from saving money.

"If you overdrink, you overspend. You're spending much more time drinking than spending that time doing something that matters. Maybe focusing on your academics, or possibly saving money, because drinking alcohol frequently means spending a lot of money." IDI 12 Male

And

"If you take alcohol too seriously, it can really affect the way you use your money. Spending money that you could have used for other purposes. you waste a whole day drinking, and then a full day recovering." IDI 4 Male

4.11.3 Domestic abuse

Some (four) participants mentioned their experiences and the consequences of excessive drinking concerning domestic abuse.

"When my boyfriend is drunk, he causes trouble, and we argue." IDI 7 Female

And

"One person I know is having a bad relationship with his family because he drinks excessively. He's abusive and beats up his wife in front of (their) children." IDI 17 Male

4.11.4 Assault and accidents

Participants identified alcohol abuse as a major contributing factor to risky sexual behaviour and sexual assault, which may cause sexually transmitted diseases and unintended pregnancies.

"They can easily get sexually abused while they're drunk. You can contract an STI or end up pregnant." IDI 4 Male

"Once people are drunk, they misbehave, which is why there are many rape incidents." IDI 10 Male

And

"There's a lot of teenage pregnancy right now, and you can also associate that with alcohol because obviously when you are drunk, especially the females, you are not all the way there in your mental

capacity. You end up doing something you are going to regret, and people get pregnant. They do not use protection while they are drunk." IDI 20 Male

Participants mentioned other incidents committed in communities where people drank a lot. Apart from sexual assault, physical assault was also reported to be an effect of excessive drinking, the effects of which could range from minor to fatal because of clouded judgment.

"The things that happen in areas where there is alcohol is not good. First, fights burst out when people are drunk. Some people get hurt, some get raped, and some people's money is stolen from them, or their possessions. There's a lot of chaos, violence, and crime that is committed around those areas most of the time." IDI 12 Female

"It makes people fight and make people resent one another." IDI 14 Male
And

"So many mistakes are made; they have very short tempers in that space. Once you step on one of the drunk people, anything can happen. There can be a fight then any fight can start from small to death." IDI 5 Male

Participants also reported how the use of alcohol could cause accidents.

"One can be arrested for drinking and driving. They can cause accidents, fatal accidents." IDI 5 Male

4.12 **Conclusion**

This chapter started with an introduction, followed by the socio-demographic characteristics of the participant. The findings were presented in the form of themes in this chapter. These themes include experiences of transitioning to remote study during the COVID-19 lockdown, fear of contracting the COVID-19 virus, and manifestations of stress during the COVID-19 lockdown. In addition, the themes also included the coping strategies implemented by participants, which include cognitive/emotional coping, problem-based coping, and avoidant coping. Lastly, the chapter presented findings on alcohol consumption among participants, their primary motive for drinking, and the consequences of drinking, especially excessively. It is important to note that all the themes were backed up by quotes expressed by the participants during research interviews.

5   Chapter Five

Discussion and Conclusion

5.1   Introduction

Alcohol abuse among university students is a significant concern likely to adversely affect their wellbeing. The emergence of the COVID-19 pandemic led to the implementation of the COVID-19 lockdown regulations, which forced restructuring of people's daily lives. There were also academic changes in the educational sector, particularly, at the tertiary level, which impacted university students. This study explored university students' experiences, how they coped with change due to the lockdown, and the factors influencing alcohol use among university students during the COVID-19 lockdown. The chapter, therefore, discusses the research findings in a bid to address the study's research questions.

5.2   Experiences of transitioning to remote study lockdown

Online learning was introduced as an alternative learning method due to the COVID-19 pandemic lockdown, leading to the abolishment of face-to-face classes in most universities. With online learning, studies have shown that ideally, students can learn and connect with their lecturers from any location (Jun et al., 2021; Singh & Thurman, 2019). This is consistent with our finding, as some participants felt that online teaching and learning was convenient and effective. Although online learning is a valuable tool for delivering lectures, some participants faced challenges such as adapting and familiarizing themselves with online learning platforms at the beginning of the pandemic, poor internet connectivity, increased study workload, lack of interaction with lecturers, and decreased motivation. Other studies also reported these challenges (Anwar et al., 2020; Dube, 2021; Govender et al., 2021; Haron et al., 2021; Kaisara & Bwalya, 2020).

Furthermore, participants struggled with various emotions, such as fear of themselves or their relations contracting the COVID-19 virus, boredom, depression, anxiety, frustration, and tiredness. This finding is supported by previous studies (Aristovnik et al., 2020; Cao et al., 2020; Dodd et al., 2021; Jehi et al., 2022). The COVID-19 pandemic had a significant impact on family relationships. Lockdown measures, which restricted social interaction and required families to spend more time together in close proximity, have led to increased stress and tension in some families. This finding aligns with a systematic review which explored the relationship between the family and the school in the face of the imposed distance learning situation caused by COVID-19 (Carrión-Martínez et al., 2021). Interestingly, we also gathered that during the COVID-19 lockdown, families had the opportunity to bond, especially those whose family members lived apart from one another due to their work and tertiary education. This is in line with a previous study by Prieto et al. (2021), who found that some participants enjoyed their family time during the pandemic (Prieto et al., 2021).

5.3 Coping strategies used by university students during the COVID-19 lockdown

Applying Lazarus and Folkman's Transactional Theory of Stress and Coping as a lens to interpret our results could suggest that university students were vulnerable to stress due to the COVID-19 lockdown measures. Coping is essential in understanding how young people respond to the stressors and changes they experience (Markova & Nikitskaya, 2017). During adaptation to stressful situations, the coping strategies a person adopts determine the physical and mental health of the individual. In line with a previous study, we identified positive thinking and planning (problem-based) as one of the strategies used by the participants (Labrague et al., 2017). Another strategy adopted by the students is the emotion-based strategy. This strategy involves using social support, sleeping, exercising, reading, watching television, listening to music, and maintaining a positive attitude to protect against stress. Our findings agree with previous studies (Ogueji et al., 2021; Prowse et al., 2021; Salman et al., 2020). In this study, majority (thirteen) of the participants used emotion-based while few (four) of the participants used problem-based coping strategies to deal with the stress associated with the COVID-19 lockdown. It has been observed that these two coping strategies are the most frequently used by students (El-Monshed et al., 2021), which shield against the development of psychological problems during COVID-19, which could be the reason most participants adopted these strategies (Chen et al., 2022). Physical activities, such as exercise and taking walks, were a helpful emotion based coping mechanisms few participants adopted during the pandemic. Physical activity can release endorphins, which have mood-boosting effects (Blumenthal & Rozanski, 2023; X. Liu et al., 2023). Additionally, physical activity can help to improve sleep quality, which is essential for overall health and well-being (Mahindru et al., 2023).

This study also found that avoidance coping strategies were adopted during the lockdown. This finding corresponds with a study carried out amongst undergraduate healthcare students in India, which found that students experiencing psychological distress applied avoidant coping behaviours (self-distraction, behavioural disengagement, denial) (Mishra et al., 2021) to deal with COVID-19.

5.4 Alcohol consumption among university students

In this study, we observed that alcohol use was common among the participants, including binge drinking patterns. The results indicated that participants consumed alcohol on campus and at home. They also drank during weekends, parties, and festive periods. This is in line with previous findings showing that the most frequent times students consume alcohol are at weekends and on special occasions (Lategan et al., 2017; Nyandu & Ross, 2020). This may be because students are busy with lectures and assignments during weekdays. The social control theory's commitment element can be applied to explain that students who devote time, effort, and resources to conventional activities such as academic work have solid commitments and are less likely to drink frequently.

It was observed in the findings that majority of the participants family members and friends consume alcohol which may have been the possible explanation why participants started consuming alcohol. This aligns with the finding conducted by Osaki et al., (2018) who reported that young people begin to drink at home, during social gatherings, and in stressful environments, with parents, relatives, close friends, and intimate partners serving as major influences (Osaki et al., 2018). Factors influencing drinking among participants in this study include drinking location and people with whom participants consumed alcohol. Participants in this study consumed alcohol mostly with friends. The possible explanation for this finding could be that students spend more time with their peers than with family and other significant individuals in the university environment, as a result, friends become the principal models. This result may also be explained by participants experiencing a feeling of belonging when they drink with their friends (Davoren et al., 2016).

This finding also supported previous studies suggesting that alcohol consumption is a social lubricant for connecting people, especially males, who believe drinking alcohol helps social cohesion (Fairbairn & Sayette, 2014; Ritchie & Roser, 2018). This study also found that consuming alcohol with friends helped participants bond with their friends and improved their social interactions. The social interaction and bonding when drinking allowed participants to express their feelings and the issues bothering them. According to Dunbar et al. (2017), these factors may offer some benefits, including buffering against mental and physical illness (Dunbar et al., 2017). Additionally, individuals primarily drink alcohol with their friends since it offers them benefits like social inclusion, according to social learning theorists. In a group, some members tend to attract more attention than others because of their personalities- these individuals are models (Bandura, 1977). People are more likely to drink alcohol to appear more sociable if they witness this behaviour in their models. Social learning theory assumptions support this study's findings, as most participants preferred drinking with friends to drinking alone. Some participants also indicated that friends influenced their drinking patterns.

Seventeen of the 20 participants reported going out to drink, including parties, taverns, clubs, bars, and restaurants, and some participants mentioned that they tended to drink more when they went out or spent time with friends than when they drank alone at home. This is in line with the findings of Londani et al. (2021), who reported that individuals who consumed alcohol at on-licensed premises were more likely to drink more alcohol and more frequently (Londani et al., 2021).

On the choice of alcoholic beverages used, we found that beer, wine, and spirits were the preferred alcoholic beverages consumed. These types of alcoholic drinks are more commonly consumed during binge drinking. However, wine seems to be associated with low to moderate forms of drinking (Babor, 2010; Jensen et al., 2002; Siegel et al., 2011; Stern et al., 2017). This study also found that the reasons most participants drank alcohol included feeling happy, socializing with others, having fun, and enjoying the taste. Socialization is the primary reason for alcohol use in young adults. Other reasons

identified include alcohol use as a relaxant to enhance performance, as a coping mechanism and as a means of 'feeling among' (Kuntsche et al., 2015; Nyandu & Ross, 2020; Sjödin et al., 2021). Interestingly, a quarter of the participants in this study claimed that they consume alcohol to cope with stress.

Moreover, participants in this study were aware of the consequences of alcohol abuse. They described it as experiencing unpleasant effects such as a hangover, vomiting and time-wasting. They also expressed an awareness of the potential for socio-economic and health-related issues such as overspending on alcohol, domestic abuse, alcohol dependence, rape, violence, and unintended pregnancy. These findings are widely reported in the global literature (Patrick & Azar, 2018; Rashied, 2021; Room et al., 2010; World Health Organization, 2018a) and South Africa (Morojele & Ramsoomar, 2016).

5.5   Changes in alcohol drinking behaviour during the lockdown

This study observed that some of the participants drank less during the lockdown than before COVID-19, while a few claimed that the lockdown helped them restructure the way they drank at the time of the study, which was post-COVID-19 lockdowns. In the early stages of the lockdown, alcohol serving and sales outlets were shut down to limit the spread of the virus, and this led to reduced access to alcohol, causing an overall decrease in drinking quantity and frequency for participants in this study. However, those who had access to alcohol could not afford to buy the quantity they consumed before COVID-19 because of the inflated prices. In line with these, several authors have also highlighted the decreased levels of use of alcohol among tertiary students during COVID-19 (Bollen et al., 2021; Vera et al., 2021; White et al., 2020). Social control theory also aligns with this finding as it focuses on what prevents an individual from engaging in deviance (Hirschi, 1969).

In South Africa, alcohol restrictions substantially reduced and prevented alcohol-related harms, especially where heavy drinking is prevalent (Manyoni & Abader, 2021; Navsaria et al., 2021). For instance, hospitalization due to alcohol abuse was reduced during the lockdown period (Chu et al., 2022; Reuter et al., 2020). Similarly, hospital trauma presentation was reduced when alcohol was banned in the early stages of the COVID-19 pandemic lockdown in South Africa (Van Hoving et al., 2021). Despite the small sample, this study augments the evidence on students' experience and coping behaviour during the COVID-19 lockdown (El-Monshed et al., 2021; Gittings et al., 2021; Tasso et al., 2021) and contributes to the findings on alcohol consumption among tertiary students during the COVID-19 pandemic in South Africa (Manyoni & Abader, 2021).

5.6 Implications of the study

This study explored students' experiences and coping strategies employed in response to the COVID-19 pandemic lockdown. This study also identified factors that influenced binge drinking among students at a major tertiary institution in KwaZulu Natal during the lockdown.

Most participants were undergraduate students who were registered before the COVID-19 pandemic started. With reference to the first objective, participants' experiences and coping mechanisms during the pandemic differed. While a few reported they preferred online learning because it was convenient and effective, some were faced with the challenge of adapting and familiarizing themselves with online learning platforms during the initial phase of the pandemic, poor internet connectivity, increased study workload, lack of interaction with lecturers, and motivation (Almahasees et al., 2021).

The current study also found that participants struggled with various emotions, such as fear of contracting the COVID-19 virus and fear of their loved ones contracting COVID-19, boredom, feelings of depression, anxiety, frustration, and tiredness. However, participants claimed to have adopted some coping mechanisms such as ignoring the situation, harnessing social support structures, sleeping, exercising, reading, watching television, listening to music, maintaining a positive attitude, positive thinking, and active planning to handle the difficulties they confronted during the lockdown (Jun et al., 2021; LaRosa et al., 2022)

The results of this study also implied that alcohol consumption was prevalent, especially binge drinking among the study participants (Bonar et al., 2021; White et al., 2017). The implementation of on-premise alcohol outlets closure and alcohol sales bans during the COVID-19 lockdown led to a reduction in alcohol use (Vera et al., 2021).

5.7 Limitations of the study

Although this research provides valuable information, it has limitations. Due to the limited sample size, contextual factors that vary throughout South Africa, including rural and urban locations, and socio-economic factors, this finding cannot necessarily be applied to other university students in South Africa. Also, participants in the study were enrolled at UKZN before the COVID-19 pandemic, and their experiences could differ from newly enrolled students. Findings should be interpreted carefully because the sample constituted more male participants than females. Similarly, participants were limited to students from only two campuses which catered for different areas of study and did not include students at other campuses who may have faced different challenges and may have had different experiences and used different coping strategies, which limits the application of the results to the total student population. As most participants were undergraduate students, postgraduate students were underrepresented. Also, this limited the study from getting a broad understanding about the differences

in student experiences based on study program. In addition, the study did not analyse the wide age range among the participants. A further limitation is that students were sampled from only one of some tertiary institutions in KwaZulu-Natal. Another limitation of this study was that participants were interviewed only in English, and participants who were not fluent or comfortable with being interviewed in English were excluded.

5.8 Recommendations

This study on alcohol misuse and how students coped during the COVID-19 lockdown contributes to the evidence base to support higher education institutions to develop policies, interventions and support services for students who face the usual stressors associated with adjusting to studying at a university and the related social changes.

In addition, higher education institutions should institute supportive structures for students who may be required to adjust to unexpected, life-changing crises and educate and support the students to make responsible choices regarding alcohol use and healthy coping strategies.

Further studies should be carried out to:

- Identify the needs of students concerning support to address psychoeducational needs for students struggling to cope with higher education and the changes in their lifestyles.
- Elucidate appropriate mechanisms for health promotion and education at tertiary education campuses on alcohol use.
- Explore appropriate interventions to capacitate students in coping strategies for anxiety and stress.

5.9 Conclusion

This study sought to understand the experiences of a sample of students at a tertiary institution in the context of the COVID-19 pandemic lockdown, with a focus on alcohol use as a coping mechanism and factors that influenced their drinking during COVID-19, as well as other coping strategies. The study found that for some students the frequency and the amount of alcohol consumption reduced during the COVID-19 lockdown. This was mostly attributed to the restrictions placed on alcohol sales in South Africa and the increase in price of the available alcohol during the lockdown. Many participants reported a change in drinking location as well. Participants also reported they experienced some distress during the COVID-19 lockdown which was related to isolation, uncertainty, fear of them or their love contracting the virus. The study identified various forms of coping participants employed when faced with stress amidst the COVID-19 lockdown which included emotion-based coping, problem-based coping, as well as avoidant coping. The study also found that alcohol was used as a coping mechanism

to deal with stress. These findings can be used to develop interventions and support services to help students cope with the challenges of unexpected events such as pandemics and lockdowns, and to encourage and support the reduction of alcohol use.

References

Abiona, O., Oluwasanu, M., & Oladepo, O. (2019). Analysis of alcohol policy in Nigeria: Multi-sectoral action and the integration of the WHO "best-buy" interventions. *BMC Public Health*, *19*(1). https://doi.org/10.1186/s12889-019-7139-9

Ahmad, A. R., & Murad, H. R. (2020). The impact of social media on panic during the COVID-19 pandemic in iraqi kurdistan: Online questionnaire study. *Journal of Medical Internet Research*, *22*(5). https://doi.org/10.2196/19556

Ajayi, A. I., Owolabi, E. O., & Olajire, O. O. (2019). Alcohol use among Nigerian university students: Prevalence, correlates and frequency of use. *BMC Public Health*, *19*(1), 1–11. https://doi.org/10.1186/s12889-019-7104-7

Akers, R. L., & Sellers, C. S. (2008). *Criminological Theories: Introduction, Evaluation, and Application*. New York: Oxford University Press.

Allmark, P., Boote, J., Chambers, E., Clarke, A., McDonnell, A., Thompson, A., & Tod, A. M. (2009). Ethical Issues in the Use of In-Depth Interviews: Literature Review and Discussion. *Research Ethics*, *5*(2). https://doi.org/10.1177/174701610900500203

Almahasees, Z., Mohsen, K., & Amin, M. O. (2021). Faculty's and Students' Perceptions of Online Learning During COVID-19. *Frontiers in Education*, *6*. https://doi.org/10.3389/feduc.2021.638470

Alonso, F., Pastor, J. C., Montoro, L., & Esteban, C. (2015). Driving under the influence of alcohol: frequency, reasons, perceived risk and punishment. *Substance Abuse Treatment, Prevention, and Policy*, *10*(1), 11. https://doi.org/10.1186/s13011-015-0007-4

Anwar, M., Khan, A., & Sultan, K. (2020). The Barriers and Challenges Faced by Students in Online Education During COVID-19 Pandemic in Pakistan. *Gomal University Journal of Research*, *36*(1).

Aristovnik, A., Keržič, D., Ravšelj, D., Tomaževič, N., & Umek, L. (2020). Impacts of the COVID-19 pandemic on life of higher education students: A global perspective. *Sustainability (Switzerland)*, *12*(20). https://doi.org/10.3390/su12208438

Aron, H. T. (2016). *Alcohol and Substance Use among Students at University Of Kwazulu-Natal, South Africa: The Protective Role of Psychological Capital and Health Promoting Lifestyle*. University Of Kwazulu-Natal, Durban South Africa.

Ashour, H. M., Elkhatib, W. F., Rahman, M. M., & Elshabrawy, H. A. (2020). Insights into the recent 2019 novel coronavirus (Sars-coV-2) in light of past human coronavirus outbreaks. *Pathogens*, *9*(3), 1–15. https://doi.org/10.3390/pathogens9030186

Aspinwall, L. G., & Taylor, S. E. (1997). A stitch in time: Self-regulation and proactive coping. *Psychological Bulletin*, *121*(3). https://doi.org/10.1037/0033-2909.121.3.417

Atwoli, L., Mungla, P. A., Ndung'u, M. N., Kinoti, K. C., & Ogot, E. M. (2011). Prevalence of substance use among college students in Eldoret, western Kenya. *BMC Psychiatry*, *11*, 9. https://doi.org/10.1186/1471-244X-11-34

Austin, Z., & Sutton, J. (2014). Qualitative Research: Getting Started. *Can J Hosp Pharm.*, *Vol. 67, N*, 436–440.

Babor, T. (2010). Alcohol: No ordinary commodity - A summary of the second edition. *Addiction*, *105*(5). https://doi.org/10.1111/j.1360-0443.2010.02945.x

Babor, T., Higgins-Biddle, J. C., Saunders, J. B., & Monteiro, M. G. (2001). The Alcohol Use Disorders Identification Test: Guidelines for use in primary care. *Geneva: World Health Organization*.

Baker, J. P., & Berenbaum, H. (2007). Emotional approach and problem-focused coping: A comparison of potentially adaptive strategies. *Cognition and Emotion*, *21*(1). https://doi.org/10.1080/02699930600562276

Bandura, A. (1977). *Social Learning Theory*. Englewood Cliffs, NJ: Prentice Hall.

Bantounou, M. A. (2023). A narrative review of the use of alcohol during the Covid-19 pandemic; effects and implications. *Journal of Addictive Diseases*, *41*(1), 30–40. https://doi.org/10.1080/10550887.2022.2058852

Bao, W. (2020). COVID -19 and online teaching in higher education: A case study of Peking University . *Human Behavior and Emerging Technologies*, *2*(2). https://doi.org/10.1002/hbe2.191

Bergdahl, N., & Nouri, J. (2021). Covid-19 and Crisis-Prompted Distance Education in Sweden. *Technology, Knowledge and Learning*, *26*(3). https://doi.org/10.1007/s10758-020-09470-6

Berger, R. (2015). Now I see it, now I don't: researcher's position and reflexivity in qualitative research. *Qualitative Research*, *15*(2). https://doi.org/10.1177/1468794112468475

Bhattacharjee, A., & Ghosh, T. (2022). COVID-19 Pandemic and Stress: Coping with the New Normal. *Journal of Prevention and Health Promotion*, *3*(1). https://doi.org/10.1177/26320770211050058

Biggs, A., Brough, P., & Drummond, S. (2017). Lazarus and Folkman's Psychological Stress and Coping Theory. In *The Handbook of Stress and Health*. https://doi.org/10.1002/9781118993811.ch21

Birt, L., Scott, S., Cavers, D., Campbell, C., & Walter, F. (2016). Member Checking: A Tool to Enhance Trustworthiness or Merely a Nod to Validation? *Qualitative Health Research*, *26*(13). https://doi.org/10.1177/1049732316654870

Blumenthal, J. A., & Rozanski, A. (2023). Exercise as a therapeutic modality for the prevention and treatment of depression. In *Progress in Cardiovascular Diseases* (Vol. 77). https://doi.org/10.1016/j.pcad.2023.02.008

Bo, R., Billieux, J., & Landrø, N. I. (2016). Which facets of impulsivity predict binge drinking? *Addictive Behaviors Reports*, *3*. https://doi.org/10.1016/j.abrep.2016.03.001

Bollen, Z., Pabst, A., Creupelandt, C., Fontesse, S., Lannoy, S., Pinon, N., & Maurage, P. (2021). Prior drinking motives predict alcohol consumption during the COVID-19 lockdown: A cross-sectional online survey among Belgian college students. *Addictive Behaviors*, *115*(December 2020), 1–5. https://doi.org/10.1016/j.addbeh.2020.106772

Bonar, E. E., Parks, M. J., Gunlicks-Stoessel, M., Lyden, G. R., Mehus, C. J., Morrell, N., & Patrick, M. E. (2021). Binge drinking before and after a COVID-19 campus closure among first-year college students. *Addictive Behaviors*, *118*. https://doi.org/10.1016/j.addbeh.2021.106879

Boyce, C., & Neale, P. (2006). Conducting In-Depth Interviews: A Guide for Designing and Conducting In-Depth Interviews for Evaluation Input. *Pathfinder International*, *2*(May).

Braitman, A. L., Linden-Carmichael, A. N., & Henson, J. M. (2017). Protective behavioral strategies as a context-specific mediator: A multilevel examination of within- and between-person associations of daily drinking. *Experimental and Clinical Psychopharmacology*, *25*(3). https://doi.org/10.1037/pha0000111

Bratberg, G. H., Wilsnack, S. C., Wilsnack, R., Håvås Haugland, S., Krokstad, S., Sund, E. R., &

Bjørngaard, J. H. (2016). Gender differences and gender convergence in alcohol use over the past three decades (1984-2008), the HUNT Study, Norway. *BMC Public Health*, *16*(1). https://doi.org/10.1186/s12889-016-3384-3

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2). https://doi.org/10.1191/1478088706qp063oa

Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it: rapid review of the evidence. In *The Lancet* (Vol. 395, Issue 10227). https://doi.org/10.1016/S0140-6736(20)30460-8

Browning, M. H. E. M., Larson, L. R., Sharaievska, I., Rigolon, A., McAnirlin, O., Mullenbach, L., Cloutier, S., Vu, T. M., Thomsen, J., Reigner, N., Metcalf, E. C., D'Antonio, A., Helbich, M., Bratman, G. N., & Alvarez, H. O. (2021). Psychological impacts from COVID-19 among university students: Risk factors across seven states in the United States. *PloS One*, *16*(1). https://doi.org/10.1371/journal.pone.0245327

Burns, D., Dagnall, N., & Holt, M. (2020). Assessing the Impact of the COVID-19 Pandemic on Student Wellbeing at Universities in the United Kingdom: A Conceptual Analysis. *Frontiers in Education*, *5*. https://doi.org/10.3389/feduc.2020.582882

Calina, D., Hartung, T., Mardare, I., Mitroi, M., Poulas, K., Tsatsakis, A., Rogoveanu, I., & Docea, A. O. (2021). COVID-19 pandemic and alcohol consumption: Impacts and interconnections. *Toxicology Reports*, *8*, 529–535. https://doi.org/10.1016/j.toxrep.2021.03.005

Campbell, S., Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S., Bywaters, D., & Walker, K. (2020). Purposive sampling: complex or simple? Research case examples. *Journal of Research in Nursing*, *25*(8). https://doi.org/10.1177/1744987120927206

Canadian Centre on Substance Use and Addiction. (2020). *COVID-19 and Increased Alcohol Consumption*. *April*. https://www.ccsa.ca/covid-19-and-increased-alcohol-consumption-nanos-poll-summary-report

Cao, W., Fang, Z., Hou, G., Han, M., Xu, X., Dong, J., & Zheng, J. (2020). The psychological impact of the COVID-19 epidemic on college students in China. *Psychiatry Research*, *287*. https://doi.org/10.1016/j.psychres.2020.112934

Carrión-Martínez, J. J., Pinel-Martínez, C., Pérez-Esteban, M. D., & Román-Sánchez, I. M. (2021). Family and school relationship during COVID-19 pandemic: A systematic review. In *International Journal of Environmental Research and Public Health* (Vol. 18, Issue 21). https://doi.org/10.3390/ijerph182111710

Castleberry, A., & Nolen, A. (2018). Thematic analysis of qualitative research data: Is it as easy as it sounds? In *Currents in Pharmacy Teaching and Learning* (Vol. 10, Issue 6). https://doi.org/10.1016/j.cptl.2018.03.019

Cauffman, E., Steinberg, L., & Piquero, A. R. (2005). Psychological, neuropsychological and physiological correlates of serious antisocial behavior in adolescence: The role of self-control. *Criminology*, *43*(1). https://doi.org/10.1111/j.0011-1348.2005.00005.x

CDC, C. for D. C. and P. (2020). *Social Distancing*. www.cdc.gov/coronavirus/2019-ncov/%0Aprevent-getting-sick/social-distancing.html

CDC, C. for D. C. and P. (2021). *Science Brief: SARS-CoV-2 and Surface (Fomite) Transmission for Indoor Community Environments*. https://www.cdc.gov/coronavirus/2019-ncov/more/science-and-research/surface-transmission.html#print

CDC, C. for D. C. and P. (2022). *Symptoms of COVID-19*. https://www.cdc.gov/coronavirus/2019-

ncov/symptoms-testing/symptoms.html

Chauke, T. M., van der Heever, H., & Hoque, M. E. (2015). Alcohol use amongst learners in rural high school in south africa. *African Journal of Primary Health Care and Family Medicine*, *7*(1), 1–6. https://doi.org/10.4102/phcfm.v7i1.755

Chen, C., Guan, Z., Sun, L., Zhou, T., & Guan, R. (2022). COVID-19 exposure, pandemic-related appraisals, coping strategies, and psychological symptoms among the frontline medical staff and gender differences in coping processes. *Applied Cognitive Psychology*, *36*(1). https://doi.org/10.1002/acp.3902

Chew, Q. H., Wei, K. C., Vasoo, S., Chua, H. C., & Sim, K. (2020). Narrative synthesis of psychological and coping responses towards emerging infectious disease outbreaks in the general population: Practical considerations for the COVID-19 pandemic. In *Singapore Medical Journal* (Vol. 61, Issue 7). https://doi.org/10.11622/SMEDJ.2020046

Chinman, M., Burkhart, Q., Ebener, P., Fan, C. C., Imm, P., Osilla, K. C., Paddock, S. M., & Wright, A. (2011). The Premises is the Premise: Understanding Off- and On-premises Alcohol Sales Outlets to Improve Environmental Alcohol Prevention Strategies. *Prevention Science*, *12*(2). https://doi.org/10.1007/s11121-011-0203-z

Choi, K. W., Watt, M. H., Macfarlane, J. C., Sikkema, K. J., Skinner, D., Pieterse, D., & Kalichman, S. C. (2014). Drinking in the context of life stressors: A multidimensional coping strategy among south African Women. *Substance Use and Misuse*, *49*(1–2). https://doi.org/10.3109/10826084.2013.819365

Chriss, J. J. (2007). The functions of the social bond. *Sociological Quarterly*, *48*(4), 689–712. https://doi.org/10.1111/j.1533-8525.2007.00097.x

Chu, J. J., Jahn, H. J., Khan, M. H., & Kraemer, A. (2016). Alcohol consumption among university students: a Sino-German comparison demonstrates a much lower consumption of alcohol in Chinese students. *Journal of Health, Population, and Nutrition*, *35*(1), 25. https://doi.org/10.1186/s41043-016-0062-0

Chu, K. M., Marco, J. L., Owolabi, E. O., Duvenage, R., Londani, M., Lombard, C., & Parry, C. D. H. (2022). Trauma trends during COVID-19 alcohol prohibition at a South African regional hospital. *Drug and Alcohol Review*, *41*(1). https://doi.org/10.1111/dar.13310

Coleman, P. (2019). In-Depth Interviewing as a Research Method in Healthcare Practice and Education: Value, Limitations and Considerations. *International Journal of Caring Sciences*, *12*(3).

Collins, R. L., & Bradizza, C. M. (2001). Social and cognitive learning processes. In *International handbook of alcohol dependence and problems.*

Conigrave, K. M., Ali, R. L., Armstrong, R., Chikritzhs, T. N., d'Abbs, P., Harris, M. F., Hewlett, N., Livingston, M., Lubman, D. I., McKenzie, A., O'Leary, C., Ritter, A., Wilson, S., Grimmond, M., & Banks, E. (2021). Revision of the Australian guidelines to reduce health risks from drinking alcohol. *Medical Journal of Australia*, *215*(11). https://doi.org/10.5694/mja2.51336

Cooper, M. L. (1994). Motivations for alcohol use among adolescents: Development and validation of a four-factor model. *Psychological Assessment*, *6*(2). https://doi.org/10.1037/1040-3590.6.2.117

Cooper, M. L., Kuntsche, E., Levitt, A., Barber, L. L., & Wolf, S. (2015). Motivational models of substance use: A review of theory and research on motives for using alcohol, marijuana, and tobacco. In *The Oxford handbook of substance use and substance use disorders: Volume 1* (Issue April).

Costello, B. J., & Laub, J. H. (2020). Social Control Theory: The Legacy of Travis Hirschi's Causes of

Delinquency. In *Annual Review of Criminology* (Vol. 3). https://doi.org/10.1146/annurev-criminol-011419-041527

Cox, W. M., & Klinger, E. (1988). A Motivational Model of Alcohol Use. *Journal of Abnormal Psychology*, *97*(2). https://doi.org/10.1037/0021-843X.97.2.168

Creswell, J. W. (2013). Qualitative enquiry & research design, choosing among five approaches. In *SAGE Publications* (3rd editio). SAGE Publications Ltd.

Creswell, J. W. (2014). The Selection of a Research Approach. *Research Design*, 3–23. https://doi.org/45593:01

Dangal, M. R., & Bajracharya, L. S. (2020). Students anxiety experiences during COVID-19 in Nepal. *Kathmandu University Medical Journal*, *18*(2 COVID-19 Special Issue). https://doi.org/10.3126/kumj.v18i2.32957

Dardas, L. A., & Ahmad, M. M. (2015). Coping strategies as mediators and moderators between stress and quality of life among parents of children with autistic disorder. *Stress and Health*, *31*(1). https://doi.org/10.1002/smi.2513

Dash, G. F., Davis, C. N., Martin, N. G., Statham, D. J., Lynskey, M. T., & Slutske, W. S. (2020). High-Intensity Drinking in Adult Australian Twins. *Alcoholism: Clinical and Experimental Research*, *44*(2). https://doi.org/10.1111/acer.14262

Davoren, M. P., Cronin, M., Perry, I. J., & O'Connor, K. (2016). Alcohol consumption among university students: A typology of consumption to aid the tailoring of effective public health policy. *BMJ Open*, *6*(11). https://doi.org/10.1136/bmjopen-2016-011815

De Wet-Billings, N., & Mataboge, P. (2021). Family structure and socio-demographic factors associated with binge drinking among adolescents in South Africa. *Vulnerable Children and Youth Studies*. https://doi.org/10.1080/17450128.2021.1883786

Docea, A. O., Tsatsakis, A., Albulescu, D., Cristea, O., Zlatian, O., Vinceti, M., Moschos, S. A., Tsoukalas, D., Goumenou, M., Drakoulis, N., Dumanov1, J. M., Tutelyan, V. A., Onischenko, G. G., Aschner, M., Spandidos, D. A., & Calina, D. (2020). A new threat from an old enemy: Re-emergence of coronavirus (Review). In *International Journal of Molecular Medicine* (Vol. 45, Issue 6). https://doi.org/10.3892/ijmm.2020.4555

Dodd, R. H., Dadaczynski, K., Okan, O., McCaffery, K. J., & Pickles, K. (2021). Psychological wellbeing and academic experience of university students in australia during covid-19. *International Journal of Environmental Research and Public Health*, *18*(3). https://doi.org/10.3390/ijerph18030866

Dominguez-Rodriguez, A., Herdoiza-Arroyo, P. E., Martínez Arriaga, R. J., Bautista Valerio, E., Mateu Mollá, J., de la Rosa-Gómez, A., Farfallini, L., Hernández Jiménez, M. J., Esquivel Santoveña, E. E., Ramírez-Martínez, F. R., Castellanos Vargas, R. O., Arzola-Sánchez, C. A., Arenas-Landgrave, P., & Martínez-Luna, S. C. (2022). Prevalence of Anxiety Symptoms and Associated Clinical and Sociodemographic Factors in Mexican Adults Seeking Psychological Support for Grief During the COVID-19 Pandemic: A Cross-Sectional Study. *Frontiers in Psychiatry*, *13*. https://doi.org/10.3389/fpsyt.2022.749236

Dorji, T., Srichan, P., Apidechkul, T., Sunsern, R., & Suttana, W. (2020). Factors associated with different forms of alcohol use behaviors among college students in Bhutan: a cross-sectional study. *Substance Abuse: Treatment, Prevention, and Policy*, *15*(1), 4–11. https://doi.org/10.1186/s13011-020-00315-0

DSD, D. of S. D. (2019). *National Drug Master Plan 4th Edition 2019 to 2024.*

https://www.gov.za/sites/default/files/gcis_document/202006/drug-master-plan.pdf

Dube, M. C. (2021). Online learning challenges postgraduate certificate in education History students faced during COVID-19 at the university of Zululand. *Yesterday and Today*, *24*. https://doi.org/10.17159/2223-0386/2020/n24a7

Dunbar, R. I. M., Launay, J., Wlodarski, R., Robertson, C., Pearce, E., Carney, J., & MacCarron, P. (2017). Functional Benefits of (Modest) Alcohol Consumption. *Adaptive Human Behavior and Physiology*, *3*(2). https://doi.org/10.1007/s40750-016-0058-4

Dworkin, S. L. (2012). Sample size policy for qualitative studies using in-depth interviews. In *Archives of Sexual Behavior* (Vol. 41, Issue 6). https://doi.org/10.1007/s10508-012-0016-6

Ehlke, S. J., Kelley, M. L., & Braitman, A. L. (2021). Weekly Drinking and Binge Drinking Mediate the Association Between Drinking Location and Sexual Coercion. *Journal of Interpersonal Violence*, *36*(19–20). https://doi.org/10.1177/0886260519879239

El-Monshed, A. H., El-Adl, A. A., Ali, A. S., & Loutfy, A. (2021). University students under lockdown, the psychosocial effects and coping strategies during COVID-19 pandemic: A cross sectional study in Egypt. *Journal of American College Health*. https://doi.org/10.1080/07448481.2021.1891086

Erlingsson, C., & Brysiewicz, P. (2013). Orientation among multiple truths: An introduction to qualitative research. *African Journal of Emergency Medicine*, *3*(2). https://doi.org/10.1016/j.afjem.2012.04.005

Etikan, I. (2016). Comparison of Convenience Sampling and Purposive Sampling. *American Journal of Theoretical and Applied Statistics*, *5*(1). https://doi.org/10.11648/j.ajtas.20160501.11

Fairbairn, C. E., & Sayette, M. A. (2014). A social-attributional analysis of alcohol response. *Psychological Bulletin*, *140*(5). https://doi.org/10.1037/a0037563

Fang, X., Li, S., Yu, H., Wang, P., Zhang, Y., Chen, Z., Li, Y., Cheng, L., Li, W., Jia, H., & Ma, X. (2020). Epidemiological, comorbidity factors with severity and prognosis. *Aging*, *12*(13), 12493–12503.

Farrer, L. M., Gulliver, A., Bennett, K., Fassnacht, D. B., & Griffiths, K. M. (2016). Demographic and psychosocial predictors of major depression and generalised anxiety disorder in Australian university students. *BMC Psychiatry*, *16*(1). https://doi.org/10.1186/s12888-016-0961-z

Fegert, J. M., Vitiello, B., Plener, P. L., & Clemens, V. (2020). Challenges and burden of the Coronavirus 2019 (COVID-19) pandemic for child and adolescent mental health: A narrative review to highlight clinical and research needs in the acute phase and the long return to normality. *Child and Adolescent Psychiatry and Mental Health*, *14*(1), 1–11. https://doi.org/10.1186/s13034-020-00329-3

Ferreira-Borges, C., Parry, C. D. H., & Babor, T. F. (2017). Harmful use of alcohol: A shadow over sub-Saharan Africa in need of workable solutions. *International Journal of Environmental Research and Public Health*, *14*(4). https://doi.org/10.3390/ijerph14040346

Ferreira-Borges, C., Rehm, J., Dias, S., Babor, T., & Parry, C. D. H. (2016). The impact of alcohol consumption on African people in 2012: An analysis of burden of disease. *Tropical Medicine and International Health*, *21*(1). https://doi.org/10.1111/tmi.12618

Fluharty, M., & Fancourt, D. (2021). How have people been coping during the COVID-19 pandemic? Patterns and predictors of coping strategies amongst 26,016 UK adults. *BMC Psychology*, *9*(1). https://doi.org/10.1186/s40359-021-00603-9

Fontes Marx, M., London, L., Harker, N., & Ataguba, J. E. (2019). Equity in household spending on alcoholic beverages in South Africa: Assessing changes between 1995 and 2011. *International Journal for Equity in Health*, *18*(1). https://doi.org/10.1186/s12939-019-0985-3

Fruehwirth, J. C., Gorman, B. L., & Perreira, K. M. (2021). The Effect of Social and Stress-Related Factors on Alcohol Use Among College Students During the Covid-19 Pandemic. *Journal of Adolescent Health*, *69*(4). https://doi.org/10.1016/j.jadohealth.2021.06.016

Fu, W., Yan, S., Zong, Q., Anderson-Luxford, D., Song, X., Lv, Z., & Lv, C. (2021). Mental health of college students during the COVID-19 epidemic in China. *Journal of Affective Disorders*, *280*. https://doi.org/10.1016/j.jad.2020.11.032

Fullana, M. A., Hidalgo-Mazzei, D., Vieta, E., & Radua, J. (2020). Coping behaviors associated with decreased anxiety and depressive symptoms during the COVID-19 pandemic and lockdown. In *Journal of Affective Disorders* (Vol. 275). https://doi.org/10.1016/j.jad.2020.06.027

Fusch, P. I., & Ness, L. R. (2015). Are we there yet? Data saturation in qualitative research. *Qualitative Report*, *20*(9). https://doi.org/10.46743/2160-3715/2015.2281

Gelinas, L., Pierce, R., Winkler, S., Cohen, I. G., Lynch, H. F., & Bierer, B. E. (2017). Using Social Media as a Research Recruitment Tool: Ethical Issues and Recommendations. *American Journal of Bioethics*, *17*(3). https://doi.org/10.1080/15265161.2016.1276644

Giesbrecht, N., & Esa, O. (2013). WHO's Global strategy to reduce the harmful use of alcohol: An assessment of recent policies and interventions in Finland and Ontario, Canada. *NAD Nordic Studies on Alcohol and Drugs*, *30*(4). https://doi.org/10.2478/nsad-2013-0023

Gittings, L., Toska, E., Medley, S., Cluver, L., Logie, C. H., Ralayo, N., Chen, J., & Mbithi-Dikgole, J. (2021). 'Now my life is stuck!': Experiences of adolescents and young people during COVID-19 lockdown in South Africa. *Global Public Health*, *16*(6). https://doi.org/10.1080/17441692.2021.1899262

Given, M. (2015). An Exploratory Study of the Relationship between Alcohol Use and Sexual Risk Behaviour among Students at the University of Kwazulu-Natal. *Journal of AIDS & Clinical Research*, *06*(01), 6–11. https://doi.org/10.4172/2155-6113.1000412

Glavak Tkalić, R., Sučić, I., & Dević, I. (2013). Motivation for Substance Use: Why Do People Use Alcohol, Tobacco and Marijuana. *Drustvena Istrazivanja*, *22*(4), 601–625. https://doi.org/10.5559/di.22.4.03

Golafshani, N. (2003). Understanding Reliability and Validity in Qualitative Research. *The Qualitative Report*. https://doi.org/10.46743/2160-3715/2003.1870

Goldman, E. (2020). Exaggerated risk of transmission of COVID-19 by fomites. In *The Lancet Infectious Diseases* (Vol. 20, Issue 8). https://doi.org/10.1016/S1473-3099(20)30561-2

Gonzalez, C. J., Aristega Almeida, B., Corpuz, G. S., Mora, H. A., Aladesuru, O., Shapiro, M. F., & Sterling, M. R. (2021). Challenges with social distancing during the COVID-19 pandemic among Hispanics in New York City: a qualitative study. *BMC Public Health*, *21*(1). https://doi.org/10.1186/s12889-021-11939-7

Govender, N., Reddy, P., & Bhagwan, R. (2021). Academic and Psychosocial Challenges of Health Sciences Students during the Covid-19 Pandemic: A University of Technology Perspective. In *Perspectives in Education* (Vol. 39, Issue 2). https://doi.org/10.18820/2519593X/PIE.V39.I3.5

Grant, V. V., Stewart, S. H., O'Connor, R. M., Blackwell, E., & Conrod, P. J. (2007). Psychometric evaluation of the five-factor Modified Drinking Motives Questionnaire - Revised in undergraduates. *Addictive Behaviors*, *32*(11). https://doi.org/10.1016/j.addbeh.2007.07.004

Gray, D. E. (2018). *Doing Research in the Real World* (4th editio). SAGE Publications Ltd.

Grennan, D. (2019). What Is a Pandemic? *JAMA*, *321*(9), 910. https://doi.org/10.1001/jama.2019.0700

Guest, G., Namey, E., & Chen, M. (2020). A simple method to assess and report thematic saturation in qualitative research. *PLoS ONE*, *15*(5). https://doi.org/10.1371/journal.pone.0232076

Guillot, C. R., Pang, R. D., & Leventhal, A. M. (2014). Anxiety sensitivity and negative urgency: A pathway to negative reinforcement-related smoking expectancies. *Journal of Addiction Medicine*, *8*(3). https://doi.org/10.1097/ADM.0000000000000017

Gumede, L., & Badriparsad, N. (2022). Online teaching and learning through the students' eyes – Uncertainty through the COVID-19 lockdown: A qualitative case study in Gauteng province, South Africa. *Radiography*, *28*(1). https://doi.org/10.1016/j.radi.2021.10.018

Haider, N., Osman, A. Y., Gadzekpo, A., Akipede, G. O., Asogun, D., Ansumana, R., Lessells, R. J., Khan, P., Hamid, M. M. A., Yeboah-Manu, D., Mboera, L., Shayo, E. H., Mmbaga, B. T., Urassa, M., Musoke, D., Kapata, N., Ferrand, R. A., Kapata, P. C., Stigler, F., … McCoy, D. (2020). Lockdown measures in response to COVID-19 in nine sub-Saharan African countries. In *BMJ Global Health* (Vol. 5, Issue 10). https://doi.org/10.1136/bmjgh-2020-003319

Ham, L. S., & Hope, D. A. (2003). College students and problematic drinking: A review of the literature. *Clinical Psychology Review*, *23*(5). https://doi.org/10.1016/S0272-7358(03)00071-0

Hamaideh, S. H., Al-Modallal, H., Tanash, M., & Hamdan-Mansour3, A. (2022). Depression, anxiety and stress among undergraduate students during COVID-19 outbreak and "home-quarantine." *Nursing Open*, *9*(2). https://doi.org/10.1002/nop2.918

Han, Y., Kim, H., & Lee, D. H. (2016). Application of social control theory to examine parent, teacher, and close friend attachment and substance use initiation among Korean Youth. *School Psychology International*, *37*(4). https://doi.org/10.1177/0143034316641727

Haron, S. C., Abdul Rashid, K. K., Haron, S., Mamat, A., & Abdullah, N. (2021). Challenges Faced by Teachers in Online Teaching during the Pandemic. *Journal of Education and Practice*, *12*. https://doi.org/10.7176/jep/12-2-06

Harvey, A. P., Fuhrmeister, E. R., Cantrell, M. E., Pitol, A. K., Swarthout, J. M., Powers, J. E., Nadimpalli, M. L., Julian, T. R., & Pickering, A. J. (2021). Longitudinal Monitoring of SARS-CoV-2 RNA on High-Touch Surfaces in a Community Setting. *Environmental Science and Technology Letters*, *8*(2). https://doi.org/10.1021/acs.estlett.0c00875

Heale, R., & Twycross, A. (2015). Validity and reliability in quantitative studies. In *Evidence-Based Nursing* (Vol. 18, Issue 3). https://doi.org/10.1136/eb-2015-102129

Hendriks, H. F. J. (2020). Alcohol and Human Health: What Is the Evidence? In *Annual Review of Food Science and Technology* (Vol. 11). https://doi.org/10.1146/annurev-food-032519-051827

Herrero-Montes, M., Alonso-Blanco, C., Paz-Zulueta, M., Sarabia-Cobo, C., Ruiz-Azcona, L., & Parás-Bravo, P. (2019). Binge drinking in spanish university students: Associated factors and repercussions: A preliminary study. *International Journal of Environmental Research and Public Health*, *16*(23). https://doi.org/10.3390/ijerph16234822

Hirschi, T. (1969). *Causes of Delinquency*. University of California Press.

Holligan, S. D., Qian, W., de Groh, M., Jiang, Y., & Leatherdale, S. T. (2020). Micro-level factors associated with alcohol use and binge drinking among youth in the COMPASS study (2012/13 to 2017/18). *Health Promotion and Chronic Disease Prevention in Canada*, *40*(3). https://doi.org/10.24095/hpcdp.40.3.01

Holm-Hadulla, R. M., & Koutsoukou-Argyraki, A. (2015). Mental health of students in a globalized world: Prevalence of complaints and disorders, methods and effectivity of counseling, structure of mental health services for students. *Mental Health and Prevention*, *3*(1–2). https://doi.org/10.1016/j.mhp.2015.04.003

Htet, H., Saw, Y. M., Saw, T. N., Htun, N. M. M., Mon, K. L., Cho, S. M., Thike, T., Khine, A. T., Kariya, T., Yamamoto, E., & Hamajima, N. (2020). Prevalence of alcohol consumption and its risk factors among university students: A cross-sectional study across six universities in Myanmar. *PLoS ONE*, *15*(2), 1–14. https://doi.org/10.1371/journal.pone.0229329

Huang, X., Shao, X., Xing, L., Hu, Y., Sin, D. D., & Zhang, X. (2021). The impact of lockdown timing on COVID-19 transmission across US counties. *EClinicalMedicine*, *38*. https://doi.org/10.1016/j.eclinm.2021.101035

Idowu, A., Akinola Olawuyi, D., & Nwadioke, C. O. (2020). Impacts of CoVID-19 Pandemic on the Psychological Well Being of Students in a Nigerian University. *Journal of Medical and Surgical Research*. https://doi.org/10.46327/msrjg.1.000000000000173

Jackson, K. M., Merrill, J. E., Stevens, A. K., Hayes, K. L., & White, H. R. (2021). Changes in Alcohol Use and Drinking Context due to the COVID-19 Pandemic: A Multimethod Study of College Student Drinkers. *Alcoholism: Clinical and Experimental Research*, *45*(4), 752–764. https://doi.org/10.1111/acer.14574

Jehi, T., Khan, R., Dos Santos, H., & Majzoub, N. (2022). Effect of COVID-19 outbreak on anxiety among students of higher education; A review of literature. *Current Psychology*. https://doi.org/10.1007/s12144-021-02587-6

Jensen, M. K., Andersen, A. T., Sørensen, T. I. A., Becker, U., Thorsen, T., & Grønbæk, M. (2002). Alcoholic beverage preference and risk of becoming a heavy drinker. *Epidemiology*, *13*(2). https://doi.org/10.1097/00001648-200203000-00005

Johnson, A. P. (2014). Social Learning Theory or Social Cognitive Learning Theory. In *Education Psychology: Theories of Learning and Human Development*. https://www.academia.edu/8504361/SOCIAL_LEARNING_THEORY

Jun, M., Lee, S., & Shim, T. (2021). First-year college student life experiences during COVID-19 in South Korea. *International Journal of Environmental Research and Public Health*, *18*(18). https://doi.org/10.3390/ijerph18189895

Kaisara, G., & Bwalya, K. J. (2020). Investigating the E-Learning Challenges Faced by Students during Covid-19 in Namibia. *International Journal of Higher Education*, *10*(1). https://doi.org/10.5430/ijhe.v10n1p308

Kalinowski, A., & Humphreys, K. (2016). Governmental standard drink definitions and low-risk alcohol consumption guidelines in 37 countries. *Addiction*, *111*(7). https://doi.org/10.1111/add.13341

Kassa, G. M., Degu, G., Yitayew, M., Misganaw, W., Muche, M., Demelash, T., Mesele, M., & Ayehu, M. (2016). *Risky Sexual Behaviors and Associated Factors among Jiga High School and Preparatory School Students , Amhara Region , Ethiopia*. *2016*.

Kawaida, K., Yoshimoto, H., Goto, R., Saito, G., Ogai, Y., Morita, N., Saito, T., & Takahashi, S. (2018). Reasons for drinking among college students in Japan: A cross- sectional study. *Tohoku Journal of Experimental Medicine*, *246*(3). https://doi.org/10.1620/tjem.246.183

Kedraka, K., & Kaltsidis, C. (2020). EFFECTS OF THE COVID-19 PANDEMIC ON UNIVERSITY PEDAGOGY: STUDENTS' EXPERIENCES AND CONSIDERATIONS. *European Journal of*

Education Studies, 7(8). https://doi.org/10.46827/ejes.v7i8.3176

Kempen, B. A. (2021). *Is zero alcohol tolerance the answer to curbing drunk driving? April.* https://hdl.handle.net/10520/ejc-servamus-v114-n4-a9

Kiger, M. E., & Varpio, L. (2020). Thematic analysis of qualitative data: AMEE Guide No. 131. *Medical Teacher*, *42*(8). https://doi.org/10.1080/0142159X.2020.1755030

Kilian, C., Rehm, J., Allebeck, P., Braddick, F., Gual, A., Barták, M., Bloomfield, K., Gil, A., Neufeld, M., O'Donnell, A., Petruželka, B., Rogalewicz, V., Schulte, B., & Manthey, J. (2021). Alcohol consumption during the COVID-19 pandemic in Europe: a large-scale cross-sectional study in 21 countries. *Addiction*, *February 2021*. https://doi.org/10.1111/add.15530

Kim, J. H., Chan, K. W. C., Chow, J. K. W., Fung, K. P., Fong, B. Y. F., Cheuk, K. K., & Griffiths, S. M. (2009). University binge drinking patterns and changes in patterns of alcohol consumption among chinese undergraduates in a Hong Kong university. *Journal of American College Health*, *58*(3). https://doi.org/10.1080/07448480903295318

Koopmann, A., Georgiadou, E., Kiefer, F., & Hillemacher, T. (2020). Did the General Population in Germany Drink More Alcohol during the COVID-19 Pandemic Lockdown? *Alcohol and Alcoholism (Oxford, Oxfordshire)*, *55*(6). https://doi.org/10.1093/alcalc/agaa058

Krohn, M. D., Loughran, T. A., Thornberry, T. P., Jang, D. W., Freeman-Gallant, A., & Castro, E. D. (2016). Explaining adolescent drug use in adjacent generations: Testing the generality of theoretical explanations. *Journal of Drug Issues*, *46*(4). https://doi.org/10.1177/0022042616659758

Kuntsche, E., Knibbe, R., Gmel, G., & Engels, R. (2005). Why do young people drink? A review of drinking motives. *Clinical Psychology Review*, *25*(7). https://doi.org/10.1016/j.cpr.2005.06.002

Kuntsche, E., Wicki, M., Windlin, B., Roberts, C., Gabhainn, S. N., Van Der Sluijs, W., Aasvee, K., Gaspar De Matos, M., Dankulincová, Z., Hublet, A., Tynjälä, J., Välimaa, R., Bendtsen, P., Vieno, A., Mazur, J., Farkas, J., & Demetrovics, Z. (2015). Drinking motives mediate cultural differences but not gender differences in adolescent alcohol use. *Journal of Adolescent Health*, *56*(3), 323–329. https://doi.org/10.1016/j.jadohealth.2014.10.267

Kurui. (2020). Determinants of Alcohol Use by Students in Medical Training Colleges in South Nyanza Region, Kenya. *Ajada*, *3*, 1–7.

Kyei, K. A., & Ramagoma, M. (2013). Alcohol Consumption in South African Universities: Prevalence and Factors at the University of Venda, Limpopo Province. *Journal of Social Sciences*, *36*(1), 77–86. https://doi.org/10.1080/09718923.2013.11893175

Kypri, K., Cronin, M., & Wright, C. S. (2005). Do university students drink more hazardously than their non-student peers? [1]. In *Addiction* (Vol. 100, Issue 5). https://doi.org/10.1111/j.1360-0443.2005.01116.x

Kypri, K., Paschall, M. J., Langley, J., Baxter, J., Cashell-Smith, M., & Bourdeau, B. (2009). Drinking and alcohol-related harm among new zealand university students: Findings from a national web-based survey. *Alcoholism: Clinical and Experimental Research*, *33*(2). https://doi.org/10.1111/j.1530-0277.2008.00834.x

Labrague, L. J., McEnroe-Petitte, D. M., Gloe, D., Thomas, L., Papathanasiou, I. V., & Tsaras, K. (2017). A literature review on stress and coping strategies in nursing students. In *Journal of Mental Health* (Vol. 26, Issue 5). https://doi.org/10.1080/09638237.2016.1244721

Laher, S., Bain, K., Bemath, N., de Andrade, V., & Hassem, T. (2021). Undergraduate psychology student experiences during COVID-19: challenges encountered and lessons learnt. *South African*

Journal of Psychology, *51*(2). https://doi.org/10.1177/0081246321995095

LaRosa, J., Doran, C., Guth, A., Varshney, K., Anaele, B., Davis, K., DiDonato, S., Romney, M., Keddem, S., & Frasso, R. (2022). Life During COVID-19: The Student Experience. *Pedagogy in Health Promotion*, *8*(2). https://doi.org/10.1177/23733799211017562

Lategan, B. W., du Preez, R., & Pentz, C. D. (2017). Socio-demographic insights into South African student drinking behaviour. *South African Journal of Higher Education*, *31*(5), 90–115. https://doi.org/10.20853/31-5-1512

Lazarus, R. S., & Folkman, S. (1984). Stress, Appraisal, and Coping. *New York: Springer*.

Le Roux, C. S. (2017). Exploring rigour in autoethnographic research. *International Journal of Social Research Methodology*, *20*(2). https://doi.org/10.1080/13645579.2016.1140965

Lechner, W. V., Day, A. M., Metrik, J., Leventhal, A. M., & Kahler, C. W. (2016). Effects of alcohol-induced working memory decline on alcohol consumption and adverse consequences of use. *Psychopharmacology*, *233*(1). https://doi.org/10.1007/s00213-015-4090-z

Lechner, W. V., Laurene, K. R., Patel, S., Anderson, M., Grega, C., & Kenne, D. R. (2020). Changes in alcohol use as a function of psychological distress and social support following COVID-19 related University closings. *Addictive Behaviors*, *110*. https://doi.org/10.1016/j.addbeh.2020.106527

Lee, Y., Jeon, Y. J., Kang, S., Shin, J. Il, Jung, Y.-C., & Jung, S. J. (2022). Social media use and mental health during the COVID-19 pandemic in young adults: a meta-analysis of 14 cross-sectional studies. *BMC Public Health*, *22*(1), 995. https://doi.org/10.1186/s12889-022-13409-0

Lees, B., Meredith, L. R., Kirkland, A. E., Bryant, B. E., & Squeglia, L. M. (2020). Effect of alcohol use on the adolescent brain and behavior. In *Pharmacology Biochemistry and Behavior* (Vol. 192). https://doi.org/10.1016/j.pbb.2020.172906

Leung, L. (2015). Validity, reliability, and generalizability in qualitative research. *Journal of Family Medicine and Primary Care*, *4*(3). https://doi.org/10.4103/2249-4863.161306

Lewnard, J. A., & Lo, N. C. (2020). Scientific and ethical basis for social-distancing interventions against COVID-19. In *The Lancet Infectious Diseases* (Vol. 20, Issue 6). https://doi.org/10.1016/S1473-3099(20)30190-0

Li, X., & Ma, X. (2020). Acute respiratory failure in COVID-19: Is it "typical" ARDS? In *Critical Care* (Vol. 24, Issue 1). https://doi.org/10.1186/s13054-020-02911-9

Liang, W., Guan, W., Chen, R., Wang, W., Li, J., Xu, K., Li, C., Ai, Q., Lu, W., Liang, H., Li, S., & He, J. (2020). Cancer patients in SARS-CoV-2 infection: a nationwide analysis in China. *The Lancet Oncology*, *21*(3), 335–337. https://doi.org/10.1016/S1470-2045(20)30096-6

Linton, N. M., Kobayashi, T., Yang, Y., Hayashi, K., Akhmetzhanov, A. R., Jung, S. M., Yuan, B., Kinoshita, R., & Nishiura, H. (2020). Incubation period and other epidemiological characteristics of 2019 novel coronavirus infections with right truncation: A statistical analysis of publicly available case data. *Journal of Clinical Medicine*, *9*(2). https://doi.org/10.3390/jcm9020538

Liu, C., McCabe, M., Dawson, A., Cyrzon, C., Shankar, S., Gerges, N., Kellett-Renzella, S., Chye, Y., & Cornish, K. (2021). Identifying predictors of university students' wellbeing during the COVID-19 pandemic—a data-driven approach. *International Journal of Environmental Research and Public Health*, *18*(13). https://doi.org/10.3390/ijerph18136730

Liu, X., Soh, K. G., & Omar Dev, R. D. (2023). Effect of Latin dance on physical and mental health: a systematic review. *BMC Public Health*, *23*(1). https://doi.org/10.1186/s12889-023-16221-6

Londani, M., Morojele, N. K., Egbe, C. O., Nel, E., Petersen Williams, P., Harker, N., & Parry, C. D. H. (2021). On- and off-licensed premises drinking behaviour among adults in the city of Tshwane, South Africa: An analysis of data from the International Alcohol Control study. *Drug and Alcohol Review*, *40*(3). https://doi.org/10.1111/dar.13223

Lorente, L., Vera, M., & Peiró, T. (2021). Nurses´ stressors and psychological distress during the COVID-19 pandemic: The mediating role of coping and resilience. *Journal of Advanced Nursing*, *77*(3). https://doi.org/10.1111/jan.14695

Mahase, E. (2020). Covid-19: WHO declares pandemic because of "alarming levels" of spread, severity, and inaction. *BMJ (Clinical Research Ed.)*, *368*. https://doi.org/10.1136/bmj.m1036

Mahindru, A., Patil, P., & Agrawal, V. (2023). Role of Physical Activity on Mental Health and Well-Being: A Review. *Cureus*. https://doi.org/10.7759/cureus.33475

Majrashi, A., Khalil, A., Nagshabandi, E. Al, & Majrashi, A. (2021). Stressors and Coping Strategies among Nursing Students during the COVID-19 Pandemic: Scoping Review. *Nursing Reports*, *11*(2). https://doi.org/10.3390/nursrep11020042

Mandeya, A., & Ter Goon, D. (2019). The Relationship Between Patterns of Alcohol Use and Knowledge of Alcohol-Attributable Health Conditions: A Survey Among Students at a South African University. *The Open Public Health Journal*, *12*(1), 455–464. https://doi.org/10.2174/1874944501912010455

Manthey, J., Kilian, C., Schomerus, G., Kraus, L., Rehm, J., & Schulte, B. (2020). Alkoholkonsum in Deutschland und Europa während der SARS-CoV-2 Pandemie. *SUCHT*, *66*(5). https://doi.org/10.1024/0939-5911/a000686

Manyoni, M. J., & Abader, M. I. (2021). The effects of the COVID-19 lockdown and alcohol restriction on trauma-related emergency department cases in a South African regional hospital. *African Journal of Emergency Medicine*, *11*(2). https://doi.org/10.1016/j.afjem.2020.12.001

Markova, S., & Nikitskaya, E. (2017). Coping strategies of adolescents with deviant behaviour. *International Journal of Adolescence and Youth*, *22*(1). https://doi.org/10.1080/02673843.2013.868363

Mason, H. D. (2017). Stress-Management Strategies among First-Year Students at a South African University: A Qualitative Study. *Journal of Student Affairs in Africa*, *5*(2). https://doi.org/10.24085/jsaa.v5i2.2744

Matzopoulos, R. G., Truen, S., Bowman, B., & Corrigall, J. (2014). The cost of harmful alcohol use in South Africa. *South African Medical Journal*, *104*(2), 127–132. https://doi.org/10.7196/SAMJ.7644

McArthur, R. (2011). *Unraveling the Sources of Adolescent Substance Use: A Test of Rival Theories* [Doctoral dissertation, University of Cincinnati]. http://rave.ohiolink.edu/etdc/view?acc_num=ucin1321367411

McIntosh, K. (2022). Covid-19: Epidemiology, virology, and prevention. *Update*.

Mcleod, S. (2016). *Albert Bandura's Social Learning Theory*. https://www.simplypsychology.org/bandura.html

Mekonen, T., Fekadu, W., Chane, T., & Bitew, S. (2017). Problematic alcohol use among university students. *Frontiers in Psychiatry*, *8*(MAY), 7–11. https://doi.org/10.3389/fpsyt.2017.00086

Liquor Amendment Bill, Government Gazette 5 (2016).

Mishra, J., Samanta, P., Panigrahi, A., Dash, K., Behera, M. R., & Das, R. (2021). Mental Health Status, Coping Strategies During Covid-19 Pandemic Among Undergraduate Students of Healthcare Profession. *International Journal of Mental Health and Addiction*. https://doi.org/10.1007/s11469-021-00611-1

Morojele, N. K., & Ramsoomar, L. (2016). Addressing adolescent alcohol use in South Africa. *South African Medical Journal*, *106*(6). https://doi.org/10.7196/SAMJ.2016.v106i6.10944

Mupara, L. M., Tapera, R., Selemogwe-Matsetse, M., Kehumile, J. T., Gaogane, L., Tsholofelo, E., & Murambiwa, P. (2021). Alcohol and substance use prevention in Africa: systematic scoping review. *Journal of Substance Use*, *00*(00), 1–17. https://doi.org/10.1080/14659891.2021.1941356

Muro, M., & Jeffrey, P. (2008). A critical review of the theory and application of social learning in participatory natural resource management processes. In *Journal of Environmental Planning and Management* (Vol. 51, Issue 3). https://doi.org/10.1080/09640560801977190

Myers, B., Carney, T., Rooney, J., Malatesta, S., White, L. F., Parry, C. D. H., Bouton, T. C., Ragan, E. J., Horsburgh, C. R., Warren, R. M., & Jacobson, K. R. (2021). Alcohol and tobacco use in a tuberculosis treatment cohort during South Africa's covid-19 sales bans: A case series. *International Journal of Environmental Research and Public Health*, *18*(10). https://doi.org/10.3390/ijerph18105449

Nabavi, R. T. (2012). Theories of Developmental Psychology: Bandura ' s Social Learning Theory & Social Cognitive Learning Theory. *Research Gate*, *January 2012*, 1–24.

Naser, A. Y., Dahmash, E. Z., Al-Rousan, R., Alwafi, H., Alrawashdeh, H. M., Ghoul, I., Abidine, A., Bokhary, M. A., AL-Hadithi, H. T., Ali, D., Abuthawabeh, R., Abdelwahab, G. M., Alhartani, Y. J., Al Muhaisen, H., Dagash, A., & Alyami, H. S. (2020). Mental health status of the general population, healthcare professionals, and university students during 2019 coronavirus disease outbreak in Jordan: A cross-sectional study. *Brain and Behavior*, *10*(8). https://doi.org/10.1002/brb3.1730

National Department of Health. (2023). *COVID-19 Statistics in South Africa*. https://sacoronavirus.co.za/2023/02/02/update-on-covid-19-wednesday-01-february-2023/

National Department of Health (NDoH), Statistics South Africa (Stats SA), & South African Medical Research Council (SAMRC), and I. (2019). *South Africa Demographic and Health Survey (SADHS) 2016*.

National Health Service, N. (2022). *Alcohol Misuse*. https://www.nhs.uk/conditions/alcohol-misuse/

National Institute on Alcohol Abuse and Alcoholism. (2004). NIAAA Newsletter. *U.S. Department of Health and Human Services*, *3*.

National Institute on Alcohol Abuse and Alcoholism. (2015). *Alcohol Overdose: The Dangers of Drinking Too Much*. https://www.niaaa.nih.gov/sites/default/files/publications/overdoseFact.pdf

National Institute on Alcohol Abuse and Alcoholism. (2018). Drinking Patterns and Their Definitions. *Alcohol Research : Current Reviews*, *39*(1).

National Treasury Republic of South Africa. (2014). *A review of the taxation of alcoholic beverages in South Africa*.

Navsaria, P. H., Nicol, A. J., Parry, C. D. H., Matzopoulos, R., Maqungo, S., & Gaudin, R. (2021). The effect of lockdown on intentional and non-intentional injury during the COVID-19 pandemic in Cape Town, South Africa: A preliminary report. *South African Medical Journal*, *111*(2). https://doi.org/10.7196/SAMJ.2021V111I2.15318

Neufeld, M., Lachenmeier, D. W., Ferreira-Borges, C., & Rehm, J. (2020). Is Alcohol an "Essential Good" During COVID-19? Yes, but Only as a Disinfectant! *Alcoholism: Clinical and Experimental Research*, *44*(9), 1906–1909. https://doi.org/10.1111/acer.14417

Nguse, S., & Wassenaar, D. (2021). Mental health and COVID-19 in South Africa. *South African Journal of Psychology*, *51*(2). https://doi.org/10.1177/00812463211001543

Nishiura, H., Jung, S. M., Linton, N. M., Kinoshita, R., Yang, Y., Hayashi, K., Kobayashi, T., Yuan, B., & Akhmetzhanov, A. R. (2020). The extent of transmission of novel coronavirus in Wuhan, China, 2020. In *Journal of Clinical Medicine* (Vol. 9, Issue 2). https://doi.org/10.3390/jcm9020330

Nkoana, S., Sodi, T., & Darikwa, T. B. (2016). Heavy episodic alcohol drinking among students from a rural South African university: Correlates with personal-social variables. *Journal of Psychology in Africa*, *26*(4). https://doi.org/10.1080/14330237.2016.1208949

Nyandu, A., & Ross, E. (2020). Alcohol consumption among undergraduate social work students at a South African university. *Social Work Education*, *39*(4). https://doi.org/10.1080/02615479.2019.1661372

Odii, A., Atama, C. S., Igwe, I., Idemili-Aronu, N. J., & Onyeneho, N. G. (2020). Risky sexual behaviours among adolescent undergraduate students in Nigeria: Does social context of early adolescence matter? *Pan African Medical Journal*, *37*. https://doi.org/10.11604/pamj.2020.37.188.22968

Ogueji, I. A., Okoloba, M. M., & Demoko Ceccaldi, B. M. D. (2021). Coping strategies of individuals in the United Kingdom during the COVID-19 pandemic. *Current Psychology*. https://doi.org/10.1007/s12144-020-01318-7

Olmos-Vega, F. M., Stalmeijer, R. E., Varpio, L., & Kahlke, R. (2022). A practical guide to reflexivity in qualitative research: AMEE Guide No. 149. *Medical Teacher*, 1–11. https://doi.org/10.1080/0142159X.2022.2057287

Osaki, H., Mshana, G., Mbata, D., Kapiga, S., & Changalucha, J. (2018). Social space and alcohol use initiation among youth in northern Tanzania. *PLoS ONE*, *13*(9). https://doi.org/10.1371/journal.pone.0202200

Osberg, T. M., Insana, M., Eggert, M., & Billingsley, K. (2011). Incremental validity of college alcohol beliefs in the prediction of freshman drinking and its consequences: A prospective study. *Addictive Behaviors*, *36*(4). https://doi.org/10.1016/j.addbeh.2010.12.004

Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful Sampling for Qualitative Data Collection and Analysis in Mixed Method Implementation Research. *Administration and Policy in Mental Health and Mental Health Services Research*, *42*(5). https://doi.org/10.1007/s10488-013-0528-y

Panagiotidis, P., Rantis, K., Holeva, V., Parlapani, E., & Diakogiannis, I. (2020). Changes in alcohol use habits in the general population, during the covid-19 lockdown in greece. *Alcohol and Alcoholism*, *55*(6), 702–704. https://doi.org/10.1093/ALCALC/AGAA092

Papalimperi, A., Athanaselis, S., Mina, A., Papoutsis, I., Spiliopoulou, C., & Papadodima, S. (2019). Incidence of fatalities of road traffic accidents associated with alcohol consumption and the use of psychoactive drugs: A 7-year survey(2011-2017). *Experimental and Therapeutic Medicine*. https://doi.org/10.3892/etm.2019.7787

Park, M., Cook, A. R., Lim, J. T., Sun, Y., & Dickens, B. L. (2020). A systematic review of covid-19 epidemiology based on current evidence. In *Journal of Clinical Medicine* (Vol. 9, Issue 4).

https://doi.org/10.3390/jcm9040967

Parry, C. D. (2013). Testing the National Alcohol Policy Score Card (NAPSC) to assess progress in implementing a comprehensive policy response to reduce the harmful use of alcohol in South Africa. *The International Journal of Alcohol and Drug Research*, *3*(3). https://doi.org/10.7895/ijadr.v3i3.98

Patrick, M. E., & Azar, B. (2018). High-Intensity Drinking. *Alcohol Research: Current Reviews*, *39*, 49–55.

Pearlin, L. I. (1989). The sociological study of stress. In *Journal of Health and Social Behavior* (Vol. 30, Issue 3). https://doi.org/10.2307/2136956

Peltzer, K., Davids, A., & Njuho, P. (2011). Alcohol use and problem drinking in South Africa: Findings from a national population-based survey. *African Journal of Psychiatry (South Africa)*, *14*(1). https://doi.org/10.4314/ajpsy.v14i1.65466

Pengpid, S., Peltzer, K., & Van Der Heever, H. (2013). Problem alcohol use and associated factors in a sample of university students in South Africa. *Journal of Psychology in Africa*, *23*(2), 243–249. https://doi.org/10.1080/14330237.2013.10820620

Pengpid, S., Peltzer, K., Van der Heever, H., & Skaal, L. (2013). Screening and brief interventions for hazardous and harmful alcohol use among university students in South Africa: Results from a randomized controlled trial. *International Journal of Environmental Research and Public Health*, *10*(5), 2043–2057. https://doi.org/10.3390/ijerph10052043

Petr Erasmus. (2022). *Excisable products*. https://www.cliffedekkerhofmeyr.com/en/news/publications/2022/Practice/Tax/tax-and-exchange-control-alert-23-february-special-edition-2022-budget-speech-Excisable-products.html#:~:text=Tobacco and alcohol (excluding traditional,5%25 for 2022%2F23.

Pittman, D. M., Brooks, J. J., Kaur, P., & Obasi, E. M. (2019). The cost of minority stress: Risky alcohol use and coping-motivated drinking behavior in African American college students. *Journal of Ethnicity in Substance Abuse*, *18*(2). https://doi.org/10.1080/15332640.2017.1336958

Pollard, M. S., Tucker, J. S., & Green, H. D. (2020). Changes in Adult Alcohol Use and Consequences During the COVID-19 Pandemic in the US. *JAMA Network Open*, *3*(9), e2022942. https://doi.org/10.1001/jamanetworkopen.2020.22942

Ponterotto, J. (2015). Brief Note on the Origins, Evolution, and Meaning of the Qualitative Research Concept Thick Description. *The Qualitative Report*. https://doi.org/10.46743/2160-3715/2006.1666

Potra, S., Pugna, A., Pop, M. D., Negrea, R., & Dungan, L. (2021). Facing covid-19 challenges: 1st-year students' experience with the romanian hybrid higher educational system. *International Journal of Environmental Research and Public Health*, *18*(6). https://doi.org/10.3390/ijerph18063058

Pratt, T. C., Franklin, T. W., & Gau, J. M. (2008). Key Idea : Hirschi ' S Social Bond / Social Control Theory. *Key Ideas in Criminology and Criminal Justice*, *1969*, 55–69. www.sagepub.com/upm-data/36812_5.pdf

Prieto, D., Tricio, J., Cáceres, F., Param, F., Meléndez, C., Vásquez, P., & Prada, P. (2021). Academics' and students' experiences in a chilean dental school during the COVID-19 pandemic: A qualitative study. *European Journal of Dental Education*, *25*(4). https://doi.org/10.1111/eje.12647

Probst, C., Parry, C. D. H., & Rehm, J. (2018). HIV/AIDS mortality attributable to alcohol use in South Africa: A comparative risk assessment by socioeconomic status. *BMJ Open*, *8*(2).

https://doi.org/10.1136/bmjopen-2017-017955

Probst, C., Parry, C. D. H., Wittchen, H. U., & Rehm, J. (2018). The socioeconomic profile of alcohol-attributable mortality in South Africa: A modelling study. *BMC Medicine*, *16*(1), 1–11. https://doi.org/10.1186/s12916-018-1080-0

Probst, C., Simbayi, L. C., Parry, C. D. H., Shuper, P. A., & Rehm, J. (2017). Alcohol Use, Socioeconomic Status and Risk of HIV Infections. *AIDS and Behavior*, *21*(7). https://doi.org/10.1007/s10461-017-1758-x

Prowse, R., Sherratt, F., Abizaid, A., Gabrys, R. L., Hellemans, K. G. C., Patterson, Z. R., & McQuaid, R. J. (2021). Coping With the COVID-19 Pandemic: Examining Gender Differences in Stress and Mental Health Among University Students. *Frontiers in Psychiatry*, *12*. https://doi.org/10.3389/fpsyt.2021.650759

Queirós, A., Faria, D., & Almeida, F. (2017). Strengths and Limitations of Qualitative and Quantitative Research Methods. *European Journal of Education Studies*, *3*(9), 369–387. https://doi.org/doi: 10.5281/zenodo.887089

Rashied, N. (2021). Socio-economic determinants of alcohol consumption for South Africa. *International Journal of Alcohol and Drug Research*. https://doi.org/10.7895/ijadr.341

Rehm, J., Hasan, O. S. M., Black, S. E., Shield, K. D., & Schwarzinger, M. (2019). Alcohol use and dementia: a systematic scoping review. *Alzheimer's Research & Therapy*, *11*(1). https://doi.org/10.1186/s13195-018-0453-0

Rehm, J., Kilian, C., Ferreira-Borges, C., Jernigan, D., Monteiro, M., Parry, C. D. H., Sanchez, Z. M., & Manthey, J. (2020). Alcohol use in times of the COVID 19: Implications for monitoring and policy. *Drug and Alcohol Review*, *39*(4), 301–304. https://doi.org/10.1111/dar.13074

Rehm, J., Mathers, C., Popova, S., Thavorncharoensap, M., Teerawattananon, Y., & Patra, J. (2009). Global burden of disease and injury and economic cost attributable to alcohol use and alcohol-use disorders. In *The Lancet* (Vol. 373, Issue 9682). https://doi.org/10.1016/S0140-6736(09)60746-7

Rehm, J., Probst, C., Shield, K. D., & Shuper, P. A. (2017). Does alcohol use have a causal effect on HIV incidence and disease progression? A review of the literature and a modeling strategy for quantifying the effect. In *Population Health Metrics* (Vol. 15, Issue 1). https://doi.org/10.1186/s12963-017-0121-9

Reuter, H., Jenkins, L. S., De Jong, M., Reid, S., & Vonk, M. (2020). Prohibiting alcohol sales during the coronavirus disease 2019 pandemic has positive effects on health services in South Africa. In *African journal of primary health care & family medicine* (Vol. 12, Issue 1). https://doi.org/10.4102/phcfm.v12i1.2528

Rippetoe, P. A., & Rogers, R. W. (1987). Effects of Components of Protection-Motivation Theory on Adaptive and Maladaptive Coping With a Health Threat. *Journal of Personality and Social Psychology*, *52*(3). https://doi.org/10.1037/0022-3514.52.3.596

Risi, M. M., Forkus, S. R., Roy, A., Laforge, R. G., Rossi, J. S., & Weiss, N. H. (2019). The Mediating Role of Impulsivity Between Psychological Distress and Alcohol Misuse Among College Students at a Historically Black University. *Journal of Dual Diagnosis*, *15*(2). https://doi.org/10.1080/15504263.2019.1583398

Ritchie, H., & Roser, M. (2018). Alcohol Consumption. *Our World in Data*. https://ourworldindata.org/alcohol-consumption

Roerecke, M., Vafaei, A., Hasan, O. S. M., Chrystoja, B. R., Cruz, M., Lee, R., Neuman, M. G., & Rehm, J. (2019). Alcohol Consumption and Risk of Liver Cirrhosis: A Systematic Review and

Meta-Analysis. *The American Journal of Gastroenterology*, *114*(10). https://doi.org/10.14309/ajg.0000000000000340

Rogers, J. P., Chesney, E., Oliver, D., Pollak, T. A., McGuire, P., Fusar-Poli, P., Zandi, M. S., Lewis, G., & David, A. S. (2020). Psychiatric and neuropsychiatric presentations associated with severe coronavirus infections: a systematic review and meta-analysis with comparison to the COVID-19 pandemic. *The Lancet Psychiatry*, *7*(7). https://doi.org/10.1016/S2215-0366(20)30203-0

Room, R., Ferris, J., Laslett, A. M., Livingston, M., Mugavin, J., & Wilkinson, C. (2010). The drinker's effect on the social environment: A conceptual framework for studying alcohol's harm to others. *International Journal of Environmental Research and Public Health*, *7*(4). https://doi.org/10.3390/ijerph7041855

Rudenstine, S., McNeal, K., Schulder, T., Ettman, C. K., Hernandez, M., Gvozdieva, K., & Galea, S. (2021). Depression and Anxiety During the COVID-19 Pandemic in an Urban, Low-Income Public University Sample. *Journal of Traumatic Stress*, *34*(1). https://doi.org/10.1002/jts.22600

Russell, M. A., Almeida, D. M., & Maggs, J. L. (2017). Stressor-related drinking and future alcohol problems among university students. *Psychology of Addictive Behaviors*, *31*(6). https://doi.org/10.1037/adb0000303

Saeed, W., Irfan, S., Zafar, N., & Cheema, F. (2021). Prevalence of Depression, Anxiety, and Stress Among University Students After the COVID-19 First Wave in Pakistan. *Pakistan Journal of Humanities and Social Sciences*, *9*(3). https://doi.org/10.52131/pjhss.2021.0903.0145

Salari, N., Hosseinian-Far, A., Jalali, R., Vaisi-Raygani, A., Rasoulpoor, S., Mohammadi, M., Rasoulpoor, S., & Khaledi-Paveh, B. (2020). Prevalence of stress, anxiety, depression among the general population during the COVID-19 pandemic: A systematic review and meta-analysis. *Globalization and Health*, *16*(1), 1–11. https://doi.org/10.1186/s12992-020-00589-w

Salman, M., Asif, N., Mustafa, Z. U., Khan, T. M., Shehzadi, N., Hussain, K., Tahir, H., Raza, M. H., & Khan, M. T. (2020). Psychological Impact of COVID-19 on Pakistani University Students and How They Are Coping. *MedRxiv*. https://doi.org/10.1101/2020.05.21.20108647

Sanders, J. M., Monogue, M. L., Jodlowski, T. Z., & Cutrell, J. B. (2020). Pharmacologic Treatments for Coronavirus Disease 2019 (COVID-19): A Review. In *JAMA - Journal of the American Medical Association* (Vol. 323, Issue 18). https://doi.org/10.1001/jama.2020.6019

Sangeeta, D., & Deepjyoti, K. (2020). Wuhan Coronavirus: a fast-emerging global threat. *International Journal of Health Research and Medico Legal Practice*, *6*(1). https://doi.org/10.31741/ijhrmlp.v6.i1.2020.19

Sanyaolu, A., Okorie, C., Marinkovic, A., Patidar, R., Younis, K., Desai, P., Hosein, Z., Padda, I., Mangat, J., & Altaf, M. (2020). Comorbidity and its Impact on Patients with COVID-19. *SN Comprehensive Clinical Medicine*, *2*(8), 1069–1076. https://doi.org/10.1007/s42399-020-00363-4

Savitsky, B., Findling, Y., Ereli, A., & Hendel, T. (2020). Anxiety and coping strategies among nursing students during the covid-19 pandemic. *Nurse Education in Practice*, *46*. https://doi.org/10.1016/j.nepr.2020.102809

Schmits, E., & Glowacz, F. (2021). Changes in Alcohol Use During the COVID-19 Pandemic: Impact of the Lockdown Conditions and Mental Health Factors. *International Journal of Mental Health and Addiction*. https://doi.org/10.1007/s11469-020-00432-8

Schneider, M., Norman, R., Parry, C., Bradshaw, D., & Plüddemann, A. (2007). Estimating the burden of disease attributable to alcohol use in South Africa in 2000. *South African Medical Journal*,

97(8).

Schröder, M., Bossert, A., Kersting, M., Aeffner, S., Coetzee, J., Timme, M., & Schlüter, J. (2021). COVID-19 in South Africa: outbreak despite interventions. *Scientific Reports*, *11*(1). https://doi.org/10.1038/s41598-021-84487-0

Seggie, J. (2012). Alcohol and South Africa's youth. *South African Medical Journal*, *102*(7). https://doi.org/10.7196/samj.6003

Sguazzin, A. (2022). *South Africa Had Fifth Covid Wave Despite 97% Antibody Protection*. https://www.bloomberg.com/news/articles/2022-05-30/s-africa-had-fifth-covid-wave-despite-97-antibody-protection?leadSource=uverify wall

Shanahan, L., Steinhoff, A., Bechtiger, L., Murray, A. L., Nivette, A., Hepp, U., Ribeaud, D., & Eisner, M. (2020). Emotional Distress in Young Adults during the COVID-19 Pandemic: Evidence of Risk and Resilience from a Longitudinal Cohort Study. *Psychological Medicine*. https://doi.org/10.1017/S003329172000241X

Sheng, W. H. (2020). Coronavirus disease 2019 (covid-19). *Journal of Internal Medicine of Taiwan*, *31*(2), 61–66. https://doi.org/10.6314/JIMT.202004_31(2).01

Shield, K., Manthey, J., Rylett, M., Probst, C., Wettlaufer, A., Parry, C. D. H., & Rehm, J. (2020). National, regional, and global burdens of disease from 2000 to 2016 attributable to alcohol use: a comparative risk assessment study. *The Lancet Public Health*, *5*(1), e51–e61. https://doi.org/10.1016/S2468-2667(19)30231-2

Siegel, L. J. (2010). *Criminology Theories,Patterns and Typologies* (C. H. Meier, S. Murphy, M. Banks, & J. Chell (eds.); 10th editi). Wadsworth, Cengage Learning.

Siegel, M. B., Naimi, T. S., Cremeens, J. L., & Nelson, D. E. (2011). Alcoholic beverage preferences and associated drinking patterns and risk behaviors among high school youth. *American Journal of Preventive Medicine*, *40*(4). https://doi.org/10.1016/j.amepre.2010.12.011

Sikuka, W., Woody, K., & Caldwell, A. (2021). *South Africa Lifts the Fourth Prohibition on Domestic Transportation and Sale of Liquor Products* (Issue August 03).

Singh, V., & Thurman, A. (2019). How Many Ways Can We Define Online Learning? A Systematic Literature Review of Definitions of Online Learning (1988-2018). *American Journal of Distance Education*, *33*(4). https://doi.org/10.1080/08923647.2019.1663082

Singhal, T. (2020). A Review of Coronavirus Disease-2019 (COVID-19). In *Indian Journal of Pediatrics* (Vol. 87, Issue 4). https://doi.org/10.1007/s12098-020-03263-6

Sitohang, E. D. (2023). Adolescents Mental Health During Covid-19 Pandemic. *JOURNAL OF BAJA HEALTH SCIENCE*, *3*(01). https://doi.org/10.47080/joubahs.v3i01.2481

Sjödin, L., Larm, P., Karlsson, P., Livingston, M., & Raninen, J. (2021). Drinking motives and their associations with alcohol use among adolescents in Sweden. *NAD Nordic Studies on Alcohol and Drugs*, *38*(3). https://doi.org/10.1177/1455072520985974

Skinner, E. A., Edge, K., Altman, J., & Sherwood, H. (2003). Searching for the Structure of Coping: A Review and Critique of Category Systems for Classifying Ways of Coping. In *Psychological Bulletin* (Vol. 129, Issue 2). https://doi.org/10.1037/0033-2909.129.2.216

Song, M. (2020). Psychological stress responses to COVID-19 and adaptive strategies in China. *Elsevier*, *136*(January), 3. https://doi.org/10.1016/j.worlddev.2020.105107

South African Government. (2023). *COVID-19 / NOVEL CORONAVIRUS*. https://www.gov.za/covid-

19/about/about-alert-system

Stallman, H. M., Lipson, S. K., Zhou, S., & Eisenberg, D. (2020). How do university students cope? An exploration of the health theory of coping in a US sample. *Journal of American College Health*. https://doi.org/10.1080/07448481.2020.1789149

Statistics South Africa. (2021). *Mid-year population estimates 2021,Statistical Release P0302* (Issue July).

Stern, S. A., Terry-McElrath, Y. M., & Patrick, M. E. (2017). Beverage-specific patterns of 5+ alcoholic drink consumption by young adults in the U.S. *Addictive Behaviors*, *65*. https://doi.org/10.1016/j.addbeh.2016.09.010

Stockley, C., Grande, C. I., Hammer, C. S., Fradera, U., Kosti, R. I., Teissedre, P. L., Restani, P., Tejedor, N. G., & Studer, P. (2019). *Comparison Of International Alcohol Drinking Guidelines*.

Strizek, J. (2020). Alcohol-related harm to others: frames and challenges for survey research. *Drugs: Education, Prevention and Policy*, *27*(6). https://doi.org/10.1080/09687637.2020.1726290

Tabatabaeizadeh, S. A. (2021). Airborne transmission of COVID-19 and the role of face mask to prevent it: a systematic review and meta-analysis. In *European Journal of Medical Research* (Vol. 26, Issue 1). https://doi.org/10.1186/s40001-020-00475-6

Tanudjaja, S. A., Chih, H. J., Burns, S., Crawford, G., Hallett, J., & Jancey, J. (2021). Alcohol consumption and associated harms among university students in Australia: Findings from a cross-sectional study. *Health Promotion Journal of Australia*, *32*(2). https://doi.org/10.1002/hpja.342

Tasso, A. F., Hisli Sahin, N., & San Roman, G. J. (2021). COVID-19 disruption on college students: Academic and socioemotional implications. *Psychological Trauma: Theory, Research, Practice, and Policy*, *13*(1). https://doi.org/10.1037/tra0000996

Tavolacci, M. P., Boerg, E., Richard, L., Meyrignac, G., Dechelotte, P., & Ladner, J. (2016). Prevalence of binge drinking and associated behaviours among 3286 college students in France. *BMC Public Health*, *16*(1). https://doi.org/10.1186/s12889-016-2863-x

Taylor, S., Paluszek, M. M., Rachor, G. S., McKay, D., & Asmundson, G. J. G. (2021). Substance use and abuse, COVID-19-related distress, and disregard for social distancing: A network analysis. *Addictive Behaviors*, *114*. https://doi.org/10.1016/j.addbeh.2020.106754

The World Bank. (2022). *World Bank Country and Lending Groups*. datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups

Theron, M., Swart, R., Londani, M., Parry, C., Williams, P. P., & Harker-Burnams, N. (2022). Did COVID-19-Related Alcohol Sales Restrictions Reduce Alcohol Consumption? Findings from a National Online Survey in South Africa. *International Journal of Environmental Research and Public Health*, *19*(4). https://doi.org/10.3390/ijerph19042422

Tobin, G. A., & Begley, C. M. (2004). Methodological rigour within a qualitative framework. *Journal of Advanced Nursing*, *48*(4). https://doi.org/10.1111/j.1365-2648.2004.03207.x

Tongco, M. D. C. (2007). Purposive sampling as a tool for informant selection. *Ethnobotany Research and Applications*, *5*. https://doi.org/10.17348/era.5.0.147-158

Toornstra, A., Massar, K., Hurks, P. P. M., Timmermans, M. M. M. S., Kok, G., & Curfs, L. M. G. (2020). Perceptions of Alcohol and Alcohol Use among Community Members and Young Adults in Ukraine. *Substance Use and Misuse*, *55*(8), 1269–1279. https://doi.org/10.1080/10826084.2020.1735436

Treleaven, T. (2015). *An Examination of Some Theories that Address the Heavy Alcohol Consumption of University Students*. School of Graduate Studies Laurentian University Sudbury, Ontario.

Tuohy, D., Cooney, A., Dowling, M., Murphy, K., & Sixsmith, J. (2013). An overview of interpretive phenomenology as a research methodology. *Nurse Researcher*, *20*(6). https://doi.org/10.7748/nr2013.07.20.6.17.e315

UKZN. (2016). *UKZN Annual Report*. https://www.ukzn.ac.za/wp-content/uploads/2017/11/UKZN-Annual-Report-2016.pdf

UKZN. (2017). *UKZN Strategic Plan 2017-2021*. https://strategicplan17-21.ukzn.ac.za/wp-content/UKZN-Strategic-Plan-2017-2021.pdf

UKZN, U. of K. N. (2021). *Annual Report 2021*. https://z3t9t3v4.stackpathcdn.com/wp-content/uploads/2022/08/Annual-Report-2021.pdf

Van Hoving, D. J., van Koningsbruggen, C., de Man, M., & Hendrikse, C. (2021). Temporal changes in trauma according to alcohol sale restrictions during the South African national COVID-19 lockdown. *African Journal of Emergency Medicine*, *11*(4). https://doi.org/10.1016/j.afjem.2021.08.001

Vanderbruggen, N., Matthys, F., Van Laere, S., Zeeuws, D., Santermans, L., Van Den Ameele, S., & Crunelle, C. L. (2020). Self-Reported Alcohol, Tobacco, and Cannabis Use during COVID-19 Lockdown Measures: Results from a Web-Based Survey. In *European Addiction Research* (Vol. 26, Issue 6). https://doi.org/10.1159/000510822

Vargas-Martínez, A. M., Trapero-Bertran, M., Mora, T., & Lima-Serrano, M. (2020). Social, economic and family factors associated with binge drinking in Spanish adolescents. *BMC Public Health*, *20*(1). https://doi.org/10.1186/s12889-020-08605-9

Vellios, N. G., & van Walbeek, C. P. (2018). Self-reported alcohol use and binge drinking in South Africa: Evidence from the national income dynamics study, 2014 - 2015. *South African Medical Journal*, *108*(1), 33–39. https://doi.org/10.7196/SAMJ.2018.v108i1.12615

Vera, B. D. V., Carmona-Márquez, J., Lozano-Rojas, Ó. M., Parrado-González, A., Vidal-Giné, C., Pautassi, R. M., & Fernández-Calderón, F. (2021). Changes in alcohol use during the covid-19 pandemic among young adults: The prospective effect of anxiety and depression. *Journal of Clinical Medicine*, *10*(19). https://doi.org/10.3390/jcm10194468

Visser, M., & Law-van Wyk, E. (2021). University students' mental health and emotional wellbeing during the COVID-19 pandemic and ensuing lockdown. *South African Journal of Psychology*, *51*(2). https://doi.org/10.1177/00812463211012219

Wang, C., & Zhao, H. (2020). The Impact of COVID-19 on Anxiety in Chinese University Students. *Frontiers in Psychology*, *11*. https://doi.org/10.3389/fpsyg.2020.01168

Weerakoon, S. M., Jetelina, K. K., & Knell, G. (2021). Longer time spent at home during COVID-19 pandemic is associated with binge drinking among US adults. *American Journal of Drug and Alcohol Abuse*, *47*(1). https://doi.org/10.1080/00952990.2020.1832508

White, A., & Hingson, R. (2013). The burden of alcohol use: Excessive alcohol consumption and related consequences among college students. *Alcohol Research: Current Reviews*, *35*(2).

White, A. M. (2019). Gender differences in the epidemiology of alcohol use and related harms in the United States. *Alcohol Research: Current Reviews*, *40*(2). https://doi.org/10.35946/arcr.v40.2.01

White, A. M., Tapert, S., & Shukla, S. D. (2017). Binge drinking predictors, patterns, and consequences. In *Alcohol Research: Current Reviews* (Vol. 39, Issue 1).

White, H. R., Stevens, A. K., Hayes, K., & Jackson, K. M. (2020). Changes in alcohol consumption among college students due to covid-19: Effects of campus closure and residential change. *Journal of Studies on Alcohol and Drugs*, *81*(6). https://doi.org/10.15288/jsad.2020.81.725

WHO. (2020). Alcohol and COVID-19 : what you need to know. *World Health Organization*, *19*, 1–6. https://www.euro.who.int/__data/assets/pdf_file/0010/437608/Alcohol-and-COVID-19-what-you-need-to-know.pdf

WHO, W. H. O. (2023a). *South Africa Situation*. https://covid19.who.int/region/afro/country/za

WHO, W. H. O. (2023b). *WHO Coronavirus (COVID-19) Dashboard*. https://covid19.who.int

Wilson, T., Abrams, R. R., David, B., & Abrams, D. B. (2013). Encyclopedia of Behavioral Medicine. In *Encyclopedia of Behavioral Medicine*. https://doi.org/10.1007/978-1-4419-1005-9

Wong, J. Y. H., Fong, D. Y. T., Choi, A. W. M., Tiwari, A., Chan, K. L., & Logan, T. K. (2016). Problem-Focused Coping Mediates the Impact of Intimate Partner Violence on Mental Health among Chinese Women. *Psychology of Violence*, *6*(2). https://doi.org/10.1037/a0039496

World Health Organization. (2010). *Global strategy to reduce the harmful use of alcohol*. 38.

World Health Organization. (2018a). *Global Status Report on Alcohol and Health 2018*.

World Health Organization. (2018b). *Global status report on road safety 2018*.

World Health Organization. (2020). *Coronavirus disease (COVID-19): How is it transmitted?* https://www.who.int/news-room/q-a-detail/coronavirus-disease-covid-19-how-is-it-transmitted

Xu, S., Park, M., Kang, U. G., Choi, J. S., & Koo, J. W. (2021). Problematic Use of Alcohol and Online Gaming as Coping Strategies During the COVID-19 Pandemic: A Mini Review. In *Frontiers in Psychiatry* (Vol. 12). https://doi.org/10.3389/fpsyt.2021.685964

Yen, F. S., Wang, S. I., Lin, S. Y., Chao, Y. H., & Wei, J. C. C. (2022). The impact of heavy alcohol consumption on cognitive impairment in young old and middle old persons. *Journal of Translational Medicine*, *20*(1). https://doi.org/10.1186/s12967-022-03353-3

Yi, S., Ngin, C., Peltzer, K., & Pengpid, S. (2017). Health and behavioral factors associated with binge drinking among university students in nine ASEAN countries. *Substance Abuse: Treatment, Prevention, and Policy*, *12*(1). https://doi.org/10.1186/s13011-017-0117-2

Yi, S., Te, V., Pengpid, S., & Peltzer, K. (2018). Social and behavioural factors associated with risky sexual behaviours among university students in nine asean countries: A multi-country cross-sectional study. *Sahara J*, *15*(1). https://doi.org/10.1080/17290376.2018.1503967

Young, C., & De Klerk, V. (2009). Patterns of alcohol use on a South African university campus: the findings of two annual drinking surveys. *African Journal of Drug and Alcohol Studies*, *7*(2). https://doi.org/10.4314/ajdas.v7i2.46367

Zaami, S., Marinelli, E., & Varì, M. R. (2020). New Trends of Substance Abuse During COVID-19 Pandemic: An International Perspective. *Frontiers in Psychiatry*, *11*. https://doi.org/10.3389/fpsyt.2020.00700

Zhao, S., Yin, P., Xiao, L. D., Wu, S., Li, M., Yang, X., Zhang, D., Liao, L., & Feng, H. (2021). Nursing home staff perceptions of challenges and coping strategies during COVID-19 pandemic in China. *Geriatric Nursing*, *42*(4). https://doi.org/10.1016/j.gerinurse.2021.04.024

Zysset, A., Volken, T., Amendola, S., Wyl, A. von, & Dratva, J. (2022). Change in Alcohol Consumption and Binge Drinking in University Students During the Early COVID-19 Pandemic.

Front Public Health, *10*. https://doi.org/10.3389/fpubh.2022.854350

Appendix 1: Letter from Registrar (permission to conduct research)

UNIVERSITY OF
KWAZULU-NATAL
INYUVESI
YAKWAZULU-NATALI

21 June 2022

Joy Adebowale Faborode (SN 221065579)
School of Nursing and Public Health
College of Health Sciences
Howard College Campus   UKZN
Email: joyajis@gmail.com   221065579@ukzn.ac.za

Dear Joy

RE: PERMISSION TO CONDUCT RESEARCH

Gatekeeper's permission is hereby granted for you to conduct research at the University of KwaZulu-Natal (UKZN), towards your postgraduate studies, provided Ethical clearance has been obtained. We note the title of your research project is:

"An exploration of binge drinking and coping behavior during COVID-19 among university students in a major tertiary institution in KwaZulu-Natal".

It is noted that you will be constituting your sample as follows:
- With a request for responses on the website. The questionnaire must be placed on the notice system http://notices.ukzn.ac.za. A copy of this letter (Gatekeeper's approval) must be simultaneously sent to (govenderlog@ukzn.ac.za) or (ramkissoonb@ukzn.ac.za).

Please ensure that the following appears on your questionnaire/attached to your notice:
- Ethical clearance approval letter;
- Research title and details of the research, the researcher and the supervisor;
- Consent form is attached to the notice/questionnaire and to be signed by user before he/she fills in questionnaire;
- gatekeepers approval by the Registrar.

You are not authorized to contact staff and students using the 'Microsoft Outlook' address book. Identity numbers and email addresses of individuals are not a matter of public record and are protected according to Section 14 of the South African Constitution, as well as the PAIA and POPI Act. For the release of such information over to yourself for research purposes, the University of KwaZulu-Natal will need express consent from the relevant data subjects.
Data collected must be treated with due confidentiality and anonymity.

Yours sincerely

Dr KE CLELAND: REGISTRAR

Office of the Registrar
Postal Address: Private Bag X54001, Durban, 4000, South Africa
Telephone: +27 (0)31 260 7971 **Email:** registrar@ukzn.ac.za **Website:** www.ukzn.ac.za

Founding Campuses: ■ Edgewood   ■ Howard College   ■ Medical School   ■ Pietermaritzburg   ■ Westville

INSPIRING GREATNESS

Appendix 2: Ethical clearance letter (BREC/00004173/2022)

UNIVERSITY OF KWAZULU-NATAL ™
INYUVESI
YAKWAZULU-NATALI

11 September 2022

Mrs Joy Adebowale Faborode (221065579)
School of Nurs & Public Health
Howard College

Dear Mrs Faborode,

Protocol reference number: BREC/00004173/2022
Project title: An exploration of binge drinking and coping behaviour during Covid-19 among Students in a major tertiary institution in KwaZulu-Natal
Degree: MMedSc

EXPEDITED APPLICATION: APPROVAL LETTER

A sub-committee of the Biomedical Research Ethics Committee has considered and noted your application.

The conditions have been met and the study is given full ethics approval and may begin as from 11 September 2022. Please ensure that any outstanding site permissions are obtained and forwarded to BREC for approval before commencing research at a site.

Note: The amended study is approved. Note that this revised application may not use any of the data collected for the international study approved in Belgium.

This approval is valid for one year from 11 September 2022. To ensure uninterrupted approval of this study beyond the approval expiry date, an application for recertification must be submitted to BREC on the appropriate BREC form 2-3 months before the expiry date.

Any amendments to this study, unless urgently required to ensure safety of participants, must be approved by BREC prior to implementation.

Your acceptance of this approval denotes your compliance with South African National Research Ethics Guidelines (2015), South African National Good Clinical Practice Guidelines (2020) (if applicable) and with UKZN BREC ethics requirements as contained in the UKZN BREC Terms of Reference and Standard Operating Procedures, all available at http://research.ukzn.ac.za/Research-Ethics/Biomedical-Research-Ethics.aspx.

BREC is registered with the South African National Health Research Ethics Council (REC-290408-009). BREC has US Office for Human Research Protections (OHRP) Federal-wide Assurance (FWA 678).

The sub-committee's decision will be noted by a full Committee at its next meeting taking place on 11 October 2022.

Yours sincerely,

Prof D Wassenaar
Chair: Biomedical Research Ethics Committee

INSPIRING GREATNESS

Appendix 3: Informed consent letter

UNIVERSITY OF
KWAZULU-NATAL
INYUVESI
YAKWAZULU-NATALI

INFORMATION SHEET AND CONSENT TO PARTICIPATE IN RESEARCH

TOPIC: AN EXPLORATION OF BINGE DRINKING AND COPING BEHAVIOUR DURING COVID-19 AMONG STUDENTS IN A MAJOR TERTIARY INSTITUTION IN KWAZULU-NATAL

Dear Student,

My name is Faborode Joy Adebowale, I am a Master's student from the School of Nursing and Public Health, College of Health Sciences, University of KwaZulu-Natal, Durban. My contact number is 0843738843, and email address is joyajis@gmail.com or 221065579@stu.ukzn.ac.za.

You are being invited to participate in a study that explores alcohol use amongst higher education students in a major university in KwaZulu Natal. Before consenting to participate in this research study, please read the information carefully below for you to understand what the study will entail. If you have any questions or concerns about anything relating to your participation, feel free to ask the researcher.

What is the purpose of this study?

The study aims to examine how students experience and coped with change due to lockdown during the COVID-19 pandemic and identifies the extent of and factors that influence binge drinking among students at a major tertiary institution in KwaZulu Natal during the COVID-19 pandemic.

Who are we asking to participate?

The study is expected to enroll students from the University of KwaZulu Natal (UKZN). The legal age of consent to participate in the study is 18 years.

What will it mean if you participate in the study?

In the context of successive waves of COVID-19, and in the interests of accommodating the requirements for ensuring the safety of participants and the interviewer, the interviews will be conducted virtually, either by telephone or an online platform such as zoom, google meets, microsoft teams, whatsapp. This is to mitigate any prospect of COVID-19 infection during the interview process. If you decide to participate in this study, the duration of your participation will be approximately 30-60 minutes, during which you will be asked a number

of questions about your alcohol consumption and reasons for consuming alcohol prior to and during COVID-19. The researcher will conduct the interview. With your permission, the interview will be audio-recorded and later transcribed. The audio recordings will be deleted immediately after they have been transcribed. In order to ensure the credibility of this study, after the transcription of the data, the researcher will send you the transcript via e-mail. To verify whether your responses were captured correctly and if there were no misrepresentations of what your response. You can remove or add to your data and send back your transcript via email within six days. If the researcher does not receive a response within six days, the transcript that has been sent to you will be considered as accepted and approved for analysis.

Will my information remain confidential?

Yes. If you consent to participate in the study, your interview session will be conducted in a private and quiet room via telephone calls or zoom without being accessed by outsiders. The researcher will ensure that the security setting is enable so that nobody else will join the online meeting room. If an outsider comes into the room, we will stop the interview and resume once the person has left. All your recorded responses to the interview questions will be listened to and transcribed by the study researcher only in a private room. Information and results of the study that are reported will not contain any personal information such as names or contact details. Every effort will be made to keep your information confidential. The information from your interviews will be stored safely on a passworded computer for up to five years. All written copies of the information collected will be filed and stored in a locked cupboard at the Centre for Rural Health (CRH) offices.

What is the possible token of appreciation for participating in this study?

Participants will be given a token of appreciation to acknowledge their time given to the study by giving them R20 airtime for their contribution and time. Your contribution in participating in this study and answering the questions will help add new insights to the body of knowledge and in designing interventions for university students.

What are the possible drawbacks or discomforts of participating in this study?

The only cost for you to participate in this study is your time. However, if you do experience any discomfort or distress during the interview session, please address this with the interviewer. You will not be under any obligation to continue with the interview should you feel any distress in answering the questions. If you experience any psychological distress, you may contact these organizations that may be helpful

UKZN Student Support Services: 0800 800 017 or chum.studentsupport@ukzn.ac.za

The South African Depression and Anxiety Group (SADAG): 011 234 4837 or 0800 456 789

LIFELINE Durban: 031 312 2323 or 0861 322 322

If you require any help with your consumption of alcohol, you may contact the organization below for assistance.

ALCOHOLICS ANONYMOUS Durban: (031) 301-4959 / 301 9830 or kzn@aasouthafrica.org.za

Do I have to participate in this study?

Your participation in this research is completely voluntary. You are free to choose whether you want to participate or not. If you decide to participate in this research, you may withdraw at any time. There are no potential consequences to the participant for withdrawal from the study. If you agree to participate, you will be asked to sign the attached consent form.

How will we report this research?

The researcher intends to publish the findings in peer-reviewed journals.

Questions

If you have any questions or concerns about participating in this research, please contact:

Researcher: Faborode Joy Adebowale
School of Nursing and Public Health,
Centre for Rural Health
Howard College,
University of KwaZulu-Natal
E-mail: joyajis@gmail.com or 221065579@stu.ukzn.ac.za
Tel: 0843738843

Supervisor: Dr. Kathree Tasneem
School of Nursing and Public Health,
Centre for Rural Health
Howard College,
University of KwaZulu-Natal
E-mail: kathree@ukzn.ac.za
Tel: 0827869330

BIOMEDICAL RESEARCH ETHICS COMMITTEE (BREC)
Research Office, Westville Campus
Govan Mbeki Building
Private Bag X 54001
Durban
4000
KwaZulu-Natal, SOUTH AFRICA
Tel: 27 31 2604769 - Fax: 27 31 2604609

DECLARATION OF CONSENT

I ------------------------------- have been informed about the study titled **'An exploration of binge drinking and coping behaviour during COVID-19 among university students in a major tertiary institution in KwaZulu Natal'** by Faborode Joy Adebowale.

I understand the purpose of the study and agree to participate in the interview.

I have been given an opportunity to answer questions about the study

I am aware that my participation in this study is entirely voluntary and that I may withdraw at any time.

Please tick or initial	Yes	No
I consent to video or telephone call for interview session		
I agree to my interviews being uploaded to an electronic device and audio recorded		

_____   _____

Signature of Participant   **Date**

Appendix 4: Interview schedule

Interview guide

Dear Participants,

My name is Faborode Joy Adebowale. I am a master's student from the School of Nursing and Public Health, College of Health Sciences, University of KwaZulu-Natal, Durban. I am currently conducting research on alcohol use and my study is titled **'An exploration of binge drinking and coping behaviour during COVID- 19 among university students in a major tertiary institution in KwaZulu Natal'**. The purpose of the interview is to gather sufficient information that will be useful for the research study. Please note that this discussion is specifically for academic purposes and will be treated with the utmost confidentiality. Thank you.

Section A

Socio-demographic and general profile of respondents

- In which study program are you currently enrolled? For how long
- Where are you from?
- What is your current age?
- Are you currently in a steady relationship?
- What is the highest level of education your father has completed?
- What is the highest level of education your mother has completed?

Section B

Factors associated with drinking

- Tell me more about how much you drink during a typical week.
- What kind of drinks?
- Do you prefer drinking alone, or with friends, at home or socially?
- Thinking back to before COVID, do you think you drank more differently in different places? And during lockdowns, did you drink differently? And now, after COVID? Where do you drink before, during and now?
- Do people in your family drink alcohol? Please tell me more.
- Do you drink more or less compared to when you are living at home? Please explain
- Why do you think people like to drink?
- Why do you like to drink?
- Have you ever considered drinking less or slowing down? If so, why/why not?
- What effects do you think alcohol has on people, on you, families, and communities?

Section C
Stress and Coping Questions

- Please describe your experience as a student during COVID-19 lockdown
- Please reflect upon your time during the COVID-19 lockdown. What are the things that cause you stress? Please mention the things that have personally caused you stress during the COVID-19 lockdown.
- Please reflect upon your time during the COVID-19 lockdown. When you have been under stress, what signs or symptoms do you exhibit? These signs/symptoms can be physical or emotional.
- Please reflect upon your time during the COVID-19 lockdown. When you have been under stress, what specifically do you do that helps you cope with the stress during the lockdown? What things have you found that help to reduce stress for you?
- What was the outcome of the coping efforts you adopted during the lockdown? How effective are the coping strategies you used in dealing with stressors during the lockdown?

Appendix 5: Codebook

Binge drinking and coping strategies of students in UKZN

Codes

Name	Description	Files	References
Frequency of drinking	The number of times a participant drinks alcohol in a given period of time.	18	59
Kind of drinks	Different kinds of alcoholic drinks participant consume before, during and after COVID-19	20	27
People with whom you drink with	participant who prefers to drink with others	20	32
Drinking Alone	participant who drinks alone	6	7
Change in drinking frequency	Increase or reduction in the number of times a person drinks alcohol before, during and after COVID-19	11	15
Do people in your family drink alcohol		19	26
Family pattern of drinking	Extent to which participant family drinks	15	28
Reasons people like to drink		14	20
where do you drink	Place where participant drink before, during and after COVID-19 lockdown	20	37

Name	Description	Files	References
Do you drink more or less compared to when you are living at home	Do participant drink more or less compared to when you are living at home	16	21
During COVID-19 drinking pattern	The way in which participant drinks alcohol during COVID-19	13	27
Before COVID-19 drinking pattern	The way in which participant drinks alcohol before COVID-19	12	19
Influence of family members drinking pattern	The Influence of family members drinking pattern on participant	12	12
Influence of friends drinking pattern	The Influence of friends drinking pattern on participant	14	15
Effects of alcohol on the communities	Positive and negative effects of alcohol on communities	9	20
Effects of alcohol on you	Positive and negative effects of alcohol on the participant	20	43
Your experience as a student during COVID-19 lockdown	participant personal and academic experience during COVID-19 lockdown	20	41
Signs or symptoms do you exhibit under stress during COVID-19 lockdown	Signs or symptoms do participant exhibited under stress during COVID-19 lockdown	10	14
Coping strategies during COVID-19	Tips that helped participant to cope during the COVID-19 pandemic	17	27
Effectiveness of the coping strategies during COVID-19 lockdown	Effectiveness of the coping strategies during COVID-19 lockdown	10	10
Other harmful substances	other harmful substance consumed by participant	13	17

103