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FACULTY OF COMMUNITY AND HEALTH SCIENCES

An investigation of alcohol and drug use and possible risk factors amongst nursing students at a University in the Western Cape

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Abstract

Background

The use of substances (alcohol and other drugs) is a significant global public health challenge, despite extensive awareness and educational strategies about the dangers of alcohol and illicit drug use. Recognition of the factors associated with substance use amongst nursing students is crucial to guide program planning, promotion of awareness and reduce risk of drug use.

Aims

The aim of this study was to describe the risk factors associated with substance use among nursing students at a university in the Western Cape.

Objectives

The objectives were to identify the possible risk factors associated with substance use among nursing students at a University in the Western Cape and to identify the type of substances used by nursing students at the university.

Research design and method

A quantitative, descriptive, survey design was conducted. A convenience sampling strategy was used to recruit nursing students in the second year to fourth-year level of study at a university in the Western Cape. A self-reporting structured questionnaire was used to collect data, which was captured on a Research Electronic Data Capture (RedCap) database; students were provided with the link, which they used to access the electronic form that was utilised to collect data.

Data analysis

Quantitative data were analysed using the SPSS version 27 statistical package for windows. Frequency distribution tables were developed to present descriptive statistics such as the socio-demographic variables and the prevalence of risk factors for substance use. The statistical significance for all tests was set at a 5% significance level and at 95% Confidence Interval. This was followed by bivariate results, Chi-square tests which show associations, followed by multivariate regression.

Ethical considerations

Informed consent was sought from all students who met the inclusion criteria and voluntarily agree to participate. Anonymity was maintained. Ethics approval to conduct the study was obtained from the Human and Social Sciences Research Committee (HSSREC # HS21/10/82)

and permission to access the students was obtained from the university registrar and the nursing school director. All records were stored in a password protected computer and will be destroyed after five years.

Results

There were 212 completed questionnaires. The most used substances by nursing students were tobacco (24.1%) alcohol (64.6%), and marijuana (23.7%). Alcohol and drug usage was higher among females than males within 12 months preceding the survey. The study findings have shown a significant association between risk for alcohol and drug use on the following variables; religious affiliation was a protective factor, gender; with females more likely to consume alcohol and drugs over a period of 12 months, peer pressure was related to substance use although in this study more than half (55.3%) refused alcohol and drugs, the family was a protective factor , and stress and boredom were risk factors for substance use.

Conclusion

Alcohol and drug use remains a public health problem. Reported alcohol and drug usage are more among females than their male counterparts within a 12-month period. The risk factors of alcohol and drug use reported in this study is similar to those established by other researchers. Tobacco, alcohol, and marijuana were the most used substances in this study whilst 'hard' drugs such as cocaine were used by a few students only. The study did not make provision for listing of any drugs used other than those stipulated. This limited the exploring of the use of some other 'street drugs' that are available in the Western Cape. The researcher recommends further research on alcohol and drug use of other substances other than those listed in the survey tool.

Key words

Risk Factors

Students

Substance Abuse

Alcohol, Drugs

Nursing students

Substance use

Declaration

I declare that the thesis entitled "**An investigation of alcohol and drug use and possible risk factors amongst nursing students at a University in the Western Cape**", which I hereby submit as a mini-thesis, submitted in partial fulfilment of the requirements of the Master's in Nursing (Psychiatric Nursing) degree at the University of the Western Cape is my own work and has never been submitted for any degree or examination in any other university, and that all sources I have used or quoted have been indicated and acknowledged by complete references.

Student name: Gaotswake Patience Kovane

Signature:

Date: March 2023

Acknowledgements

I would like to extend my sincere appreciation to my Heavenly Father for the gift of life and for making it possible to achieve this qualification. To my Mom, my siblings, and my extended family, I am grateful for your continuous prayers and love for me. A special appreciation to my husband for his support throughout this qualification, assisting with data collection and continuous encouragement. My three “exceptional kids”, you mean the world to me, little ones; thank you for your love and support; you are such a blessing, and you are a true reflection of how much God loves me.

My gratitude to my supervisor Professor Pat Mayers, thank you for your patience with me and guidance. The participants of this study, without you, this study would have not been possible.

Mr Christopher Manyamba, for the statistical assistance, thank you.

Dedication

I would like to dedicate this thesis to the two incredible men in my life that natured me on this earth and, guided me to be the most responsible woman that I am. Mr Calvin Mpeti Moloi, you were such a wonderful father to me.

To my Dad Mr Godfrey Mzilikazi Ndebele, ooh Nsungwasha, Ndeti, Wumbe, Bamakulukusa, you have left a hole in my heart that no one can ever fill. I love and will always love you, daddy. I miss you every day and thank you for believing in me and instilling in me that education is key. The queen, my Mom, this one is for you; thanks for the wisdom and guidance to make the right choices in life.

To all those struggling with alcohol and drug use for different reasons, I wish you strength and the ability to get help.

Definition of concepts

Risk factors: It is something that increases a person's chances of developing a disease or adopting a habit (Shiel, 2018).

Operational definition: In this study, it refers to anything that will increase the possibility of nursing students to use alcohol and drugs.

Student: “is a person who is studying at a university or college” (Collins, 2018).

Operational definition: In this study a student refers to a person enrolled for an undergraduate nursing degree at a university in the Western Cape province.

Substance use: It is a pattern of unsafe use of any substance for mood-altering purposes; these substances can include alcohol and other drugs (illegal or not) (Buddy, 2020).

Operational definition: In this study, substance use refers to any substance that alters the mood, either legal or illegal and this includes alcohol, tobacco products, recreational and illicit drugs that are used by nursing students at a university in the Western Cape.

Table of Contents

List of Tables

List of Figures

Abbreviations and acronyms

AIDS:	Acquired immunodeficiency syndrome
DUI	Driving under the influence
DWI	Driving while intoxicated
HIV:	Human Immunodeficiency virus
HREC	Human and Social Sciences Research Committee (HREC)
HSSREC	Humanities and Social Sciences Research Ethics Committee
LSD:	Lysergic acid diethylamide
MDMA	Methylenedioxy-methamphetamine
PCP:	Phencyclidine
RedCap:	Research Electronic Data Capture
SANC:	South African Nursing Council
USA:	United States of America
UWC:	University of the Western Cape

Chapter 1
Introduction and Overview of the Study

1.1 Introduction and background

This chapter presents a broad summary of the study. It includes background, problem statement, aims and objectives, the research methods, design, and study setting.

Substance abuse has been a worldwide concern, regardless of widespread awareness to educate people about the risks of alcohol and smoking of illegal drugs (Birhanu et al., 2014). The use of substances among health science students remains a threat to the nobleness of the profession, has a detrimental effect on the standard of health care and places the health of the communities at risk (Panthee et al. 2017).

The use of alcohol and drugs remains to be a public health challenge globally and adds to morbidity and mortality (Kameg et al., 2020; Fuhr et al., 2014; Morojele et al., 2016; Birhanu et al., 2014). It is documented that tobacco smoking causes the death of more people than alcohol, AIDS, car crashes, illegal drugs, murders, and suicides combined, Human immunodeficiency virus (HIV) and Acquired immunodeficiency syndrome (AIDS) and malaria combined (South-eastern Idaho Public Health, 2023; Birhanu et al., 2014).

Substances are extensively used and abused among the African young generation post COVID (Givetash, 2022). Rabanales Sotos and co-researchers reported nearly half (43.3%) use of substances among nursing students in Spain (Rabanales Sotos et al., 2015). Another study conducted in the United States of America (USA) reported increased risky alcohol use among 20% of students and moderate to high-risk drug use in fewer (3.6%) students (Kameg et al., 2020). The risky involvement in unprotected sex which exposes persons to sexually transmitted infections like HIV is associated with the use of substances among the youth in Cape Town (Carney et al., 2019) and physical and/or mental health complications (Birhanu et al., 2014).

The period between the stage of late teens up to the twenties (18-25) is a developmental stage considered to emerging adulthood (Maricopa Community Colleges, 2023; Arnett, 2000). Most of the higher institution of learning students within undergraduates are within this group. This developmental stage is deemed the most critical stage in their life, in which there is commonly an increased risk of substance abuse (Skidmore et al., 2016). However, university students undergo different stressors that predispose them to indulge in the use of alcohol, marijuana, and use of prescription drugs not for medical purposes (Skidmore et al., 2016).

1.2 Problem statement

Despite health awareness campaigns about the use and abuse of alcohol and illicit drugs, the use and abuse of substances among adolescents and young adults in South Africa is high (Vorster et al., 2019). There are various factors that influence students to indulge in alcohol and drug use as well as abuse. These factors are peer pressure, social activities and external influences which have been reported to influence students drinking behaviour (Vorster et al., 2019). Nursing students may be vulnerable to the use or abuse of substances, due to the exposure of stressful situations as developing healthcare professionals (Vorster et al., 2019). There was a significant increase observed over a three-month period of drug use from 3.7% in 2008 to 4.4% in 2012 in South Africa (Peltzer & Phaswana-Mafuya, 2018). A similar study of nursing students at a university in Spain reported that more than 50% of the students reported alcohol intake; 31% were classified as having “risky alcohol use”, and 19.5% met the criterion for hazardous drinking (Tejedor-Cabrera & Cauli, 2019). The Western Cape records the highest prevalence rate of substance use; therefore, the researcher identified the need to conduct a survey to identify risk factors contributing to the use of substances among nursing students at a university in the Western Cape (Peltzer & Phaswana- Mafunya, 2018).

As a master’s student in Advanced Psychiatric Nursing, the researcher conducted her psychosocial rehabilitation project amongst adolescents at a high school in the Cape Town metropole. The educators indicated that they were experiencing problems with students using illicit drugs and were concerned about the perceived increase in the

number of students who abuse substances, resulting in the associated drop in academic performance and absenteeism. The majority of nursing students are in the late adolescence phase and have recently completed their schooling. Nurses generally constitute the largest number in a team of health professionals in all health facilities in South Africa, hence nursing students are the future health professionals who are directly involved in the day-to-day contact with the community, therefore the use of substances can create a potential risk in their practice. As schools were not accessible to the researcher during COVID, the study focused on nursing students.

1.3 Research Questions

- What are the substances used by nursing students
- What are the possible risk factors of alcohol and drug use amongst nursing students at a University in the Western Cape Province of South Africa?

1.4 Research Aim

The aim of this study was to investigate alcohol and drug use and possible risk factors amongst nursing students at a University in the Western Cape Province of South Africa.

1.5 Research Objectives

1.5.1 To identify the possible risk factors associated with substance use among nursing students at a University in Cape Town

1.5.2 To identify the type of substances used by nursing students at a University in Cape Town

1.6 Significance of the study

Nursing education

The findings of the study may offer Nursing education institutions information with regard to development of content which should be included in nursing programme curricula.

Nursing research

Results of this study may add to the body of knowledge and assist with planning for the future research regarding alcohol and drug use among nursing students within the university.

Nursing practice

The findings of the study may offer Nursing education institutions information with regard to risk factors associated with substance use among nursing students in the selected university, and thus facilitate the development of prevention and support programmes.

1.7 Research Methodology

Research methodology involves the techniques used by the researcher to carry out the research suitable for answering the research question, achieving research objective, identify the study participants and select a sample, select a process to collect data and a method to analyse the study data (Polit & Beck, 2021; Brink *et al.,* 2021). A quantitative research design was employed for this study to investigate alcohol and drug use and possible risk factors amongst nursing students at a University in the Western Cape Province of South Africa. The research methods will be discussed in detail in this chapter.

1.7.1 Research design

This study used a quantitative research approach, and a descriptive survey design was utilized to collect data that describe risk factors associated with substance use and types of substances used by nursing students at a university in the Western Cape. Quantitative research is all-inclusive, objectively follows an organised process for

generating numeric data (Grove & Gray, 2022). Descriptive studies are conducted to identify data and some variables concerning the aspect under investigation (Grove & Gray 2022).

1.7.2 Study setting

The study was conducted at a university in the Western Cape which offers both undergraduate and postgraduate qualifications in Nursing. The school of nursing is accredited by the South African Nursing Council as a Nursing Education Institution.

1.8 Ethical considerations

COVID-19 Statement: All national regulations, guidelines, and protocols with respect to the collection of data during this time were adhered to, taking into consideration particular regulations related to lockdown level of alert level one. The research process did not interfere with COVID-19 care and outbreak control measures. A written, signed informed consent was obtained from all respondents to confirm the willingness of the respondent to participate in the research study voluntarily without coercion, either physically or online data collection prior to responding to the questionnaire. Voluntary consent is required according to the Nuremberg Code which was the first guideline to protect human subjects who participate in research (Annas, 2018).

Ethical approval for the study was obtained from the Human and Social Sciences Research Committee (HREC) of The University of the Western Cape (UWC), HSSREC Reference Number**:** HS21/10/82. Permission to access the students was obtained from the Director of the Nursing School of the selected University. The proposal, questionnaire and information sheet and consent forms were submitted together with the ethical approval letter to the University at which the research was to be conducted. The nature and the purpose of the research study was explained to the research participants before obtaining their consent to participate in the study. Confidentiality and anonymity were maintained; all electronically completed questionnaires did not have names linked to them. The respondents were provided

with contact information, so that they could contact the researcher if they have any further questions, comments, or complaints. The study involved minimal risk to the respondents.

This study did not have direct benefits to the respondents, but the results may assist educators to know how to manage and assist students regarding substance abuse. The study may also inform policy makers. Student counselling services at the university health centre was consulted regarding this study and they agreed to be available for any respondents who may have felt distressed through participation. All participants were treated equally and fairly. All measures required ethically for research on humans were maintained. The researcher has completed a Good Clinical Practice course which equipped the researcher with knowledge and be able to maintain research integrity and ensure that all ethical principles are followed during the conduct of this study. The electronic data was password protected and stored in Dropbox. All data materials were locked up in a safe place and will be stored for five years and then destroyed in accordance with the University data management policy.

1.9 Summary

An overview of the study is provided in this chapter. This dissertation has five chapters which are delineated as follows:

Chapter one: Overview and background. In chapter one a broad overview of the study the background to the problem and problem statement were presented. The aims of the research, objectives, significance of the study, a brief research methodology and a discussion of the ethical considerations were also provided.

Chapter two: **Review of literature**. The literature on possible risk factors of alcohol and drug use amongst nursing students were provided in this chapter.

Chapter three: **Research methodology.** In this chapter the research methodology adapted to conduct the study was discussed in-depth, including the research design, data collection method, data analysis methods, the validity and reliability of the study as well as ethical consideration is discussed in this chapter.

Chapter four: Results The results of the survey were presented in this chapter.

Chapter five: **Discussion, conclusions, and recommendations**. This chapter comprises the discussion of research findings and their relationship with the research objectives. The recommendations for practice and future research as well as conclusion were provided in this chapter.

Chapter 2

Literature Review

2.1 Introduction

In this chapter the literature pertaining to the research topic is reviewed and as far as possible the most recent published work on the topic has been included (Gray & Grove 2021; Polit & Beck 2021). It gives a foundation for the research study, and it allows the researcher to explore or identify what is known about the phenomena under investigation. The literature review chapter is guided by the aim of the study.

A number of scholarly databases were utilized to search for journal articles and other published work related to the topic. The search was conducted on the following platforms, Google Scholar, PubMed, Ebscohost, Medline, North-West University Online Library as well as The University of the Western Cape Online. The keywords used for the search were: substance abuse, substance use, nursing students, pupil nurses, alcohol consumption, alcohol intake, alcohol drinking habits; risk factors.

The literature review focused on the use of substances among nursing students, the prevalence rate of alcohol and drug use amongst this group, and possible risk factors of substance abuse and the commonly used drugs. The increasing consumption of alcohol and drugs among university students remains a public health concern (Ansari et al., 2020). It is deemed a major additional factor in the increase in morbidity and mortality rate (Ansari et al.,2020; Kameg et al., 2020). The use of substances has detrimental impact on the health of those who smoke and those who do not. Hence one of the avoidable outcomes is death (Mashita et al, 2011). Nursing students' use of drugs without medical prescription, in a study conducted in Brazil, was linked with excessive drinking, nicotine dependence, as well as the use of illicit drugs (Sousa et al., 2020).

2.2 Impact of alcohol and drug use on the economy

Acarli and Kasap (2015) postulate that substance abuse places a tremendous burden on the economy and is harmful to the environment. In a study carried out by Panthee et al. (2017), respondents reported dysfunctions because of their use of substances. Drunken driving results in major car accidents which may lead to loss of lives and critical injuries (Ncube et al., 2016), which need to be managed in hospitals and which has financial costs. Healthcare costs are high due to increased health challenges the alcohol and drug users incur (American Addiction Center, 2022).

2.3 Prevalence of alcohol and drug use among health sciences students

In a study carried out in Brazil amongst medical students, the prevalence of alcohol use and alcohol dependence was 28.4% and 15.6% respectively (dos Santos et al., 2019). Amongst health science students in a European university, including nursing students, 51.4 % reported alcohol use, 16.6% used both alcohol and cannabis, 1.6% reported alcohol and other illicit drug use, and 3.7% used alcohol, marijuana, and other illicit drugs. In another study the majority of students (73.3%) reported alcohol intake alone or together with cannabis/hashish and/or other illicit drugs (Colomer-Pérez et al., 2019). In a study in Nepal on health care students (including nursing students), the prevalence of use of illegal use of prescription drugs and illegal drug use was nearly half (42.8%) over lifetime and just over a quarter (26%) in the previous 12 months, and 11.3% in the previous month (Panthee et al., 2017). The use of substances by health science students (nursing and medical) in Cameroon had a reported prevalence rate of 1.64% (Mbanga et al., 2018). Despite the low prevalence rate, it remains worrying, as the use of the substance has a negative impact on the performance and general health of the students (Mbanga et al., 2018). A cross-sectional study conducted at a university in Ethiopia found a relatively high (70.2%) prevalence of current substance users among health and medical science students (Alebachew et al., 2019).

In a South African university, a high prevalence rate of 81.2% of alcohol use among nursing students was recorded; 52.2% used alcohol in combination with energy drinks,

whereas 40.6% smoked cigarettes or tobacco and a lower percentage (21.7%) reported use of cannabis (Vorster et al., 2019). In another study carried out at a South African university, 15.6% of students revealed hazardous drinking, 4.1% harmful drinking while about 5.6% were alcohol dependent (van Zyl et al., 2015). There is a significant growth in the prevalence of alcohol use among young generation in South Africa with a record of 6.3% in Free State and Northern Cape (5.2%) recorded past-three month of drug use (Peltzer & Phaswana-Mafuya, 2018). In 2018, the use of alcohol among the youth in the Western Cape was found to be worrisomely high, with a past three-month drug use of 7.1% (Peltzer & Phaswana-Mafuya, 2018).

2.4 Commonly used or abused substances

Any substance which, after ingestion, results in an altered feeling ("high feeling") may be used or abused by individuals. Table 2 depicts some of the drugs that are commonly abused by nursing students and may result in dependence.

Table 2.1: Commonly used drugs

Substance	Reference
Alcohol	Sousa et al., 2019, Vorster et al., 2019, Colomer-Pérez et al., 2019, Panthee et al., 2017, Boulton & O'Connell, 2018
Glue and other solvents	Vorster et al., 2019
Waterpipe	Vorster et al., 2019
Cocaine	Zanetti et al., 2019, Sousa et al., 2019, Panthee et al., 2017
Tobacco (cigarette)	Vorster et al., 2019, Colomer-Pérez et al., 2019
Cannabis (Marijuana)	Peltzer & Phaswana-Mafuya, 2018, Mbanga et al., 2018, Vorster et al., 2019, Colomer-Pérez et al., 2019, Sousa et al, 2019, Panthee et al., 2017, Boulton & O'Connell, 2018
Cigarettes	Öztürk & İncedere., 2021, Voster et al., 2019, Panthee et al., 2017
Sedatives and tranquillizers without prescription	Vorster, et al., 2019, Panthee et al., 2017, Boulton & O'Connell, 2018

2.5 Possible risk factors for alcohol and drug use

2.5.1 Psychological factors

The use of substances in a study conducted in Bangladesh were associated with loneliness and sleep loss due to anxiety or stress (Khan et al., 2020). Moreover, in

Cameroon, the indulgence in substances among the health science students were also due to the scarcity of mental health institutions in the country, which indicates the challenges to accessing professional assistance and resorting to the use of substances as coping strategies (Mbanga et al., 2018). Individuals also use substances as a distraction from stressors (Olashore, et al., 2018). In a study conducted in Kenya at medical training colleges, the respondents who were under significant stress were 3.64 (P=0.045) times more likely to consume alcohol as compared to those without stress (Kurui et al., 2020). In the USA, a study conducted among undergraduate nursing students found that students consume alcohol as a way of dealing with their stressors (Ruth-Sahd & Schneider, 2022).

Students who have symptoms of depression have an increased risk of managing their symptoms through the use of substances (Malebana et al., 2019). These authors further reported a significant positive association between anxiety and use of substances. A risk factor associated with the use of substances in nursing students is the stressful and time-consuming daily lectures (Mbanga et al., 2018). Nursing students also experience psychological challenges due to caring for severely ill and dying patients during their practical placements in the clinical settings (Mbanga et al., 2018).

2.5.2 Gender

Gender noticeably influences risky behaviour among nursing students. Males are more at risk of alcohol and drug consumption. At Zagazig University, a prevalence rate of 16.5% was recorded among male students who drink alcohol, of which 6.5% drank alcohol only once, and no females were abusing alcohol (Amin et al., 2019). Similarly, smoking had a higher prevalence (26.1) rate amongst male students than female students (1.4%) Amin et al., 2019). In a study at two European countries (Spain and Portugal) by Fernández-García et al., (2020), differences in prevalence of smoking by gender was reported. A high prevalence rate in males (24.4%) compared with 19% in females were stated. Similarly, in Brazil marijuana and cocaine were mostly used by male students whilst at university during the three months prior to the data collection (Zanetti et al., 2019). In a study conducted on undergraduate university

students in Finland, male students were 1.82 times more likely to use illicit drugs than female students (Ansari et al., 2020).

2.5.3 Peer pressure

The initiation of alcohol and drug use was found to be mostly due to the influence of peers (Gupta et al., 2021). Feelings of being excluded or unwanted by peers are often one of the leading causes of student's stress, hence they resort to using substances (Scott et al., 2015; Chen et al., 2012). Olashore et al. (2018) reported a negative correlation of substance use if a student did not have a friend who does not use drugs, indicating that non-drug using friends are important for reducing an individual's drug use. In a multi-centre study conducted in Spain and Portugal, the majority of the nursing students (34.9%) justified their smoking habit as related to their friends being smokers (Fernández-García et al., 2020). The most prominent motive for alcohol and drug use was found to be associated with students' desire "to belong" to the social environment and to be recognized by their peer group (Kvillemo et al., 2021). Similarly, Panthee and colleagues (2017) also identified that peer influence is one of the risk factors for substance use.

2.5.4 Living arrangements

The surroundings in which students live have a significant impact on substance use. Ansari and co-researchers in Finland reported that students living independently away from parents during university semesters were more likely to report the use of illegal drugs compared to those residing with parents (Ansari et al., 2020). In a study conducted in Europe among health sciences university students, more than half (75.7%) of the sample population were nursing students living with a family member. This was regarded as a protective factor for alcohol and drug use (Colomer-Pérez et al., 2019). In another survey among nursing students, half of the students who smoke were those who stayed with people who smoke (Fernández-García et al., 2020). Although living with friends is regarded as a risk factor for alcohol and drug use, Zanetti et al. (2019) reported that the majority of students lived with friends but there was no significant difference with the group living with parents. Colomer-Pérez et al., (2019)

also reported that in their study, students who were working during university studies were significantly disadvantaged for risky alcohol and drug use.

2.5.5 Religious association

Students at a university in Finland who were associated with a religious gathering or association were less likely to report substance use while those with lower religiousity affiliations, were significantly more likely to report the use of illicit drugs (Ansari et al., 2020). In a study conducted at a University in Brazil, religion was found to a protective factor. The highest rate of alcohol, marijuana and cocaine use was among students who did not associate with religion (Zanetti et al., 2019).

2.5.6 Desire for experimentation

The use of alcohol and drugs may be due to a consequence of the natural desire to experiment among youth. A study conducted among nursing students across five KwaZulu-Natal College of Nursing campuses found that majority of the students (69%) used substances because of their desire to experiment (Cebekhulu, 2021).

2.5.7 Family influence

A student's family can act as a supportive factor and have a positive effect on the decreased risk of alcohol consumption by the student (Soliman et al., 2022). In a study conducted in India, Masthi and Ravi (2020) reported that substance use in the family and the presence of family conflict were significant risk factors for alcohol and drug use among students.

2.6 Substance use and nursing

2.6.1 Impact of alcohol and drugs on nursing students

Alcohol and drug use among nursing students negatively affects academic performance as well as the well-being of the student. A decline in academic performance as a results of drug use was noted in a study performed in Nigeria (Onyebuchukwu, et al., 2015). A substance using student will lose concentration in

class, show frequent absenteeism from lectures due to a hangover and the consequences will be failing tests because they missed the material being taught (Onyebuchukwu et al., 2015).

The use of alcohol and drugs predisposes nursing students to sexual assault behaviour, which is common in colleges and Universities (Onyebuchukwu et al., 2015). Mellins et al., (2017) found that students who were using substances reported different incidents of sexual assault, such inappropriate touching, penetrated rape or attempted penetration. The females were more at high risk of sexual assault (Mellins, 2017). Not only does alcohol and drug use increase the risk of being sexually assaulted and dropping of student academic performance, but it also results in risk for liver damage, brain damage, and cancer (American Addiction Center, 2022).

2.6.2 Implications of student nurses' substance use for patient care

All nursing students are involved in the holistic care of patients during their placement which requires them to be functioning optimally and be mentally healthy. The long-term use of alcohol and drugs puts patient care at risk, as substance users may not be able to make competent clinical judgments (Tejedor-Cabrera, 2019). In an integrative review in Brazil, the common utilised substances by health workers were alcohol, anxiolytics, opioids and self-medication and different types of drugs (Fernandes et al., 2017). The stipulated reasons for use were workload, work related stressors and family challenges which result in these professionals consuming these substances.

2.7 Summary

This chapter reviewed literature on the risks of factors of alcohol and drug among nursing students. Furthermore, the substances commonly used were also identified. The prevalence of alcohol and drug use were discussed. The implications of alcohol and drug use among nursing students on patient care, were also covered.

Chapter 3
Research Methodology

3.1 Introduction

This chapter describes the methodology and design used to conduct the study. This chapter further describes the population under study, research setting, sampling, sample size, inclusion and exclusion criteria, data collection instrument, data collection process and data management. The reliability and validity of the study, data analysis, and ethical considerations are also discussed. The research methodology encompasses how the researcher plan to conduct the study step by step (Gray & Grove, 2021). The positivist assumption "have represented the traditional form of research and these assumptions hold true more for quantitative research than qualitative research" (Creswell & Creswell, 2017).

An overview of the research methodology used in this study is presented in figure 3.

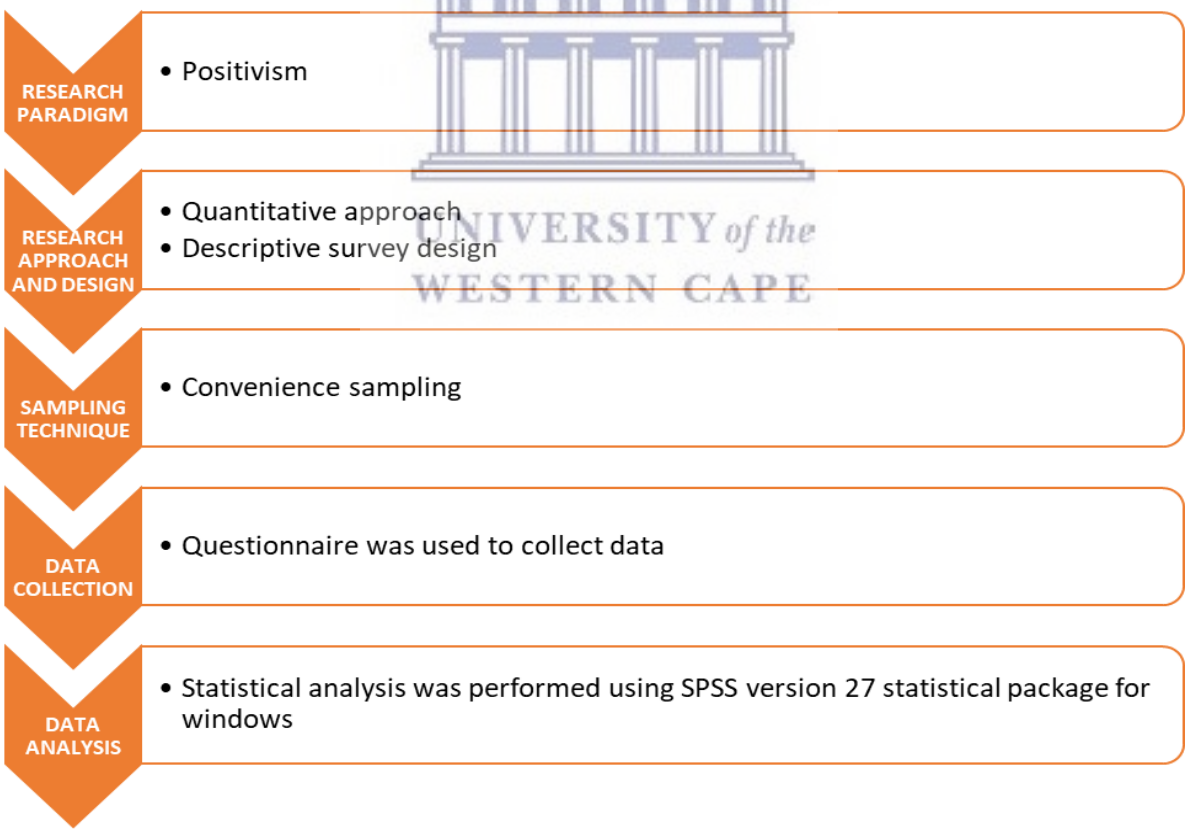


Figure 3.1: Overview of the research methodology

3.2 Quantitative research methodology

The quantitative research approach relies mainly on numerically retrieved information (Pajo, 2018). The description of the information of the phenomena is conducted numerically and the analysis uses descriptive and inferential statistics (Creswell & Creswell, 2017) and uses deductive reasoning (Pajo, 2018). Rigorous quantitative research can provide valuable data on trends, attitudes, and frequencies of a specific phenomenon in a population by studying a sample of that population (Creswell & Creswell, 2017, Creswell, 2014). A quantitative research approach was appropriate for this study, as the researcher aimed to investigate possible risk factors of alcohol and drug use amongst nursing students at a university in the Western Cape Province of South Africa using a survey method.

3.3 Research Design

A research design is the structure of the study and has control over aspects that can affect the desired outcome of the research study (Gray & Grove, 2021). This study employed a descriptive design, which is concerned with collecting data from a representative sample of the population (Brink et al., 2018). In a descriptive study, the investigator does not manipulate any variables, they are described as they are (Brink et al., 2018). This design allowed the researcher to describe the risk factors of alcohol and drug use among nursing students and the relationships that are present between the study variables without a depiction of inferences about other hypotheses (Aggarwal & Ranganathan, 2019).

The objectives for the study were as follows:

- To identify the possible risk factors associated with substance use among nursing students at a University in Cape Town
- To identify the type of substances used by nursing students at a University in Cape Town

3.4 Study setting

The study was conducted at a nursing school at a university in the Western Cape that offers undergraduate and postgraduate qualifications in Nursing.

3.5 Population and sampling

3.5.1 Study population

The population comprised second, third and fourth-year students who were registered for a Bachelor of Nursing degree at the selected university in the Western Cape (n=581).

3.5.1.1 Inclusion Criteria

- Second, third and fourth-year undergraduate nursing students registered for the 2022 academic year,
- Aged 18 years and above

3.5.1.2 Exclusion Criteria

- Students who met the inclusion criteria but were absent during data collection period were excluded.

3.5.2 Sampling Technique

Convenience sampling was used and the second-year, third-year, fourth-year nursing students who were readily available were conveniently approached and recruited to participate (Brink et al., 2018). Convenience sampling permits the researcher to select any participant who is readily available, and who meets the inclusion criteria to participate in the study (Pajo, 2018). It involves gathering of data on participants who are available during the research study at a particular point in time (Pajo 2018). A general invitation was first sent to all students to participate in the study.

The sample was drawn from a population of 581 nursing students in the second, third and fourth year of their studies in the University. In a study conducted by Flisher et al.

(2003) the prevalence rates of use of cigarettes, alcohol, and cannabis by youth in Cape Town were 27%, 31%, and 7% respectively. However, in a study carried out by Peltzer & Phaswana-Mafuya (2018) the prevalence of drug use among youth of past three-month drug use was 7.1% in the Western Cape. Therefore, the sample size for this study was calculated based on 15% prevalence rate. The sample size was 196 students. The sample size was calculated using the following formula:

$$n = \frac{Z^2 . P . (1-P).}{d^2} \quad n = \frac{1.96^2 . 0.15 . (1-0.15).}{0.05^2}$$

n = 196

3.6 Data Collection Instrument

The questionnaire was adapted from the Core Alcohol and Drug Survey (Presley et al., 1994; Appendix C). This instrument has been administered to students at over 800 campuses, and the findings from these surveys has been used to create a national database on the use of alcohol and drugs in institutions of higher learning (Presley et al., 1994). The self-reported questionnaire is intended to investigate the type, scope, and outcomes of the use of alcohol and other drugs among students in institution of higher learning (Presley, et al.,1994). Universities and colleges in the USA have made use of the Core Alcohol and Drug Survey in attempt to develop programs for combating high risk use of substances (Thompson et al., 2006).

Adaptation of the questionnaire was limited to terminology more familiar to South African students. Question one (classification of the level of study) was changed to the year levels used at South African Universities. As ethnic groups were not appropriate for the proposed study; these were replaced with religious groupings with which respondents associate. Question 19 which refers to students on campus in general, has been amended to only nursing students. A question was added (Q 40) which addressed the risk factors that lead nursing students to use substances. The questionnaire was estimated to take approximately 20 minutes to complete. The questionnaires were in English. English is the language of instruction at the selected

university, thus fluency in the language is required. The following aspects were covered in the questionnaire:

Demographics: (Year level of study) age, religion, marital status, gender, working and living arrangements, grade point average, perception of campus substance-abuse policies and their enforcement.

Substance risk and usage: Number of drinks per week, frequency of binge drinking episodes, use of alcohol, tobacco, marijuana, cocaine, amphetamines, sedatives, hallucinogens, opiates, inhalants, designer drugs, steroids, and other drugs, age of first use of these drugs, perceptions of others' use, location of use, consequences of use, reasons for substance use.

3.7 Pre-testing of the instrument

Pre-testing of the questionnaire was carried out. The questionnaire was distributed to a smaller group of respondents, about ten nursing students to check if they could understand and be able to answer the questions correctly (Brink et al., 2018). The population used for pre-testing was similar to the population of the main study, as the students are also registered for the R174 programme and are from a similar age group. Second to fourth-year level nursing students at a university in the Northwest province who met the same inclusion criteria with respect to age and years of study were invited to participate. The researcher chose this university as she is residing in the Northwest and could access these students. The pilot questionnaires were not included in the main study.

3.8 Reliability and validity

3.8.1 Reliability

Reliability refers to the consistency and the ability of the instrument to be dependable whereby the data collection tool measures what it is intended to measure, while validity refers to the degree at which the data collection tool measures what it is expected to measure (Creswell & Creswell, 2018; Brink et al., 2018). The questionnaire used in this study has been used in more than 800 campuses for a database of substance abuse in higher education settings (Presley et al., 1994). The internal consistency of

the data collection tool (questionnaire) was assessed by conducting a reliability test using Cronbach's alpha coefficient. The Cronbach's alpha value 0,7≤ α <0,9 means the scale has internal consistency, while 0.6 ≤ α<0,7 the internal consistency of the scale was acceptable (Sürücü & Maslakçi 2020).

3.8.2 Validity

Face and content validity were checked. Face validity is a confirmation that the data collection tool measures the content desired, if the questionnaire looks as though it was measuring the correct concept (Polit & Beck, 2021, Brink et al., 2018). The objectives of the study link to relevant questions in the questionnaire, as shown in Table 3.2

Table 3.1: Objectives link to questions

Objective	Questionnaire	Subscale
1. To identify the possible risk factors associated with substance use among nursing students at a university in Cape Town	2,3,4,5,6,7,8,9,10,12, 20,22,23,24,27,28,29,30,31, 32,36,38,40	Risk factors
2. To identify the type of substances used by nursing students at a university in Cape Town	16,17,18,19,41	Substances used

The content validity is the degree at which the method of measurement comprises all the main elements applicable to the construct being measured if the contents measure what they are intended to measure (Creswell & Creswell, 2018). Content validity was established by checking the questions of the questionnaire against the objectives of the study (table 3.1). Cronbach's Alpha assisted to check the internal consistency of the questionnaire.

3.9 Data Collection process

After receiving approval to conduct the study from the university ethics committee (Appendix B), the university registrar (Appendix A) and the head of the nursing school (Appendix F), data collection commenced. The researcher gave information about the study (Appendix D) and handled the process of signing informed consent (Appendix

E). The researcher arranged with the nursing school to be allowed to give information about the study and recruit participants. Permission was given for the researcher to use a free period or to utilise 20 minutes at the end of a class to speak to students about the study. The researcher arranged to have an information session with the respondents after their lectures. This was done with prior arrangements with nursing module lecturers of the various years of study.

The researcher gave each nursing student (second, third and fourth year) an information sheet. Students who agreed to take part in the survey were screened to ensure they met the inclusion criteria, and if these were met, they were given the consent form to sign without coercion. Respondents who wished to take the information sheets with them to discuss participation with family members were given the opportunity to do so and followed up the next day to check if they were interested in taking part in the study. The anonymity of the questionnaire was emphasised and maintained, and no names were used. A study number were allocated to each respondent. There was no information provided or requested in the questionnaire that could link the respondents to the completed questionnaires.

The questionnaire was an online survey, which students could complete on their smartphones. After informed consent was given, the survey link was shared with the students who all had smart phones which allowed the use of this technology. Students completed the questionnaire anonymously on their smart phones which were submitted directly to the RedCap database that was managed by a statistician.

3.10 Data management

Data was captured directly into SPSS version 27. Even though the sample size was calculated to be 196, the researcher was notified by class representatives that they had shared the link to their class WhatsApp groups. Students who were not initially recruited from the three year levels had accessed the link and completed the survey, thus 212 complete surveys were submitted instead of the initial sample size of 196.

Incomplete questionnaires were discarded. The only people who had access to the data were the researcher and the statistician. The hard copy documents of informed consent documents were scanned, and all hard copies were shredded after completion of the study. The data was also deleted from all cloud storage systems and stored in a hard drive which is password protected. The storage device will be stored for five years in a lockable cupboard and be destroyed.

3.11 Data analysis

Statistical analysis was performed with the SPSS version 27 statistical package for Windows 2020. The descriptive data are presented in numbers and percentages, and frequency distributions were done. The level of statistical significance for all tests was set at 5% significance level and at 95% Confidence Interval. This was followed by bivariate results which included Chi-square tests which show associations, followed by multivariate regression. Association between the use of substances by nursing students and variables such as age and religious affiliations were calculated to measure the extent of the relationship between the variables with substance use (Brink et al., 2018). The comparison of percentages in independent groups, significance test (Chi-square test) of the difference between two independent ratios were used, for example, the use of substances and affiliation to religion or age. Results were presented in figures, tables, and text in chapter 4.

3.12 Ethical Considerations

3.12.1 Ethical Clearance and Permission to Conduct the Study

Ethical clearance was obtained from Biomedical Science Research Ethics Committee (HS21/10/82 (Appendix A) at the University of the Western Cape. Permission to conduct the study was also received from the Director of the school of nursing at the selected University (Appendix B) as well as from the University Registrar (Appendix C).

3.12.2 Informed consent

The researcher obtained permission from students after they were given adequate information about the study. Engaging with research participants prior to participation gives them the opportunity to ask questions to the investigator and understand the purposes of research. The researcher explained what were expected from all students who agreed to participate. Further information about the process of this research study was conveyed to all prospective participants before they could make an informed decision to part take in the research activity.

3.12.3 Principle of respect for persons

The research recognizes the research participants as autonomous with the right to self-determination (Vanderstoep & Johnston, 2009; Brink et al., 2018). The researcher made the students aware that they have a right to decide whether or not to participate in the study without any risk of prejudicial treatment. Participants had the right to participate without cohesion and could withdraw from the study at any time without resulting in any punitive results (Brink et al., 2018). The students were given complete information about the study and informed consent was signed voluntarily. They were given the liberty to only answer the questions that they felt comfortable with.

3.12.4 Beneficence

The researcher ensured that the possible risks were kept to a minimum. The researcher avoided causing them harm either emotionally, physically, spiritually, psychologically, or socially. As data were collected during the Covid-19 pandemic, all regulations were adhered to. In order to minimise exposing the research participants to the risk of contracting the virus, sanitising, washing of hands and wearing face masks properly covering the nose and mouth were ensured during physical contact with participants to hand over the consent forms for signing and sharing of information about the study. The researcher will protect the reputation of the selected institution of the population under study by not mentioning the name or any identifying information in the report or any publication (Brink et al., 2018). There was no direct

benefit for the participants, however, the results may be useful for future support of students.

3.12.5 Justice

This ethical principle includes participants' right to fair treatment and their right to privacy (Polit & Beck, 2021). The researcher assured the participants that withdrawal from the study would not incur prejudice (Polit & Beck, 2021). In this study, the researcher ensured that there was no discrimination against respondents as it is their right to be treated fairly. The researcher ensured that the study was not intrusive, and the respondents' privacy was maintained throughout the study. The researcher ensured privacy and confidentiality regarding all the data collected from the respondents as their participation was strictly anonymous (Brink et al., 2018). No names were written on the questionnaires, only study numbers were allocated, and names were not disclosed during report writing.

3.12. 6 Privacy and confidentiality

The researcher assured the respondents that their participation in the study is confidential and anonymous (Brink et al., 2018). No names were used on the questionnaire, but respondents were allocated study numbers and no other identifying information was collected.

3.12.7 Voluntary participation

The research respondents were orientated to the study, given all complete information concerning the study, any risks and benefits involved were explained (Brink et al., 2018). Respondents were allowed to ask any questions regarding the study so that they could be well informed and be able to make an informed decision without any coercion. The respondents were aware that they were free to withdraw from the study at any time.

3.13 Summary

This chapter described the research approach, design, and methods utilised in this study. The study setting, population, sample size and sampling technique, data collection method, inclusion criteria, validity, and reliability data analysis. The ethical considerations related to carrying out a study with human subjects were also described.

Chapter 4
Presentation of results

4.1 Introduction

This chapter provides an analysis of the data and results. The analysis was done in SPSS version 27, at 95% Confidence Interval and 5% significance level. The chapter provides descriptive statistics in a form of frequency tables, pie charts and showing counts and percentages. This is followed by bivariate results of Chi-square tests which show associations, followed by multivariate regression.

4.2 Demographic characteristics of respondents

There were 212 completed responses in this study; 81% (n=171) were females and 19% (n=40) were males. One respondent did not indicate their gender. Regarding marital status and religious affiliation, 94% of the students were single. 81% of the students were Christian.

Table 4.1 Respondent Demographic characteristics

		1. Classification						Total
		Second-year		Third-year		Fourth-year		
Gender	Male	8	17.78	19	25.33	13	14.44	**40**
	Female	38	84.44	57	76.00	76	84.44	**171**
Religion	Christianity	39	86.67	60	80.00	71	78.89	**170**
	Islam	1	2.22	9	12.00	15	16.67	**25**
	African Traditional	2	4.44	4	5.33	1	1.11	**7**
	Other	3	6.67	2	2.67	4	4.44	**9**
Marital Status	Single	44	97.78	70	93.33	85	94.44	**199**
	Married	0	-	4	5.33	5	5.56	**9**
	Separated	0	-	1	1.33	0	-	**1**
	Divorced	0	-	0	-	2	2.22	**2**
Total		**45**	**100.00**	**75**	**100.00**	**89**	**98.89**	**212**

Table 4.1 indicates that females were the majority. One in eight respondents were females. The proportion was relatively lower (76%) among third-year students, compared to second-year (84.4%) and fourth-year (84.4%) students. Among males,

a relatively lower proportion was observed among fourth-year students. In terms of religion, most respondents were Christians, with a relatively higher proportion among second-year students (86.7%), compared to third-year (25.3%) or fourth-year (78.9%) students. Notably, among Muslims there was a relatively higher proportion among fourth-year students (16.7%), compared to second year (2.2%) and third-year (12%) students. Most were single, with similar proportions across all year levels; second year (97.8%), third-year (93.3%) and fourth-year (94.4%) students.

4.3 Respondent Characteristics

The students were asked about their current residence as students and the type of employment.

Table 4.2: Respondent characteristics

		1. Classification						Total	
		Second-year		Third-year		Fourth-year			
Is your current residence as a student		n	%	n	%	n	%	n	**%**
	On-campus	12	26.67	21	28.00	21	23.33	54	**25.47**
	Off-campus	34	75.56	55	73.33	68	75.56	157	**74.06**
Are you working	Yes, full-time	1	2.22	4	5.33	7	7.78	12	**5.66**
	Yes, part-time	5	11.11	5	6.67	6	6.67	16	**7.55**
	No	40	88.89	67	89.33	78	86.67	185	**87.26**
Total		**45**	**100.00**	**76**	**100.00**	**91**	**101.11**	**212**	**100.00**

Table 4.2 indicates that seven out of ten (74.1%) of the students resided off-campus, while a quarter (25.5%) stayed on campus. Proportionally, no significant differences are observed among second-year, third-year and fourth-year students. Most of them were not working (unemployed) (87.3%) while very few were either working part time (7.6%) or working full time (5.7%). This question was probably misinterpreted as all undergraduate students are full time students, and thus may not be employed full time. Clinical experience in health care settings is a component of the programme and not considered employment.

4.4 Living arrangements

Students were asked about their living arrangements, with whom and where they were residing during the academic year.

Table 4.3: Respondents' living arrangements

		1. Classification						Total	%
		Second-year	%	Third-year	%	Fourth year	%		
A. Living arrangements (Where)	House/ apartment	20	44.44	31	41.33	62	68.89	113	53.55
	University Residence	15	33.33	32	42.67	19	21.11	66	31.28
	Approved housing	6	13.33	5	6.67	4	4.44	15	7.11
	Fraternity or sorority	1	2.22	0	-	1	1.11	2	0.95
	Other	4	8.89	9	12.00	4	4.44	17	8.06
B. Living arrangements (with whom)									
Roommate(s)	No	37	82.22	69	92.00	80	88.89	186	88.15
	Yes	9	20.00	8	10.67	12	13.33	29	13.74
Alone	No	25	55.56	41	54.67	68	75.56	134	63.51
	Yes	21	46.67	36	48.00	24	26.67	81	38.39
Parent(s)	No	34	75.56	55	73.33	57	63.33	146	69.19
	Yes	12	26.67	22	29.33	35	38.89	69	32.70
Spouse	No	46	102.22	73	97.33	86	95.56	205	97.16
	Yes	0	-	4	5.33	6	6.67	10	4.74
Children	No	44	97.78	70	93.33	84	93.33	198	93.84
	Yes	2	4.44	7	9.33	8	8.89	17	8.06
Total		**46**	**100.00**	**75**	**100.00**	**91**	**100.00**	**212**	**100.00**

Table 4.3 indicates that at least half of the students lived in apartments or in a house (53.5%); fourth-year students had a relatively higher proportion (68.8%) compared to second-year (44.4%) or third-year (41.3%) students. Three out of ten students resided in the university residence (31.3%), with relatively higher proportion among third-year students (42.7%), followed by second-year students (33.3%) and fourth-year students (21.1%). Less than 10% stayed in approved housing and fraternity or sorority.

4.5 Students' cumulative grade percentage (Self-report)

The respondents were requested to give their approximate cumulative grade point average.

Table: 4.4: Cumulative grade percentages

9. Approximate cumulative percentage		1. Classification						Total	
		Second-year		Third-year		Fourth-year			%
A (75-100%)	No	35	77.78	63	84.00	79	87.78	177	83.89
	Yes	11	24.44	14	18.67	13	14.44	38	**18.01**
B (70-74%)	No	27	60.00	53	70.67	64	71.11	144	68.25
	Yes	19	42.22	24	32.00	28	31.11	71	**33.65**
C (60-69%)	No	33	73.33	46	61.33	44	48.89	123	58.29
	Yes	13	28.89	31	41.33	48	53.33	92	**43.60**
D (50-59%)	No	41	91.11	67	89.33	84	93.33	192	91.00
	Yes	5	11.11	10	13.33	8	8.89	23	**10.90**
E (45-49%)	No	44	97.78	74	98.67	90	98.90	210	99.53
	Yes		-	1	1.33	1	1.10	2	0.95
F (40-44%)	No	46	102.22	75	100.00	91	100.00	212	100.00
	Yes	0	-	0		0		0	
G (0-39%)	Yes	46	102.22	75	100.00	91	100.00	212	100.00
	No	0	-	0	-	1	1.11	1	0.47
Total		**46**	**102.22**	**75**	**100.00**	**91**	**100.00**	**212**	**100.00**

Table 4.4 indicates that less than 20% of students had an approximate cumulative grade percentage A (75-100%), proportionally higher among second-year students (24.4%), compared to third-year (18.7%) and fourth-year (14.4%) students. A third of the students earned grade B on average (33.3%), more likely to be second-year students (42.2%), compared to third-year (32%), and fourth-year (31%) students. Four out of ten of the students earned Grade C points (60-69%), more likely among fourth-year students (53.3%), compared to third-year (41.3%) and second-year (28.9%) students and were least likely to get C grades. A tenth of the students earned grade D points on average (50-59%), with no noticeable difference across student years.

Very few-less than 5% achieved grades E (45-49%), grade F (40-44%) and grades G (0-39%)-these were rare occurrences in this sample.

4.6 Availability of drugs and alcohol at parties

The respondents were asked their view with regard to having alcohol and drugs available at the parties for enjoyment or not have them available as they lead to negative situations.

Table 4.5: Preference for drugs and alcohol availability at parties

		1. Classification						Total	%
		Second-year		Third-year		Fourth-year			
With regard to drugs?	Have available	7	15.56	14	18.67	15	16.48	36	17.14
	Not have available	38	84.44	62	82.67	75	82.42	175	83.33
With regard to alcohol?	Have available	26	57.78	49	65.33	47	51.65	122	58.10
	Not have available	18	40.00	27	36.00	43	47.25	88	41.90
Total		44	97.78	75	100.00	91	100.00	210	100.00

Table 4.5 indicates that very few (17.1%) of the students preferred to have drugs available at parties and the majority (83.3%) preferred not to have drugs available at parties. There were no differences in proportions of preference for drug availability at parties across student year levels. However, with regards to alcohol, more than half (58.1%) preferred to have alcohol available at parties while 41.9% preferred not to have alcohol available at parties. Third-year students were more likely to prefer alcohol availability at parties (65.3%), compared to second-year (57.8%) or fourth-year (51.7%) students.

4.7 Students' university attendance status

Respondents were requested to indicate if they are full time or part-time students. The undergraduate nursing programme is full time study, all students are expected to indicate that they are full time.

Table 4.6: Attendance status

		1. Classification						Total	%
		Second-year		Third-year		Fourth-year			
Student status	Full-time (12+ credits)	43	95.56	74	98.67	90	100	207	98.1
	Part-time (1-11 credits)	2	4.44	1	1.33	1	1.11	4	1.90
Total		**45**	**100.00**	**75**	**100**	**91**	**100**	**211**	**100**

Table 4.6 indicates that the majority (98.1%) of students were studying full-time (12+ credits), that is a total of about 95% across all student year levels. Part-time students (1-11 credits) was uncommon in this sample. Undergraduate nursing is offered full-time at this university and part time status may reflect those who were repeating a subject.

4.8 Policies at the university on alcohol and drugs

Students were requested to indicate if their campus had alcohol or drug policies available.

Table 4.7: Availability of alcohol and drug policies

		1. Classification						Total	
		Second-year		Third-year		Fourth-year			%
a. Does your campus have alcohol and drug policies?	Yes	30	65.22	51	68.00	63	69.23	145	68.40
	No	1	2.17	1	1.33	1	1.10	3	1.42
	Don't know	15	32.61	23	30.67	27	29.67	64	30.19
Total		46	100.00	75	100.00	91	100.00	212	100.00

Table 4.7 indicates that at least two thirds of the students (68.4%) were aware that their campus had alcohol and drug policies and 30.9% were unsure about the existence of such policies. The majority (92.8%) of respondents who believed the campus had policies on alcohol and drugs, believed the policies were enforced.

4.9 Drug prevention program

This section dealt with students' awareness of or involvement in drug prevention programmes on the university campus.

Table 4.8: Drug prevention program

		1. Classification						Total	
		Second-year		Third-year		Fourth-year			-
		n	%	n	%	n	%	n	%
Does your campus have a drug and alcohol prevention program?	Yes	10	21.74	19	25.33	22	24.18	51	24.06
	No	7	15.22	8	10.67	12	13.19	27	12.74
	Don't know	29	63.04	50	66.67	55	60.44	134	63.21
Do you believe your campus is concerned about the prevention of drug and alcohol use	Yes	22	47.83	32	42.67	39	42.86	92	43.40
	No	10	21.74	18	24.00	24	26.37	52	24.53
	Don't know	14	30.43	27	36.00	28	30.77	68	32.08
Are you actively involved in efforts to prevent drug and alcohol use problems	Yes	4	8.70	9	12.00	9	9.89	22	10.38
	No	34	73.91	61	81.33	78	85.71	176	83.02
	Don't know	8	17.39	5	6.67	4	4.40	17	8.02
Total		**46**	**100.00**	**75**	**100.00**	**91**	**100.00**	**212**	**100.00**

Table 4.8 indicates that 24% of students were aware that their campus had a drug and alcohol prevention program, a tenth (12%) were not aware while 63.2% were not sure

if the campus had such a programme or not. Four out of ten (43.4%) of the students believed their campus was concerned about the prevention of drug and alcohol, a quarter (24.5%) did not believe so, while 32.1% were uncertain about this. A tenth of them were actively involved in efforts to prevent drug and alcohol use problems (10.4%), eight out of ten (83%) were not active in this respect, while very few (8%) were uncertain. There were no noticeable differences in terms of proportions across the years.

4.10 Place of permanent residence

The majority of respondents were South African (n=197, 93%) with 14 (7%) non-South African students.

4.11 Alcohol consumption in the two weeks prior to the study

Students were asked to reflect on their alcohol consumption in the two weeks preceding the completion of the questionnaire.

Table 4.9: Alcohol consumption in last two weeks

Think back over the last two weeks.		**1. Classification**						**Total**	
		Second-year		**Third-year**		**Fourth-year**			
How many times have you had 5 or more drinks in 1 sitting		n	%	n	%	n	%	n	%
	None	24	52.17	44	58.67	58	63.74	126	59.43
	Once	7	15.22	9	12.00	9	9.89	25	11.79
	Twice	6	13.04	8	10.67	8	8.79	22	10.38
	3 to 5 times	6	13.04	11	14.67	9	9.89	26	12.26
	6 to 9 times	1	2.17	0	-	3	3.30	4	1.89
	10 or more	2	4.35	3	4.00	4	4.40	9	4.25
Total		**46**	**100.00**	**75**	**100.00**	**91**	**100.00**	**212**	**100.00**

Table 4.9 indicates that almost six out of ten students (59.4%) had never had five or more drinks in one sitting, especially the fourth-year students (63.7%), compared to

third-year (58.7%) and second-year (52.2%) students. Regarding multiple episodes of excessive drinking, 11,8% reported only one occasion when they had five or more drinks in one sitting once, 10.38% reported three to five occurrences. Fewer students (8%) reported having had five or more drinks at one sitting on more than six occasions.

12 Age of first use of alcohol and drugs

Respondents were asked to indicate their age of first use of substances.

Table 4.10: Age of first use of alcohol and drugs

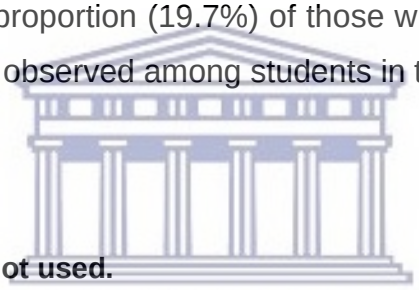
At what age did you first use alcohol and drugs		Classification						Total	
		second-year Year		third-year		fourth-year			
		n	%	n	%	n	%	n	%
a. Tobacco (smoke, chew, snuff)	Did not use	27	60	45	59.2	61	67.8	133	63
	9-17 years	9	20	20	26.3	14	15.6	43	20.4
	18+ years	9	20	11	14.5	15	16.7	35	16.6
	Total	45	100	76	100	90	100	211	100
b. Alcohol (beer, wine, liquor)	Did not use	13	28.9	15	19.7	32	35.2	60	28.3
	9-17 years	14	31.1	37	48.7	33	36.3	84	39.6
	18+ years	18	40	24	31.6	26	28.6	68	32.1
	Total	45	100	76	100	91	100	212	100
c. Marijuana (pot, hash, hash oil)	Did not use	32	71.1	41	53.9	65	71.4	138	65.1
	9-17 years	6	13.3	15	19.7	13	14.3	34	16
	18+ years	7	15.6	20	26.3	13	14.3	40	18.9
	Total	45	100	76	100	91	100	212	100
d. Cocaine (crack, rock, freebase)	Did not use	44	97.8	73	96.1	86	94.5	203	95.8
	9-17 years	0	-	1	1.3	3	3.3	4	1.9
	18+ years	1	2.2	2	2.6	2	2.2	5	2.4
	Total	45	100	76	100	91	100	212	100
e. Amphetamines (diet pills, speed)	Did not use	45	100	72	94.7	86	94.5	203	95.8
	9-17 years	0	-	0	-	4	4.4	4	1.9
	18+ years	0	-	4	5.3	1	1.1	5	2.4
	Total	45	100	76	100	91	100	212	100
f. Sedatives (downers, ludes)	Did not use	43	95.6	69	92	84	92.3	196	92.9
	9-17 years	1	2.2	2	2.7	4	4.4	7	3.3
	18+ years	1	2.2	4	5.3	3	3.3	8	3.8
	Total	45	100	75	100	91	100	211	100
g. Hallucinogens (LSD, PCP)	Did not use	43	95.6	71	94.7	88	96.7	202	95.7
	9-17 years	0	-	0	-	3	3.3	3	1.4
	18+ years	2	4.4	4	5.3	0	-	6	2.8
	Total	45	100	75	100	91	100	211	100
h. Opiates (heroin, smack, horse)	Did not use	43	95.6	66	88	86	94.5	195	92.9
	9-17 years	1	2.2	2	2.7	3	3.3	6	2.9
	18+ years	0	-	7	9.3	2	2.2	9	4.3
	Total	44	97.8	75	100	91	100	210	100
i. Inhalants (glue, solvents, gas)	Did not use	45	100	75	100	87	95.6	207	97.6
	9-17 years	0	-	0	-	4	4.4	4	1.9
	18+ years	0	-	1	1.3	0	-	1	0.5
	Total	45	100	76	100	91	100	212	100
j. Designer drugs (ecstasy, MDMA).	Did not use	43	95.6	66	88	86	94.5	195	92.9
	9-17 years	1	2.2	2	2.7	3	3.3	6	2.9
	18+ years	0	-	7	9.3	2	2.2	9	4.3
	Total	44	97.8	75	100	91	100	210	100
k. Steroids	Did not use	45	100	74	97.4	87	95.6	206	97.2
	9-17 years	0	-	0	-	4	4.4	4	1.9
	18+ years	0	-	2	2.6	0	-	2	0.9
	Total	45	100	76	100	91	100	212	100
l. Other illegal drugs	Did not use	44	97.8	71	97.3	86	94.5	201	96.2
	9-17 years	1	2.2	1	1.4	5	5.5	7	3.3
	18+ years	0	-	1	1.4	0	-	1	0.5
	Total	45	100	73	100	91	100	209	100

Six out of every ten respondents had never used tobacco (smoke, chew, snuff) (63%), 20%. Started using tobacco at the age between 9 and 17 years while fewer (16.6%)

started using it above 18 years. The proportion of those who did not use tobacco was similar across the year levels; second-year (60%), third-year (59.2%) and fourth-year (67.8%). There was a slightly higher proportion of students who started using tobacco between 9-17 years (26.3%).

28.3% of the respondents had never used alcohol (wine, liquor, beer). 39.6% started using alcohol between 9 and 17 years of age, and fewer (32.1%) started using alcohol over the age of 18. A relatively higher proportion of those who had ever consumed alcohol aged 9-17 years is observed among students in the third-year (48.7%).

65% of the respondents had never used marijuana (pot, hash, hash oil). Less than 20% of the students had started using marijuana between 9 and 17 years of age. The use of marijuana was relatively high in fourth (71.4%) and second year students (71.1%). A relatively higher proportion (19.7%) of those who started using marijuana between 9-17 years old was observed among students in the third-year, compared to other year levels.



4.12.1 Substances rarely or not used.

The majority of the respondents in this sample had never used cocaine (crack, rock, freebase) or amphetamines (diet pills, speed). Most of the respondents (92.9%) had never used sedatives (downers, ludes), hallucinogens such as Lysergic acid diethylamide (LSD), Phencyclidine (PCP), or opiates (heroin, smack, horse). Similarly, of the majority (97.6%) had never used Inhalants (glue, solvents, gas), suggesting that 2.4% had ever done so. 96.2% of respondents in this sample had never used other illegal drugs, suggesting that 3.8% had ever done so. The proportion of those who did not take other illegal drugs was relatively lower among students in the fourth-year (94.5% vs 97%-second-year).

4.13 Alcohol and drug use in past 12 months

In this section, respondents were asked to reflect on their use of alcohol or drugs in the 12 months preceding the completion of the questionnaire.

Table 4.11: Drug usage in the last year

		Classification							
Within the last year abou		Second-year		Third-year		Fourth-year		Total	
		n	%	n	%	n	%	n	%
a. Tobacco (	Did not use	29	64.44	51	68	78	85.71	158	74.88
	Rarely (Year	6	13.33	6	8	6	6.59	18	8.53
	Sometimes	3	6.67	4	5.3	1	1.1	8	3.79
	Often	6	13.33	9	12	1	1.1	16	7.58
	Always	1	2.22	6	8	5	5.49	12	5.69
b. Alcohol (	Did not use	13	28.89	24	32	38	41.76	75	35.55
	Rarely (Year	8	17.78	16	21.3	12	13.19	36	17.06
	Sometimes	18	40	17	22.7	27	29.67	62	29.38
	Often	6	13.33	18	24	14	15.38	38	18.01
	Always	0	-	1	1.3	0	-	1	0.47
c. Marijuana	Rarely (Year	4	8.89	10	13.3	7	7.69	21	9.95
	Sometimes	1	2.22	7	9.3	5	5.49	13	6.16
	Often	3	6.67	6	8	2	2.2	11	5.21
	Always	1	2.22	2	2.7	2	2.2	5	2.37
d. Cocaine (	Did not use	44	97.78	74	98.7	88	96.7	206	97.63
	Rarely (Year	1	2.22	1	1.3	3	3.3	5	2.37
	Sometimes		-		-		-		-
	Often	0	-	1	1.3	0	-	1	0.47
	Always		-		-		-		-
e. Amphetai	Did not use	45	100	75	100	86	94.51	206	97.63
	Rarely (Year	0	-	0	-	2	2.2	2	0.95
	Sometimes	0	-	0	-	2	2.2	2	0.95
	Often	0	-		-		-		-
	Always	0	-	1	1.3	0	-	1	0.47
f. Sedatives	Did not use	44	97.78	74	98.7	88	96.7	206	97.63
	Rarely (Year	0	-	1	1.3	0	-	1	0.47
	Sometimes	0	-	1	1.3	1	1.1	2	0.95
	Often	0	-	0	-	2	2.2	2	0.95
	Always	1	2.22	0	-	0	-	1	0.47
g. Hallucino	Did not use	45	100	73	97.3	88	96.7	206	97.63
	Rarely (Year	0	-	2	2.7	0	-	2	0.95
	Sometimes	0	-	1	1.3	3	3.3	4	1.9
	Often		-		-		-		-
	Always		-		-		-		-
h. Opiates	Did not use	45	100	74	98.7	88	96.7	207	98.1
	Rarely (Year	0	-	1	1.3	0	-	1	0.47
	Sometimes	0	-	0	-	3	3.3	3	1.42
	Often		-		-		-		-
	Always		-		-		-		-
i. Inhalants	Did not use	45	100	76	101.3	88	96.7	209	99.05
	Rarely (Year	0	-	0	-	1	1.1	1	0.47
	Sometimes	0	-	0	-	1	1.1	1	0.47
	Often	0	-	0	-	1	1.1	1	0.47
	Always		-		-		-		-
j. Designer (	Did not use	45	100	71	94.7	88	96.7	204	96.68
	Rarely (Year	0	-	4	5.3	0	-	4	1.9
	Sometimes	0	-	1	1.3	2	2.2	3	1.42
	Often	0	-	0	-	1	1.1	1	0.47
	Always		-		-		-		-
k. Steroids *	Did not use	45	100	75	100	86	94.51	206	97.63
	Rarely (Year	0	-	1	1.3	0	-	1	0.47
	Sometimes	0	-	0	-	2	2.2	2	0.95
	Often	0	-	0	-	1	1.1	1	0.47
	Always		-		-		-		-
l. Other illeg	Did not use	45	100	74	98.7	87	95.6	206	97.63
	Rarely (Year	0	-	0	-	1	1.1	1	0.47
	Sometimes	0	-	0	-	2	2.2	2	0.95
	Often	0	-	1	1.3	1	1.1	2	0.95
	Always		-		-		-		-
Total		45	100	75	100	91	100	211	100

Yearly=Rarely, Monthly=Sometimes, Weekly=Often, Everyday=Always

Table 4.11 indicates that within the last year, three quarters of the students (74.9%) had not used tobacco in the 12 months preceding the survey. The results suggest that the prevalence of tobacco intake was 24.1% in this sample. Notably, second-year students were least likely to always smoke tobacco (2.2%), compared to other year levels.

Less than half (35.6%) of students had not consumed alcohol in the past 12 months preceding the survey. None of the students consumed alcohol daily (bingeing was not common). These results suggest that prevalence of alcohol use in this study was 64.6%, and six out of ten of the respondents had used alcohol in the past 12 months. 77% had not consumed marijuana in the 12 months preceding the survey. The prevalence of marijuana use was 23.7%, and one in five had used marijuana in the reference period of this study.

Most of the respondents had never consumed cocaine (97.6%), a proportion evenly distributed among all years. The same trend was found for amphetamines (diet pills, speed), (97.6%), sedatives (97.6%), hallucinogens (LSD, PCP) (97.6%), and opiates (heroin, smack, horse). The use of inhalants (glue, solvents, gas), designer drugs (ecstasy, methylenedioxy-methamphetamine [MDMA]), and steroids was not reported.

4.14 Alcohol and drug use in the past 30 days

The respondents were asked to indicate their use of alcohol and drugs in the 30 days preceding the survey.

Table 4.12: Alcohol and drug usage in the past 30 days

		Classification						Total	
During the past 30 days		Second-year		Third-year		Fourth-year			
		n	%	n	%	n	%	n	%
a. Tobacco	Did not have	31	68.89	59	77.63	77	85.56	167	79.15
	1-5 days	9	20	7	9.21	5	5.56	19	9
	6-9 days	3	6.67	4	5.26	2	2.22	9	4.27
	10+ days	2	4.44	9	11.84	6	6.67	17	8.06
	Total	45	100	76	100	90	100	212	100
b. Alcohol	Did not have	20	44.44	34	44.74	42	46.67	96	45.5
	1-5 days	19	42.22	28	36.84	29	32.22	76	36.02
	6-9 days	5	11.11	6	7.89	11	12.22	22	10.43
	10+ days	1	2.22	8	10.53	8	8.89	17	8.06
	Total	45	100	76	100	90	100	211	100
c. Marijuana	Did not have	38	84.44	66	88	78	85.71	182	86.26
	1-5 days	5	11.11	2	2.67	9	9.89	16	7.58
	6-9 days	0	-	2	2.67	1	1.1	3	1.42
	10+ days	2	4.44	6	8	3	3.3	11	5.21
	Total	45	100	76	100	91	100	212	100
d. Cocaine	Did not have	45	100	75	100	86	94.51	206	97.63
	1-5 days	0	-	0	-	2	2.2	2	0.95
	6-9 days	0	-	0	-	2	2.2	2	0.95
	10+ days	0	-	1	1.32	1	1.1	2	0.95
	Total	45	100	76	100	91	100	212	100
e. Amphetar	Did not have	45	100	75	98.68	86	96.63	206	97.63
	1-5 days	0	-		-		-		-
	6-9 days	0	-	0	-	2	2.25	2	0.95
	10+ days	0	-	1	1.32	1	1.12	2	0.95
	Total	45	100	76	100	89	100	210	99.53
f. Sedatives	Did not have	44	97.78	74	97.37	87	96.67	205	97.16
	1-5 days	0	-	2	2.63	2	2.22	4	1.9
	6-9 days	0	-		-		-		-
	10+ days	1	2.22	0	-	2	2.22	3	1.42
	Total	45	100	76	100	91	100	212	100
g. Hallucino	Did not have	45	100	74	97.37	87	96.67	206	97.63
	1-5 days	0	-	1	1.32	2	2.22	3	1.42
	6-9 days	0	-		-		-		-
	10+ days	0	-	0	-	2	2.22	2	0.95
	Total	45	100	75	98.68	91	100	211	100
h. Opiates	Did not have	45	100	76	100	86	95.56	207	98.1
	1-5 days	0	-	0	-	3	3.33	3	1.42
	6-9 days	0	-		-		-		-
	10+ days	0	-	0	-	2	2.22	2	0.95
	Total	45	100	76	100	91	100	212	100
i. Inhalants	Did not have	45	100	75	98.68	87	96.67	207	98.1
	1-5 days		-		-		-		-
	6-9 days	0	-	0	-	1	1.11	1	0.47
	10+ days	0	-	0	-	3	3.33	3	1.42
	Total	45	100	75	98.68	91	100	211	100
j. Designer	Did not have	45	100	75	98.68	87	96.67	207	98.1
	1-5 days	0	-	0	-	3	3.33	3	1.42
	6-9 days	0	-	1	1.32	0	-	1	0.47
	10+ days	0	-	0	-	1	1.11	1	0.47
	Total	45	100	76	100	91	100	212	100
k. Steroids	Did not have	45	100	76	100	87	96.67	208	98.58
	1-5 days	0	-	0	-	1	1.11	1	0.47
	6-9 days	0	-	0	-	1	1.11	1	0.47
	10+ days	0	-	0	-	2	2.22	2	0.95
	Total	45	100	76	100	91	100	212	100

Almost eight (8) out of ten (79.2%) of the respondents had ever used tobacco. The prevalence of tobacco consumption in the past 30 days preceding the survey was 21.8%. One in five had smoked some form of tobacco. Unlike tobacco intake, four out of ten (45.5%) of students had not consumed alcohol in the past 30 days prior to the survey, with no differences in proportions across the years. Eight (8) of ten (10) (86.2%) of students had not smoked marijuana in the past 30 days prior to the survey, with no pronounced differences in proportions across the student-level years.

The prevalence of cocaine uptake (2.4%), Amphetamines (diet pills, speed) (2.4%), sedatives (2.8%), Hallucinogens (LSD, PCP) (2.4%), opiates (1.9%) inhalants (1.9%), Designer drugs (ecstasy, MDMA) (1.9%), and steroids (1.4%) were negligible in this sample, the use of these drugs was not common.

4.15 Perceptions of student usage of alcohol and drugs on campus

The students were asked how often they thought the average student on campus used the substances specified in this study.

Table 4.13: Average perceived student usage of alcohol and drugs on campus

How often do you think		Classification							
		Second-year		Third-year		Fourth-year		Total	
a. Tobacco (smoke, chew, snuff)	Never	7	15.56	6	8	12	13.19	25	11.85
	Rarely (Year	1	2.22	2	2.67	5	5.49	8	3.79
	Sometimes	2	4.44	5	6.67	4	4.4	11	5.21
	Often	12	26.67	17	22.67	24	26.37	53	25.12
	Always	23	51.11	45	60	46	50.55	114	54.03
	Total	45	100	75	100	91	100	211	100
b. Alcohol (beer, wine, liquor)	Never	5	11.11	2	2.67	9	9.89	16	7.58
	Rarely (Year	1	2.22	4	5.33	4	4.4	9	4.27
	Sometimes	5	11.11	7	9.33	4	4.4	16	7.58
	Often	19	42.22	48	64	47	51.65	114	54.03
	Always	15	33.33	14	18.67	27	29.67	56	26.54
	Total	45	100	75	100	91	100	211	100
c. Marijuana (pot, hash, hash oil)	Never	12	26.67	11	14.67	18	19.78	41	19.43
	Rarely (Year	1	2.22	6	8	4	4.4	11	5.21
	Sometimes	0	-	7	9.33	7	7.69	14	6.64
	Often	12	26.67	30	40	32	35.16	74	35.07
	Always	20	44.4	21	28	30	32.97	71	33.65
	Total	45	100	75	100	91	100	211	100
d. Cocaine (crack, rock, freebase)	Never	19	42.22	30	40	41	45.56	90	42.86
	Rarely (Year	9	20	15	20	15	16.67	39	18.57
	Sometimes	3	6.67	13	17.33	13	14.44	29	13.81
	Often	10	22.22	14	18.67	14	15.56	38	18.1
	Always	4	8.89	3	4	7	7.78	14	6.67
	Total	45	100	75	100	90	100	210	100
e. Amphetamines (diet pills, speed)	Never	23	51.11	37	49.33	44	48.35	104	49.29
	Rarely (Year	5	11.11	13	17.33	19	20.88	37	17.54
	Sometimes	3	6.67	9	12	9	9.89	21	9.95
	Often	8	17.78	14	18.67	13	14.29	35	16.59
	Always	6	13.33	2	2.67	6	6.59	14	6.64
	Total	45	100	75	100	91	100	211	100
f. Sedatives (downers, ludes)	Never	22	48.89	33	44	40	43.96	95	45.24
	Rarely (Year	5	11.11	14	18.67	16	17.58	35	16.67
	Sometimes	5	11.11	12	16	11	12.09	28	13.33
	Often	8	17.78	11	14.67	15	16.48	34	16.19
	Always	4	8.89	5	6.67	9	9.89	18	8.57
	Total	44	97.78	75	100	91	100	210	100
g. Hallucinogens (LSD, PCP)	Never	24	53.33	38	50.67	42	46.67	104	49.52
	Rarely (Year	5	11.11	12	16	18	20	35	16.67
	Sometimes	4	8.89	13	17.33	10	11.11	27	12.86
	Often	7	15.56	10	13.33	14	15.56	31	14.76
	Always	4	8.89	2	2.67	6	6.67	12	5.71
	Total	44	97.78	75	100	90	100	209	99.52
h. Opiates (heroin, smack, horse)	Never	27	60	40	54.05	48	53.93	115	55.29
	Rarely (Year	4	8.89	14	18.92	11	12.36	29	13.94
	Sometimes	1	2.22	8	10.81	10	11.24	19	9.13
	Often	9	20	11	14.86	15	16.85	35	16.83
	Always	4	8.89	1	1.35	5	5.62	10	4.81
	Total	45	100	74	100	89	100	208	100
i. Inhalants (glue, solvents, gas)	Never	26	57.78	40	53.33	51	56.67	117	55.45
	Rarely (Year	3	6.67	14	18.67	13	14.44	30	14.29
	Sometimes	4	8.89	8	10.67	12	13.33	24	11.43
	Often	8	17.78	11	14.67	9	10	28	13.33
	Always	4	8.89	2	2.67	5	5.56	11	5.24
	Total	45	100	75	100	90	100	210	100
j. Designer drugs (ecstasy, MDMA)	Never	25	55.56	35	46.67	44	48.89	104	49.52
	Rarely (Year	4	8.89	10	13.33	16	17.78	30	14.29
	Sometimes	3	6.67	13	17.33	12	13.33	28	13.33
	Often	9	20	15	20	12	13.33	36	17.14
	Always	4	8.89	2	2.67	6	6.67	12	5.71
	Total	45	100	75	100	90	100	210	100
k. Steroids	Never	25	55.56	39	52.7	41	45.56	105	50.24
	Rarely (Year	2	4.44	12	16.22	20	22.22	34	16.27
	Sometimes	2	4.44	9	12.16	12	13.33	23	11
	Often	11	24.44	8	10.81	9	10	28	13.4
	Always	5	11.11	6	8.11	8	8.89	19	9.09
	Total	45	100	74	100	90	100	209	100

54% of the respondents indicated that they believed that tobacco was regularly used by students, and 54% thought that the average student often consumed alcohol on

campus. The respondents' perceived prevalence of alcohol consumption on campuses was 92.5%. Approximately one-third (33.7%) of the respondents perceived that about 80% of students had used marijuana. Almost half of the students believed that an average student on campus had never taken Amphetamines (diet pills, speed). 45.2% of the respondents thought that the average student on their campus had never taken sedatives as a drug substance. The reported perceived prevalence of hallucinogens (LSD and PCP) uptake in this sample was 50.5%. Slightly above half of the respondents (55.2%) reported that they believe that an average student on their campus had never taken opiates or inhalants.

4.16 Experiences in the past year after alcohol and drug use

Students were requested to indicate from a list of post substance use events, how often they experienced each after alcohol and drug use in the past year.

Table 4.14: Experiences in the past year after use of alcohol and drugs

Experiences after alcohol and drug use in the past year	Never	Once	Twice/	3-5 times	6-9 times	10 or more times	
a. Had a hangover	46.67	12.86	15.71	15.24	2.38	7.14	100
b. Performed poorly on a test or important project	70.14	14.22	10.90	3.32	0.47	0.95	100
c. Been in trouble with police, residence hall, or other college authorities	92.42	4.27	1.42	0.95	0.47	0.47	100
d. Damaged property, pulled fire alarm, etc.	97.63	1.42	0.47	-	-	0.47	100
e. Got into an argument or fight	77.73	9.48	6.16	4.74	0.95	0.95	100
f. Got nauseated or vomited	54.98	14.22	13.74	11.85	3.79	1.42	100
g. Driven a car while under the influence	88.63	3.32	3.32	2.84	0.95	0.95	100
h. Missed a class	74.88	8.06	10.43	3.79	1.42	1.42	100
i. Been criticized by someone I know	72.25	7.18	8.61	4.78	2.87	4.31	100
j. Thought I might have a drinking or other drug problem	84.83	5.69	4.27	1.90	0.95	2.37	100

Table 4.14 indicates that nine out of ten (97%) of the students had never damaged 'property, pulled a fire alarm, or been in trouble with police, residence hall, or other

college authorities (92%) as a consequence of use of alcohol or drugs. A hangover was the most common reported effect after drinking beer, followed by vomiting.

4.17 Activities post consumption of alcohol and drugs

Respondents were requested to indicate from a list of stipulated experiences, how often they experienced each after alcohol and drug use in the past year.

Table 4.15: Activities post consumption of alcohol and drugs

	Never	Once	Twice	3-5 times	6-9 times	10 or more times	
k. Had a memory loss	72.04	9.95	8.06	5.21	1.90	2.84	100
l. Done something I later regretted	62.09	15.17	12.80	6.16	0.95	2.84	100
m. Been arrested for DWI/DUI	98.57	0.48	-	0.48	-	0.48	100
n. Have been taken advantage of sexually	91.90	4.29	1.43	1.90	-	0.48	100
o. Have taken advantage of another sexually	98.10	0.95	-	0.48	-	0.48	100
p. Tried unsuccessfully to stop using	86.19	6.19	3.33	2.38	0.48	1.43	100
q. Seriously thought about suicide	86.26	3.79	4.27	0.95	0.47	4.27	100
r. Seriously tried to commit suicide	91.43	3.81	1.43	1.43	0.48	1.43	100
s. Been hurt or injured	83.41	9.48	5.21	0.95	-	0.95	100

Most students indicated that they had never been arrested for driving while intoxicated (DWI) / driving under the influence (DUI) (98.6%) and had never taken advantage of another sexually (98.1%). Nine out of ten (91.9%) had never been taken advantage of sexually and had never seriously tried to commit suicide (91.4%), and a tenth of them experienced been sexually taken advantage off. Most students had not been had been hurt or injured after alcohol and drugs consumption. The most reported issues were regret after using alcohol and drugs (37,9%) and loss of memory (28%).

4.18 Family status regarding alcohol and drug use

Students were asked to think about their own families and reflect on their use of alcohol and/or drugs by family members.

Table 4.16: Status of family members regarding alcohol and drug use

		Year level							
		Second-year		Third-year		Fourth-year		Total n	%
Mother	No	40	88.89	68	90.67	88	96.70	196	92.45
	Yes	5	11.11	7	9.33	3	3.30	15	7.08
Father	No	37	82.22	63	84.00	79	86.81	182	85.85
	Yes	9	20.00	12	16.00	12	13.19	33	15.57
Stepfather	No	45	100.00	73	97.33	90	98.90	208	98.11
	Yes	1	2.22	2	2.67	1	1.10	4	1.89
Brothers	No	41	91.11	55	73.33	76	83.52	172	81.13
	Yes	5	11.11	20	26.67	15	16.48	40	18.87
Mothers	No	42	93.33	76	101.33	89	97.80	207	97.64
	Yes	4	8.89	1	1.33	3	3.30	8	3.77
Fathers	No	40	88.89	74	98.67	90	98.90	204	96.23
	Yes	6	13.33	1	1.33	1	1.10	9	4.25
Aunts/uncle	No	32	71.11	52	69.33	68	74.73	152	71.70
	Yes	14	31.11	23	30.67	23	25.27	60	28.30
Spouse	No	46	100.00	75	100.00	89	97.80	210	99.06
	Yes	0	-	0	-	2	2.20	2	0.94
None	No	26	57.78	44	58.67	50	54.95	123	58.02
	Yes	20	44.44	31	41.33	41	45.05	92	43.40
Total		46	100.00	75	100.00	91	100.00	212	100.00

As part of the family, the students felt that their fathers (15.6%), brothers (18%), and more so uncles (28.3%) had alcohol or other drug problems. It was not common that mothers (7%), stepfathers (2%), stepmothers (3.8%), and spouse (1%) had alcohol or other drug problems.

4.19 Student activities in the past year

Figure 4.2 indicates that the three most commonly attended activities were religious and interfaith groups (25.5%), music and other performing arts (16%), and social fraternities or sororities (13.7%). Very few were involved in student newspapers, radio and TV groups, ethnic organisations, and international and language groups.

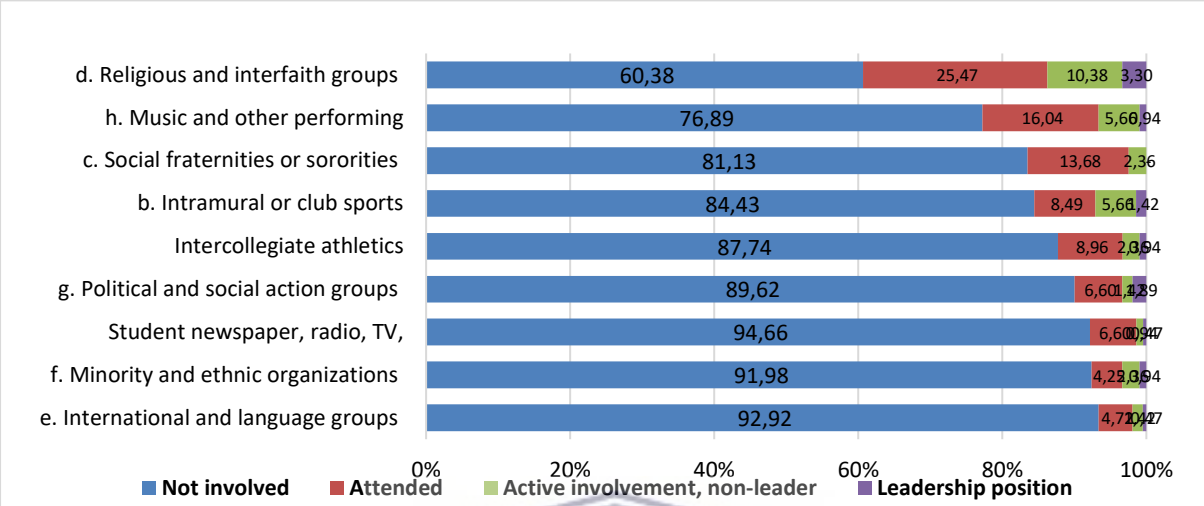


Figure 4.2 Student activities in the last year

4.20 Student experiences within the last year in and around campus

Students were requested to select, from a list of actions or events, those they had experienced in the past year, and if these had occurred while under the influence of alcohol and/or drugs.

Table 4.17: Student experiences within the last year in and around campus

Experiences in the last year		Total			
		Happened to		Consumed	
		n	%	n	%
a. Ethnic or racial harassment	yes	39	18.48	5	13.51
	no	172	81.52	32	86.49
b. Threats of physical violence	yes	28	13.27	8	30.77
	no	183	86.73	18	69.23
c. Actual physical violence	yes	11	5.21	6	66.67
	no	193	91.47	3	33.33
d. Theft involving force or threat of force	yes	15	7.11	3	23.08
	no	196	92.89	10	76.92
e. Forced sexual touching or fondling	yes	12	5.69	4	40.00
	no	199	94.31	6	60.00
f. Unwanted sexual intercourse	yes	13	6.16	5	45.45
	no	199	94.31	6	54.55

Table 4.17 indicates that 18.5% of the students had ever experienced ethnic or racial harassment, while 13.3% had experienced threats of physical violence. This was more evident after the consumption of alcohol (30.8%), and ethnic harassment had also been experienced after consumption of alcohol. Physical violence after alcohol use was also reported by students (66.7%). Other reported concerns after alcohol consumption included theft involving force (23.1%), forced sexual touching when intoxicated (40%) compared to when they were not intoxicated (5.7%). They were seven times more likely to experience unwanted sex when intoxicated (45.5%) compared to 6% when they were not intoxicated.

4.21 Feelings of friends regarding alcohol and drug use

Students were asked what they think their friends feel or would feel about them regarding the use of alcohol and drugs.

Table 4.18: Feelings of friends regarding alcohol and drug use

Friends' feelings regarding alcohol and drug use	Approve	Disapprove	Strongly disapprove	Total
a. Trying marijuana once or twice	34.43	22.64	42.92	100.0
b. Smoking marijuana occasionally	15.57	15.09	69.34	100.0
c. Smoking marijuana regularly	14.15	15.09	70.75	100.0
d. Trying cocaine once or twice	15.09	13.68	71.23	100.0
e. Taking cocaine regularly	16.04	21.23	62.74	100.0
f. Trying LSD once or twice	15.09	13.21	71.70	100.0
g. Taking LSD regularly	20.75	27.36	51.89	100.0
h. Trying amphetamines once or twice	43.87	18.87	37.26	100.0
i. Taking amphetamines regularly	37.26	21.70	41.04	100.0
j. Taking one or two drinks of an alcoholic beverage (beer, wine, liquor) nearly	40.09	17.45	41.51	100.0
k. Taking four or five drinks nearly every day	19.34	12.26	68.40	100.0
l. Having five or more drinks in one sitting	22.17	25.00	52.83	100.0
m. Taking steroids for body building or improved athletic performance	15.57	13.68	70.75	100.0

There was strong disapproval from most participants for the use of nearly all substances in the list, except for the occasional use of alcohol or marijuana, which was more acceptable.

4.22 Beliefs about effects of alcohol use

Respondents were requested to indicate if they believe alcohol has an effect on the list of events provided.

Table 4.19: Beliefs about effects of alcohol use

Beliefs about effects of alcohol use	n		%
a. Breaks the ice	yes	156	73,58
	no	56	26,42
b. Enhances social activity	yes	164	77,36
	no	47	22,17
c. Makes it easier to deal with stress	yes	102	48,11
	no	110	51,89
d. Facilitates a connection with peers	yes	140	66,04
	no	72	33,96
e. Gives people something to talk	yes	139	65,57
	no	73	34,43
f. Facilitates male bonding.	yes	111	52,36
	no	100	47,17
g. Facilitates female bonding	yes	107	50,47
	no	105	49,53
h. Allows people to have more fun	yes	156	73,58
	no	55	25,94
i. Gives people something to do	yes	116	54,72
	no	96	45,28
j. Makes food taste better	yes	57	26,89
	no	154	72,64
k. Makes women sexier	yes	44	20,75
	no	168	79,25
l. Makes men sexier	yes	35	16,51
	no	176	83,02
m. Makes me sexier	yes	43	20,28
	no	169	79,72
n. Facilitates sexual opportunities	yes	78	36,79
	no	131	61,79
Total		212	100,00

Seven in every ten students (73.6%) felt that alcohol was an icebreaker in social settings, allowed people to have more fun (75.6%) and enhanced social activity (77.4%). Sixty-six percent felt that alcohol facilitated connection with peers and gives people something to talk about (65.6%). Half of the respondents felt alcohol gives people something to do (54.7%) and facilitates male bonding (50.7%). In contrast, 61,8% did not believe that alcohol facilitates opportunities (61,8%) or makes food taste better (72.6%), and strongly disagreed that alcohol makes one sexier (79.7%).

4.23 Is drinking a central part of social life on campus

This section reports on the student's perception about drinking, if they think is a central; part of social life among different groups presented on the table below.

Table 4.20 Is drinking a central part of the social life on this campus among different groups

		n	%
a. Male students	yes	178	83.96
	no	34	16.04
b. Female students	yes	163	76.89
	no	49	23.11
c. Faculty/staff	yes	60	28.30
	no	152	71.70
d. Alumni	yes	73	34.43
	no	139	65.57
e. Athletes	yes	68	32.08
	no	144	67.92
f. Fraternities	yes	93	43.87
	no	119	56.13
g. Sororities	yes	89	41.98
	no	123	58.02
Total		212	100

Respondents perceived that male students were more likely to have drinking as part of their social life (84%) compared to females (76.9%), faculty staff (28%), alumni (34.4%), athletes (32%).

4.24 Campus environment, drug and alcohol use

Just over half of the students felt that the social atmosphere on this campus promoted alcohol use (58.5%) and 78% stated that they felt safe on the campus. Respondents did not generally feel that the campus social atmosphere promoted the use of other drugs (41%).

Table 4.21: Campus environment and alcohol and drug use

		n	%
a. Does the social atmosphere on this campus promote alcohol use?	yes	124	58.49
	no	88	41.51
b. Does the social atmosphere promote other drug use?	yes	87	41.04
	no	125	58.96
c. Do you feel safe on this campus?	yes	166	78.30
	no	46	21.70
Total		**212**	**100.00**

4.25 Students' concerns about problems related to alcohol and drug use

The respondents generally felt that alcohol led to some problems. Sexual assault was the main concern (55%), followed by racial harassment (48%), harassment related to sexual orientation, and gender related harassment (48.3%). Alcohol and other drug use (31.6%), campus vandalism (27.9%), religious harassment (20%) were not rated as significant problems.

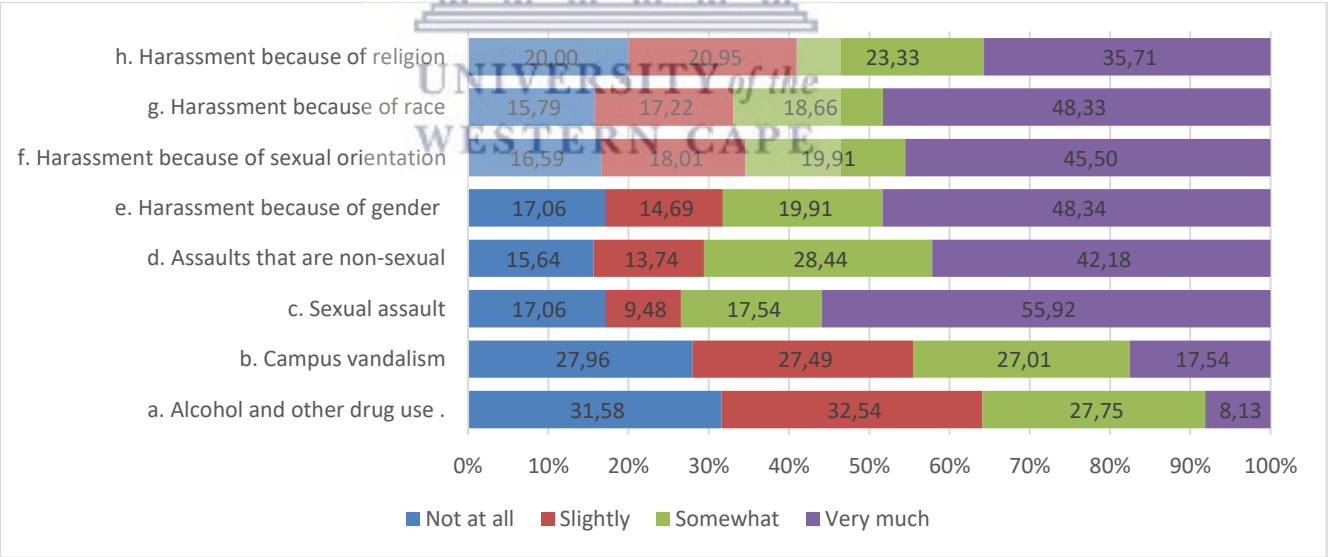


Figure 4.3: Extent to which students care about problems

4.26 Alcohol and drug use in the past 12 months

Students were requested to indicate to what extent has their alcohol and drug use changed within the last 12 months.

Table 4.22: Alcohol and drug use changes in the past 12 months

Alcohol and drug use changes in the last 12 months	Description	n	%
To what extent has your alcohol use changed within the last 12 months?	Increased	36	16.98
	About the same	44	20.75
	Decreased	60	28.30
	I have not used alcohol	72	33.96
To what extent has your drug use changed within the last 12 months?	Increased	18	8.49
	About the same	21	9.91
	Decreased	26	12.26
	I have not used drugs	147	69.34
Total		**212**	**100.00**

A third of respondents said that they had not used alcohol in 12 months preceding the survey (33%). A fifth though that their alcohol use remained the same (28%) while 28.3% indicated that they had decreased their alcohol intake. Few had increased their alcohol intake (16%). While fewer students had not used alcohol in the past 12 months, a significant percentage of students had never used drugs in the same period (69%).

4.27 Amount of alcohol and drugs use that risks people harming themselves

Respondents were requested to indicate how much they think people risk harming themselves either physically or in other ways after use of substances.

Table 4.23: Amount of alcohol and drugs use that risks people harming themselves

Risk of harming themselves due to alcohol and drug use	No risk	Slight risk	Moderate risk	Great risk	Can't say	Rank
a. Try marijuana once or twice	20.38	21.80	15.64	28.91	13.27	15
b. Smoke marijuana occasionally	7.08	2.83	14.15	61.32	14.62	5
c. Smoke marijuana regularly	6.73	9.13	22.60	50.00	11.54	4
d. Try cocaine once or twice	27.49	18.01	15.17	26.54	12.80	16
e. Take cocaine regularly	7.08	8.49	18.40	49.06	16.98	6
f. Try LSD once or twice	5.71	4.29	15.24	57.14	17.62	1
g. Take LSD regularly	14.62	14.62	20.28	38.68	11.79	14
h. Try amphetamines once or twice	7.69	8.17	20.19	49.04	14.90	9
i. Take amphetamines regularly	11.06	15.87	16.83	44.23	12.02	13
j. Take one or two drinks of an alcoholic beverage (beer, wine, liquor) nearly every day	6.67	5.71	13.81	54.76	19.05	3
k. Take four or five drinks nearly every day	6.22	3.83	10.05	65.55	14.35	2
l. Have five or more drinks in one sitting	8.57	10.95	18.10	48.10	14.29	11
m. Take steroids for body building or improved athletic performance	9.13	10.10	16.83	51.92	12.02	12
o. Regularly engage in unprotected sexual activity with a single partner	7.11	9.95	17.06	54.50	11.37	8
p. Regularly engage in unprotected sexual activity with multiple partners	8.53	9.48	18.96	47.87	15.17	10

Generally, the results show that the students did feel alcohol put them at risk, at different levels. There were four factors that they felt did not relatively put them at risk: trying marijuana once or twice (27.5%), trying cocaine once or twice (20.4%), taking cocaine regularly (11.1%), taking LSD regularly (14.6%) and taking amphetamines regularly.

Students felt that smoke marijuana regularly (95.5%), taking four or five drinks nearly every day (94.4%), consuming alcohol prior to being sexually active (93.3%), trying LSD once or twice (94.3%%), and smoking marijuana regularly (93.4%) put them at high risk of harm.

4.28 Sexual intercourse and the use of alcohol and drugs

Students were requested to indicate if they had sexual intercourse in the past year, if yes were they under the influence of alcohol and drugs.

Table 4.24: Sexual intercourse and the use of alcohol and drugs

Sexual intercourse and the use of alcohol and drugs	Response	Total (n)	%
a. Did you have sexual intercourse within the last year? If yes, answer b and c	yes	146	68.87
	no	66	31.13
b. Did you drink alcohol the last time you had sexual intercourse?	yes	41	19.34
	no	171	80.66
c. Did you use other drugs the last time you had sexual intercourse?	yes	21	9.91
	no	191	90.09
Total		**212**	**100.00**

Table 4.24 indicates that use of drugs was not a high-risk factor for initiation of sexual intercourse. 68.9% reported having had sexual intercourse within the last year. 90% of the students had not used other drugs the last time they had sexual intercourse. Likewise, drinking of alcohol was not a high-risk factor for students to be involved in sexual intercourse; 80.7% of the students had not drank alcohol the last time they had sexual intercourse.

4.29 Student behaviour in the past 30 days

Students were asked to reflect on their behaviour in the 30 days prior to completing the survey. Figure 4.4 indicates that eight out of ten students had not carried a weapon (87.6%), bragged about alcohol (86.1%) or told a sexual partner that he/she was not attractive because he/she was drunk (85%). Three in ten experienced peer pressure to drink or use drugs (30.3%), slightly above half (55.3%) refused an offer of alcohol or other drugs and 63.5% heard someone else brag about his/her alcohol or other drug use.

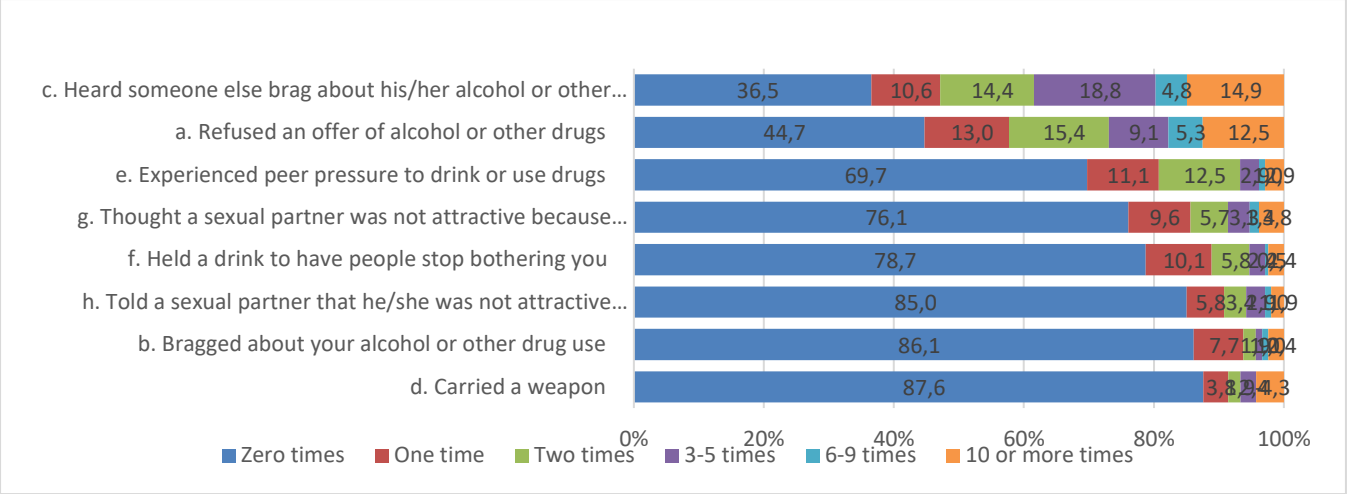


Figure 4.4: Student behaviour in past 30 days

4.30 Interference of student drinking on other students on campus

Students were asked in which ways did the other students' drinking interfere with their life on or around campus. Generally, alcohol drinking by other students did not significantly affect respondents' life on campus.

Table 4.25: How other students drinking interfered with others on campus

Other students drinking and interference with your life on campus	Yes		No	
	n	%	n	%
a. Interrupts your studying	92	43.4	118	55.7
b. Makes you feel unsafe	79	37.3	132	62.3
c. Messes up your physical living space (cleanliness, neatness, organization, etc.)	90	42.5	119	56.1
d. Adversely affects your involvement on an athletic team or in other organized groups	47	22.2	161	75.9
e. Prevents you from enjoying events (concerts, sports, social activities, etc.)	53	25	156	73.6
f. Interferes in other way(s)	73	34.4	134	63.2
g. Doesn't interfere with my life	80	37.7	128	60.4

Table 4.25 indicated that generally majority of the respondents felt that other students' drinking did not interfere with their involvement in athletics (75.9%) or in enjoying events such as concerts (73.6%). Six out of ten did not feel alcohol drinking by other

students made them feel unsafe (62.3%) or interfered in other ways (63.2%). 56.1% of the students felt that other students drinking of alcohol affected their physical living space or interrupted with their studying (55.7%).

4.31 Students' reasons for substance use

The highest-reported reason for substance use was boredom (50%) followed by trying out fun (39.8%). They generally disagreed that family influence led them to substance abuse (57%). Substances were used to sleep comfortable or to calm down anger. They also generally did not feel substance abuse was caused by friends' influence (42%), or to forget problems (44%.)

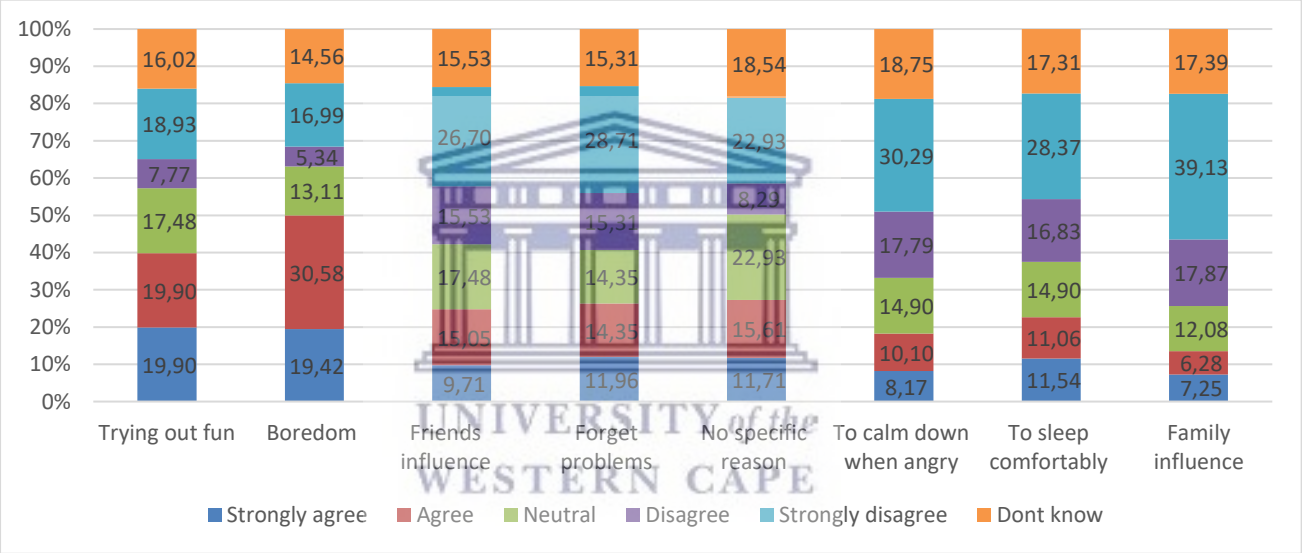


Figure 4.5: Reasons for substance use

4.4 Multivariate Regression Analysis on Consumption of alcohol and drugs in the past year, past 30 days and general use

The multivariate regression analysis shows the results of alcohol drug use in the past year and the past 30 days. The results provide some insights with regards to potential risk factors that affect substance use among nursing students at a university in the Western Cape. The results are not generalisable but specific to the university under study.

Table 4.26: Multivariate Regression Analysis on Consumption of alcohol and drugs in the past year, past 30 days and general use

	Q17_PASTYEAR (1=More often, 0=Never consumed, or less often)			Q18_PAST30 (1=More often, 0=Never consumed, or less often)			Q19_HOWOFTEN (Generally)		
	Coef.	Std. Err.	P>t	Coef.	Std. Err.	P>t	Coef.	Std. Err.	P>t
Classification (4th Year)									
Second-year	0.225	0.139	0.110	0.366	0.137	0.009	0.212	0.139	0.128
Third-year	0.109	0.098	0.270	0.016	0.097	0.870	0.067	0.096	0.491
Age (19-20years)									
20-21 years	0.143	0.147	0.333	0.207	0.145	0.156	0.124	0.146	0.400
25+ years	0.275	0.191	0.153	0.547	0.188	0.004	0.262	0.189	0.167
Religion (Traditional)									
Christianity	0.011	0.248	0.966	0.309	0.244	0.208	0.036	0.244	0.882
Islam	0.039	0.274	0.888	0.073	0.270	0.788	0.099	0.269	0.713
Other	0.176	0.339	0.604	0.152	0.334	0.649	0.026	0.333	0.937
Gender (Female)									
Male	-0.068	0.110	0.538	0.059	0.108	0.587	- 1.148	0.108	-
Res- (off campus)									
On-campus	0.067	0.096	0.485	0.059	0.095	0.536	0.112	0.094	0.238
Working- (Partial)									
Yes, full-time	0.046	0.219	0.833	0.079	0.216	0.713	0.275	0.215	0.203
Yes, part-time	0.022	0.165	0.894	0.346	0.162	0.035	0.108	0.166	0.518
Alc_Posess..(available									
Not have available	- 0.014	0.115	0.903	0.100	0.113	0.377	0.054	0.113	0.636
Status									
Part-time (1-11 credits)	- 0.122	0.316	0.700	- 0.446	0.311	0.154	0.631	0.311	0.044
Prevention (Yes)									
No	- 0.085	0.151	0.574	- 0.301	0.149	0.045	0.290	0.148	0.052
Change In Alc									
Decreased	0.045	0.125	0.722	- 0.119	0.123	0.335	0.001	0.123	0.995
I have not used alcohol	0.057	0.147	0.700	- 0.143	0.144	0.325	0.065	0.144	0.652
Increased	- 0.064	0.149	0.668	- 0.068	0.146	0.643	0.112	0.146	0.445
Change In Drugs (Remained unchanged)									
Decreased	0.132	0.188	0.484	- 0.084	0.185	0.651	0.219	0.186	0.240
I have not used drugs	0.063	0.162	0.697	- 0.143	0.159	0.369	0.421	0.160	0.010
Increased	0.129	0.231	0.577	- 0.376	0.227	0.101	0.192	0.229	0.402
_cons	0.715	0.625	0.255	1.724	0.615	0.006	1.940	0.613	0.002

Table 4.26 shows results that are not significant. The representative values are greater than 0.05. The results indicated that second-year students were 23% more likely to

consume alcohol more often in the past 12 months preceding the survey (B=0.23, p<0.05). Model three confirms these results, indicating that, generally, second-year students were 21% more likely to consume drugs and alcohol more often (B=0.21, p>0.05). However, short-term second-year students were 36% less likely to consume substances (B=-0.36, p>0.05) compared to third and fourth-year students (B=0.02, p>0.05).

4.4.1 Age

The results indicate that older students (25+ years) were 28% more likely to consume alcohol more often in the 12 months preceding the survey (B=0.28, p<0.05), twice as much likely to do so compared to those aged 20-21 years (B=0.14, p>0.05). Model three indicates that generally, older students were 26% LESS likely (?) to consume drugs and alcohol more often (B=-0.26, p>0.05), twice more likely compared to those aged 20-21 years (B=-0.12). Model three confirms model two results; short-term older students were twice as much LESS likely to consume substances (B=-0.54, p>0.05) compared to the younger students (B=-0.21, p>0.05).

4.4.2 Religion

The results indicate that students from other religions were 17% more likely to consume alcohol more often in the 12 months preceding the survey (B=0.17, p<0.05), compared to Muslims (B=-0.04, p>0.05) and Christians (B=-0.011, P>0.05). Model two confirms these results and indicates that in the short term (30 days) Other religious students were 15% MORE likely to consume drugs and alcohol more often (B=-0.15, p>0.05), compared to Muslims and Christians. Model three has consistent results confirming that generally, other religion students were more likely to consume substances, and so were Christian students compared to Muslim students.

4.4.3 Gender

Male respondents were 6% less likely to report consuming alcohol and drugs in the past 12 months preceding the survey (B=-0.06, p>0.05), implying females were more likely to do so. Chi-square results also confirm this. Model three confirms these results,

indicating that males were generally 15% less likely to consume alcohol and drugs (B=-14.5, p>0.05). Model two shows that in the short run, males were more likely to consume alcohol and drugs (B=0.06, p>0.05) compared to females. Contrary to this survey, in another study by Fernández-García et al., (2020), the prevalence of smoking was higher among males as compared to females.

4.4.4 Presence of alcohol and drugs at parties

Students who reported that they would prefer not to have alcohol at parties or other functions were less likely to consume alcohol and drugs (B-0.01, p>0.05), compared to those who preferred to have. Part-time students were generally less likely to drink alcohol and use drugs 12 months preceding the survey (-0.12, p>0.05) and in the short run (B=-0.44, p>0.05).

4.4.5 Change in alcohol and drugs use

Students were more likely to have decreased (0.05, p<0.05) and not used (0.05, p>0.05) alcohol in the 12 months preceding the survey compared to those who remained unchanged/the same; they were less likely to have had alcohol intake increase (B=-0.06, p>0.05). However, results show that alcohol consumption was less likely to have decreased in the short run (30 days). The mixed results show that this factor is not a predictor of substance use, as the direction of effect is not clear. The same applied to changes in drug consumption. Levels of intake did not affect the ultimate consumption generally.

4.5 Summary

This chapter presented the results of the data analysis regarding alcohol and drug use and possible risk factors amongst nursing students at a university in the Western Cape. The following chapter will discuss the results, make recommendations and conclude the study.

Chapter 5
Discussion, recommendations, and conclusion

5.1 Introduction

This chapter presents and discusses the results presented in Chapter four. The study aimed to investigate alcohol and drug use and possible risk factors amongst nursing students at a University in the Western Cape. A quantitative research approach and a descriptive survey design were utilised to collect data. The population of this study were nursing students from the second year to the fourth year. The discussion of findings, recommendations and limitations of this study are presented in this chapter.

5.2. Objective 1:

To identify the possible risk factors associated with substance use among nursing students at a University in Cape Town.

5.2.1 Age

According to The Recovery Village (2022), age is a vital component that predisposes an individual to alcohol and drug use. This is confirmed by this study's results which indicate age as a risk factor for alcohol and drug use by nursing students. Similarly, the findings by Pérez-García et al. (2022) reported that harmful and binge drinking commences from adolescence to young adulthood and increases with advancing adulthood. The majority of older students (25 + years) were 28% more likely to consume alcohol compared to the younger students in this survey, also reported by (Shibiru et al 2023). In this study the age at first use of drugs by students ranged from 9 to 17 years, which is similar to the findings of Ponce-Blandón et al. (2021). Other studies which have reported initiation of substance use in the adolescent years include Clemans-Cope et al., (2022) in the USA and in Botswana at the University of Botswana (Olashore et al., 2018).

5.2.2 Religion

The current study shows that Christian and Muslim students over a 12-month period were less likely to consume alcohol and drugs compared to students from other religions or non-religious students. Several studies have reported the positive effect of religion, religious practices and spiritual beliefs on substance use. Persons with religious beliefs or affiliations are less likely to consume alcohol and drugs (Grim & Grim, 2019; Moscati & Mezuk 2014; Palamar et al., 2014, Zanetti et al., 2019). Olashore et al., (2018) argue that belonging to a religious organisation is one of the solutions to the challenge of substance use and abuse.

5.2.3 Marital status

Almost all respondents in the study were single, therefore no comparison was made in relation to alcohol and drug consumption. However, marriage in some previous studies was found to have an association with an onset of alcohol use. Married couples displayed a lower risk of use of alcohol and drugs as compared to single people (Kendler et al., 2016).

5.2.4 Gender

The use of alcohol and drugs remains a challenge for both sexes. However, this study revealed that males were less likely to consume alcohol and drugs compared to their female counterparts over a period of 12 months. These findings are similar to a cross-sectional study on nursing students in Brazil (Monterio et al., 2018) and in a study that was conducted in Nigeria, which revealed that females were higher consumers of drugs and alcohol (23.4%) more than males (18.5%) (Charles et al., 2021). Of interest in the current study, in the 30 days prior to this survey, males were more likely to use alcohol and drugs than females.

Males, are however, reported to be at a greater risk of abusing drugs as compared to females (The Recovery Village, 2022). In this study the majority (81%) of the nursing students are females, which is in line with the South African Nursing Council (SANC) statistics for student nurses in South Africa (SANC, 2021) and has also been reported

by Monteiro et al., (2018). In a study conducted in Cameroon, male students were associated with the use of alcohol and drugs (Metuge et al., 2022).

5.2.5 Peer pressure

A minority (42%) of students consumed alcohol and drugs due to friends' influence. Three (3) in ten reported having experienced peer pressure to drink or use drugs (30.3%) in the past 30 days. These findings are similar to those of a study conducted by Fernández-García et al. (2020), in which approximately 30% of the participants reported their smoking habits were influenced by those of their friends The influence of drug and alcohol use has been shown to be related to peer pressure in several studies (Fernández-García et al., 2020; Kvillemo et al., 2021; Panthee et al., 2017; Patel et al., 2016). However, over half (55.3%) of students who took part in the current survey reported that they refused offers of alcohol or other drugs. Individuals have been reported to consume alcohol and drugs in order to fit in and be accepted in their social environment (Kvillemo et al., 2021).

5.2.6 Boredom

Half (50%) of the respondents who took part in this survey indicated that they consume alcohol and drugs to alleviate boredom. A study conducted by Magidson et al. (2021) affirms that boredom is a risk factor for an individual to resort to alcohol and drug use. In this current survey, 39.8% of the students reported trying out alcohol and drugs for fun. In a qualitative study among students, a participant reported that "If you want a little extra fun, then you take drugs" (Kvillemo et al., 2021).

5.2.7 Family Influence

The majority (57%) of the study respondents disagreed that family had some influence in their use of alcohol and drugs. In a study conducted in Menoufia, the way the family conducted themselves had a positive impact on the students, resulting in a lower rate of alcohol and drug use (Soliman et al., 2022). In a study conducted at a medical college at Belagavi in North Karnataka, students with parents who had a history of tobacco use were likely to be using tobacco (Patel et al., 2016). Similarly, in a study

conducted in Nigeria, the students, either of whose parents were alcohol drinkers were also at the risk of using alcohol (Charles et al., 2021).

5.2.8 Stress relief

The current study found that the students consumed alcohol and drugs in order to forget their problems. Similarly, in a study conducted in Cameroon, nursing students were reported to be facing immense pressure due to their clinical care responsibilities and study workload. This resulted in the use and abuse of alcohol and drugs to cope with the pressure (Mbanga et al., 2018). Patel et al., (2016) in their study, reported that the majority (84%) of students consumed tobacco as a means to alleviate stress.

5.3 Objective 2:

To identify the type of substances used by nursing students at a selected university in the Western Cape.

5.3.1 Tobacco

The current study findings indicate the usage of tobacco use in the past 12 months to be 24.1%, and even lower in the 30 days preceding the survey (21.8%). In contrast, tobacco was reported to be the most abused drug in Menoufia, with a prevalence rate of 68% among vocational students (Soliman et al., 2022). The current study findings are higher than those reported by Fernández-García et al. (2020), in which 18.9% of the nursing student reported using tobacco. In the current study, the higher the academic level of study with associated with tobacco usage. These study findings are similar to those of a study conducted in Spain among nursing students (Rodríguez-Muñoz et al., 2020).

5.3.2 Alcohol

The use of alcohol among nursing students is higher than the use of drugs. The majority (39.6 %) of students had first consumed alcohol (beer, wine, liquor) between

the ages of 9 -17 years. The reported alcohol usage by students in this study is 64.6%, which has also been reported by Zanetti et al., (2019) and Voster et al., (2019). Similarly, alcohol consumption has been noted to be high among nursing students in Spain at University of Córdoba (Rodríguez-Muñoz et al., 2020). High rates of alcohol consumption among youth have also been noted by other researchers (van Zyl et al., 2015; Peltzer & Phaswana-Mafuya, 2018). Alcohol consumption in the past year is higher among the students in the senior classes as compared to those in lower year levels which corroborates a study conducted at the University of Córdoba (Rodríguez-Muñoz et al., 2020). The reasons for substance use among nursing students align with those reported by Moagi and van der Wath (2021); namely intrapersonal, interpersonal, and environmental risk factors. Alcohol consumption was not reported as a significant risk for sexual intercourse. In contrast, a study conducted among nursing students in a higher education institution in Brazil, found that the involvement in risky health behaviours such as sexual intercourse and changing of partners were related to alcohol consumption, which exposes the individuals to sexually transmitted diseases (da Silva et al., 2022).

5.3.3 Marijuana

In the current study, 23.7% of the respondents had used marijuana in the 12 months. In Nepal, Panthee et al., (2017) found that marijuana was the most used illegal drug. In the 30 days prior to the current study, limited usage was reported, which may be related to the timing of data collection. In Cameroon, marijuana was one of the most used drugs among the nursing students (Mbanga et al., 2018). Similar results were reported from other health care students in a European university that stated the consumption of marijuana alongside other illicit drugs (Colomer-Pérez et al., 2019).

5.3.4 Cocaine

Cocaine use in the current study was low (2.4%), which corroborates with the findings of a study in Brazil (Zanetti et al., 2019). The low usage of cocaine may be due to difficulties in accessing it or the cost thereof.

5.4 Limitations of the study

This survey was conducted in one university in the Western Cape among nursing students. Hence these results be generalisable to similar nursing education institutions. As a self-reported survey, this is reliant on the honesty of the respondents. A convenient sample is not as rigorous as other types of sampling. The study questionnaire did not make provision for the listing of any other drugs used other than those stipulated. In the Western Cape, there are several 'street drugs', or combinations of drugs, the use of which could not be explored (Western Cape Government, 2019).

5.5 Recommendations

The recommendations outlined in this report are derived from the results of the research study. The results indicated that age, religion, gender, employment, peer pressure, boredom, family influence, and stress are risk factors for substance use among nursing students. The outlined recommendations may be of assistance to Nursing Education Institutions to develop awareness and support programmes to minimise the risk of the use of substances which has detrimental effects on their health. The recommendations presented relate to nursing education, nursing research and nursing practice.

5.5.1 Recommendations for nursing education

It is evident that substance use is a public health problem. Nursing students should have appropriate information regarding substance use disorders included at all levels of the nursing programme, and in all specialty areas. Opportunities for community outreach into schools and health facilities to promote awareness and information can be a useful learning experience for nursing students. There should be education around early identification of substance use or risk factors that may lead to substance use.

5.5.2 Recommendations for nursing research

Further research on alcohol and drug use to investigate the use of substances other than the traditional ones listed in this survey tool. Research into specific risk factors in

health care settings, such a trauma and work stress and their association with substance use and abuse is important to plan and provide support for health care workers.

5.5.3 Recommendations for nursing practice

Higher education institutions with health sciences student, including nursing students, should collaborate to develop guidelines for awareness of substance use, and support of students. Support structures such as wellness centres, psychosocial rehabilitation groups and post trauma debriefing are all options to consider in promoting wellness and minimal use of substances by nursing students.

5.6 Conclusion

This study's aim was to investigate the risk factors of alcohol and drug use and possible risk factors among nursing students at a university in the Western Cape Province of South Africa. The result of this study show that alcohol and drug use remain a public health problem. In the past 12months preceding the survey, this study shows females are more likely to consume alcohol and drugs than males, whilst in the short term (30days preceding the survey), males were more prone to consume alcohol and drugs. The risk factors for alcohol and drug use established from this study are similar to those reported by other researchers.

This study has described the current use of alcohol and drugs among nursing students at a university in the Western Cape of South Africa. Tobacco, alcohol, and marijuana were the most used substances by students in this study. "Hard" drugs were used by only a few students. The use of designer drugs (ecstasy, MDMA) and steroids was negligible in this study. Further research is needed not only to establish the prevalence of substance use but the effect thereof on nursing education and practice, and mechanisms to raise awareness and support nursing students who use substances.

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Appendices

Appendix A: University Permission to conduct research

APPENDIX A

UNIVERSITY OF THE WESTERN CAPE
PERMISSION TO CONDUCT RESEARCH

DEAR **Gaotswake Patience Kovane**

This serves as acknowledgement that you have obtained and presented the necessary ethical clearance and your institutional permission required to proceed with the project referenced below:

RESEARCH TOPIC

An investigation of alcohol and drug use and possible risk factors amongst nursing students at a University in the Western Cape

Name of researcher	:	Gaotswake Patience Kovane
Permission valid till	:	1 June 2025
Institution	:	University of the Western Cape
Ethics reference	:	HS21/10/82
Permission reference	:	UWCRP967563

You are required to engage this office (researchperm@uwc.ac.za) in advance if there is a need to continue with research outside of the stipulated period. The manner in which you conduct your research must be guided by the conditions set out in the annexed agreement: Conditions to guide research conducted at the University of the Western Cape.

Please be at liberty to contact this office should you require any assistance to conduct your research or require access to either staff or student contact information.

Regards
Dr Ahmed Shaikjee
Deputy Registrar Academic Administration

Approval status: **APPROVED** 9 June 2022

To verify or confirm the authenticity of this document please contact the University at researchperm@uwc.ac.za.

UNIVERSITY OF THE WESTERN CAPE
Robert Sobukwe Road, Bellville, 7535, Republic of South Africa

Appendix B Ethical approval

UNIVERSITY of the WESTERN CAPE

50 YEARS of hope, action & knowledge

02 June 2022

Dr G Kovane
School of Nursing
Faculty of Community and Health Sciences

HSSREC Reference Number:	HS21/10/82
Project Title:	An investigation of alcohol and drug use and possible risk factors amongst nursing students at a University in the Western Cape.
Approval Period:	**1 June 2022 – 1 June 2025**

I hereby certify that the Humanities and Social Science Research Ethics Committee of the University of the Western Cape approved the methodology, and amendments to the ethics of the above mentioned research project.

Any amendments, extension or other modifications to the protocol must be submitted to the Ethics Committee for approval.

Please remember to submit a progress report by 30 November each year for the duration of the project.

For permission to conduct research using student and/or staff data or to distribute research surveys/questionnaires please apply via:
https://sites.google.com/uwc.ac.za/permissionresearch/home

The permission letter must then be submitted to HSSREC for record keeping purposes.

The Committee must be informed of any serious adverse events and/or termination of the study.

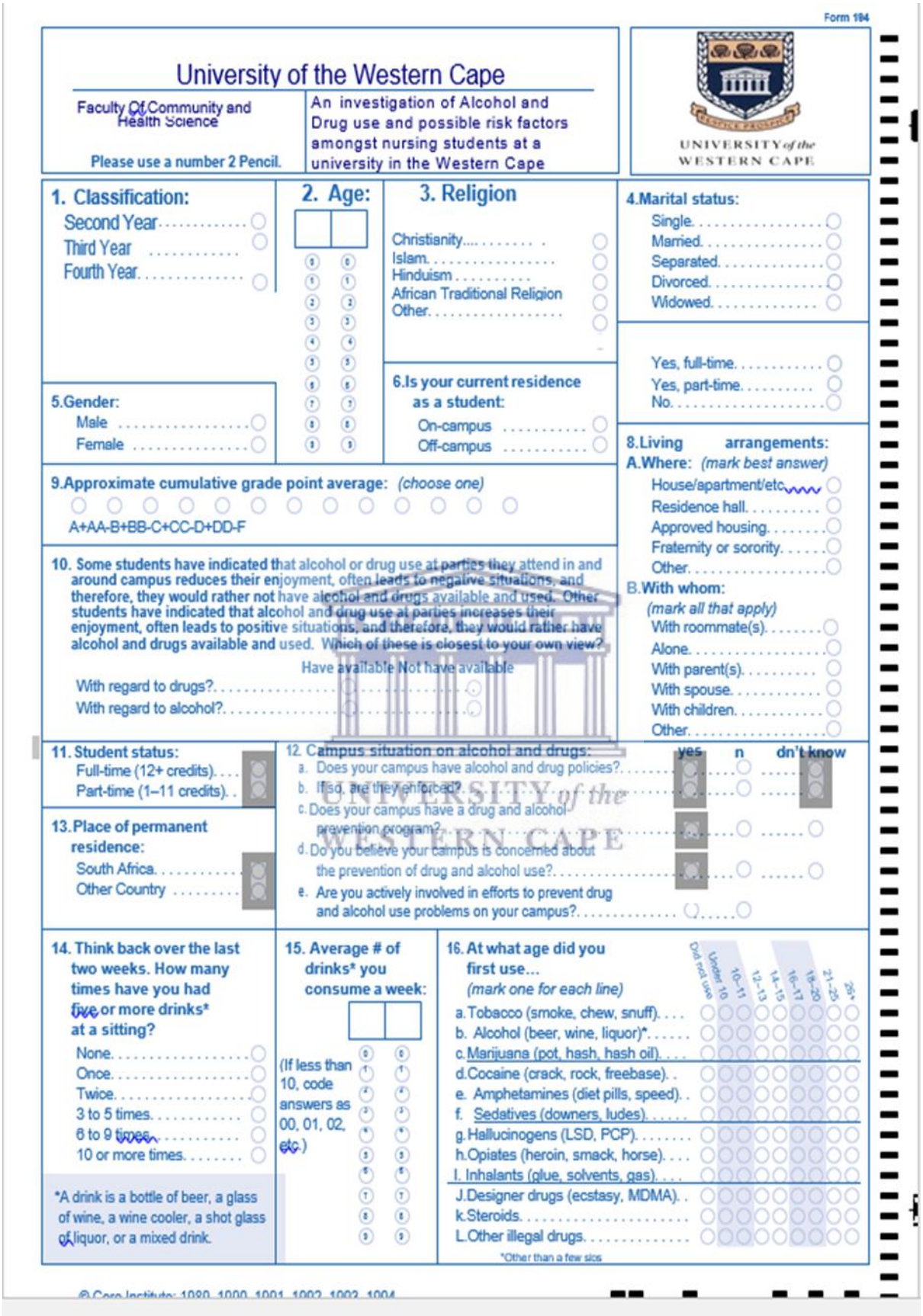
Ms Patricia Josias
Research Ethics Committee Officer
University of the Western Cape

Director: Research Development
University of the Western Cape
Private Bag X 17
Bellville 7535
Republic of South Africa
Tel: +27 21 959 4111
Email: research-ethics@uwc.ac.za

UWREC Registration Number: HSSREC-130416-049

FROM HOPE TO ACTION THROUGH KNOWLEDGE.

Appendix C: Questionnaire



Form 184

University of the Western Cape

Faculty Of Community and Health Science

Please use a number 2 Pencil.

An investigation of Alcohol and Drug use and possible risk factors amongst nursing students at a university in the Western Cape

UNIVERSITY of the WESTERN CAPE

1. Classification:
Second Year
Third Year
Fourth Year

2. Age:

3. Religion
Christianity
Islam
Hinduism
African Traditional Religion
Other

4. Marital status:
Single
Married
Separated
Divorced
Widowed

Yes, full-time
Yes, part-time
No

5. Gender:
Male
Female

6. Is your current residence as a student:
On-campus
Off-campus

8. Living arrangements:
A. Where: *(mark best answer)*
House/apartment/etc
Residence hall
Approved housing
Fraternity or sorority
Other

B. With whom:
(mark all that apply)
With roommate(s)
Alone
With parent(s)
With spouse
With children
Other

9. Approximate cumulative grade point average: *(choose one)*
A+ AA- B+ BB- C+ CC- D+ DD- F

10. Some students have indicated that alcohol or drug use at parties they attend in and around campus reduces their enjoyment, often leads to negative situations, and therefore, they would rather not have alcohol and drugs available and used. Other students have indicated that alcohol and drug use at parties increases their enjoyment, often leads to positive situations, and therefore, they would rather have alcohol and drugs available and used. Which of these is closest to your own view?

	Have available	Not have available
With regard to drugs?		
With regard to alcohol?		

11. Student status:
Full-time (12+ credits)
Part-time (1–11 credits)

12. Campus situation on alcohol and drugs:

	yes	n	dn't know
a. Does your campus have alcohol and drug policies?			
b. If so, are they enforced?			
c. Does your campus have a drug and alcohol prevention program?			
d. Do you believe your campus is concerned about the prevention of drug and alcohol use?			
e. Are you actively involved in efforts to prevent drug and alcohol use problems on your campus?			

13. Place of permanent residence:
South Africa
Other Country

14. Think back over the last two weeks. How many times have you had five or more drinks* at a sitting?
None
Once
Twice
3 to 5 times
6 to 9 times
10 or more times

*A drink is a bottle of beer, a glass of wine, a wine cooler, a shot glass of liquor, or a mixed drink.

15. Average # of drinks* you consume a week:
(If less than 10, code answers as 00, 01, 02, etc.)

16. At what age did you first use...
(mark one for each line)

	Did not use	Under 10	10–11	12–13	14–15	16–17	18–20	21–25	26+
a. Tobacco (smoke, chew, snuff)									
b. Alcohol (beer, wine, liquor)*									
c. Marijuana (pot, hash, hash oil)									
d. Cocaine (crack, rock, freebase)									
e. Amphetamines (diet pills, speed)									
f. Sedatives (downers, ludes)									
g. Hallucinogens (LSD, PCP)									
h. Opiates (heroin, smack, horse)									
I. Inhalants (glue, solvents, gas)									
J. Designer drugs (ecstasy, MDMA)									
k. Steroids									
L. Other illegal drugs									

*Other than a few sips

© Core Institute, 1980, 1990, 1991, 1992, 1993, 1994

17. Within the last year about how often have you used... *(mark one for each line)*

	Did not use	Once/year	6 times/year	Once/month	Twice/month	Once/week	3 times/week	5 times/week	Every day
a. Tobacco (smoke, chew, snuff)	○	○	○	○	○	○	○	○	○
b. Alcohol (beer, wine, liquor)	○	○	○	○	○	○	○	○	○
c. Marijuana (pot, hash, hash oil)	○	○	○	○	○	○	○	○	○
d. Cocaine (crack, rock, freebase)	○	○	○	○	○	○	○	○	○
e. Amphetamines (diet pills, speed)	○	○	○	○	○	○	○	○	○
f. Sedatives (downers, ludes)	○	○	○	○	○	○	○	○	○
g. Hallucinogens (LSD, PCP)	○	○	○	○	○	○	○	○	○
h. Opiates (heroin, smack, horse)	○	○	○	○	○	○	○	○	○
i. Inhalants (glue, solvents, gas)	○	○	○	○	○	○	○	○	○
j. Designer drugs (ecstasy, MDMA)	○	○	○	○	○	○	○	○	○
k. Steroids	○	○	○	○	○	○	○	○	○
L. Other illegal drugs	○	○	○	○	○	○	○	○	○

18. During the past 30 days on how many days did you have: *(mark one for each line)*

	0 days	1–2 days	3–5 days	6–9 days	10–19 days	20–29 days	All 30 days
a. Tobacco (smoke, chew, snuff)	○	○	○	○	○	○	○
b. Alcohol (beer, wine, liquor)	○	○	○	○	○	○	○
c. Marijuana (pot, hash, hash oil)	○	○	○	○	○	○	○
d. Cocaine (crack, rock, freebase)	○	○	○	○	○	○	○
e. Amphetamines (diet pills, speed)	○	○	○	○	○	○	○
f. Sedatives (downers, ludes)	○	○	○	○	○	○	○
g. Hallucinogens (LSD, PCP)	○	○	○	○	○	○	○
h. Opiates (heroin, smack, horse)	○	○	○	○	○	○	○
I. Inhalants (glue, solvents, gas)	○	○	○	○	○	○	○
J. Designer drugs (ecstasy, MDMA)	○	○	○	○	○	○	○
k. Steroids	○	○	○	○	○	○	○
L. Other illegal drugs	○	○	○	○	○	○	○

19. How often do you think the average student on your campus uses... *(mark one for each line)*

	Never	Once/year	6 times/year	Once/month	Twice/month	Once/week	3 times/week	5 times/week	Every day
a. Tobacco (smoke, chew, snuff)	○	○	○	○	○	○	○	○	○
b. Alcohol (beer, wine, liquor)	○	○	○	○	○	○	○	○	○
c. Marijuana (pot, hash, hash oil)	○	○	○	○	○	○	○	○	○
d. Cocaine (crack, rock, freebase)	○	○	○	○	○	○	○	○	○
e. Amphetamines (diet pills, speed)	○	○	○	○	○	○	○	○	○
f. Sedatives (downers, ludes)	○	○	○	○	○	○	○	○	○
g. Hallucinogens (LSD, PCP)	○	○	○	○	○	○	○	○	○
h. Opiates (heroin, smack, horse)	○	○	○	○	○	○	○	○	○
i. Inhalants (glue, solvents, gas)	○	○	○	○	○	○	○	○	○
j. Designer drugs (ecstasy, MDMA)	○	○	○	○	○	○	○	○	○
k. Steroids	○	○	○	○	○	○	○	○	○
l. Other illegal drugs	○	○	○	○	○	○	○	○	○

20. Where have you used... *(mark all that apply)*

	Never used	On campus events	Residence hall	Fraternity/sorority	Friend's apartment	Friend's car	Private parties	Other
a. Tobacco (smoke, chew, snuff)	○	○	○	○	○	○	○	○
b. Alcohol (beer, wine, liquor)	○	○	○	○	○	○	○	○
c. Marijuana (pot, hash, hash oil)	○	○	○	○	○	○	○	○
d. Cocaine (crack, rock, freebase)	○	○	○	○	○	○	○	○
e. Amphetamines (diet pills, speed)	○	○	○	○	○	○	○	○
f. Sedatives (downers, ludes)	○	○	○	○	○	○	○	○
g. Hallucinogens (LSD, PCP)	○	○	○	○	○	○	○	○
h. Opiates (heroin, smack, horse)	○	○	○	○	○	○	○	○
i. Inhalants (glue, solvents, gas)	○	○	○	○	○	○	○	○
j. Designer drugs (ecstasy, MDMA)	○	○	○	○	○	○	○	○
k. Steroids	○	○	○	○	○	○	○	○
l. Other illegal drugs	○	○	○	○	○	○	○	○

21. Please indicate how often you have experienced the following due to your drinking or drug use during the last year... *(mark one for each line)*

	Never	Once	Twice	3–5 times	6–9 times	10 or more times
a. Had a hangover	○	○	○	○	○	○
b. Performed poorly on a test or important project	○	○	○	○	○	○
c. Been in trouble with police, residence hall, or other college authorities	○	○	○	○	○	○
d. Damaged property, pulled fire alarm, etc.	○	○	○	○	○	○
e. Got into an argument or fight	○	○	○	○	○	○
f. Got nauseated or vomited	○	○	○	○	○	○
g. Driven a car while under the influence	○	○	○	○	○	○
h. Missed a class	○	○	○	○	○	○
i. Been criticized by someone I know	○	○	○	○	○	○
j. Thought I might have a drinking or other drug problem	○	○	○	○	○	○
k. Had a memory loss	○	○	○	○	○	○
l. Done something I later regretted	○	○	○	○	○	○
m. Been arrested for DWI/DUI	○	○	○	○	○	○
n. Have been taken advantage of sexually	○	○	○	○	○	○
o. Have taken advantage of another sexually	○	○	○	○	○	○
p. Tried unsuccessfully to stop using	○	○	○	○	○	○
q. Seriously thought about suicide	○	○	○	○	○	○
r. Seriously tried to commit suicide	○	○	○	○	○	○
s. Been hurt or injured	○	○	○	○	○	○

22. Have any of your family had alcohol or other drug problems: *(mark all that apply)*

- ○ Mother
- ○ Father
- ○ Stepmother
- ○ Stepfather
- ○ Brothers/sisters
- ○ Mother's parents
- ○ Father's parents
- ○ Aunts/uncles
- ○ Spouse
- ○ Children
- ○ None

23. If you volunteer any of your time on or off campus to help others, please indicate the approximate number of hours per month and principal activity:

- ○ Don't volunteer, or less than 1 hour
- ○ 4 hours
- ○ 5–9 hours
- ○ 10–15 hours
- ○ 16 or more hours 1–

Principal volunteer activity is: _____

24. Within the last year to what extent have you participated in any of the following activities? *(mark one for each line)*

	Not involved	Attended	Active involvement, non-leader	Leadership position
a. Intercollegiate athletics	○	n/a	○	○
b. Intramural or club sports	○	n/a	○	○
c. Social fraternities or sororities	○	○	○	○
d. Religious and interfaith groups	○	○	○	○
e. International and language groups	○	○	○	○
f. Minority and ethnic organizations	○	○	○	○
g. Political and social action groups	○	○	○	○
h. Music and other performing arts groups	○	○	○	○
i. Student newspaper, radio, TV, magazine, etc.	○	○	○	○

25. In the first column, indicate whether any of the following have happened to you within the last year while you were in and around campus. If you answered yes to any of these items, indicate in the second column if you had consumed alcohol or other drugs shortly before these incidents.

	Happened to you		Consumed alcohol or drugs	
	yes	no	yes	no
a. Ethnic or racial harassment	○	○		
b. Threats of physical violence	○	○		
c. Actual physical violence	○	○		
d. Theft involving force or threat of force	○	○		
e. Forced sexual touching or fondling	○	○		
f. Unwanted sexual intercourse	○	○		

If yes →

26. How do you think your close friends feel (or would feel) about you... *(mark one for each line)*

	Disapprove strongly	Disapprove	Approve	Approve strongly
a. Trying marijuana once or twice	○	○	○	○
b. Smoking marijuana occasionally	○	○	○	○
c. Smoking marijuana regularly	○	○	○	○
d. Trying cocaine once or twice	○	○	○	○
e. Taking cocaine regularly	○	○	○	○
f. Trying LSD once or twice	○	○	○	○
g. Taking LSD regularly	○	○	○	○
h. Trying amphetamines once or twice	○	○	○	○
i. Taking amphetamines regularly	○	○	○	○
j. Taking one or two drinks of an alcoholic beverage (beer, wine, liquor) nearly every day	○	○	○	○
k. Taking four or five drinks nearly every day	○	○	○	○
l. Having five or more drinks in one sitting	○	○	○	○
m. Taking steroids for body building or improved athletic performance	○	○	○	○

27. Do you believe that alcohol has the following effects? *(mark one for each line)*

	yes	no
a. Breaks the ice	○	○
b. Enhances social activity	○	○
c. Makes it easier to deal with stress	○	○
d. Facilitates a connection with peers	○	○
e. Gives people something to talk about	○	○
f. Facilitates male bonding	○	○
g. Facilitates female bonding	○	○
h. Allows people to have more fun	○	○
i. Gives people something to do	○	○
j. Makes food taste better	○	○
k. Makes women sexier	○	○
l. Makes men sexier	○	○
m. Makes me sexier	○	○
n. Facilitates sexual opportunities	○	○

28. On this campus, drinking is a central part in the social life of the following groups: *(mark one for each line)*

	yes	no
a. Male students	○	○
b. Female students	○	○
c. Faculty/staff	○	○
d. Alumni	○	○
e. Athletes	○	○
f. Fraternities	○	○
g. Sororities	○	○

29. Campus environment: *(mark one for each line)*

	yes	no
a. Does the social atmosphere on this campus promote alcohol use?	○	○
b. Does the social atmosphere promote other drug use?	○	○
c. Do you feel safe on this campus?	○	○

30. Compared to other campuses with which you are familiar, this campus' use of alcohol is... *(mark one)*

- Greater than other campuses ○
- Less than other campuses ○
- About the same as other campuses ○

31. Housing preferences: *(mark one for each line)*

	yes	no
a. If you live in university housing, do you live in a designated alcohol-free/ drug-free residence hall?	○	○
b. **If no,** would you like to live in such a residence hall unit if it were available?	○	○

32. To what extent do students on this campus care about problems associated with... *(mark one for each line)*

	Not at all	Slightly	Somewhat	Very much
a. Alcohol and other drug use	○	○	○	○
b. Campus vandalism	○	○	○	○
c. Sexual assault	○	○	○	○
d. Assaults that are non-sexual	○	○	○	○
e. Harassment because of gender	○	○	○	○
f. Harassment because of sexual orientation	○	○	○	○
g. Harassment because of race or ethnicity	○	○	○	○
h. Harassment because of religion	○	○	○	○

33. To what extent has your alcohol use changed within the last 12 months?

- Increased ○
- About the same ○
- Decreased ○
- I have not used alcohol ○

34. To what extent has your illegal drug use changed within the last 12 months?

- Increased ○
- About the same ○
- Decreased ○
- I have not used drugs ○

35. How much do you think people risk harming themselves (physically or in other ways) if they... *(mark one for each line)*

	Make no risk	Slight risk	Moderate risk	Great risk
a. Try marijuana once or twice	○	○	○	○
b. Smoke marijuana occasionally	○	○	○	○
c. Smoke marijuana regularly	○	○	○	○
d. Try cocaine once or twice	○	○	○	○
e. Take cocaine regularly	○	○	○	○
f. Try LSD once or twice	○	○	○	○
g. Take LSD regularly	○	○	○	○
h. Try amphetamines once or twice	○	○	○	○
i. Take amphetamines regularly	○	○	○	○
j. Take one or two drinks of an alcoholic beverage (Beer, wine, liquor) nearly every day	○	○	○	○
k. Take four or five drinks nearly every day	○	○	○	○
l. Have five or more drinks in one sitting	○	○	○	○
m. Take steroids for body building or improved Athletic performance	○	○	○	○
consume alcohol prior to being sexually active	○	○	○	○
o. Regularly engage in unprotected sexual activity with a single partner	○	○	○	○
p. Regularly engage in unprotected sexual activity with multiple partners	○	○	○	○

36. Mark one answer for each line:

	yes	no
a. Did you have sexual intercourse within the last year?	○	○
If yes, answer b and c below.		
b. Did you drink alcohol the last time you	○	○
	○	○
	○	○

37. During the past 30 days, to what extent have you engaged in any of the following behaviors? *(mark one for each line)*

	Zero times	One time	Two times	3–5 times	6–9 times	10 or more times
a. Refused an offer of alcohol or other drugs	○	○	○	○	○	○
b. Bragged about your alcohol or other drug use	○	○	○	○	○	○
c. Heard someone else brag about his/her alcohol or other drug use	○	○	○	○	○	○
d. Carried a weapon such as a gun, knife, etc. (do not count hunting situations or weapons used as part of your job)	○	○	○	○	○	○
e. Experienced peer pressure to drink or use drugs	○	○	○	○	○	○
f. Held a drink to have people stop bothering you about why you weren't drinking	○	○	○	○	○	○
g. Thought a sexual partner was not attractive because he/she was drunk	○	○	○	○	○	○
h. Told a sexual partner that he/she was not attractive because he/she was drunk	○	○	○	○	○	○

38. To what extent do you agree with the following statements? *(mark one for each line)*

	Strongly agree	Agree	Neutral	Strongly disagree	Don't know
a. I feel valued as a person on this campus	○	○	○	○	○
b. I feel that faculty and staff care about me as a student	○	○	○	○	○
c. I have a responsibility to contribute to the well-being of other students	○	○	○	○	○
d. My campus encourages me to help others in need	○	○	○	○	○
e. I abide by the university policy and regulations that concern alcohol and other drug use	○	○	○	○	○

39. In which of the following ways does other students' drinking interfere with your life on or around campus? *(mark one for each line)*

	yes	no
a. Interrupts your studying	○	○
b. Makes you feel unsafe	○	○
c. Messes up your physical living space (cleanliness, neatness, organization, etc.)	○	○
d. Adversely affects your involvement on an athletic team or in other organized groups	○	○
e. Prevents you from enjoying events	○	○
	○	○
	○	○

Appendix D: Information sheet

UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa
Tel: +27219592271 / 07353819463

E-mail: 2359643@myuwc.ac.za

INFORMATION SHEET

Project Title: An investigation of alcohol and drug use and possible risk factors amongst nursing students at a University in the Western Cape

What is this study about?

This is a research project being conducted by Gaotswake Patience Kovane at the University of the Western Cape. We are inviting you to participate in this research project because you are a nursing student at the selected University in the Western Cape.

The purpose of this study is to identify the possible risk factors associated with substance use among nursing students at a University in Cape Town. The researcher would also like to investigate the type of substances used by nursing students at the selected University.

What will I be asked to do if I agree to participate?

You will be given information about the study, if you agree to participate and meet the criteria of inclusion in the study, you will be asked to sign consent form and to complete a questionnaire that the researcher will hand out to you or you will complete the survey and consent signing electronically, that will last for about 30 minutes. Your role for the purpose of this study is merely answering a few questions regarding the risk factors associated with substance use and the substances nursing students use.

Would my participation in this study be kept confidential?

The researcher will undertake to protect your identity and the nature of your contribution. To ensure your anonymity, the survey is anonymous and will not contain information that may personally identify you. Your name will not be included

on the survey and other collected data, all participants will be allocated a study number which will be placed on the questionnaire and other collected data.

To ensure your confidentiality, all data collected will be kept in a locked filing cabinet; only study numbers will be used not names on data forms, and all computer files will be password protected.

If researcher writes a report or article about this research project, your identity will be protected.

What are the risks of this research?

There may be some risks from participating in this research study. All human interactions and talking about self or others carry some amount of risks. We will nevertheless minimise such risks and act promptly to assist you if you experience any discomfort, psychological or otherwise during the process of your participation in this study. Where necessary, an appropriate referral will be made to a suitable professional for further assistance or intervention.

What are the benefits of this research?

This research is not designed to help you personally, but the results may help the investigator learn more about risk factors associated with substance use amongst nursing students and type of substances they use. We hope that, in the future, other people might benefit from this study through improved understanding of the risk factors associated with the use of substances among nursing students.

Do I have to be in this research, and may I stop participating at any time?

Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify.

What if I have questions?

This research is being conducted by *Gaotswake Patience Kovane, Masters in nursing student at the School of Nursing* at the University of the Western Cape. If

you have any questions about the research study itself, please contact Gaotswake Patience Kovane 0735381946/ 2359643@myuwc.ac.za
Should you have any questions regarding this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact:

Prof. P Martin
Head of Department: School of Nursing
University of the Western Cape
Private Bag X17
Bellville 7535
pmartin@uwc.ac.za

Prof Anthea Rhoda
Dean of the Faculty of Community and Health Sciences
University of the Western Cape
Private Bag X17
Bellville 7535
chs-deansoffice@uwc.ac.za

This research has been approved by the University of the Western Cape's Humanities and Social Sciences Research Ethics Committee
REFERENCE NUMBER: HS21/10/82

Appendix E: Consent form

UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa

Tel: +27219592271 / 07353819463

E-mail: 2359643@myuwc.ac.za

CONSENT FORM

Title of Research Project: **An investigation of alcohol and drug use and possible risk factors amongst nursing students at a University in the Western Cape**

The study has been described to me in a language that I understand. My questions about the study have been answered. I understand what my participation will involve and I agree to participate at my own choice and free will. I understand that my identity will not be disclosed to anyone. I understand that I may withdraw from the study at any time without giving a reason and without fear of negative consequences or loss of benefits.

Participant's name.....

Participant's signature.....

Date.....

Appendix F: Permission to conduct study

7 September 2022

Dear Dr Gaotswake Patience Kovane

RE: REQUEST FOR PERMISSION TO CONDUCT RESEARCH AT THE SCHOOL OF NURSING, UNIVERSITY *of the* WESTERN CAPE

Name of Researcher: Dr Gaotswake Patience Kovane
Research Topic: *An investigation of alcohol and drug use and possible risk factors amongst nursing students at a University in the Western Cape.*
Institution: UWC
HSSREC Reference No.: HS21/10/82
UWC Permission Reference Code: UWCRP967563
Target population: B Nur 2nd, 3rd and final year students
Validity Period: 1 June 2022 – 1 June 2025

As per your request and evidence provided, we acknowledge that you have obtained the necessary permission and ethics clearance. Permission is therefore granted for you to conduct your research as outlined in your proposal.

Please note that while permission is granted to conduct your research (i.e. interviews and surveys) staff and students at the School of Nursing are not compelled to participate and may decline to participate or withdraw should they wish to.

Should you wish to make use of or reference the School's name, spaces, identity, etc. in any publication/s, you must first furnish the School with a copy of the proposed publication/s so that the School can verify and grant permission for such publication/s to be made publicly available.

As per your letter of permission to conduct research at the UWC from Dr Ahmed Shaikjee, Deputy Registrar, assistance to access student contact information, must be done through the office of the Deputy Registrar or your supervisor.

We wish you success with your research.

Yours sincerely

Prof Penelope Martin
Director: School of Nursing
Faculty of Community and Health Sciences
UNIVERSITY *of the* WESTERN CAPE
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