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Alcohol control at South African universities

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Alcohol Control at South African Universities

A Research Report submitted to the Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, in partial fulfilment of the requirements for the degree of Master of Public Health (MPH)

School of Public Health
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18 September 2021

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Candidate Declaration

I, Laetitia Anyma-Tsala Temper, declare that this research report is my own work. It is submitted in the partial fulfillment of the requirements for the degree of Master of Public Health, in the field of Health System and Policy in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination at this or any other university.

Signature:



18 September 2021

Dedication

Although I was childless at the beginning of this degree, Titus, Boaz and Keanu, your existence has influenced so much about this study. My academic desire to spring myself forward into a new career was one that was necessary but was almost derailed by postpartum depression. My desire to conclude this academic journey and finish strong was not only to prove to you, my boys, but also to prove to myself that by overcoming some of life's obstacles, you can achieve anything you put your mind to. In life it is not how you start, and not even how you finish, but how you handle the journey that determines the outcome. To my loving husband, Roland, you supported me in every shape and form to achieve this; you are the embodiment of love, *I mog di*. To my family, who helped me look after my sons while I pursued this degree, I am so grateful for your support and cheerleading. Sammy, this is also for you, thank you for everything you did for us. Finally, I would also like to dedicate this thesis to any woman who has ever suffered from post-partum depression. Through love and a network of support, I saw light and colour in my world again; I survived and overcame my dark days. You can too.

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Above all I thank God, your grace and mercy never cease to amaze me.

Abstract

Background

It is known that university students frequently engage in harmful alcohol consumption with serious consequences for their health, well-being and academic performance. However, there are currently no national guidelines regarding alcohol control at universities and technikons in South Africa. The National Drug Master Plan (NDMP) outlines a national strategy to address substance abuse but provides limited specific guidance to higher education institutions (HEIs). Campus alcohol policies (CAP) in low- and middle-income countries have also received very little attention in the academic literature to date. This study aims to explore the policies and practices of alcohol control currently used in South African universities and technikons by drawing on the knowledge, experiences and perspectives of national stakeholders and HEI administrators.

Methodology

This qualitative study explored the views of national and HEI participants on alcohol control in South African HEIs. Data was collected through in-depth interviews with 15 key informants (KIs) and then analysed using Thematic Network Analysis. Data was coded and the study themes were unearthed at different levels; thematic networks were then constructed to identify the overarching main themes.

Results

The majority of study participants believed that alcohol abuse was a significant problem in HEIs in South Africa. Commonly cited negative impacts related to compromised student safety, student health and academic performance. The respondents outlined a range of strategies currently implemented at HEIs to control alcohol access and consumption on campus. These focused mainly on providing information about the dangers of alcohol abuse, and regulating access to alcohol at university events through the issuing of event specific alcohol licenses. Only a few institutions have gone further in prohibiting alcohol industry marketing or sponsorship at their institutions.

KIs acknowledged the limitations of current initiatives, but identified a number of obstacles to improving alcohol control at HEIs in South Africa. One concern was the lack of national standardisation and coordination of alcohol control initiatives at HEIs. Informants also noted that current national and institutional surveillance systems for monitoring the problem are under-developed.

Conclusion

Alcohol abuse and its effects are an important public health issue in HEIs. Alcohol abuse affects the safety, productivity and health of students. However, this study has found that

alcohol control strategies at South African HEIs are currently poorly developed and coordinated at both the national and institutional levels.

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Abbreviations

AA	Alcohol Anonymous
AET	Adult Educational and Training
AIM	College Alcohol Intervention Matrix
AACUSC	Association of African College and University Student Communities
AUDIT	Alcohol Use Disorders Identification Test
AYDF	African Youth Development Fund
BD	Binge drinking
CAP	Campus Alcohol Policy
CDA	Central Drug Authority
DoH	Department of Health
DHET	Department of Higher Education and Training
DSD	Department of Social Development
DTI	Department of Trade and Industry
FET	Further Education Training
GBV	Gender Based Violence
HEAIDS	Higher Education and Training HIV and AIDS Programme
HEI	Higher Education Learning Institution
HED	Heavy episodic drinking
HIV	Human Immunodeficiency Virus
HREC	University of Witwatersrand Human Research Ethics Committee
KI	Key informant
KII	Key informant interview
LDA	Legal drinking age
LMIC	Low- and Middle-Income Countries
MRC	Medical Research Council
NDMP	National Drug Master Plan
NIAAA	National Institute on Alcohol Abuse and Alcoholism
NGO	Non-governmental Organisation
NPO	Non-profit Organisation
NSFAS	National student financial aid scheme
ONDCP	Office of National Drug Control Policy
SAADD	South African Against Drunk Driving
SAB	South African Breweries
SADHS	South African Demographic and Health Survey
SANCA	South African National Council on Alcohol and Drug Dependence
STI	Sexually transmitted infection

TVET	Technical and Vocational Education and Training
USA	United States of America
UK	United Kingdom
YRBS	Youth Risk Behaviour Study

Chapter 1: Introduction

1.1. Background

The adverse effects of alcohol are directly associated with the amount of alcohol consumed, and patterns of drinking. Drinking behaviour is categorised along a continuum of alcohol consumption ranging from safe to hazardous (1). Harmful drinking is defined as alcohol consumption that results in adverse events, while hazardous drinking is defined as a quantity or pattern of alcohol consumption that puts a consumer at risk for adverse health events (2).

The drinking patterns of university students, as a subgroup of the youth, have attracted public health attention internationally (3–7). University students appear to be less risk-averse and have been found to engage in more reckless behaviour while intoxicated, so that student drinking is often associated with harmful or hazardous drinking (3,8). Furthermore, a comparison of students versus non-students of the same age group has found that students were more likely to engage in binge drinking and were also more likely to experience the adverse effects of alcohol abuse (9).

The adverse effects of excessive alcohol consumption in students have been reported to include: behavioural changes that result in poor academic performance, absenteeism, a greater tendency to experiment with other illegal substances, alcohol poisoning, liver disease, injury, sexual harassment, and death (5,10,11). For example, a study in the United States of America (USA) found that over 500 000 full time students had suffered unintentional injuries while under the influence of alcohol, 600 000 had been assaulted or hit by a student under the influence of alcohol, and alcohol-related death was the leading cause of student deaths (11). However, there are very few studies on student drinking patterns from low- and middle-income countries to enable comparison (4,5,12–14).

A number of authorities have argued that strategies to curtail student excess drinking should be supported by appropriate university policies. These policies should acknowledge the problem of student drinking and alcohol abuse and influence the student environment in order to reduce the prevalence of harmful alcohol consumption (11,15). Policies to curtail excessive alcohol consumption by university students have been formulated in some countries. For example, universities in the USA have a legal obligation to implement alcohol control measures in their institutions given that the legal drinking age in the USA is 21 years of age, but also because of the serious alcohol-related harms associated with binge drinking (BD) and harmful alcohol consumption (16). Over the past years, studies have been conducted in the USA to evaluate the content and effectiveness of these campus alcohol policies (CAP) (17–19). Furthermore, the most advance recommendations made for CAP include and address the

management of other addictive substances in a comprehensive strategy addressing student health.

Although alcohol is considered a legal substance, it is grouped with other psychoactive and addictive substances such as nicotine, prescription and over-the-counter medication, as well as illicit substances such as heroin, cocaine and cannabis. Therefore alcohol abuse and its related harm are often grouped with other dependence-inducing substances in current national policies. There are several pieces of legislation in South African law that acknowledge the abuse of alcohol as problematic (20). According to both *The Treatment and Prevention of Alcohol Abuse Act* (Act no. 70 of 2008) and the National Drug Master Plan (NDMP), alcohol is acknowledged as a psychoactive substance with the potential to cause alcohol-based dependence (21).The NDMP reiterates the norms and standards with regard to substance control, treatment and the prevention of alcohol abuse found in *The Treatment and Prevention of Alcohol Abuse Act*. The NDMP also outlines South Africa's three strategies to deal with substance abuse; namely, to decrease substance demand, decrease substance supply, and decrease substance abuse-related harm (21). There is currently no act providing for the regulation of alcohol use in HEIs. The Department of Social Development (DSD) in South Africa developed and launched a youth substance abuse prevention programme, called *Ke Moja*, in 2003 (22). This programme targets primary schools, high schools, tertiary universities, further education training (FET) colleges, and youth who are out of school and out of work. The initial programme was piloted in a few provinces and in primary schools before it was rolled out in secondary and tertiary institutions throughout the country in 2008 (22,23). There have been few evaluations of the programme in tertiary institutions, and only for learning institutions in urban areas, but one report showed that students responded well to the content (24).

Beyond these legal and policy frameworks, little is known about the perceptions and experiences of administrators in tertiary education regarding alcohol control at higher education learning institutions (HEIs) in South Africa.

1.2. Literature Review

This literature review aims to provide background knowledge of recent work on the research topic, helping to build understanding of the topic and its associated terminology. This chapter reviews studies on general alcohol consumption, student alcohol consumption, and university alcohol policies. It first reviews the international literature on these topics before focusing more specifically on South African studies.

1.2.1. Alcohol consumption around the world

The consumption of alcohol is a common practice worldwide (25). A recent report found that worldwide consumption levels are currently 6,5 litres of pure alcohol per person over the age of 15, which translates to approximately 13,5 grams of alcohol being consumed per person each day (26). Approximately 16% of the world's drinkers engage in heavy episodic drinking (25), which is defined as the consumption of 60 grams or more of pure alcohol on one occasion. In terms of regions, Africa comes second, after South East Asia, with an alcohol consumption of 19.6 litres per capita (26).

The same report also confirmed that alcohol abuse is a significant global threat to the youth, as it has been found that the youth tend to engage in heavy episodic or hazardous drinking with significantly increased risk of alcohol harm (26).

1.2.2. University student alcohol consumption around the world

International studies have reported that university students in particular frequently engage in heavy episodic drinking (HED) or binge drinking (BD). A review conducted during 2005 and 2006 assessed the prevalence of student alcohol use in Africa, Asia, Australasia, Europe and South America (3). A number of studies included in the review found that students engaged in heavy episodic drinking with harmful, hazardous behaviours, and some were already alcohol-dependent (27–31). For example, a study conducted at a university in Sweden (29) found that hazardous drinking was reported by 50% of the female students and 71% of male students. This same study found that 20% of females and 50% of males reported having black-outs and being intoxicated on a weekly basis, in the three months preceding the survey (29) Only three studies were included in the review from the African region: one from Egypt and two from Nigeria (6,32,33). One of the studies in Nigeria used the Alcohol Use Disorders Identification Test (AUDIT) to identify harmful alcohol consumption in students. The authors identified 107 students with alcohol-related harm from a total of 810 enrolled into the study. Of the 107 students identified, 76 were categorised with hazardous drinking, 25 with harmful drinking and 6 with alcohol dependence (6). The review identified not having class on a Friday and living in university accommodation as possible environmental risk factors.

The review provided useful insights into alcohol abuse by students, but also identified certain methodological deficiencies in this literature. For example, convenience sampling was the most common sampling technique used in these studies, which compromises their internal validity. Furthermore, it is difficult to directly compare results across different studies because they use different measures of drinking behaviour. The Alcohol Use Disorders Identification Test (AUDIT) is a questionnaire developed by the World Health Organisation (WHO) to determine the prevalence and distribution of drinking behaviour (34). Fortunately, the AUDIT

tool has been used in several studies in university settings, aiding international comparison (35–37). The questionnaire consists of 10 items, with questions related to alcohol consumption, alcohol-related problems and alcohol dependence. Each item has a scoring range from zero to four, with 40 being the maximum score of the test. A score of 0-8 is indicative of safe drinking, 8-15 is indicative of hazardous drinking, 16-19 of harmful/dangerous drinking, and a score of 20 or more indicates alcohol dependence.

1.2.3. University alcohol policy interventions around the world

Campus Alcohol Policy (CAP) responses to address alcohol abuse by university students has been seen as important tools to mitigate dangers associated with binge drinking in the USA (16). . Addressing the high prevalence of alcohol consumption and alcohol-related harm has been a key priority in the USA due to high levels of harm reported to be alcohol-related In 1989, the USA government passed the Drug Free Schools and Communities Act to address substance abuse in its higher education institutions (38). The law requires higher education institutions to establish policies to address the unlawful use, possession, and distribution of drugs and alcohol as a condition to receive federal financial assistance (38). American universities are required at a minimum to disseminate information regarding the following: the laws that regulate alcohol and drug use; the biological effects and risks of alcohol and illicit drug use; information on prevention programmes such as education and counselling as well as treatment programmes; and the consequences and actions that the institution will take on a student who violates the policies (38). The Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act (also known as the Clery Act or Clery) (39), is another law that requires universities to report their crime statistics to inform students on campus safety and inform government of the safety status of HEIs in the USA. This act links student health and wellness to negative behaviours associated with BD resulting in acts of crime. Incidents of crime as a result of alcohol or drugs are required to be specified in the public report. Higher educational institutions are liable to be fined should they not compile with the requirements of the Clerly Act (40).

The College Alcohol Intervention Matrix (AIM) is a guide for tertiary intuitions administrators on college alcohol control interventions developed by the National Institute on Alcohol Abuse and Alcoholism (NIAAA). The guide offers options of evidence based information to help administrators make the best informed decisions by evaluating interventions they can use based on the quality of research, relative cost, barriers to implementation and effectiveness to reduce alcohol consumption and its associated harms. The matrix offers intervention options at an individual level and environmental level interventions. See a summary of these interventions in Appendix J and Appendix K.

A study by Leontini *et al* (41) in 2017 found that a policy in place, or lack thereof, can have a significant impact on the pattern and frequency of drinking at an HEI. This case study aimed to understand CAP and how administrators at six Australian universities represented and responded to student drinking. The study consisted of two parts, a qualitative part and a content analysis of CAP. Twelve minimally structured interviews were done with the university principals. Salient findings of the study were that although administrators perceived students to be over 18 and therefore had a right to consume alcohol and do so responsibly, they also found excessive alcohol use to be a problem in individuals or small groups of students (41). In the context of CAP, this created a problem whereby campus policies allowed drinking in many settings that supported harmful drinking in students. The authors found that the administrators failed to link the permissive nature of the policies to the culture of heavy drinking experienced by the universities (41).

Some published studies have explored the content of CAPs, with the aim of establishing a working checklist for HEIs in the USA (18,42–44). Faden and Baskin (17) conducted an evaluation of online alcohol policy information of 52 HEIs in the USA in order to establish a working minimum policy content requirement for CAPs. The authors identified four core categories into which policy content can be organised:

1. Information or explanation: involves policy components relating to educating students of the law and health risks, plus information regarding counselling as well as contact details for this service.
2. Rules, restrictions and requirements: relates to components with restrictions on consumption in different settings, alcohol sponsorship and using alcoholic references in advertising, kegs, drinking games, and advertising of alcohol.
3. Consequences to individuals: relates to disciplinary action for individual students who breach university policies. Consequences for individuals may vary from a fine, a warning, suspension and expulsion to dismissal from residence. Some consequences include alcohol education, alcohol evaluation or treatment.
4. Consequences to groups: relates to disciplinary action for student groups who breach university policies. Possible consequences for groups involve dissolution of the organisation, or prohibition to sell or serve alcohol (17).

Chitty *et al* (44) conducted a CAP content analysis in 11 universities in one state in Australia by using the same components as Faden and Baskin, although they identified and added other categories to Faden and Baskin's checklist to address the inclusion of monitoring and evaluation, as well as recommendations made by the WHO's Global Strategy to Reduce the Harmful Use of Alcohol (45). The study analysis centred on recording the presence of a component, and then calculating the sum and proportion of required components. Findings of

this study showed that the checklist was implemented poorly by all 11 universities. Only 27.3% of CAPs had content on disciplinary actions to groups or student societies or a restriction on the types of alcohol sold. The highest compliance was for providing information about counselling/treatment, and support for people with alcohol use problems. Furthermore, 90% had content with regard to engaging in responsible, respectful and appropriate behaviours when consuming alcohol, content that specified the link between the (non-)availability of non-alcoholic drinks and food, and excessive drinking There was great variation on review dates, definition of a student community (whether or not the surrounding commercial environment was included in the definition), and the overarching aims of the policy. None of the university CAPs made mention of monitoring or evaluating (44). Because the study was limited to one state, it may not be applicable to the whole country.

The studies by Faden and Baskin (18,46) and Chitty *et al* (44) differed significantly based on the aims of the studies. Chitty *et al* aimed to not only report the main overarching themes of the CAP but also to report the presence or absence of certain components in the Faden and Baskin study. The main themes of the study could be divided into two main themes based on the aims of the CAPs: mainly policies to optimise the safety and health of students and policies that aimed to protect the university. The suthemes associated with the former being: the promotion of responsble behaviours and attitudes, providing a safe and healthy environment and providing access to information. The latter main them was associated with policies that aimed to preserve the reputation of the institution, adhere to the countries legislative reuirements, reduce risk to roperty damage (44). . Furthermore, Chitty *et al* (44) did not confirm completeness of the the content of the CAP online by confirming it with HEI administrators. By seeking agreement between the online CAPs and actual practice as reported by staff, Faden and Baskin (18,46) were able to identify other practices used on campus that were not neccessarily captured by the online CAPs.

According to Lange's (47) Unified Theory of Prevention, HEIs should consider a comprehensive approach to any alcohol or drug prevention strategy. **Error! Reference source not found.** illustrates the important components of his theory. This framework highlights policy options that target the individual, offer harm minimisation solutions, address social norms, mobilise community action and support research. Individual level policies address access control to alcohol. Behavioural alternatives seek to give students substance-free activities, which might encourage and support them to make different behavioural choices and minimise the risk of alcohol harm (47). Enforcement and access policy options are there to repel or remove the attractiveness of alcohol. This can be done through a social norms marketing campaign, counter-advertising, or simply enforcing rules and regulations. The latter three components lie at the core of any prevention strategy. Community action, through collaboration

with local alcohol outlets and law enforcement agencies, is vital to achieving and sustaining the changes in alcohol-related behaviour one would like to see in a student community. Lastly, research is important for programme evaluation and planning (47).



Figure 1.1: Lange's unified theory of prevention (47)

Policy interventions to curb the harmful use of alcohol by students in the USA appear to have been partially effective, especially where multilateral approaches have been used, as illustrated by Lange's diagram (19,48,49). These not only deal with the supply and demand of alcohol, but also consider the social norms associated with alcohol consumption in the student environment, and implement appropriate environmental strategies to influence those norms. Toomey, Len and Wagenaar (19,48) published a review of the most effective university interventions. The authors found 20 studies that focused on environmental strategies to curb college drinking. Three studies investigating the policy of limiting the number of alcohol establishments found that higher drinking levels were associated with higher densities of alcohol establishments in the vicinity of the campus. The latter was also associated with higher reports of alcohol-related harm (19). Three studies indicated that the restriction of 'happy hours' and limiting the amount of alcohol at parties or campus events was associated with a decrease in alcohol consumption (49). Furthermore, it was found that on campuses with a zero tolerance policy (a total ban of alcohol on university property), students were less likely to have episodes of hazardous drinking and were more likely to abstain from drinking (50). However, the lack of general applicability of these studies should be treated cautiously, as all were cross-sectional studies.

A meta-analytical review of mandated alcohol interventions for students who violated CAP has some compelling results to inform administrators on policy intervention options. Carey *et al* (51), reviewed 31 studies, all published between 1991 and 2015, where the inclusion criteria required studies to use a pre-test and post-test design, and assessed alcohol use as the study outcome. The authors aimed to determine the effectiveness of the policy strategies by linking the strategies used to alcohol use in students. The authors found that only 5 studies had significantly less alcohol consumption than their control groups. The authors also found that the interventions that generated the greatest reduction in alcohol consumption were associated with goal-setting, personalised feedback, and expectancy challenges. Goal-setting helps to facilitate behavioural change through a self-management strategy. Personalised feedback helps a student to become more aware of any alcohol harms they suffer as a consequence of their excessive drinking (51). The expectancy challenge aims to change the alcohol expectancy process to reduce alcohol use, whereby the motivation to consume alcohol is driven by a positive expectancy of consumption alcohol ("If I drink I will have more fun at the party"). By contrast, negative expectancy of consumption is linked to practising restraint ("If I drink I will be hung over") (52). Despite the intervention gains observed, the authors found that the gains deteriorated after 3 months, with no benefit observed after a year. They recommended that "booster" interventions be given at different time intervals to maintain the gains.

1.2.4. Alcohol consumption in South Africa

South Africa's per capita alcohol consumption is approximately 8.2 litres per capita, which is above the international average of 6.5 litres (53). As a region, Southern Africa has the highest consumptions rates in Africa, with South Africa as the leading consumer of alcohol in the region and the continent (54). Furthermore, South Africa is estimated to have a high unrecorded consumption rate of 2.9 litres per capita, placing our total per capital consumption at closer to 11 litres per capita (26). Unrecorded alcohol consumption refers to the consumption, distribution and sale of alcohol that takes place outside government control (26). The most recent South African Demographic and Health Survey (SADHS) (55) found that 61% of men and 26% of South African women had ever consumed alcohol. However, the prevalence of risky and problem drinking in women was 9% overall, and 4% for women between the ages of 20-24 years old. For men those figures were 36% and 22% respectively. Another study evaluated trends in the prevalence of alcohol use in South African youth from four national prevalence surveys – the SADHS from 1998 and 2003 and the Youth Risk Behaviour Study (YRBS) from 2002 and 2008 (56). They confirmed an increase in female youth binge drinking. For example, the SADHS survey revealed female binge drinking increased from 27.3% to 36.6

% between 1998 and 2003, and the YRBS surveys reported an increase from 17.9% to 23.7% from 2002 to 2008 (56).

1.2.5. University student alcohol consumption in South Africa

Although the national prevalence of alcohol consumption by university students is unknown, individual studies have explored the prevalence, motivations, effects, outcomes and drinking patterns of selected students from various South African universities (57–65). Young and de Klerk (66) conducted annual drinking surveys at Rhodes University over two years, 2007 and 2008. The survey was completed by 2,049 students in 2007 and 1,119 in 2008. Both survey results showed that approximately half of the students reported drinking patterns that were hazardous, harmful or alcohol-dependent. Peltzer and Phaswana's (60) study, using a mixed-method design and conducted at the University of the North (now known as the University of Limpopo), reported a greater risk of alcohol abuse in males (60). The qualitative aspect of the study made use of focus group discussions to explore different aspects of alcohol use. Some of the main findings included the easy accessibility of alcohol in university residences, and the perception held by students that no student party could go on without alcohol use. Students also reported they were introduced to alcohol by a friend or acquaintance (60). Students were aware of the behavioural (aggressive behaviour), biological (damage to the brain, liver and kidneys) and social (loss of family and friends) effects of alcohol, but mentioned that alcohol was also a coping mechanism, stress reliever and a confidence-booster Another quantitative study found that 88.3% of social work students consume alcohol, with first year students being the biggest consuming group (63). Enjoyment was the primary reason for consuming alcohol, with students practising moderate drinking by consuming 2 to 4 drinks in one sitting (63). This study was a cross-sectional one, with the majority of participants being female.

1.2.6. Alcohol policy interventions in South Africa

According to the National Liquor Norms and Standards Act, it is illegal for individuals under the age of 18 to consume and purchase alcohol in South Africa (67). *The Prevention and Treatment of Drug Dependence Act* (No 20 of 1992) and the *Prevention of and Treatment for Substance Abuse Act* (No 70 of 2008) are important pieces of legislation that have shaped how the government addresses substance abuse in South Africa. These laws form the legal foundations on which the National Drug Master Plan (NDMP) of 2013-2017 is based. The NDMP is the national document dealing with all substance abuse issues of South Africa (23). The Central Drug Authority (CDA) is the statutory body tasked with implementing all the plans of the NDMP, and includes representatives from 18 national government departments, three national government entities, and 13 experts drawn from research councils, faith-based organisations and non-governmental organisations (NGOs). Members of the CDA develop and apply the NDMP but also play a role in developing practice, protocols and policies relating to

substance abuse. The NDMP outlines the work of different government departments in their specific portfolios to address substance abuse. The Department of Social Development (DSD), Department of Higher Education and Training (DHET) and Department of Health (DoH) are three prominent departments involved in alcohol prevention strategies at universities and colleges (23,68).

The DSD launched and developed a substance abuse prevention programme in 2003 called *Ke Moja* (22), which is a Sesotho word meaning “I am fine” - referring to the state of well- being without the use of drugs. This programme aimed at targeting primary schools, high schools, tertiary institutions, further education training colleges (FET), and youth who are out of school and out of work (22,23). The programme aimed to educate targeted youth about drug dependence, give them information about drug abuse, and establish registered treatment centres. Through partnerships with non-governmental organisations, the African Youth Development Fund (AYDF) trained local coaches and coordinators to implement the programme objectives. Coaches were often post-matriculants functioning as mentors to targeted youth and children. These coaches worked together with social workers to help identify scholars or youth with substance abuse. The social worker was later tasked with working with families and referring the identified scholar or youth to a treatment facility.

Ke Moja was a programme that was well received despite major implementation challenges (69). There have been few evaluations of the programme in tertiary institutions, but one report showed that students responded well to the content (although that study was confined to urban institutions) (22). A qualitative study by Khosa *et al* reported the progress of the programme’s implementation. In-depth interviews with the director of the AYDF, the coaches and training coordinators were done. According to programme reports, approximately 399,760 children and out-of-school youths were reached between 2013 and 2015, and prior to that, between 2012 and 2013, approximately 44,184 were reached. These numbers superseded targeted numbers by 178% in 2013/14 to 574% in 2014/15. The reach of the project was successful due to the multi-platform rollout of the project. The programme was rolled out in 469 schools and 478 out-of-school contexts which included youth clubs and churches. Although the programme was rolled out in 2003 in 5 sites of Gauteng province, it took 10 years before independent monitoring and evaluation was done by the AYDF. Local non-profit organisation (NPOs) were resistant to the monitoring as they felt it encroached on their ownership of the project after ten years of monitoring themselves (69). This resulted in issues of ownership and lack of morale. Local implementers felt a top-down approach was eroding their inclusion in major decision-making processes about the project, as they had been partners from its inception. Furthermore, independent monitoring and evaluation increased the administrative workload of local NPOS, which contributed to a lack of motivation and affected their performance (69).

South Africa's *Draft Policy for the Management of Drug Abuse by Learners in Public Schools and Further Education and Training Institutions* is a document containing guidelines for all levels of education to manage the issue of drug abuse in their settings (70). The draft policy encourages all learning institutions to have policies on the prevention and intervention of substance abuse. It further stipulates that these policies and procedures should give priority to (70):

- ensuring the development of a safe and supportive school environment that places value on human dignity and innocence;
- education about substance abuse and drugs to the entire school community;
- ensuring the cultivation of varied responses in the management of drug-related incidents;
- ensuring that educators dealing with drug-related incidents are properly trained; and
- ensuring that these policies and procedures are regularly monitored and evaluated to manage drug-related incidences in schools or institutions.

The draft policy is generic and does not provide for different contexts or different levels of education. In particular, universities are slightly different in that university students are legally allowed to consume and buy alcohol. Also, the culture of drinking is often deeply entrenched in the social context of most universities, therefore generic policies may not suffice to influence this particular group of youths at risk (66,71). A more focused approach, taking these specific differences into consideration, may be needed to curb excessive drinking by university students. Further research on these issues is necessary.

1.3. Study aim, justification and objective

1.3.1. Statement of problem

Although the NDMP and the draft policy on managing substance abuse in students at public institutions acknowledge the role of universities in alcohol control, the policy does not describe the specific roles and responsibilities of South African universities (23). Furthermore, not much is known about the alcohol strategies currently implemented at South African HEIs or the experiences of administrators involved in alcohol control.

1.3.2. Study justification and aim

At present there is no comprehensive national document to inform the alcohol control practices at tertiary institutions in South Africa. The draft policy on substance abuse for learners and students provides broad and general guiding principles that are not focused on the specificities of tertiary education institutions (70). The NDMP provides a national cohesive plan to address substance abuse in South Africa and includes universities in the national plan. However, the

NDMP gives little attention to the exact role of universities in the plan. Studies have found that youths entering the university environment are especially at risk of harmful and hazardous alcohol drinking patterns with subsequent negative alcohol-related consequences, and the university environment offers specific challenges that affect this at-risk population (71–74). Although relatively few South African studies have been done to determine the national prevalence of problematic alcohol consumption at tertiary institutions, these studies indicate that the prevalence of drinking is high, with a significant number of students engaging in hazardous and harmful drinking, with associated negative consequences (57,60,75,76).

Little research has been done to date in low- and middle-income countries (LMICs) with regard to alcohol control policies at universities - and none in the South African context. Through an exploration of the perceptions of policy makers and university administrators about CAP, this study aims to fills a gap in what is currently know about CAP in South Africa.

The aim of this study is to investigate the perceptions of current alcohol policies and practices in South African universities and technikons.

1.3.3. Study objectives

The specific study objectives are:

1. To describe the perceptions of key informants on the impact of alcohol abuse at South African universities.
2. To describe the current alcohol control strategies in place in South African universities and technikons.
3. To describe the experiences of key informants in relation to the alcohol control policy process at their respective institutions.
4. To summarise the recommendations made by key informants on alcohol control at universities and technikons in South Africa.

Chapter 2: Methodology

This chapter details the research methodology used by describing the study design, methodological choices, sampling strategy, participant selection, and study setting. The methods of data collection, data management, and data analysis are also explained. The chapter ends by highlighting the important ethical considerations.

2.1. Study design

This study made use of a qualitative study method, as this was more appropriate to explore the perspectives of study participants. Key informant interviews (KIIs) were conducted to investigate the perspectives of participants from HEIs and as well as national policy-makers and stakeholders. In-depth interviews were conducted with the national key stakeholders, while semi-structured interviews were conducted with university informants at selected HEIs.

2.2. Study population

The National Drug Master Plan (NDMP) identifies the following national departments as key stakeholders in alcohol control at universities: the Departments of Health (DOH), Higher Education and Training (DHET), and Social and Development (DSD). The Central Drug Authority (CDA) is the division of the DSD responsible for implementing all resolutions of the NDMP, advising the minister on all matters pertaining to drug and substance abuse, and promoting any measures to curtail drug and substance abuse. Experts working in the private or public sector have also been identified as contributors to policy-making, such as experts in non-government organisations (NGOs) and research councils.

Post-education and training institutions in South Africa comprise three distinct categories: private and public Higher Education Institutions (HEIs), Technical and Vocational Education and Training (TVET) and private Adult Educational and Training (AET). This study aimed to look at all public HEIs and TVET institutions in South Africa. There are 26 registered HEIs and 120 registered TVET public institutions in South Africa (77). Private universities were excluded from this study to keep it more feasible. Private and public AET institutions were also excluded from this study as they have very different student populations, and most studies have reported excessive alcohol consumption amongst young university or college students.

2.3. Study sample

Purposive sampling was used to select key informants (KI). They were identified based on their engagement in the issue of alcohol as well as their engagement with the NDMP if they were potential national KI. The researcher initially aimed to interview 10 national KI and 10 universities KI. The national KIs were identified and selected from the identified key national department or partner organisations of the NMDP or from the DHET list of registered HEIs in

South Africa. A total of national 5 KIIs were conducted where KIs were drawn from the DSD, CDA, an NGO: Soul City, Association of African College and University Student Communities (AACUSC), and the South African Medical Research Council (MRC), see Table 2.1. Although purposive sampling was used to identify key informants, snowball sampling (78) was also used to identify other potential study participants involved in alcohol control as regards the NDMP and universities. This sampling technique was useful to the study as one KI did not have complete information on the research topic, and follow-up with their colleague was done to deepen information on the research question. Key Informants referred or recommended colleagues to the researcher. This is how the KIs were identified and recruited into the study.

Table 2.1: Number of interviews conducted

Targeted Key Informants:	Targeted interviews	Total interviews done
National KII	10	5
University KII	10	10*
Total study participants	20	15

**Although 10 KIIs were done, 2 pairs of KIs were from the same tertiary institutions. Thus only 8 tertiary institutions were included in the study*

Key informants at HEIs were identified from the list of registered public HEIs as recognised by the DHET (see Appendix B and Appendix C) .The number of universities in South Africa is too small to sample, thus all registered universities were invited to participate in the study. The study aimed to target only universities but later added one TVET institution due to poor participant recruitment. The study aimed to conduct interviews with 10 university administrators due to logistical constraints, but finally only managed to conduct interviews at 8 tertiary institutions.. The selection of the 10 universities was primarily based on available access to the researcher. The dean of student affairs was initially targeted for interview in each institution. However, snowball sampling was again used to identify other useful key informants aside from the dean, if the dean was not available. Snowball sampling was used twice, resulting in two different interviews being conducted at the same university with two different KIs. Six participants held the title of dean of student or student affairs equivalent, with one nurse, one counsellor, one psychologist and one head of residence. The 10 HEI KI were drawn from the 8 institutions listed in Table 2.2.

Table 2.2: Characteristics of HEI Key Informants

	Tertiary Institution	Location	Province	Total number of students	Number of participants recruited
1	North West University	Potchefstroom	North West	74,355	1
2	University of Pretoria	Pretoria	Gauteng	50,000	1
3	University of the Free State	Bloemfontein	Free State	33,000	1
4	University of Witwatersrand	Johannesburg	Gauteng	32,703	2
5	Nelson Mandela University	Port Elizabeth	Eastern Cape	26,000	1
6	Central University of Technology	Johannesburg	Gauteng	20,000	1
7	Vaal University of Technology	Vanderbiljpark	Gauteng	17,000	2
8	University of Limpopo	Turfloop, Pretoria	Limpopo	20,000	1

2.4. Study setting

The study took place in 5 provinces: Gauteng, Free State, Eastern Cape, Limpopo and the North West province. Gauteng is host to 7 of South Africa's public universities, as listed in Appendix B. The province occupies just 1.4% of South Africa's area and is host to approximately 14 million people. The province has 3 major metropolitan municipalities: the City of Johannesburg, City of Tshwane and Ekurhuleni. (79). The Eastern Cape is the second most populated province of South Africa, with 7 million people residing in the province. The Free State is South Africa's third largest province, occupying approximately 10% of South Africa's area and is host to approximately 2.7 million people. The province has one public university, the University of the Free State (80). Lastly, the North West province borders with Botswana, is west of Johannesburg and north of the Free State. The province has a population of 3.5 million people and contains 2 universities, the University of Limpopo and University of Venda (80). It is important to note that University of Limpopo and North West University have campuses and residences in different provinces, and thus function under different liquor laws depending on the location of the campus.

2.5. Data collection

All KI were contacted either telephonically or via email to inform them about the study and invite them to participate (see Appendix D). Telephone numbers and email addresses were sourced through relevant organisation, government or institution websites. All KIs who accepted participation in the study were sent an informed consent form to sign prior to arranging the time, date, place and mode of interview (See Appendix E and Appendix F). All interviews were conducted from July 2014 to July 2015. Interviews were conducted in settings

at the convenience of the researcher and participant. The modes of the interviews were telephonic, over Skype or face-to-face, depending on the geographical location of the KI and researcher. All national KII were conducted in person, 6 HEI interviews were conducted in person while the remaining four were conducted either telephonically or through Skype. Both consent forms for participation into the study and consenting to being tape recorded were required to be completed and returned to the researcher before an interview could be conducted.

All interviews were conducted in English. Interviews of national KIs were 40 minutes long, while interviews with university administrators were approximately 60 minutes long. All interviews were done by the researcher and recorded using a digital voice recorder. Field notes were taken by the researcher during each interview.

Two different interview guides were designed to gather information from the different targeted groups. Appendix G shows the in-depth interview guide for national, NGO and research institute KI. The questions mainly pertain to national strategies for alcohol control at universities, with themes of current policies, programmes, monitoring and implementation. Semi-structured interviews were conducted with university administrators. Appendix H contains the interview guide for university administrators, and mainly covers questions on the current university policies, current national policies as well as how universities implement, develop and enforce alcohol policies.

2.6. Data analysis

A professional external transcriber was hired to transcribe all digital recording verbatim into Microsoft Word documents. The transcriptions were crosschecked and validated by the researcher, who confirmed that the audio and text were the same and edited any errors before analysis began. All data was anonymised with each HEI and national key informants denoted by codes. All the researcher's field notes were captured electronically and imported with all KI interviews transcripts into MAXQDA, a qualitative research analysis software program, which was used to help with the coding of text and thematic analysis of data. The study used Thematic Content Analysis to analyse the transcribed data (81). More specifically, Thematic Networks was the tool used to build themes through inductive coding (82). Text segments were coded by emerging basic themes, which were later summarised and grouped together as an organising theme. Organising themes were later grouped together and analysed to provide the final overarching themes of the study. A code book was developed with a definition of each code in MAXQDA. A sample of the transcripts was assessed independently by a second coder, the researcher's supervisor (DB), to check the quality of analysis and ensure reliability. Analysis and identification of emerging themes took place during the field work process.

2.7. Ethical considerations

Formal ethical clearance was obtained from the University of Witwatersrand Human Research Ethics Committee (HREC), certificate number M140719 (See Appendix I).

The study posed minimal risks to the study participants (selected KI at national and at HEIs). Study data was anonymised - all identifiers were removed from the data after data collection and each participant was allocated a study identification number. Data was collected privately in the workplace of the participants when it was done in person. The recruitment and inclusion of KI was done with no coercion. Given the senior position of the KIs it was unlikely that they would be coerced to participate in the study. The participants received no direct benefits from their participation into the study. The information collected may potentially benefit future policy planners and university administrators in the formulation of university policies.

KI were given consent forms that they signed to consent to an interview. All voice recordings content was kept confidential between the researcher and key informant. A tape recorder was used in all interviews if the KI consented to recording. KIs were also informed that their anonymity could not be guaranteed due to the nature of purposive sampling and their job title (in the case of university administrators). Please see Appendix D for the information sheet on the study, Appendix E for the study consent form and Appendix F for the consent form for the tape recording.

All voice recordings were saved in a password-safe folder and saved digitally on the researcher's personal computer. All data, whether digital or hardcopy from the study, will be stored for a minimum of two years after publication (or six years in the absence of publication) before being destroyed. In this period only the study supervisor and researcher will have access to the data.

Chapter 3: Results

This chapter describes the main findings of the study, based on an analysis of the responses of the study participants. The chapter is divided into 5 sections. The first section will describe the sociodemographic of the study participants. The latter sections will discuss the study's main themes identified from the data in four sections: the effects of alcohol on students, current strategies at universities for alcohol control, obstacles to improve current policies in place, , and the policy recommendations made by key informants. .

3.1. Sociodemographic characteristics of study participants

As reported in Table 3.1, most of the study participants were female (77%), with the shortest duration in their roles being 8 months and the longest 35 years. The majority of university participants held senior positions, either as the Dean of Student Affairs, or equivalent of Head of Student Life and Governance or Director of Student Affairs. The majority of national study participants held senior positions in their respective institutions.

Table 3.1: Characteristics of the 15 study participants

KI identity	Position held	Duration in position
University 1	Dean of Student Affairs	9 months
University 2	Dean of Student Affairs	4.5 years
University 3	Director of Student Affairs	4 years
University 4	Student Support Services Manager	6 years
University 5	Director of Campus Housing & Residence Life	15 years
University 6	Head of Student Life and Governance	5 years
University 7	Head of Health and Wellness	8 months
University 8	Head of Department of Student Health	35 years
University 9	Dean of Student Affairs	1 year
University 10	Manager of Crisis Centre	3 years
National 1	Research organisation: Senior Researcher	17 years
National 2	Department of Social Development: Senior manager	7 years
National 3	Central Drug Authority: Deputy Chairperson	8 years
National 4	Non-governmental organisation: Senior manager	6 years
National 5	National HEI committee: Convenor	3 years

3.2. Effects of alcohol on students

Most of the participants commented on the effects of excessive alcohol consumption on students. All study participants reported only negative effects of alcohol consumption. However, the responses of KIs varied in the detail provided. Participants who dealt with students on a day-to-day basis were more candid and more detailed in describing the effect of alcohol on their students, while those in more senior administrative roles gave more general descriptions.

3.2.1. Effects on student violence, injury and conflict

The majority of the participants reported instances where the safety of certain students on campus or in residences was compromised as a result of excessive alcohol consumption. Many of the participants were also able to contextualise the events under which student safety was compromised.

> *"You see a student being drunk or you will hear that students were drunk, and the violence amongst themselves, male to male students." (University Interview 7)*

> *"Students are being charged with maybe harming one another during a particular occasion and would say well: there was alcohol involved, because it happened at a party." (University Interview 8)*

One KI reported a student's death on campus due to another student driving under the influence of alcohol:

> *"That is also a problem, because we also had an accident on campus where a lady died. A guy rolled his car [into her], on our campus, and he was intoxicated." (University Interview 10)*

Another participant reported that alcohol abuse was historically strongly associated with the increased incidence of racial conflict between students. The HEI that the participant worked at had a well-publicised history of racial conflicts, as well as discrimination based on race. The HEI has since taken steps to address contributing factors that result in racial conflict by limiting the access of alcohol on campus and at student functions.

> *"At this university we have a history of racial conflict and, ah, it had been a…a conclusion reached by management, that alcohol plays a major role in sustaining the conflict between white and black students". (University Interview 2)*

Gender-based violence (GBV) in the form of rape and molestation were also reported outcomes of alcohol abuse.

"The other thing is we've also seen a couple of cases where ladies were almost date raped because they left their drinks unattended or they had too much alcohol, and somebody wanted to take advantage of them." (University Interview 10)

"We have seen quite a number of casualties whereby male students inflict violence on female students. And we check in which context does that happen, and you know alcohol that's number one. There is a lot of abuse, molestation, also rapes, and most cases whoever the culprit is being caught, you find that they are under the influence of alcohol" (University Interview 7)

3.2.2. Effects on student health and wellness

The negative effects of alcohol consumption on student health were the most reported effects of alcohol. Half of the participants reported that risky sexual behaviour was strongly associated with alcohol consumption, and made mention of the problems associated with risky sexual behaviour such as unprotected sex, sexually transmitted infections (STIs) including HIV, and unplanned pregnancies, which in turn influenced the student health services needed at campus health facilities. Participants commented that there was a need for sexual health services such as tests for STIs and pregnancy, and linked the need for these services to periods of increased alcohol consumption on campus such as university functions or weekend binge drinking. Three university KIs made mention of effects of alcohol on the mental health of students with resulting issues arising due to alcohol consumption or as a result of withdrawal symptoms. One KI believed alcohol had a played a role in a depressive episode that resulted in the suicide of a student on campus.

"But for instance, at this campus you would have evidence on how, when there is a bash or a huge student party, our clinics would be almost flooded with young women on a Monday who are looking for morning-after pill. So the numbers are there, in terms of the relationship between alcohol and promiscuous behaviour or unprotected sex, even HIV, or teenage pregnancy and so on." (National Interview 5)

"Our experience in the clinic has been if we look at the amount of unplanned pregnancies that we see. The number of sexually transmitted infections that we see. The rate of HIV infection that we see. Those things we don't think just happen all by themselves. They are part of a bigger environment. So the alcohol played a role in what we see in the clinic, on a daily basis." (University Interview 8)

"…They (referring to students) get to withdrawal symptoms. Which for me depicts the eliciting or the situation which triggers some depression or distress. So alcohol all in all it

really it is, I've forgot the word, it is debilitating the wellbeing of a student in all aspects". (University interview 7)

3.2.3. Effects on academic performance

Many of the respondents believed that alcohol consumption had an impact on the academic success and attrition rate of students. Study participants commented that the social environment on some campuses is dominated by student interactions that involved alcohol consumption. Some of the study participants linked the students' social behaviour and BD to apathy or neglect of their academic performance. .

> *"And when students engage in alcohol, um, whether its binge drinking or they, they drink every weekend, most of the time they use those (NSFAS) funds and if not, they drink themselves to forget about their studies eventually. And what happens at the end of the day is, we experience a high failure rate, uh, or a high dropout rate… And that's a loss for the Department." (National Interview 3)*

> *"If we look at our graduate rates and especially amongst first-years, which is almost on average 40% of our first-years don't go to the second year. A lot of the reasons why they don't succeed is not about their intellectual [ability], because when they came here they had qualified to be involved in those programmes, academic programmes. So a lot of it has to do with social behaviour outside the classroom." (National Interview 5)*

> *"At a national level I am convinced that substance abuse is one of those factors that threaten student success, and I think there is evidence if we pay attention." (University Interview 3)*

Most of the participants were not able to substantiate these claims with rigorous data. However, one study participant from a rural HEI reported that a campus survey was done in response to a period of high failure rates. The survey reportedly found that drinking alcohol was a common social practice to combat boredom. These comments highlight not only the impact of social activities available to students and the proximity of alcohol outlets, but also the consequence of institutions not offering alcohol-free alternative social activities.

> *"So for us to see exactly what is happening and then we realised that, oh, based on that (survey) it's because students don't have anything to do, they go you know, they drink alcohol and do all these fancy stuff." (University Interview 6)*

One participant explicitly commented that alcohol consumption was a significant hindrance to the academic success of students at their institution, and suggested that the absence of alcohol during the years of study would be ideal from her perspective.

> *"I must say that we also perceive it as a hindrance to academic success and to also healthy lifestyle, you know. If there is a way for us to take alcohol away until they complete their studies it would be ideal." (University Interview 7)*

The report above not only highlighted the strong influence of alcohol on the students' academic lives but also introduced the notion of banning alcohol completely from the tertiary environment. The theme of banning alcohol was brought up by nearly half of the participants and will be discussed further below.

Another participant commented about the short-term harmful effects of alcohol on student absenteeism, failure to finish a degree in the required minimum number of years, and hangovers.

> *"The other risk is the fact that we're losing students on an academic level, due to the fact that they fall behind with their schedules and they don't attend class, because of their hangovers and stuff like that." (University Interview 10)*

3.3. Current strategies for alcohol control

This section of the report examines the current strategies used by universities. There were many similarities in strategies between institutions, as well as some differences. The range of strategies reported by the different universities is summarised in Table 3.2.

3.3.1. Institutional alcohol policy

All of the university participants reported that their respective institutions did not have one document specifically relating to alcohol control, but instead had rules to govern the use of alcohol in different settings. Campuses and residences were the two most frequently reported settings that were differentiated from one another. Each setting had separate rules with regard to alcohol use. Campus rules reportedly related to designated areas of consumption and the hours of sale. Residence rules related more to the restriction of alcohol storage and consumption in general.

> *"So students are not, um, actually allowed to keep or store or use alcohol in our residences, in our campus residences, while any event where students want to make use of alcohol, distribute it or sell it, they must have a formal, um, they must have formal approval for that." (University Interview 2)*

"The only place where there is a separation is within the residences, as they would have sub-sections to the policy pertaining to what they would want in res, and how they would actually handle certain circumstances." (University Interview 8)

Table 3.2: Typology of current HEI alcohol policies

	UNI 1	UNI 2	UNI 3	UNI 4	UNI 5	UNI 6	UNI 7	UNI 8	UNI 9	UNI 10
1. Existing policy*										
1.1. Campus-specific										
1.2. Residence-specific										
1.3. Alcohol-specific policy										
2. Health Information										
2.1. Health risks										
2.2. Mass substance abuse campaigns										
2.3. Targeted group campaigns										
2.4. Laws on alcohol use										
2.5. Counselling resources										
3. Restrictions										
3.1. Liquor licence application										
3.2. Restricted trading hours										
3.3. Restricted alcohol use in different settings										
3.4. Alcohol packaging										
3.5. Alcohol sponsorship or support prohibited										
3.6. Alcohol advertising prohibited										
4. Possible sanctions / responses										
4.1. Sanctions dependent on misconduct										
4.2. Counselling referral										
4.3. Treatment referral										

Legend: Reported as absent in policy | Absent and not relevant | Unclear | Reported as present in policy

*Policy includes any written rules, regulations or protocols that the HEI has in place.

Alcohol control enforcement and the coordination of student events involve multiple actors. This line of questioning revealed a lack of communication and co-ordination between different settings and actors on campuses, as knowledge of the policies in one setting did not guarantee

the knowledge in another. Different staff members did not know the policies and practices of the settings they did not operate in.

> *"I can't say those rules because they are at the side of the residence, we don't have much control on our side, you know the campus life." (University Interview 7)*

3.3.2. Separate alcohol and drug policies

Alcohol and other illicit drugs were not separated in the policies of many of the universities and technikons in this study. Participants reported that the effects of both alcohol and drugs were destructive and detrimental to students' health and academic success. Alcohol is commonly addressed with other health and wellness topics, discussed later in this chapter. Some participants reported that the legality of alcohol as a substance was the only aspect that made it more complex to control.

> *"If anything, one should be more harsh on alcohol than on other drugs because it's more readily available and socially acceptable." (University Interview 2)*

> *"It's important to group alcohol with other drugs I think...they're all mood-altering substances, alcohol, dagga, heroin, you name them, they're all psychoactive substances, and alcohol just happens to be a legal one whereas others are not." (National Interview 1)*

> *"Just like drugs, it has got similar outputs in terms of behaviour. Violence and health-wise, you know it's got that, but within the legal framework it would be difficult to do that. "(National Interview 5)*

By contrast, one participant expressed the need to separate alcohol and drug policy based on differences in their legality of use and effects.

> *"It should definitely be uh an independent, separate, separate because alcohol is different from illicit substances. Alcohol is a legal drug. Uh there are restrictions on, on drunk driving. Uh there are uh health consequences for alcohol consumption um and um so we should have a different approach." (National Interview 4)*

3.3.3. Liquor licensing

The common strategy used by all universities to control alcohol access was through issuing a liquor licence for a university event. On approval, a temporary campus alcohol licence is granted to the applicant, giving them permission to sell and distribute alcohol. Many of the participants identified the SRC as the most common applicant for university functions. Third party vendors can be used to sell and distribute alcohol, but this should be specified on the application form. Common university functions reported by participants where a liquor licence

was required were: Orientation Week, student bashes and intervarsity functions. Outside of university events, all establishments on campus that sell alcohol are required by the Liquor Act to have a liquor licence to sell and distribute alcohol. These strategies are aimed to control the circumstances under which students have access to alcohol.

> *" It is arranged in such a way that the providers come on campus, serve within that context of a liquor licence having been granted and approved by our legal office, especially when there are events, like for instance during orientation period at the beginning of the year." (University Interview 1)*

> *"Yes, only in... We've got a liquor licence and it is only sold at the restaurants and then the clubhouses at the residences, but they must make a special application for that. Usually two weeks before the specific occasion at the residence, they apply and, yes, there's strict regulations concerning the buying of the alcohol and where they buy it and stuff." (University Interview 10)*

> *"… in the application process you must indicate whether you want to distribute or sell alcohol and if you want to sell alcohol, you have to also table an alcohol licence that you gain directly from, the (university) authorities. Um, so, um, we don't allow, umm we don't allow alcohol use outside our formally approved programmes and events." (University Interview 2)*

Although alcohol licensing is a common alcohol access control strategy at universities, technikons in South Africa admit students as young as 15 years old. These students are thus below the legal drinking age of 18. This was the case with one technikon, which specified that alcohol was therefore banned from all their campuses. This participant reported that allowing alcohol on their campuses posed many challenges due to the age differences of their students and the different legal restrictions on alcohol consumption.

> *"Because of that age you have to protect everybody. We don't allow the sale of alcohol at all at our activities. Our activities are 100% sober. You still have students that will be drunk from somewhere, but they know that they cannot bring alcohol on the premises." (University Interview 4)*

3.3.4. Awareness campaigns to educate and raise awareness

Every participant reported that some form of alcohol awareness campaign occurred at their institutions. Based on the reports of the study participants, the majority of the awareness campaigns offered information on the dangerous associated with HED, its effect on health and wellness and information on the rules and regulation at the learning institution. The alcohol

awareness campaigns were never a stand-alone topic but it was commonly incorporated into other health and wellness campaigns at HEIs.

> *"Last year we had mental health awareness and part of that mental health awareness month and even for a day we featured the issue of alcohol and substance." (University 7)*

A common feature of these campaigns was that the majority HEI often partnered with an external organisation to support their activities in a different capacity. A full list of external partners and the capacity in which they support HEIs is capture and detailed later in the chapter in Table 3.3. The majority of the study participants often reported NGO such as South African Against Drunk Driving (SAADD) and South African National Council on Alcohol and Drug Dependence (SANCA). Two university KIs reported partnering with South African Breweries. Many of the participants also made mention of the health and wellness professional's staff often recruited to run these campaigns, such as internal or external psychologists, campus health care professionals and student counsellors. Three institutions also used students for peer education in their awareness campaigns.

> *"They develop them into peer counselors so they build in information on HIV and AIDS and in preparing them to be counselors and alcohol abuse, alcohol and drug abuse would feature as a theme. They (the student peer educators) have been very, very successful and they would join in with a campaign like this, each time we do this thing they bring their stall and they are very creative". (University interview 3)*

> *"We have a Student Counselling Centre and in the Student Counselling Centre we have psychologists employed and we also have social workers. The social worker has been regarded as the custodian of all educational awareness programs for alcohol and drugs and the same with the clinic staff."* (University Interview 9)

The frequency and targets of these campaigns differed greatly between institutions. Four participants reported targeting first year students during orientation week, with one day commonly allocated to discuss the topic of alcohol and substance abuse and only 2 university KIs specified the duration of a presentation. In some cases they mentioned an hour in others 30 minutes. Other participants reported only annual campaigns in relation to major institutional functions such as intervarsity; well others executed alcohol awareness campaigns three to four times a year as it was incorporated in to other health and wellness campaigns

> *"We do is that we, on an annual basis, have a number of campaigns where students have the opportunity to be made aware of what is, for instance, a unit. What is the legal limit of alcohol use? What is the side effects of you overindulging in alcohol? So these*

campaigns take different forms throughout the year. First year orientation, for instance, we have sessions with all the first years on the various campuses". (University 8)

The responsibility of planning and managing of these awareness campaigns also varied between institutions. Three institutions fully collaborated with external partners by maximising their resources to make it an enriching campaign for students. One institution fully relied on SAB to run an awareness campaigns independently was done on the day of a major campus event where alcohol would be sold. This line of questioning revealed the level on commitment, investment and engagement HEIs put towards their awareness campaigns. The majority of the HEI are currently unable to measure the effectiveness of their campaign as they have not lined their activities to a measurable outcome. Furthermore, based on the report general information regarding alcohol is disseminated to students and event specific normative re-education activities. One institution conducted institutions reported an approach to use skill training through the expectancy challenge intervention, which was being piloted at the time this research study was done.

"We are partnering with SAB because they are running that as a project on their own, so we partnering with them to say, build up to our events we would then have a responsible drinking campaign whereby SAB will come and do it for us, we would contract SAB to come and do it for us." (University interview 6)

"Yes, we haven't got a specific, strategic strategy in place, currently, to monitor that or to determine our success. …No, there is nothing currently, officially in place. It is basically, the campaign and the interventions that we do, but we don't measure it afterwards, to find out if it was successful or not." (University interview 10)

Conflicting accounts of the priority of an alcohol awareness campaign were found between the reports of two study participants at the same learning institutions. A senior staff felt that attention to alcohol could not be given due to other prioritised topics on chronic illnesses and poverty. A psychologist working at the crisis centre at the same institution reported that much investment had been made to improve their alcohol awareness campaigns because alcohol was found to cut across many of the social and health issues students experienced at this HEI.

"So there are educational awareness programs but I don't believe it is enough because we just do so many things. You know, on so many other social issues and social justice issues."(University interview 9)

"The other risk is the fact that we're losing students on an academic level, due to the fact that they fall behind with their schedules and they don't attend class, because of their hangovers and stuff like that. The other thing is we've also seen a couple of cases

where ladies were almost date raped because they left their drinks unattended or they had too much alcohol, and somebody wanted to take advantage of them. Yes, there are other risks involved as well, and also the damage of the university property." (University interview 10)

3.3.5. Disciplinary processes

All participants reported disciplinary actions taken against students for not adhering to the alcohol policies. Although a range of disciplinary actions are in place, action taken against a student depended on the severity or reoccurrence of an offence. However, participants were unanimous in not taking punitive actions such as expulsion against students for alcohol infringements. Many of the participants acknowledged the social and university environment as a reason for a less punitive stance.

"And number two, providing support to students when they make mistakes and a support that teaches consequence and at the same time it restores people to their futures." (University Interview 2)

"Then the University's process in dealing in disciplinary hearings, we try and focus on rehabilitation. More so then on just the punitive part of expelling a young person." (University Interview 8)

3.3.6. Relationships with the alcohol industry

Significant differences in policy were observed among universities when it comes to alcohol sponsorship, alcohol advertising, and packaging restrictions. Half of the participants reported a restriction on alcohol packaging – e.g. not allowing glass packaging. This was often reported as a harm-reducing policy to prevent glass bottle injuries on campus. Most universities were actually quite permissive in their approach to the organised alcohol industry. One university reported that SAB is allowed to promote their products as well as conduct an awareness campaign at Fresher's Ball and university bashes. Brandhouse/Diageo, another alcohol company, has also been granted permission to distribute promotional "goodie bags" and free alcohol to students at that university.

"...We usually allow, I'd say SAB and Brandhouse to come and do a little bit of branding and to bring alcohol. So you'll only find large quantities of alcohol when you've got your events, your Fresher's Ball and your bashes. But other than that, we usually don't allow alcohol companies to come and brand, they only brand when there is events or promote when there is events." (University Interview 6)

Another study participant also echoed the alcohol industry as having a presence at specific student events and giving permission to advertise on campus.

"The sponsorship is limited to, for instance billboards that may be put up at our sporting arena. Like the indoor sports centre or the outdoor track and they may bring in, like I say, a designated secure area, like in a tent or a gazebo." (University Interview 8)

Another university reported that their institution received sponsorship from the alcohol industry that was invested into sports and other student activities, but also highlighted this as problematic as they are dealing with alcohol abuse on campus. This particular participant had a special interest in alcohol and its role in student life, and was well-aware of the evidence-based practises on campus prevention strategies.

"They've put in a lot of money into sports and other student activities, so that can definitely be a barrier because, on the one hand we're trying to fight the whole thing of alcohol abuse…" (University Interview 10)

Three participants specifically reported that their HEI accepted the practice of allowing alcohol industry support and sponsorship. The alcohol industry was said to be engaged in supporting substance abuse campaigns, sponsoring the sports department, or allowing them to market on their campuses. Another participant felt that by not restricting alcohol advertising at their institutions, universities in particular give liquor companies access to students.

"(Alcohol marketing) whether it was on television, on the radio and on billboards etcetera,... which is ever-present everywhere. And we would propose that that should be eliminated, and another types of sponsorship as well, and the most important one being sports because there's a lot of sports sponsorship by the alcohol companies." (National Interview 1)

"Basically, the universities, by not acting, are leaving young people in the hands of the alcohol industry." (National Interview 4)

Three of the university participants reported that alcohol sponsorship and advertising is banned by their institutions. Two study participants reported that their institution had stopped taking any form of sponsorship or support from the alcohol industry to help deal with the issue of alcohol abuse at their institutions. One of these two recalled that the institution had previously accepted sponsorships from the alcohol industry in the past, but had stopped all ties with the alcohol industry because of the drinking culture associated with their institution.

A national participant also expressed their disappointment at tertiary institutions' accepting sponsorship and support from the alcohol industry. This participant also highlighted the issue of alcohol industry sponsorship of beverages to students in the first week of varsity as

problematic. New students are introduced to university life through events where alcohol is available, which contributes to the association of alcohol with student culture and student life. The national participants argued that universities should not accept any sponsorship from the alcohol industry.

> *"…but because now the university is taking a different direction in terms of cleansing the community of alcohol abuse, we are moving away from taking sponsors from such vendors." (University Interview 3)*

> *"So they are basically sponsoring orientation um by selling alcohol on campus and I mean that is so basic. It is shocking that our universities are still doing that..." (National Interview 4)*

One KI expressed a personal concern for the impact of alcohol marketing on campuses and its long-term effects on lifelong alcohol consumption.

3.4. Obstacles to improving current CAP

3.4.1. Alcohol control is not a priority

Most of the participants reported that although alcohol abuse is problematic, alcohol control was not an important priority for universities. Respondents explained that other issues were prioritised before alcohol control at both national and institutional levels. Some of the more pressing issues are: other addictive substance such a '*nyaope*' affecting students, HIV programmes, transformation imperatives to address social inequalities, or simply getting on with the business of producing graduates.

> *"…we are overwhelmed. As you may have heard, seven transformation imperatives plus others, and then its substance abuse, and we are also as a unit also helping corporate services with their gender and disability programmes." (National Interview 3)*

> *"The awareness that we focus on are the awareness of, you know, gender inequities and sort of racism issues and so forth. So, um, I'm quite happy at the moment, that, ah, alcohol, ah, abuse is not a major issue for us." (University Interview 2)*

3.4.2. Lack of consensus about alcohol control strategies at universities

Half of the university participants highlighted the lack of consensus on the topic of changing alcohol control efforts at their institutions. According to respondents, many administrators at HEIs do not consider alcohol control to be an important topic, and efforts to bring about change on their campuses are still met with resistance.

"Some people turn it into a big joke when you talk about… there are lots of meetings where you are arguing about the amount of alcohol. But that became part of the reality and each year there was a need to keep on reducing the amount because it leads to a lot of drunkenness, alcohol abuse." (University Interview 3)

"The task team, one half of the task team wanted a totally dry campus. And the other half of the task team said, 'Don't be ridiculous, we can never ever have a dry campus'." (University Interview 9)

One participant believed the lack of consensus was because of the lack of exposure to the extent of the problem of alcohol on campuses. This particular participant worked in student health, and was thus fully aware of the negative consequences that result due to alcohol abuse in students.

"I think perhaps our perception, and coming from health, seeing the effects thereof, has hampered myself to perhaps think well: how can we have a different policy and come to a scenario where we not only teach the students, but allow them the opportunity to engage in social activities on campus?" (University Interview 8)

3.4.3. Lack of data on student drinking

Almost all participants in this study could not quantify or offer any data at a national or local institutional level on student alcohol consumption. No alcohol or substance abuse surveillance strategies are currently in place, according to study participants. To put it simply, participants were not able to quantify the scope of the problem of alcohol abuse on their campuses.

"But we haven't done a proper survey, ja, a proper survey to say; when we say we've got a high rate what is it, you know. It's just the cases that we meet, the cases that we get engaged to and that survey that we did in I think it was in 2012, late 2012." (University Interview 6)

"So, the problem in South Africa is that of course, there hasn't been a study of the social impact, of the impact, you know, in terms of for instance, how alcohol affects success rate, and then how it affects student behaviour in terms of violence and many forms of misconduct." (National Interview 5)

"Evidence within the clinic, once again, there's no formal research to say: Yes, we had so many students that was abusing it and now it's gone down to this." (University Interview 8)

Participants at learning institutions mostly gave anecdotal reports of binge drinking and its associated effects. While one HEI believed their institution to be different from others, the

majority of the university participants assumed their institutions' consumption levels and prevalence of abuse were similar to other universities.

> *"…so...ah, a little bit of drinking, here and there, happens. But it is our perception that we do not have quite the same level of alcohol abuse as other universities." (University Interview 5)*

> *"I think the trend is basically the same as with other tertiary institutions. That students drink during special occasions, like Rag, and inter-varsity, just before the... We've got a period before the exam that we call 'no action time', where there's no formalised and structured actions on campus, and then, before that they tend to drink more, because they know the exam is near." (University Interview 10)*

Only one participant reported the collection of data on the drinking patterns, experiences of students and consequences of alcohol consumption, as this was part of her doctorate research project.

> *"Yes, we are also busy now... I'm busy doing my PhD in the expectancy theory, as well as the perception that students have got of alcohol use within the student culture. We definitely collect data, and we're looking at the trends, and we're working on that." (University Interview 10)*

Another participant reported their institution receiving support from the alcohol industry to help them gather data on different aspects of alcohol usage.

> *"Mm, no, we actually don't have data at the moment to give us a sense on how wide and what is the type of alcohol use. We are in the process of developing a study with ah, one of the, one of the, um, ah, producers in the country, to help us to do a study to see exactly what's the extent of alcohol use, um, but we don't have data to tell us precisely, you know, how often, how much and which constituencies among the student body, really makes use if one can differentiate in that, in that respect." (University Interview 2)*

This participant further elaborated that despite their lack of data, low levels of alcohol-related incidents support their contention that their institution's current strategies are effective to curb alcohol abuse.

> *"Although we don't have hard data at the moment, we've not, we've not received information to tell us there's a problem, there's an extraordinary problem or out of the ordinary or so forth and quite simply, our, ah, the reason for that is, and how we*

make sense of that is we don't have a clamp down on alcohol use, we provide a channel for, for responsible use of alcohol." (University Interview 2)

One participant felt the strategy to monitor student drinking was unrealistic due to the complexities of monitoring and restricting alcohol access of students.

"Monitoring student drinking or controlling student drinking I think is a unrealistic…is an unrealistic project, because I don't think anyone can restrict anyone from drinking because, you know, even if you say that at the party, you know, each person can only buy four drinks, you know, and let us assume I have only had two I can go stand in the queue to buy another two to hand it over to someone who wants six. You understand what I am saying?" (University Interview 9)

The diffuse establishment of policies in different settings appears to influence how data is obtained and circulated depending on the co-ordination between the relevant stakeholders.

"Well, there are a number of departments that would work with such pieces of information, for example the department of security would always be at the heart of it. If it's a disciplinary matter, we have a registrar's office who is responsible for that. If it's a res issue obviously from res. At times it comes from the faculty. If it's conflict or incident which happened within the faculty and when investigated then the information." (University Interview 3)

3.4.4. Relationships between national and university actors

The theme of poor transparency between stakeholders became very prominent with the discussion on data about alcohol abuse. Whether it was between HEIs or between national actors and HEIs, many participants conveyed an attitude of reluctance to be forthcoming and transparent with their experiences on their campuses. National participants reported difficulty in gaining data from universities.

"There's a problem with getting information from universities, and reluctance, um for an admission of guilt on the part of the authorities to recognise the issue." (National Interview 2)

Another participant reported that access to information from HEIs was dependent on the level of cooperation from an institution.

"We write to the institutions and request the information and compile our reports. But obviously some are not co-operative and some do co-operate. When you want their quarterly reports, some will not give them to you, some will give it to you. But we are able to, to see, uh, to what extent they are dealing with the issue and I have

no doubt that even those that do not report are doing their best to deal with the problem." (National Interview 3)

One participant implied that the government having access to university activities and data would not only interfere with university activities but also open HEIs to criticism.

"Well, I think that the universities, you know it is, it is uh, it is a 'Catch 22' because universities will say Government is interfering but then when they don't do anything uh they don't want to be criticised either, you know. Um I think they are open to a lot of criticism because they, you know, they, they are shifting the responsibility to students and saying it is students that want to drink a lot, so we can't stop them because they are young people." (National Interview 4)

A lack of transparency about alcohol consumption, incidences of alcohol-related harm, may have been rooted in the perception that it would reflect negatively on the HEI. Some participants revealed that alcohol-related incidents reported in the media were bad for the institution's publicity.

"We have never…I don't think it has ever featured in the headlines, you know I don't think it has ever been negative…we have never had negative publicity." (University Interview 9)

"We had an incident and it was in the media, I think, three years back, where they basically demolished a residence and the House Committee Members were involved, and all of them were expelled from the residence and some of them, even from the university. They are very strict with that." (University Interview 10)

3.4.5. Challenges with harm-reduction strategies

3.4.5.1. Challenges with enforcing current practices

Respondents stated that many current enforcement strategies were ineffective or of uncertain effectiveness. University administrators reported certain strategies to enforce university rules such as: residence raiding, campus security searching cars entering the campus, or working with the local police to set up road blocks around the university to screen for intoxication. Campus security, residence monitors and residence house committee members were responsible for monitoring the adherence to rules and regulations. Nevertheless, a breach of rules or regulations often did not result in a disciplinary process. Furthermore, the process of enforcing was often reported as being uncoordinated and inconsistent:

"Because one thing that I know, we've got an issue [with] access control in our residences. So as a result, you wouldn't say a security guard will then stand at the

door and say that, "you can't come in with alcohol." We don't have proper access control. Students come in and out and do as they please, you know." (University Interview 6)

"It's done maybe in a limited way, by our security staff, in that they will screen students that come in and out on campus over weekends. Maybe check what's in the boot of their car or what are in their packets. But it's not done in a formalised way to say that everybody will be screened." (University Interview 8)

One participant expressed the view that their institution does not (as a sign of mutual respect to students) conduct raids or monitor student residences, choosing instead to give students the opportunity to practise self-management and maturity.

"So we do, we don't sort of check students all the times, you know, it's, we respect students, um, ah, and accountability and their maturity to manage themselves but if there's misconduct we, we're quite strict about that..." (University Interview 2)

Participants reported the inaction of staff members and institutional heads for not adequately dealing with acts of misconduct. Another participant reported on an annual unsanctioned student function that is characterised by alcohol abuse despite the institution's clear rule of no alcohol consumption on campus. This participant further elaborated that, to date, there has been no move to ban this event, or any disciplinary action taken against the organisers, despite students getting visibly intoxicated on campus.

"It should have been formally banned and disciplinary action should be taken against anyone who attempts to break the rules of the university because there is a rule. I read it to you right at the beginning and they are all breaking the rule and with the...basically, with the tacit consent of academic leaders." (University Interview 5)

Another participant reported that universities are not thinking about the implications of authorising the sale of alcohol at approved functions. The participant believed universities contribute to the drinking culture at universities by allowing alcohol to be sold at first-year functions, but will not acknowledge the effects or impacts that alcohol has on its student body.

"A lot of universities, including (states institution's name), would say no alcohol, but they will sign for a liquor licence for student activities. First year Fresher's Ball, I mean you know, introducing young first year students to alcohol, including what they call bashes or student parties. The university would turn a blind eye to that and so on, because there's no thinking in terms of the impact." (National Interview 5)

3.4.5.2. Identification of students with alcohol-related problems

The identification of students with problematic drinking was mostly passive, derived from disciplinary processes of students involved in theft, violence or social misconduct, rather than actively seeking to identify students with alcohol-related problems.

> *(Responding to identifying students with problematic drinking behaviours) "Yes, there's a very good working relationship between us and the disciplinary office, so if they've got misconduct where alcohol is involved, they immediately refer, or at the residences – if the house parents picks something up or there's a disciplinary process at the residences then they will also refer the students for treatment." (University Interview 10)*

Other respondents noted that some students with alcohol-related issues have been referred by parents or academic staff to student counselling services.

> *"They may be brought in; sometimes they are brought in by the concerned parent. Sometimes they are brought in by the lecturer; they will notice the behaviour in class and will refer the students to us or come with them." (University Interview 4)*

> *"The academic department, the academics will call me, "(Identifier removed), we've got this child, we are worried, you know," I will say "okay bring them to my office, and I will refer them." But there are some that we let, that we don't see. (University Interview 6)*

Only one participant reported proactive actions to try and identify students with harmful drinking patterns or alcohol dependency by conducting general substance abuse screening through a survey. The survey was only used on one occasion in one residence at their institution. The participant was unable to provide data on the number of students identified, or if they had received treatment or counselling.

> *"A student fills in a brief little questionnaire and we then assess the amount of alcohol that they consume. And if they indicate that they consume over and above the usual amount, we try and assess whether they do what we call 'binge drinking' or we assess behaviour that is involved in overindulging in alcohol." (University Interview 8)*

One participant claimed that the current practice of most universities focuses on student misconduct rather than more widespread alcohol abuse.

> *"For instance, in the residence they say there should be no alcohol, but if you're found drunk and you're not disturbing anybody, it's okay. They'll only take you to the*

disciplinary committee if you display destructive behaviour. So we are not dealing with alcohol as a drug problem, as an addiction, as a social problem and so on." (National Interview 5)

3.4.5.3. Lack of resources

Resource constraints appear to have an effect both on alcohol awareness campaigns as well as the treatment of alcohol-related problems. Different participants reported the need for more resources when it comes to the awareness campaigns, referring a student for treatment, and the provision and costs of treatment. Counsellors at HEIs currently do not treat students themselves but refer students for external treatment, since rehabilitative treatment requires resources that are currently not budgeted for. According to one participant, the responsibility to get to treatment lies with the student. Furthermore, the cost of treatment was paid by some universities while others shift the burden of payment to the student. This causes inequalities between institutions based on their ability to successfully support a student through treatment:

"So we do refer here as well, and we have an educational psychologist resident that we have been using the services of, for about two years now, that we refer our students to. However, we do pay for the services on their behalf, the students do not pay, we pay." (University Interview 4)

"I don't even foresee us doing any rehabilitation because that's a programme on its own; it needs a lot of resources…." (University Interview 7)

"Our students are sent to our on-site counsellor first, who assists with immediate interventions because the outside facility is very costly, and unfortunately we don't have a state-supported facility in [name of city]. We then will need to see how our students can be referred to some of the private facilities for assistance. SANCA works only on an outpatient basis. So the patients need to be highly motivated to go back on a regular basis to participate in interventions, to assist them. So what we have found [is] that the facility that provides an in-house program for someone, for a thirty or sixty day period, has been more beneficial. But because of finances that one often has not been available to us." (University Interview 8)

External partners were identified to play significant roles to contribute support in various areas of insufficiency by HEIs. Reported partners, summarised in Table 3.3, range from NGOs to private companies.

External partners either gave help in the form of educational materials, providing staff to do talks, or even giving financial support for strategies by an institution.

"Ja, like I currently said we're partnering with SAB to do, I think it is a responsible drinking campaign." (University Interview 6)

"The campaign of South Africans Against Drunken Driving, the SAADD programme, that's very inspirational, and they also give us some material, promotional material that we can use very effectively." (University Interview 10)

Table 3.3: Reported list of partners currently working with HEIs

Organisation/ Group	Type of support		
	Sponsor / financial support	Educational content	Treatment
Alcoholics Anonymous (AA)			
Sasol			
South African Breweries (SAB)			
South Africans Against Drunken Driving (SAADD)			
South African National Council on Alcohol & Drug Dependence (SANCA)			
South African Police Services (SAPS)			

One participant explicitly expressed that a small operational budget limited the activities their department could do until they received external funding.

"So if we want to expand anything, then we need to find external support. Last year for instance, Sasol, who is a petrol and oil company, they assisted us in providing some funding to increase our campaign. So last year we arranged a one-day workshop and invited all the students for free." (University Interview 8)

3.4.5.4. The proximity of liquor outlets

The proximity of alcohol outlets close to campuses was reported to increase students' consumption levels by facilitating the ease of alcohol access. Participants reported that while their institutions regulate alcohol access on campuses, they cannot control off-campus consumption, but have to deal with the secondary effects of intoxicated students who return to campus. Some participants believed it was the university's responsibility to deal with these businesses to lessen the impact on students and ensure student safety.

"The other worrying factor, for me is, the tavern, taverns and, and shebeens or, or alcohol outlets, uh, that are situated nearby learning institutions. For example, one of the universities in the Eastern Cape one student commented that, if they can close that Spar… if they can close it, we will be safe." (National Interview 3)

However, a national study participant indicated that not all universities agreed that they should act against nearby liquor outlets.

"Well, we have put that on, on the universities' agenda we have found a lot of resistance because they are saying it is outside of the campus and it is not on campus, and they can't interfere. But we believe that that is a copout." (National Interview 4)

Another national participant recalled an example of one university that was able to influence the immediate commercial environment in its vicinity. This university bought the majority of the commercial properties in close proximity to its main campus, which resulted in their exerting control over the number of bars or pubs in the area. The university has also legally sued bars in the area for their noise levels affecting on-campus activities.

" ..if so, there's a lot of litigation that has gone on, and I think now the university has taken a view that you know, the only way sometimes is a sort of buyout. So, there's an attempt from the university to sort of minimise the number of clubs, because even if they are not part of the university, they have had a huge impact in terms of student behaviour, student success rate." (National Interview 5)

Two participants implied that their location being relatively far away from the commercial centre of their city has lessened the impact of the bars or other alcohol outlets on their campuses.

"You see, [where] we [are] situated, our campus is regarded as part of a nature reserve. So, although we are in a suburb, across the street it is a huge open field and on either ends of the road there is like, you know, it is a housing development but there is no nightclubs or pubs in the area." (University Interview 9)

One participant noted that local shebeens are profit-driven to sell as much alcohol to the community and students as possible, regardless of the negative impact of alcohol on those communities and students.

"(The) community is out there to make money, so alcohol is the fastest money-making business. If he's got a pub, we've got a pub just next to the gate in gate three. Just a stone's throw from the university main entrance, there's a pub. So I think the university, I mean the community is looking at profit-generating, but not

looking at the effect and the impact it has on any other person." (University Interview 6)

One participant expressed strong opinions regarding the close proximity of alcohol outlets to an entrance of their campus, giving an example of the effects of alcohol abuse, which resulted in a violent altercation between students that resulted in the death of a student.

"Uh, you find that, for example, just outside the gate there is a tavern, or there is a, an alcohol outlet….At (institution's name) recently, with the student that was killed in a faction fight of some Zulu students from KZN(KwaZulu-Natal), those students were drinking at the shebeen right at the gate of the institution." (National Interview 3)

3.5. Recommendations by study participants

A range of different recommendations for improving alcohol control at universities and technikons were made by study participants. The recommendations were grouped together under the different categories to illustrate the different areas aspects of relevance to alcohol control. A summary of these categories is plotted in Figure 3.1 which plots the number of participants making each recommendation. Table 3.4 below that lists the frequency of the detailed recommendations by category.

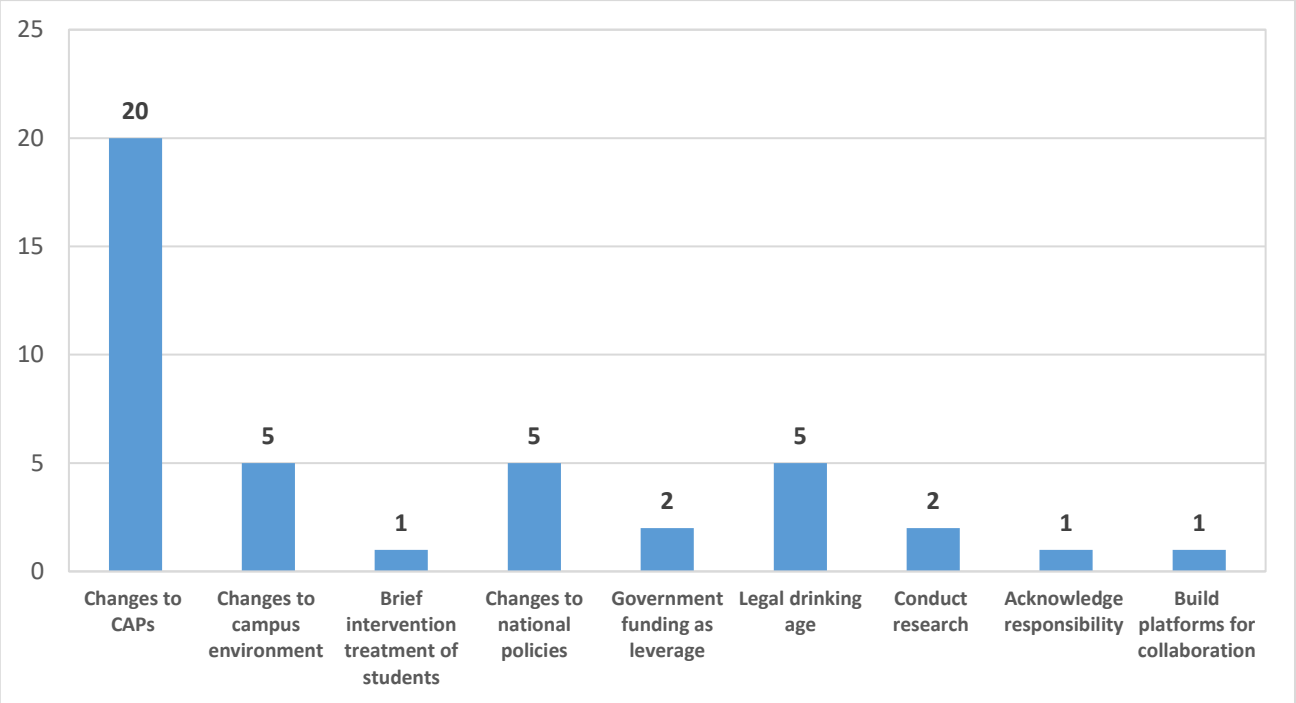


Figure 3.1: University alcohol control policy recommendations

Table 3.4: Detailed university control policy recommendations

Recommendations	No. of Participants
Changes to CAPs	**20**
Ban alcohol sponsorship and advertising	4
Detention	1
Enact effective policies	2
Have a campus policy	2
Improve CAPs on access control to alcohol	7
Improve current CAPs	2
Routine random testing	2
Changes to campus environment	**5**
Create a safe environment	1
Change the student culture	**1**
Promote a healthy lifestyle	3
Brief intervention treatment of students	**1**
Changes to national policies	**5**
Create additional national policies	3
Formulate a national HEI alcohol policy	5
Update current Liquor Act	1
Government funding as leverage	**2**
Incentives	1
Penalties	1
Legal drinking age	**5**
Increase LDA	2
Maintain LDA	3
Conduct research	**2**
Acknowledge responsibility	**1**
Build platforms for collaboration	**1**

The top five recommendations were:

1. Changes to CAP: Improve alcohol access controls
2. Changes to national policy: formulate a national HEI alcohol policy
3. Changes to CAP: ban alcohol sponsorship and advertisement
4. Changes to the campus environment: promoting a healthy lifestyle

5. Recommendations with regards to the legal drinking age

3.5.1. Decrease alcohol access on campus

Two participants made the recommendation to improve the control of alcohol access from different perspectives. One participant was very detailed in the strategies that universities and technikons could possibly use to discourage the uptake of alcohol by looking at alcohol pricing, whilst the other participant reported this recommendation from a general view, whereby university and technikon policy should govern the times and contexts under which students drink alcohol:

> *"So, so measures that ensure that the price is high, access is limited…other measures include things like, you know how you have in some places, uhm, happy hour or two for the price of one type measures, those universities should ensure... are not allowed on campus." (National Interview 1)*

3.5.2. Develop a national higher learning alcohol policy

The second most frequently reported recommendation by participants was to develop a national alcohol policy for institutions of higher learning. The suggestion was made with different motivations in mind: to create a standardised policy for all learning institutions to adhere to, or to harmonise institution-level policies with national substance abuse policies. An argument in support of the recommendation was to ensure that all universities and technikons have the same alcohol control policies, so that students would not be motivated to choose one institution over another based on their differing alcohol restrictions.

> *"I think if they can develop a tertiary education policy, regarding alcohol use on campuses overall. That would make it easier because currently, there's different rules for different campuses and that makes it different. Some campuses – they call themselves 'dry campuses'. Others not, so I think if they can look into that." (University Interview 10)*

> *"That tough policy has to be aligned, uh, with the Substance Abuse Act, uh, because the Substance Abuse Act is a national Act. And so whatever policy we develop should not contradict the Substance Abuse Act. It should not contradict the, the National Drug Master Plan." (National Interview 3)*

However, one particular participant strongly motivated that any future national policy should allow HEIs to cater for the needs of the students without too much government interference. This reflected concerns about interfering with the status quo and shifting power over university environments from universities to national departments.

"So a policy, you know, when we talk about national policy, it should be assisting us in terms of finding a national definition and framework for making sense of alcohol as part of the life of higher education, but it cannot and it should not direct the management practices and detail per institution because each environment differs vastly from the next. " (University Interview 2)

One participant argued that current national policies do not influence the way HEIs are operating at the moment. They supported this argument by stating that they have to consider so many factors specific to their context, be sensitive to change and be responsive to local issues, so that a national policy would not influence what they are already doing. This participant also expressed scepticism of current national policies intended to help their institution improve their practices.

"So, really that is why I am saying, I couldn't think of what absolute policy or legislative framework could come from government that could help us further, than what is actually already happening." (University Interview 1)

3.5.3. Ban alcohol industry sponsorships and advertising

The banning of alcohol industry sponsoring or marketing and advertising at learning institutions was suggested by four participants. Marketing and advertising were criticised for perpetuating the promotion of alcohol. Furthermore, participants reported that both alcohol industry sponsorships and marketing were strongly linked to varsity sport, an association that would need to be broken for universities to promote a healthy alcohol-free lifestyle.

"The second place is not to link sport and alcohol at all on campus – to make sure that even if people do come on campus to play sport, that they don't bring the alcohol companies' logos with them." (National Interview 4)

3.5.4. Promote healthy lifestyles

A large portion of the recommendations to change the campus environment made by participants recommended that universities and technikons could do more to promote healthy lifestyles. Participants specified the responsibility of the university to promote and organise alcohol-free activities and events. The importance of awareness campaigns was also reported as a vital strategy so that students are fully informed of the dangers associated with alcohol abuse and dependence.

"They need to teach their young people that not only is alcohol something cool, but it has permanent long-term health harm." (National Interview 4)

"I think awareness campaigns for me it's, we need to, we need to educate our students as much as, because if we educate them, we're educating them, we're educating, basically we're educating the nation." (University Interview 6)

"Make the environment interesting. Not only through activities where alcohol will be served but also through activities where alcohol would not be served." (University Interview 4)

3.5.5. Update the current Liquor Act

Although only one participant made the recommendation to update the current Liquor Act, it revealed their understanding of the implications of the Liquor Act on student alcohol access. Many of the participants understood controlling the liquor outlets in their vicinity to be a challenge, but this participant's recommendation offered a suggestion to influence the policy governing liquor outlets off and on campus. They reported that the current Liquor Act allows the sale of alcohol until two o'clock in the morning. This gives students long periods of time to access alcohol.

"The other thing is the fact that the Alcohol Act that we are working according to is also a very old Act ...because according to that old Act, the places in (states city institution is situated in) can sell alcohol, sometimes up to two o'clock, regarding their licence they've got. That also creates an environment where students can get easily alcohol available. "(University Interview 10)

Chapter 4: Discussion

The aim of this study was to investigate current alcohol policies and practices in South African universities and technikons. The research objectives were to describe the perceptions of key informants on the impact of alcohol abuse at South African universities and the current alcohol control strategies in place; their experiences of the policy process; and their recommendations for improving alcohol control at HEIs. This chapter is organised in three sections: the first summarises the main study findings; the second highlights some of the strengths and limitations of the study; while the last discusses the main study findings in relation to the existing academic literature.

4.1. Summary of main study findings

The main study findings are discussed in relation to three main organising themes: (1) alcohol consumption and abuse are a problem on South African campuses; (2) most universities are doing something to address the problem but their strategies should be intensified and better coordinated; and (3) institutional and national surveillance systems for monitoring the problem are under-developed.

The majority of study participants believed that alcohol abuse was a significant problem in HEIs in South Africa, although none of the study institutions had any rigorous data to support that contention. Most KIs linked alcohol consumption directly to negative consequences for students. The most commonly cited negative impacts related to compromised student safety, student health and academic performance.

The study respondents outlined a range of strategies currently implemented at universities and technikons to control alcohol access and consumption on campus. These focused mainly on providing information about the dangers of alcohol abuse, and regulating access to alcohol at university events through licensing. Only a few institutions had gone further in prohibiting alcohol industry marketing or sponsorship, or banning alcohol on campus completely. Despite administrators being clearly aware of the negative consequences of alcohol consumption by students, most institutions appeared to be doing little actively to control alcohol abuse and minimise potential harm.

Some key informants did acknowledge the limitations of their current initiatives, and many identified a number of obstacles to improving alcohol control at universities in South Africa. An important concern was the lack of coordination in alcohol control initiatives at universities and technikons, not only between different actors within HEIs, but also between HEIs and national policymakers. The lack of trust and transparency between national government departments

and HEIs has a direct impact on the sharing of data and knowledge, inhibiting the formulation and implementation of more appropriate and effective strategies.

In the absence of national guidelines or directives, universities and technikons are currently self-regulating, and so do not have to adhere to any specified minimum alcohol control policies for HEIs. At an institutional level, diffuse policies in universities have resulted in diffuse responsibilities and perspectives of different institutional actors. Differentiated alcohol policies may be required for different student groups, but fragmentation also produces inadequate communication, poor coordination, and weaker impact. The lack of consensus on HEIs accepting alcohol sponsorship and marketing at their institutions is an example of differing approaches to alcohol control between the HEIs and national actors. Some informants also recognised that the location of alcohol outlets in close proximity to HEIs contributed to student alcohol abuse. However, most of them did not feel sufficiently responsible or empowered to deal with that problem, noting that Liquor Act reform would probably be required. The lack of data on student drinking patterns, coupled with the poor resources given to student wellness and health units assigned to deal with students at risk, have a significant impact on the ability of universities to implement effective alcohol control strategies. Therefore, the main strategies in place at many HEIs are limited to providing information on alcohol and its effects.

Lastly, both HEIs and national informants acknowledged the absence of alcohol surveillance and monitoring programmes at both national and institutional levels. According to the participants in this study, little or no data is collected on student alcohol consumption and abuse. Data is also not available on the effectiveness of prevention strategies currently undertaken at the institutions in the study.

4.2. Study strengths and limitations

This qualitative study on the perceptions of university and technikon administrators about alcohol control adds to a topic that is under-recognised and under-researched, particularly in LMICs. The majority of the published studies on alcohol at universities in South Africa focus on the prevalence, patterns and motivations of alcohol consumption (57,59,60,75,83,84). Only a handful of published papers exist, mostly quantitative studies and only from high-income countries, on the perceptions of university and technikon staff regarding alcohol control policies and strategies (85–87). A recent USA quantitative survey of university administrators recommended that more qualitative research is required in this area, as surveys cannot capture the complex forces at play that impact on CAPs (85). This study remains, to date, the first of its kind in South Africa to investigate the alcohol policies at HEIs. The geographical coverage of the study was advantageous in that it included HEIs from five provinces, in both urban and rural settings. This study also included five national KIs from the most important

actors in this policy space. The purposive and snowballing sampling strategies ensured that the most relevant key informants were included from each institution.

Nevertheless, the results of the study should be interpreted in light of certain constraints. Firstly, the data of the study was collected in 2014 and 2015, so some time has elapsed. However, I believe the results are still relevant as no new national alcohol control guidelines or policies have been published for universities and technikons, and little has changed at the institutions themselves.

Secondly, the number of HEIs included in the study is relatively small. The eight universities represent a sufficient proportion of universities in the country, adequate for the qualitative design, scope and objectives of this study. But only one technikon finally agreed to participate in the study, limiting the representation of that sector. It should be noted, however, that the key informant from that technikon had significant and extensive work experience on this topic and contributed useful insights to the study results. Although the alcohol policies of other HEIs in South Africa are likely to be similar to those included, further studies with larger numbers are needed to evaluate current national practice at HEIs. The lack of inclusion of tertiary institutions in the Western Cape and Kwa-Zulu Natal province is noteworthy as these institutions would have added unique experiences to the topic at hand. Although the institutions were invited to participate, the institution's administrative processes for inclusion into the study or lack of feedback resulted in them not being included in the study. Based on the studies on student drinking from 3 institutions in these provinces that were included in the literature review, I can only assume that they are dealing with same problem of student drinking as with the other institutions included in the study.

Thirdly, new stakeholders such as Higher Health, formerly Higher Education and Training HIV and AIDS Programme (HEAIDS), were formed in 2019 and could have contributed greatly to this study. This organization currently aims to assist HEIs address the health, development and wellness challenges that students face.

Lastly, social desirability bias may be a concern in such studies, with interviewees overstating current alcohol control strategies because they did not want to reflect badly on their institutions or their own performance if this was their area of responsibility. I attempted to mitigate this by assuring them that the data would be confidential and anonymous, and HEIs would not be identified by name.

My own position and experiences may have influenced data collection and analysis. At the time of half of the interviews, I was employed by an organisation involved with alcohol policy in South Africa In general, I felt that most informants responded more openly because of that,

seeing me as an ally to help them on the topic of alcohol control. Only one university interviewee seemed more cautious in answering certain questions because of my position. . The other half of the interviews were done when I had stopped working of the organisations. I also had personal experience of being a student at two of the HEIs included in this study; I had previously been a student at one university and was a registered student at another. As a student, I was aware of the alcohol culture, events and policies in those institutions. This allowed for deeper questioning and provided lines of questioning related to specific events where alcohol was consumed on campus. Lastly, I felt that my status as a black female facilitated better rapport in two interviews with participants from historically black universities.

4.3. Discussion of study findings in relation to the existing literature

4.3.1. Alcohol as a problem in higher education

This study found that alcohol was a problem for the majority of the HEIs represented by the study participants. Many of the participants explicitly identified the abuse of alcohol as being problematic due to the negative consequences that manifested on their respective campuses. Similar alcohol-related problems have been reported by HEI administrators in other studies (7,50,72,88,89). All of these studies highlighted the prevalence of alcohol binge drinking and its behavioural consequences, finding a strong relationship between the frequency of binge drinking and alcohol-related problems.

For example, the large Core Survey successfully surveyed 52,000 students and found that 42% of students engaged in binge drinking (88). A follow-up of the survey, a year later, found that binge drinking rates had increased to 46%, while the negative consequences of alcohol binge drinking remained similar. These included academic problems, memory loss, missing class, or students doing something that they later regretted (72). Another study also found that students that drank were 7 to 10 times more likely to get involved in physical conflict, get injured, engage in unprotected sex, damage property, or to breach campus regulations or rules resulting in interactions with campus police (72). Comparable alcohol-related harms were reported by university administrators in Australia (41). The administrators also commented on the negative impact of commercial alcohol outlets in the vicinity of campuses.

4.3.2. University alcohol control strategies

Overall, most of the strategies currently in place at HEIs in this study would be considered ineffective and low-cost according to the ranking of effective strategies outlined in the NIAAA's College Alcohol Intervention Matrix (AIM) (90). HEIs have mostly used individual-level interventions in the form of information dissemination to educate students about alcohol and its associated harms, or do event-related normative re-education. Event related normative re-education refers to presenting educational content on alcohol but making sure that it coincides

with a function or event highly associated with BD such as 21st birthdays, intervarsity sports events or campus function that will involve the consumption of alcohol. Both of those have been found to be ineffective in changing heavy episodic drinking (HED) or alcohol-related harm (90). Moderately effective, but higher costing, environmental strategies, such as the banning of advertisement and sponsorship, were only used by three institutions in this study.

The results of our study are comparable to a recent study by Brown and Murphy (53), which investigated UK university administrators' perceptions about alcohol control on campus. They found that administrators reported a reluctance to enforce alcohol consumption rules to avoid *"micromanaging the students"*, given that students were over 18 years old and legally allowed to consume alcohol. Instead they tended only to intervene when campus property was damaged, and then mainly by taking disciplinary action against the student/s responsible (53). The authors also reported that alcohol consumption was a normalised practice that was found acceptable by both the staff and students (53). Although Brown and Murphy reported that respondents perceived a duty to do something about excess alcohol consumption, they differed significantly on the appropriate strategies to deal with alcohol abuse (53). Most HEI respondents and national stakeholders in my study favoured a more active and interventionist approach to minimise alcohol abuse and harm, while the UK administrators in Brown and Murphy's study promoted less coercive educational interventions.

This research is similar to the studies by Faden and Baskin (17,18) in the USA in noting that CAPs are seldom found in a single document, but are typically dispersed to different departments overseeing residence life, sport, student affairs or student events. Other studies investigating CAP have also noted the diffuse location of different elements of university alcohol policy leading to the involvement of many departments (41,86,91).

The studies by Faden and Baskin also provided a detailed evaluation of the information provided to students in compliance with USA legislation. That was not the aim of this study, but we did find that most HEIs in South Africa used mass awareness campaigns to deliver general information on alcohol. Some institutions targeted first-year students while others delivered the information sporadically over the academic year to the general student body. A recent review reported that the awareness campaigns that had the sole aim of disseminating information about the negative aspects of consuming alcohol are ineffective in decreasing university alcohol abuse (90,92). Similarly, a recent doctoral study in a South African HEI found that students believed that awareness campaigns on campus were ineffective in changing student drinking behaviours (93). The author further recommended that it would be more effective if administrators were able to link student alcohol abuse to real harms common on

campuses, and that South African HEIs should not only increase efforts to address alcohol consumption but should also be improving harm-reduction strategies (93).

Administrators in the study by Leontini *et al* (41) study recommended the strategy to minimise alcohol-related harm, which was to open and manage a university bar under the strict auspices of the university, ensuring that university bar staff were trained on Responsible Beverage Service (RBS). Through this the university could effectively control the environment in which students consumed alcohol, and could essentially trust the servers to be responsible (41).

Another risk-minimising strategy practised by HEIs in this study and identified by Leontini *et al* was the requirement that students seek approval for campus events where alcohol would be served (41). Other recommendations made by participants in this study have also been reported in the literature. These include strengthening restrictions on access to alcohol, raising the legal drinking age, banning alcohol advertising, and promoting a healthy lifestyle (94–96). Implemented together, these recommendations promote an environmental approach to campus-based alcohol prevention rather than relying on interventions that hope to change individual behaviour and drinking patterns (94–96). Many USA colleges also have restrictions on alcohol packaging, with 47% banning alcohol kegs in residences in 2007 and 60% requiring "glass-free" packaging (17,18). But banning sponsorship from the alcohol industry was very infrequently suggested in the USA (17,18), as we found here for South African HEIs.

According to Dejong and Langford (97), addressing university alcohol related problems requires a comprehensive approach that not only targets the individual but also groups at risk, the institution, the community and the public. Evidence supporting the effectiveness of a more environmental approach to alcohol prevention is accumulating (19,96,98,99). For example, the Study to Prevent Alcohol Related Consequences (SPARC) conducted a randomised control trial of environmental strategies enacted through community organisation (100). The environmental strategies included establishing policies that limited alcohol outlet density, increased the price of alcohol, and lowered the legal blood alcohol concentration limit for driving (100). The intervention group in the SPARC study had a significant reduction in alcohol-related harm compared to the control group, both for individual students and their peers around them(96). The success of the environmental strategies crucially depended on the clear establishment of roles and responsibilities; ongoing commitment of university-appointed team leaders to forge and sustain coalitions; the sustained engagement in activities; and working together with key stakeholders identified in the community (96). This suggests that universities have to actively own and invest in comprehensive alcohol prevention strategies if they want to have any real impact.

Another compelling study is that of Kypri *et al* (101) in four New Zealand universities. They demonstrated a significant impact of incremental CAP changes over a period of 10 years on important target outcome measures including drinking prevalence, recent intoxication, and number of days of intoxication in the previous 7 days. The first policy change was an amendment to the Code of Student Conduct, which allowed the universities to expel or reprimand students for disorderly conduct on and off campus (101). The next policy change involved establishing a stronger campus security and student liaison programme called Campus Watch, which strengthened the enforcement of CAP but also offered support to students (101). Another strategy used by the universities was to proactively monitor applications for alcohol outlets in the campus vicinity, and then intervene by objecting to the issuing of liquor licences to outlets that might encourage excessive drinking. The final policy change was a ban on all alcohol advertising and sponsorship at university-organised events both on and off campus (101). This example of an incremental environmental approach to dealing with hazardous drinking offers possible solutions to universities in other settings.

4.3.3. Improving university alcohol surveillance and monitoring systems

According to the NIAAA's College AIM, effective planning and monitoring of alcohol control strategies must be based on the use of credible and reliable data (90,102). In their guide on *Reducing Alcohol Problems on Campus: A Guide to Planning and Evaluation* (102), the authors highlight a 5-step process:

1. Identifying specific goals and objectives
2. Reviewing the evaluation research
3. Outlining how the intervention will work
4. Creating and executing a data collection plan
5. Providing feedback to the intervention program

By establishing surveillance and monitoring systems, administrators are better able to provide feedback on the effectiveness of programmes to other HEIs (90). The need for data on student drinking patterns, attitudes and motivations is recommended by many authors (66,72,73,103). This data is vital to evaluate the scope of alcohol misuse amongst the students, inform alcohol control policy development, and aid resource mobilisation (103). Saltz and De Jong (102) recommend that HEI administrators should collaborate with relevant departments to coordinate, plan and execute a data collection plan. Lategan *et al* (73), found that knowledge of students' drinking motivations is vital for designing an appropriate educational campaign. A South African study found that any responsible drinking campaign at HEIs must promote a culture of moderate and safe alcohol consumption, but also showed that excessive alcohol consumption needs to be clearly identified as unacceptable, for the campaign to be effective

(66,73). The goal is to create alcohol education campaigns that foster an acceptance of moderate drinking but strongly discourage intoxication (73).

Chapter 5: Study Conclusions and Recommendations

Alcohol abuse and its effects are an important public health issue in HEIs. Students have to navigate an environment that is highly experimental with overt exposure to alcohol as part of the student experience. Alcohol abuse significantly affects the safety, productivity and health of students. However, this study has found that alcohol control strategies at South African HEIs are currently poorly developed and coordinated at both the national and institutional levels.

At the national level, a lack of information-sharing and poor coordination of activities has resulted in a missed opportunity between HEIs and national institutions to collaborate in developing and implementing a common health promotion strategy. Although South Africa has established national policies and bodies tasked to address the issues of alcohol abuse, there are no specific guidelines for the higher learning sector. Until a national standard or policy guideline is established with a clear definition of roles and responsibilities, HEIs will continue working in isolation without adherence to a minimum set of evidence-based strategies and with limited accountability for their actions or inaction. Strengthened engagement at the national level would be instrumental in supporting better environmental policies to directly influence alcohol access on and off campus. Proposed Liquor Act reforms which would strengthen CAP need to be enacted. Lastly, the lack of national alcohol surveillance systems in HEIs hampers policy development and the monitoring of current strategies.

Campus alcohol control is also a neglected topic at the HEI level. The findings of this study highlight that HEIs lack coordinated alcohol control strategies linked to effective enforcement and measurable outcomes. Current strategies focus on simple health education and primarily deal with disruptive behaviour rather than proactively identifying and preventing problematic drinking. More comprehensive environmental strategies are required lessen the impact of alcohol consumption off campus. The lack of consensus and collaboration within HEIs contributes to significant challenges in terms of policy development, enforcement and resource mobilisation.

Based on this study I would recommend the following most immediate interventions:

<u>To South African HEIs:</u>

1. All institutions should begin collecting regular campus data on alcohol abuse and alcohol harm. This recommendation is strongly encouraged because it is essential to understand and monitor the full extent of the problem, as noted in the Office of National Drug Control Policy (ONDCP) guidelines to HEI administrators in the USA (104). Regular campus-wide health surveys can easily be executed by HEIs to collect information on alcohol prevalence, drinking patterns and alcohol-related harm. Better

information on the scope of the alcohol problem will help inform the design of strategies to change student drinking behaviours and drinking patterns, and that are also sensitive to the needs of the student community. The surveys would provide a reliable and valid contextual information base for HEI administrators to help formulate and evaluate alternative strategies. Annual health surveys are already used in the USA through the *Core Alcohol and Drug Survey* (88). This survey has been in place for over 30 years in over 70 HEIs in the USA (88). It not only monitors trends in alcohol and drug consumption, but also studies the links between alcohol binge drinking (BD) to harms reported by students (105). The collection of bi-annual surveys is already known to be practised in one South African institution (Rhodes University) as shown by the Young and de Klerk studies (59,66). However, self-reported surveys alone are not enough to measure the extent of alcohol misuse. According to the ONDCP guidelines, administrators should also use crime and campus incident statistics, as well as feedback from other key actors, as an indication of alcohol misuse (104). It appears that disciplinary processes are the norm for student misconduct in all the HEIs in this study, and administrators could make better use of the information from these processes to monitor alcohol abuse. Regularly updated data is required for the monitoring and evaluation of policy implementation, which is vital not only to assess programme progress but also to better plan for future resource requirements.

2. HEI administrators should consider consolidating their approach to dealing with problematic drinking on campuses by formalising a CAP that is linked to a clear set of strategies and underpinned by the appropriate resources to implement them. The introduction of the revised CAP would need to be planned over a period of time to facilitate the mobilisation of the necessary resources. Consensus generation is a vital step in the consolidation process to ensure that all staff and departments are unified in their actions. A stakeholder analysis could be done by HEIs to support this. HEIs should also revise existing policies to incorporate more evidence-based practices The College AIM (see Appendix J and Appendix K**Error! Reference source not found.**) offers HEI a dministrators a useful matrix that categorises strategies based on their effectiveness as well as cost (90). This matrix indicates that reducing social and commercial access to alcohol significantly reduces the incidence of BD and alcohol-related harm to both consuming and non-consuming students. The most effective strategies take a more environmental approach and seek to de-emphasise the role of alcohol on campus. More attention could also be directed to monitor drunk driving, by identifying the relevant departments on campus and strengthening links with external entities such as the traffic department.

To key national stakeholders:

1. National alcohol control plans and policies could pay more attention to the specificities of alcohol (vs other licit and illicit drugs) and HEIs (vs schools). Alcohol control is complicated by the fact that it is widely available and that the sale and consumption of alcohol is both legally and socially permissible. HEIs also require different alcohol strategies to schools given the current legal drinking age in South Africa.
2. Clear alcohol control guidelines should be established by the national government for HEIs. This should clearly outline the responsibility of HEIs; define a minimum set of alcohol control strategies or actions that HEIs need to implement; assign or establish the national body to be responsible for overseeing alcohol policies at HEIs; and develop the national reporting and monitoring systems to enable such oversight. The financing required to enable this national strategy would need to be determined and allocated. Long-established national campus alcohol control systems such as in the USA could be studied and emulated in this policy process.
3. As part of that, national government should also clearly reiterate its stance on alcohol advertising and sponsorship at HEIs. Current alcohol advertising and sponsorship laws should be re-evaluated to take tertiary institutions into consideration. For example, existing laws on liquor advertising and sales limit those activities in the proximity of places of worship and primary schools, but there are no such provisions for HEIs.
4. Government should explore strategies to incentivise HEIs to invest more time and effort on their alcohol control strategies or fine them when they do not comply with established government requirements. This is supported by participants in my study who made this recommendation. This funding incentive can be framed in a greater overarching student health promotion strategy similar to the Drug Free Schools and Communities Act (38). Similarly, HIE can be fined should they not comply with crime reporting as with the USA's Clerly Act (39). The benefits of this strategy may not only support the abovementioned 3 recommendations, by creating a legal framework to work from, but also potentially aid HIEs control strategies with limited financial resources. Asa many HEIs in this study reported budget restriction which limited their alcohol control strategies, government could re-thinking how to leverage compliance .through the use of funding or fines.

References

1. Barbor T, Campbell R, Room R, Saunders J. Lexicon of Alcohol and Drugs Terms [Internet]. World Health Organisation. Geneva; 1994 [cited 2021 Sep 18]. p. 1–69. Available from: http://apps.who.int/iris/bitstream/handle/10665/39461/9241544686_eng.pdf;jsessionid=61D845C4792B0F860E20FF5694C77ED9?sequence=1
2. Reid M, Fiellin D, O'Connor P. Hazardous and harmful alcohol consumption in primary care. Arch Intern Med. 1999;159(15):1681–9.
3. Karama E, Kyprid K, Salamound M. Alcohol use among college students: an international perspective. Curr Opin Psychiatry. 2007;20(3):213–21.
4. Wicki M, Kuntsche E, Gmel G. Drinking in European universities? A review of student's alcohol use. Addict Behav. 2010;13:391–424.
5. Joseph K, Uwanede C, Veronica A. Alcohol abuse as a cause of poor academic performance among social science students of the University of Calabar , Nigeria. Mediterr J Sci. 2013;4(1):413–22.
6. Adewuya A. Validation of the Alcohol Use Disorders Identification Test (AUDIT) as screening tool for alcohol-related problems among Nigerian university students. Alcohol Alcohol. 2005;40(6):575–7.
7. Roche A, Watt K. Drinking and university students: From celebration to inebriation. Drug Alcohol Rev. 1999;18(4):389–99.
8. Dantzer C, Wardle J. International study of heavy drinking: attitudes and sociodemographic factors in university students. J Am Coll Heal. 2006;55(2):83–9.
9. Slutske WS. Alcohol use disorders among US college students and their non-college-attending peers. Arch Gen Psychiatry. 2005;62(3):321–7.
10. Newbury-birch D, Walker J, Avery L, Beyer F, Brown N, Jackson K, et al. Impact of alcohol consumption on young people: a systemic review [Internet]. Alcohol. 2009. Available from: www.dcsf.gov.uk
11. Hingson RW, Heeren T, Zackocs RC, Kopstein A, Weschler H. Magnitude of Alcohol-Related Mortality and Morbidity among U.S College Students Ages 18-24. J Stud Alcohol Drugs. 2002;2(63):136–44.
12. Vantamay S. Alcohol consumption among university students: Applying a social ecological approach for multilevel preventions. Southeast Asian J Trop Med. 2009;40:354–69.
13. Kim JH, Chan KWC, Chow JKW, Fung KP, Fong BYF, Cheuk KK, et al. University binge drinking patterns and changes in patterns of alcohol consumption among chinese undergraduates in a Hong Kong university. J Am Coll Heal. 2009;58(3):255–65.
14. Atwoli L, Mungla PA, Ndung'u MN, Kinoti KC, Ogot EM. Prevalence of substance use among college students in Eldoret, western Kenya. BMC Psychiatry. 2011;11(1):34.
15. Perkins M, Bord J. University Alcohol Policy and Student Attitudes [Internet]. UW Journal of Student Research. 2011. p. 1–23. Available from: http://digital.library.wisc.edu/1793/53220
16. Task Force of the National Advisory Council on Alcohol Abuse and Alcoholism, National Institute on Alcohol Abuse and Alcoholism (NIAAA), National Institutes of Health. A Call to Action: Changing the culture of drinking at U.S. colleges [Internet]. Vol. 13. 2002 [cited 2021 Mar 30]. p. 1–11. Available from: https://www.collegedrinkingprevention.gov/NIAAACollegeMaterials/publications/calltoaction.aspx
17. Faden VB, Baskin ML. An evaluation of college online alcohol-policy information. J Am Coll Health. 2002 Nov;51(3):101–7.
18. Faden VB, Corey K, Baskin M. An Evaluation of College Online Alcohol-Policy Information: 2007 Compared With 2002. J Stud Alcohol Drugs. 2009;(Supplement no. 16):28–33.
19. Toomey T, Lenk K, Wagenaar A. Environmental Policies to Reduce College Drinking: An Update of Research Findings. J Stud Alcohol Drugs. 2007;68(2):208–19.
20. Central Drug Authority. National Drug Master Plan 2012-2016. 2011.
21. Department of Social Development. National Drug Master Plan 4th Edtion 2019 to 2024: South Africa free of substance abuse. Pretoria; 2019.
22. Department of Social Development. " KE MOJA " Intergrated Strategy [Internet]. Pretoria; 2008 [cited 2021 May 5]. Available from: http://www.socdev.gpg.gov.za

23. Department of Social Development. National drug master plan 2013 – 2017. Pretoria; 2013.
24. Freeman PM, Freeman M, Parry C. Alcohol use literature review. Africa (Lond). 2006;(February):1–39.
25. World Health Organization. Global status report on alcohol and health 2018 [Internet]. Geneva; 2018. Available from: https://www.who.int/publications/i/item/9789241565639
26. World Health Organization. Global status report on alcohol and health [Internet]. Geneva; 2014 [cited 2014 May 27]. Available from: https://apps.who.int/iris/bitstream/handle/10665/112736/9789240692763_eng.pdf?sequence=1
27. Kyprid K, Stephenson S. Drink-driving and perceptions of legally permissible alcohol use. Traffic Inj Prev. 2005;6(3):219–24.
28. Dawson DA, Grant BF, Stinson FS, Chou PS. Another look at heavy episodic drinking and alcohol use disorders among college and noncollege youth. J Stud Alcohol. 2004;65(4):477–88.
29. Bendtsen P, Johansson K, Akerlind I. Feasibility of an email-based electronic screening and brief intervention (e-SBI) to college students in Sweden. Addict Behav. 2006;31(5):777–88.
30. Keller S, Maddock JE, Laforge RG, Velicer WF, Basler HD. Binge drinking and health behavior in medical students. Addict Behav. 2007;32(3):505–15.
31. Boland M, Fitzpatrick P, Scallan E, Daly L, Herity B, Horgan J, et al. Trends in medical student use of tobacco, alcohol and drugs in an Irish university, 1973-2002. Drug Alcohol Depend. 2006;85(2):123–8.
32. Refaat A. Practice and awareness of health risk behavior among Egyptian university students. East Meditteranean Heal J. 2004;10(1–2):72–8.
33. Adewuya AO, Ola BA, Aloba OO. Gender differences in the relationship between alcohol use and anxiety symptoms among Nigerian college students. Drug Alcohol Depend. 2006;85(3):255–7.
34. Allen J, Litten R, Fertig J, Barbor T. A Reiview of Research on the Alcohol Use Disorder Test (AUDIT). Alcohol andClinical Experiemental Res. 1997;21(4):613–613.
35. Andersson C, Johnsson K, Berlund M, Ojeghagen A. Alcohol involvement in Swedish university freshmen related to gender, age, serious relationship and family history of alcohol problems. Alcohol Alcohol. 2007;42(5):448–55.
36. Fleming F, Barry K, MacDonald R. The Alcohol Use Disorder Identification Test (AUDIT) In A College Sample. Int J Addict. 1991;26(11):1173–85.
37. Kyprid K, Langley J, McGee R, Saunders J, Williams S. High prevalence, persistent hazardous drinking among New Zealand tertiary students. Alcohol Alcohol. 2002;37(5):457–64.
38. US Government. Drug-Free Schools and Campuses Act [Internet]. United States of America; 1999 p. 1–214. Available from: https://www.mhcc.edu/DFSCA/#:~:text=The Drug-Free Schools and,of alcohol and illicit drugs.
39. Janosik SM, Gregory DE. The Clery Act and Its Influence on Campus Law Enforcement Practices. J Stud Aff Res Pract. 2003;41(1):180–98.
40. Gregory DE, Janosik SM. The Effect of the Clery Act on Campus Judicial Practices. J Coll Stud Dev. 2003;44(6):763–78.
41. Leontini R, Schofield T, Brown R, Hepworth J. “Drinking cultures” in university residential colleges: Australian case study of the rle of alcohol olicy. Contemp Drug Probl. 2017;44(1):32–48.
42. Faden VB, Baskin ML. An evaluation of college online alcohol-policy information. J Am Coll Health Assoc. 2002;51(3):101–7.
43. Pernie SE. Content analysis of university alcohol policies: “Party schools” compared to non-party schools. ProQuest Diss Theses [Internet]. 2008 [cited 2017 May 8];163-n/a. Available from: http://scholarworks.wmich.edu/dissertations
44. Chitty KM, Chow Chuen JAP, Howse E, Thow AM. Content of university alcohol policies in New South Wales, Australia. Heal Promot J Aust. 2019;30(3):324–32.
45. WHO. Global strategy to reduce the harmful use of alcohol [Internet]. Geneva; 2010. Available from: https://www.who.int/teams/mental-health-and-substance-use/alcohol-drugs-and-addictive-behaviours/alcohol
46. Faden VB, Baskin ML. Evaluation of College Alcohol Policies. J Am Coll Heal. 2002;51(3):101–7.
47. Lange JE. Being a coordinator of campus alcohol and other drug (AOD) prevention activities. In: When They Drink : Practitioner Views and Lessons Learned On Preventing High-Risk Collegiate

Drinking [Internet]. Glassboro, New Jersey: Rowan University Center for Addiction Studies; 2006. p. 265–74. Available from: https://www.juliavtaylor.com/uploads/3/1/3/0/3130679/_whentheydrinkbook.pdf

48. Toomey TL, Wagenaar AC. Environmental policies to reduce college drinking: options and research findings. J Stud Alcohol Suppl. 2002;(14):193–205.
49. Christie J, Fisher D, Kozup JC, Smith S, Burton S, Creyer EH. The Effects of Bar-Sponsored Alcohol Beverage Promotions Across Binge and Nonbinge Drinkers. J Public Policy Mark. 2001;20(2):240–53.
50. Wechsler H, Lee JE, Gledhill-Hoyt J, Nelson TF. Alcohol use and problems at colleges banning alcohol: results of a national survey. J Stud Alcohol. 2001;62(2):133–41.
51. Carey KB, Scott-Sheldon LAJ, Garey L, Elliott JC, Carey MP. Alcohol Interventions for Mandated College Students: A Meta-Analytic Review. J Consult Clin Psychol. 2016;84(7).
52. Jones B, Corbin W, Fromme K. A review of expectancy theory and alcohol consumption. Addiction. 2001;96(1):57–72.
53. Brown R, Murphy S. Contrasting staff and student views on alcohol education provision in a UK university. Drugs Educ Prev Policy [Internet]. 2019;26(3):229–37. Available from: https://doi.org/10.1080/09687637.2018.1475548
54. Room R, Babor T, Rehm J. Alcohol and public health. Lancet. 2005;365:519–30.
55. National Department of Health (NDoH), Statistics South Africa (Stats SA), South African Medical Research Council (SAMRC), ICF. South Africa Demographic and Health Survey 2016 [Internet]. Pretoria, South Africa and Rockville, Maryland; 2019. Available from: https://dhsprogram.com/pubs/pdf/FR337/FR337.pdf
56. Ramsoomar L, Morojele NK. Trends in alcohol prevalence , age of initiation and association with alcohol-related harm among South African youth : Implications for policy Current alcohol policy in SA. South African Med J. 2012;102(7):609–12.
57. Kyei K, Ramagoma M. Alcohol Consumption in South African universities: Prevalence and factors at the University of Venda, Limpopo Province. J Soc Sci. 2013;36(1):77–86.
58. Pengpid S, Peltzer K, van der Heerver H, Skaal L. Screening and brief interventions for hazardous and harmful alcohol use among university students in South Africa: Results from a Randomized Control Trial. Int J Enivironmental Res Public Heal. 2013;10:2043–57.
59. Young C, Klerk V De. Patterns of alcohol use on a South African university campus: The findings of two annual drinking surveys. African J Drug Alcohol Stud [Internet]. 2009 [cited 2014 May 27];7(3):101–10. Available from: http://www.sahealthnet.co.za/admodule/afrjour/ajdas7(2).pdf#page=34
60. Peltzer K, Phaswana N. Substance use among South African university students: a quantitative and qualitative study [Internet]. Vol. 2, SA Health Info. 1999. p. Alcohol and Drug Abuse Module. Available from: http://www.sahealthinfo.org/admodule/sustudents.htm
61. Berezowski N. The prevalence of subtsnace use amongst first and fourth year commerce students at the Univerisity of Cape Town: A comparative analysis [Internet]. University of Cape Town; 2005. Available from: https://open.uct.ac.za/bitstream/handle/11427/5851/thesis_com_2005_berezowski_n.pdf?sequence=1
62. Van Zyl P, Botha J, Van Wyk M, Breytenbach J, Nel C, Van Niekerk M, et al. Hazardous, harmful and dependent drinking in hostel-dwelling students at the University of the Free State, Bloemfontein: A cross-sectional study. J Child Adolesc Ment Health. 2015;27(2):125–33.
63. Nyandu A, Ross E. Alcohol consumption among undergraduate social work students at a South African university. Soc Work Educ [Internet]. 2020;39(4):515–33. Available from: https://doi.org/10.1080/02615479.2019.1661372
64. Govender I, Nel K, Sibuyi XM. An exploration of alcohol use amongst undergraduate female psychology students at a South African university. South African J Psychiatry. 2017;23(1):1–6.
65. Vorster A, Gerber AM, van der Merwe LJ, van Zyl S. Second and third year medical students' self-reported alcohol and substance use, smoking habits and academic performance at a south african medical school. Heal SA Gesondheid. 2019;24(0):1–8.
66. Young C, Klerk V De. Patterns of Alcohol Usage on a South African University Campus. Afr J Drug Alcohol Stud. 2008;7(2):101–12.

67. Department of Trade and Industry. National liquor norms and standards. Liquor Act 59 of 2003 South Africa: Government Gazette; 2013 p. 3–13.
68. Department of Social Development. Anti-substance Abuse Programme of Action. Pretoria; 2011.
69. Khosa P, Dube N, Nkomo TS. Investigating the Implementation of the Ke-Moja Substance Abuse Prevention Programme in South Africa's Gauteng Province. Open J Soc Sci. 2017;05(08):70–82.
70. Department of Education. Draft Policy for the Managment of Drug Abuse by learners in public and independent schools and further education and training institutions. Pretoria, South Africa: Government Gazette; 2002 p. 1–12.
71. Borsari B, Carey K. Peer influences on college drinking: A review of the research. J Subst Abuse. 2001;13:391–421.
72. Wechsler H, Nelson T. What We Have Learned From the Harvard School of Public Health College Alcohol Study: Focusing Attention on College Student Consumption and The Environmental Conditions That Promote It. J Stud Alcohol Drugs. 2008;69(4):481–90.
73. Preez R, Pentz C., Lategan BW. Why students drink: a study of South African university students' drinking behaviour. South African J High Educ. 2016;30(2):73–93.
74. Moure-Rodrigues L, Carbia C, Lopez-Caneda E, Varela MC, Cadaveria F, Caamano-Isorna F. Trends in alcohol use among young people according to the pattern of consumtion on starting university: A year follow-up study. Pols One [Internet]. 2018;13(4):1–16. Available from: https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0193741
75. Pengpid S, Peltzer K, der Heever H. Problem alcohol use and associated factors in a sample of university students in South Africa. J Psychol Africa. 2013;23(2):243–9.
76. Pengpid S, Peltzer K, van der Heever H, Skaal L. Screening and brief interventions for hazardous and harmful alcohol use among university students in South Africa: results from a randomized controlled trial. Int J Environ Res Public Health. 2013 May;10(5):2043–57.
77. Department of Higher Education Training. Department of Higher Education Training [Internet]. 2020 [cited 2020 Jul 26]. Available from: https://www.dhet.gov.za/SitePages/UniversitiesinSA.aspx
78. Frank O, Snijders T. Estimating the Size of Hidden Populations Using Snowball Sampling. J Off Stat. 1994 Mar;10(1):53–67.
79. Gauteng Tourism. Gauteng Tourism [Internet]. Available from: http://www.gauteng.net/
80. SA Tourism. South Africa Info [Internet]. Available from: http://www.southafrica.info/about/geography/north-west.htm#.U7vAkW4aJMs
81. Anderson R. Thematic Content Analysis (TCA) Descriptive Presentation of Qualitative Dat [Internet]. Well Knowing Consulting. 2007. p. 1–4. Available from: http://www.wellknowingconsulting.org/publications/pdfs/ThematicContentAnalysis.pdf
82. Attride-Stirling J. Thematic networks: An analytic tool for qualitative research. Qual Res. 2001;1(3):385–405.
83. Lategan BW, du Preez R, Pentz CD. Socio-demographic insights into South African student drinking behaviour. South African J High Educ. 2017;31(5):90–115.
84. du Preez R, Pentz CD, Lategan BW. Why students drink: A study of South African University students' drinking behaviour. South African J High Educ. 2016;30(2):73–93.
85. Cremeens JL, Usdan SL, Umstattd MR, Talbott LL, Turner L, Perko M. Challenges and recommendations to enforcement of alcohol policies on college campuses: An administrator's perspective. J Am Coll Heal. 2011;59(5):427–30.
86. Wechsler H, Kelley K, Weitzman ER, San Giovanni JP, Seibring M. What colleges are doing about student binge drinking a survey of college administrators. J Am Coll Health Assoc. 2000;48(5):219–26.
87. Harris SK, Sherritt L, Van Hook S, Wechsler H, Knight JR. Alcohol policy enforcement and changes in student drinking rates in a statewide public college system: A follow-up study. Subst Abus Treat Prev Policy. 2010;5(1):1–11.
88. Presley C, Meilman P, Lyerla R. Development of the Core Alcohol and Drug Survey: Initial Findings and Future Directions. J Am Coll Heal. 1994;42(6):248–55.
89. O'Malley PM, Johnston LD. Epidemiology of alcohol and other drug use among American college students. J Stud Alcohol. 2002;63(SUPPL. 14):23–39.

90. Cronce JM, Toomey TL, Lenk K, Nelson TF, Kilmer JR, Larimer ME. NIAAA's College Alcohol Intervention Matrix. Alcohol Res. 2018;39(1):43–7.
91. Jernigan DH, Shields K, Mitchell M, Arria AM. Assessing Campus Alcohol Policies: Measuring Accessibility, Clarity, and Effectiveness. Alcohol Clin Exp Res. 2019;43(5):1007–15.
92. Hunter Fager J, Mazurek Melnyk B. The effectiveness of intervention studies to decrease alcohol use in college undergraduate students: an integrative analysis. Worldviews Evid Based Nurs. 2004;1(2):102–19.
93. Rheeder CS. First year students' depictions of alcohol consumption : an alcohol expectancy challenge programme [Internet]. North-West University; 2018. Available from: https://repository.nwu.ac.za/bitstream/handle/10394/33192/Rheeder_CS.pdf?isAllowed=y&sequence=1
94. Harm RA. Environmental Strategies to Reduce Alcohol-Related Harm Among College Students " the scope of the problem makes immediate results of any interventions highly unlikely ". 2017;1–13.
95. Saltz RF, Paschall MJ, McGaffigan RP, Nygaard PMO. Alcohol Risk Management in College Settings. Am J Prev Med [Internet]. 2010 Dec [cited 2016 Oct 13];39(6):491–9. Available from: http://linkinghub.elsevier.com/retrieve/pii/S0749379710005295
96. Wolfson M, Champion H, McCoy TP, Rhodes SD, Ip EH, Blocker JN, et al. Impact of a Randomized Campus/Community Trial to Prevent High-Risk Drinking Among College Students. Alcohol Clin Exp Res. 2012;36(10):1767–78.
97. DeJong W, Langford LM. A typology for campus-based alcohol prevention: moving toward environmental management strategies. J Stud Alcohol Suppl. 2002;(14):140–7.
98. Saltz RF. Targeted Prevention Approaches-What Works: Environmental approaches to prevention in college settings. Vol. 34, Alcohol Research & Health. 2004.
99. Watson M, Shaw D, Molchanoff L, McInnes C. Challenges, lessons learned and results following the implementation of a human papilloma virus school vaccination program in South Australia. Aust N Z J Public Health [Internet]. 2009 Aug [cited 2012 Jul 27];33(4):365–70. Available from: http://www.ncbi.nlm.nih.gov/pubmed/19689598
100. Martin BA, Sparks M, Wagoner KG, Sutfin EL, Egans KL, Sparks A, et al. Study to Prevent Alcohol-Related Consequences: Using a Community Organizing Approach to Implement Environmental Strategies in and around the College Campus-An Intervention Manual [Internet]. Winston Salem, North Carolina; 2012 [cited 2021 Mar 30]. Available from: https://www.nccpsafety.org/assets/files/library/SPARC_Manual.pdf
101. Kypri K, Maclennan B, Cousins K, Connor J. Hazardous drinking among students over a decade of university policy change : controlled before-and-after evaluation. Internatonal J Environ Res ublic Heal. 2018;25:12–7.
102. Saltz RF, DeJong W. Reducing Alcohol Problems on Campus: A Guide to Planning and Evaluation [Internet]. 2002. Available from: https://www.collegedrinkingprevention.gov/media/finalhandbook.pdf
103. Kawaida K, Yoshimoto H, Goto R, Saito G, Ogai Y, Morita N, et al. Reasons for drinking among college students in Japan: A cross- sectional study. Tohoku J Exp Med. 2018;246(3):183–9.
104. Office of National Drug Control Policy. The Challenge in Higher Education - Confronting and Reducing Substance Abuse on Campus. National Criminal Justice Reference Service (NCJRS) Virtual Library. Washington, DC; 2004.
105. SIU/CORE Institute. CORE Alcohol and Drug Survey: Executive Summary [Internet]. Carbondale, Illinois; 2015 [cited 2021 Mar 21]. Available from: https://core.siu.edu/_common/documents/2013-2015-core-institute-executive-summary.pdf
106. Department of Higher Education Training. Univerisities in South Africa [Internet]. [cited 2021 Jan 27]. p. 3. Available from: https://www.dhet.gov.za/SiteAssets/New site Documents/Universities in South Africa1.pdf
107. National Govenrment of South Africa. TVET Colleges [Internet]. [cited 2021 Jan 27]. Available from: https://nationalgovernment.co.za/units/type/9/tvet-college

Appendices

Appendix A: Plagiarism Declaration





PLAGIARISM DECLARATION TO BE SIGNED BY ALL HIGHER DEGREE STUDENTS

I, Laetitia Temper (Student number: 538062) am a student registered for the degree of COMH7178A Master of Public Health in the academic year 2.

I hereby declare the following:

I am aware that plagiarism (the use of someone else's work without their permission and/or without acknowledging the original source) is wrong.

I confirm that the work submitted for assessment for the above degree is my own unaided work except where I have explicitly indicated otherwise.

I have followed the required conventions in referencing the thoughts and ideas of others.

I understand that the University of the Witwatersrand may take disciplinary action against me if there is a belief that this is not my own unaided work or that I have failed to acknowledge the source of the ideas or words in my writing.

I have included as an appendix a report from "Turnitin" (or other approved plagiarism detection) software indicating the level of plagiarism in my research document.

Signature:  Date: 22 April 2021

Appendix B: List of South African Universities

From (106)

1. University of Cape Town
2. University of Fort Hare
3. University of the Free State
4. University of Johannesburg
5. University of KwaZulu-Natal
6. University of Limpopo
7. University of Mpumalanga
8. Nelson Mandela University
9. North West University
10. University of Pretoria
11. Rhodes University
12. Sefako Makgatho Health Sciences University
13. Sol Plaatje University
14. University of South Africa
15. University of Stellenbosch
16. Walter Sisulu University for Technology
17. University of Venda
18. University of the Western Cape
19. University of the Witwatersrand
20. University of Zululand
21. Cape Peninsula University of Technologies
22. Central University of Technology Free State
23. Durban University of Technology
24. Mangosuthu University of Technology
25. Tshwane University of Technology
26. Vaal University of Technology

Appendix C: List of South African TVET Institutions

From (107)

1. Boland TVET College
2. Buffalo City TVET College
3. Capricorn TVET College
4. Central Johannesburg TVET College
5. Coastal TVET College
6. College of Cape Town for TVET
7. Eastcape Midlands TVET College
8. Ehlanzeni TVET College
9. Ekurhuleni East TVET College
10. Ekurhuleni West TVET College
11. Elangeni TVET College
12. Esayidi TVET College
13. False Bay TVET College
14. Flavius Mareka TVET College
15. Gert Sibande TVET College
16. Goldfields TVET College
17. Ikhala TVET College
18. Ingwe TVET College
19. King Hintsa TVET College
20. King Sabata Dalindyebo TVET College
21. Lephalale TVET College
22. Letaba TVET College
23. Lovedale TVET College
24. Majuba TVET College
25. Maluti TVET College
26. Mnambithi TVET College
27. Mopani South TVET College
28. Motheo TVET College
29. Mthashana TVET College
30. Nkangala TVET College
31. Northern Cape Rural TVET College
32. Northern Cape Urban TVET College
33. Northlink TVET College
34. Orbit TVET College
35. Port Elizabeth TVET College
36. Sedibeng TVET College
37. Sekhukhune TVET College
38. South Cape TVET College
39. South West Gauteng TVET College
40. Taletso TVET College
41. Thekwini TVET College
42. Tshwane North TVET College
43. Tshwane South TVET College
44. Umfolozi TVET College
45. Umgungundlovu TVET College
46. Vhembe TVET College
47. Vuselela TVET College
48. Waterberg TVET College
49. West Coast TVET College
50. Western College for TVET

Appendix D: Study Information Sheet

An explorative studying into the role of universities in alcohol control

Hello

My name is Laetitia Ngandu. I am studying towards my masters by conducting a research study. In this study we want to explore the role of universities in alcohol control. I particularly want to explore themes current practice and policies in place for alcohol control. I am inviting you to take part in a research study and would be very grateful if you would agree to answer a few questions about alcohol control at universities.

I will be conducting a qualitative research study and involve conducting interview with various people involved in the area of alcohol control on a national level as well as university administrators. The interview will take up to 45 minutes to complete during which I will ask you questions and would you like to tell what circumstances are really like, not what they should be.

If you feel that a question is inappropriate or too sensitive, you are free not to answer it. While answering all the questions will be most useful for our study, you can decide not to answer any questions if you wish. You can stop the interview at any time or ask for clarity when the questions are unclear.

To make the interview easier for me, I will also request if we can tape record the interview. If you do not want the interview to be taped that is your right, and it will not influence the interview or the research in any way. If you give us permission to tape the interview we will listen to the tape and write down everything that you say but not use your name. We will keep the tapes until the full report has been compiled and finalised, after which they will be destroyed.

You will receive no direct benefit from your participation in this study. However, your participation may help the researcher and universities better understand alcohol control in the context of tertiary education. Your participation in this study is completely voluntary. If you agree to take part, you can stop at any time if you do not want to carry on being involved. If you refuse to take part or stop at any point during the study, you will not be affected in any way and you will not be discriminated against.
All the information you choose to give me will be kept confidential. Your name will not be used in the research report and no one will be able to link your answers to you. Only my supervisors

and I will have access to the information which will be kept in a secure place. All efforts will be made to keep information confidential.

If you have any questions about this, please feel free to contact me:

Laetitia Ngandu

School of Public Health

University of Witwatersrand

Johannesburg

Tel no: 0825682241

Email: langandu@gmail.com

Appendix E: Study Consent Form

Study title: Exploring the perceptions of alcohol control at South African universities at a national and institutional level

The study has been described to me in a language that I understand and I freely and voluntarily agree to participate. My questions about the study have been answered. I understand that my identity will not be disclosed and that I may withdraw from the study without giving a reason at any time and this will not negatively affect me in any way. I understand there will be no reimbursement for participation.

At all times the researcher will keep the source of the information confidential and refer to me and my words by a number or invented name. The written transcripts or notes of the actual interview will only be released to supervisors who will assist in the data analysis, the number or invented name will be used in these transcripts.

I understand the procedure described above. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given a copy of this form

If you consent to partake in this study please sign here:

_____

Participant signature

_____

Date

_____

Interviewer's signature

_____

Date

Appendix F: Consent for Tape Recording

If you consent to partake in the study could you please tick an option regarding audio tape-recording:

I have read the project information sheet and it has been clearly explained to me and I understand that it is up to me whether or not the interview is tape-recorded. The purpose of recording the interview is to capture accurately all the information that will be given. It will not affect in any way how the researcher treats me if I do not want the interview to be tape-recorded.

I understand that if my participation is tape-recorded that the recording will be destroyed after compilation and completion of this report. I understand that I can ask the person interviewing me to stop tape recording, and to stop the interview altogether, at any time. I understand that the information that I give will be treated in the strictest confidence and that my name will not be used when the interviews are typed up.

___ Yes, I agree to be **audio taped** during my participation in this study.

___ No, I do not agree to be **audio taped** during my participation in this study.

_____

Interviewee's signature

_____

Interviewer's signature

Date: _____

Appendix G: National Interview Guide

Alcohol control at South African universities

In-Depth Interview (National administrators, NGOs and researchers)

Interview GUIDE

Questions in bold (with prompts below – ONLY if not raised)

1. What is known about alcohol consumption at South African universities?

a. Why?
b. Any recorded data?

2. What broad responsibilities do you think universities have to curtail alcohol abuse in students?

a. Despite the legal drinking age of 18
b. Boundaries of responsibility?

The draft policy for the management of drug abuse by learners in schools and in public further education institutions gives institutions brief guidelines to develop their own policies on both prevention and intervention of substance abuse at their respective institutions.

3. What are your thoughts on this policy draft?

a. Are the guidelines applicable for all levels of education?

4. What policies are in place to regulate alcohol consumption at universities?

a. What are your thoughts on universities practicing self-regulation with institution specific policies?

5. What are barriers to universities developing and implementing their own policies?

a. Any resource limitations?
b. Having a standardized policy?

c. More coordinated effort?

6. What government departments would be important if a standardized policy were to be formulated?

The draft policy framework for the management of drug abuse by learners in schools and in public further education institutions is a document outlining broad strategies to manage substance abuse in learning institutions.

7. Can you tell me what national strategies currently are in place to be implemented by universities for alcohol control?

a. If Ke Moja is mentioned
    - **Follow up question: what is the status on the roll out to all universities?**
    - Challenges?
    - Successes?
b. If Ke Moja, is not mentioned
    - A brief description will be given
    - **Follow up question: Do you have any comments on that?**

8. How is alcohol control at universities monitored?

a. National statistics collected?

9. What additional policies do you think South African can develop to encourage universities to curb alcohol-related consumption and harm?

a. Feasibility of grants or reward systems?

10. What other measures might be considered to target excessive drinking among young people?

a. Is rising the legal drinking age on the policy agenda?
b. Why or why not?

11. Do you have anything else to add?

Appendix H: HEI Interview Guide

Alcohol control at South African universities

In-Depth Interview (university administrators)

Interview GUIDE

Questions in bold (with prompts below – ONLY if not raised)

To begin with I would like to ask you some questions about your current position.

Current position	
Duration in current position	
Description of roles and responsibility in position	

1. What is known about student alcohol consumption at your university?

a. Sources of data?

University alcohol policy: formation, enforcement and implementation

2. How is student drinking monitored at this University?

a. Reports from student health?
b. Reports from campus security?
c. Reports at residences?
d. Reports on campus?
e. Reports from the surrounding community?

3. Please describe what alcohol policies this university has in place?

a. Hostel specific? (if relevant)
b. Zero tolerance on campuses?
c. Sponsorship from alcohol industry?
d. Counselling referral?

4. How often have these policies been reviewed?

a. Who is responsible?
b. Who is involved?

5. Describe programmes the university has put in place to curb alcohol consumption on your campus and residences if any?

a. Mass education programme?
b. Targets: first or to all students?

6. What results have you seen from these campaigns?

a. Successes?
b. Challenges?

7. Please describe how alcohol policies are enforced at this university.

a. On campus?
b. At university residences?
c. At university organized functions where alcohol is being sold?

8. What disciplinary actions are taken against students who breach alcohol policies?

a. Such as suspension or expulsion of student
b. Do you keep records of these cases?
c. Alcohol education programme?

9. What are the barriers to this institution further developing and implementing alcohol policies?

a. Resource restriction?
b. Understanding of National guidelines?

I will now be asking you questions with regards to the draft policy for the management of drug abuse by learners in school and in public further education institutions.

10. **What are your thoughts on this policy draft?**

a. How are the guidelines

11. **What are your thoughts about alcohol being grouped with other substances of abuse in the draft policy?**

a. How does the issue of alcohol abuse differ from other substances of abuse?

12. **Can you discuss a national anti-substance abuse programme that has been rolled out to universities?**

a. if Ke Moja is mentioned
    i. Following-up question: what is the status on the roll out to all universities?
    ii. Challenges?
    iii. Successes?
b. Which national departments were involved in the programme?
c. If Ke Moja, is not mentioned
    i. A brief description will be given
    ii. Follow-up question: Do you have any comments?

13. **What additional policies do you think South African can develop to encourage universities to curb alcohol-related consumption and harm?**

b. Feasibility of grants or reward systems?

14. **Do you have anything else to add?**

Appendix I: Ethics Clearance Certificate

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)

Office of the Deputy Vice-Chancellor (Research & Post Graduate Affairs)

TO: Ms LA-T Temper, nee Ngandu
School of Public Health
Medical School
University

E-mail: langandu@wits.ac.za

CC: Supervisor: Dr D Blaauw <Duane.Blaauw@wits.ac.za>
and <HREC-Medical.ResearchOffice@wits.ac.za>

FROM: Iain Burns
Human Research Ethics Committee (Medical)
Tel: 011 717 1252

E-mail: Iain.Burns@wits.ac.za

DATE: 2020/09/17

REF: *R14/49*

PROTOCOL NO: **M2008123** *(This is your ethics application study reference number. Please quote this reference number in all correspondence relating to this study)*

PROJECT TITLE: *Alcohol control at South African universities*

Please find attached the Clearance Certificate for the above project. I hope it goes well and that an article in a recognized publication comes out of it. This will reflect well on your professional standing and contribute to the Government funding of the University.

MSWorks2000/Iain0007/Clearscan.wps

Appendix J: NIAAA Alcohol Intervention Matrix: Individual Level Strategies

From (90)

INDIVIDUAL-LEVEL STRATEGIES: Revised and Updated*

Estimated Relative Effectiveness, Costs, and Barriers; Public Health Reach; Research Amount; and Primary Modality[1]

COLLEGEAIM

COSTS: Combined program and staff costs for adoption/implementation and maintenance

EFFECTIVENESS: Success in achieving targeted outcomes[1]

	Lower costs $	Mid-range costs $$	Higher costs $$$
Higher effectiveness ★★★	**IND-3** Normative re-education: Electronic/mailed personalized normative feedback (PNF)—Generic/other[2] [##, B, ●●●●, online/offsite] **IND-10** Skills training, alcohol focus: Self-monitoring/self-assessment alone[3] [#, F, ●●●, online/offsite] **IND-24** Personalized feedback intervention (PFI): eCHECKUP TO GO (formerly, e-CHUG)[2] [#, B, ●●●●, online]	**IND-9** Skills training, alcohol focus: Goal/intention-setting alone[3] [##, F, ●●, IPI] **IND-14** Skills training, alcohol plus general life skills: Alcohol Skills Training Program (ASTP)[2] [#, F, ●●●, IPG] **IND-18** Brief motivational intervention (BMI): In-person—Individual (e.g., BASICS) [##, F, ●●●●, IPI] **IND-26** Personalized feedback intervention (PFI): Generic/other[2] [##, B, ●●●●, online]	**IND-19** Multi-component education-focused program (MCEFP): AlcoholEdu® for College[2] [#, B, ●●, online]
Moderate effectiveness ★★	**IND-11[a]** Skills training, alcohol focus: Decisional balance exercise alone[3] [#, F, ●●, online/offsite] **IND-12[a]** Skills training, alcohol focus: Protective behavioral strategies alone[3] [#, B, ●●, online/offsite]	**IND-4[b]** Normative re-education: In-person norms clarification alone[3] [#, F, ●●●, IPG] **IND-8** Skills training, alcohol focus: Expectancy challenge interventions (ECI)—Experiential [##, F, ●●●, IPG] **IND-15** Skills training, alcohol plus general life skills—Parent-based alcohol communication training [#, F, ●●●●, offsite] **IND-16** Skills training, alcohol plus general life skills or general life skills only: Generic/other[2] [#, F, ●●●●, IPG] **IND-17** Brief motivational intervention (BMI): In-person—Group [##, F, ●●●, IPG] **IND-20[a]** Multi-component education-focused program (MCEFP): Alcohol-Wise® (contains eCHECKUP TO GO) [#, B, ●●, online]	Interventions Delivered by Health Care Professionals Strategies in which health care professionals identify and help students whose drinking patterns put them at risk for harm, or who are already experiencing alcohol-related problems: **IND-27** Screening and behavioral treatments **IND-28** Medications for alcohol use disorder These approaches can reduce harmful drinking, according to studies conducted mainly in general adult populations (ages 18–65). *The differences in research populations, along with wide variations in costs and barriers across campuses, precluded ratings relative to other strategies. See page 18 for more information.*
Lower effectiveness ★	**IND-2** Normative re-education: Electronic/mailed personalized normative feedback (PNF) Event-specific prevention (21st birthday cards) [#, B, ●●●, online/offsite] **IND-13[b]** Skills training, alcohol plus general life skills: Alcohol 101 Plus™ [2] [#, B, ●●, online]		
Not effective X	**IND-7** Skills training, alcohol focus: Expectancy challenge intervention (ECI)—By proxy/didactic/discussion alone[3] [#, F, ●●, IPG]	**IND-1** Information/knowledge/education alone[3] [#, B, ●●●●, IPG] **IND-5** Values clarification alone[3] [#, F, ●●●, IPG] **IND-6[b]** Skills training, alcohol focus: Blood alcohol concentration feedback alone[3] [#, F, ●●, IPI]	
Too few studies to rate effectiveness ?	**IND-22** Personalized feedback intervention (PFI): CheckYourDrinking (beta 1.0 version)[2] [#, B, ●, online] **IND-23** Personalized feedback intervention (PFI): College Drinker's Check-up (CDCU)[2] [#, B, ●, online] **IND-25[a]** Electronic/mailed Personalized Feedback Intervention (PFI): Drinking Assessment and Feedback Tool for College Students (DrAFT-CS) [##, B, ●, computer]	**IND-21** Multi-component education-focused programs (MCEFP): Miscellaneous[2] [#, B, ●, online]	

Legend

Effectiveness rating, based on percentage of studies reporting any positive effect:
*** = 75% or more
** = 50% to 74%
* = 25% to 49%
X = Less than 25%
? = Too few studies to rate effectiveness

Barriers:
= Higher
= Moderate
= Lower

[a] = New intervention (2019)
[b] = Intervention changed position in the matrix

Public health reach:
B = Broad
F = Focused

Research amount/quality:
●●●● = 11+ studies
●●● = 7 to 10 studies
●● = 4 to 6 studies
● = 3 or fewer studies

Primary modality:
Computer
IPI = In-person individual
IPG = In-person group
Online
Offsite

*See box on page 3 for details. See brief descriptions and additional ratings for each individual-level strategy on the summary table beginning on page 13.

[1]**Effectiveness** ratings are based on the percentage of studies reporting any positive outcomes (see legend). Strategies with three or fewer studies did not receive an effectiveness rating due to the limited data on which to base a conclusion. **Cost** ratings are based on the relative program and staff costs for adoption, implementation, and maintenance of a strategy. Actual costs will vary by institution, depending on size, existing programs, and other campus and community factors. **Barriers** to implementing a strategy include cost and opposition, among other factors. **Public health reach** refers to the number of students that a strategy affects. Strategies with a broad reach affect all students or a large group of students (e.g., all underage students); strategies with a focused reach affect individuals or small groups of students (e.g., sanctioned students). **Research amount/quality** refers to the number of randomized controlled trials (RCT) that evaluated the strategy (see legend).

[2]Strategies are listed by **brand name** if they were evaluated by at least two RCTs; strategies labeled **generic/other** have similar components and were not identified by name in the research or were evaluated by only one RCT; strategies labeled **miscellaneous** have the same approach but very different components.

[3]Although this approach is a component of larger, effective programs such as BASICS and ASTP, it is rated here as a stand-alone intervention.

Appendix K: NIAAA Alcohol Intervention Matrix: Environmental Level Strategies

From (90)

ENVIRONMENTAL-LEVEL STRATEGIES: Revised and Updated*

Estimated Relative Effectiveness, Costs, and Barriers; Public Health Reach; and Research Amount/Quality[1]

COLLEGE AIM

COSTS: Combined program and staff costs for adoption/implementation and maintenance

EFFECTIVENESS: Success in achieving targeted outcomes[1]

	Lower costs $	Mid-range costs $$	Higher costs $$$
Higher effectiveness ★★★	**ENV-16** Restrict happy hours/price promotions [###, B, ●●●] **ENV-24** Retain age-21 drinking age [##, B, ●●●●]	**ENV-11** Enforce age-21 drinking age (e.g., compliance checks) [##, B, ●●●●] **ENV-22**[a] Establish minimum unit pricing [###, B, ●●●●] **ENV-25** Increase alcohol tax [###, B, ●●●●]	
Moderate effectiveness ★★	**ENV-17** Retain or enact restrictions on hours of alcohol sales [##, B, ●●●●] **ENV-21**[b] Retain ban on Sunday sales (where applicable) [##, B, ●●●●] **ENV-36** Enact social host provision laws [##, B, ●●●]	**ENV-3** Prohibit alcohol use/sales at campus sporting events [##, F, ●●●●] **ENV-23**[a] Conduct "reward & reminder" or "mystery shopping visit" [C/L = #, S = ##, B, ●●●] **ENV-27** Enact dram shop liability laws: Sales to intoxicated [##, B, ●●●●] **ENV-28** Enact dram shop liability laws: Sales to underage [##, B, ●●●] **ENV-32** Limit number/density of alcohol establishments [###, B, ●●●●] **ENV-37** Retain state-run alcohol retail stores (where applicable) [###, B, ●●●●] **ENV-39**[a] Enact false/fake ID laws [##, B, ●●●]	**ENV-12**[b] Restrict alcohol sponsorship and advertising [##, B, ●●●●] **ENV-33** Enact responsible beverage service training laws [##, B, ●●●]
Lower effectiveness ★		**ENV-1** Establish an alcohol-free campus [###, B, ●●●] **ENV-7** Conduct campus-wide social norms campaign[2] [#, B, ●●●●]	**ENV-14** Implement beverage service training programs: Sales to intoxicated [C = #, S/L = ##, B, ●●●●] **ENV-15** Implement beverage service training programs: Sales to underage [C = #, S/L = ##, B, ●●●●] **ENV-30** Enact keg registration laws [##, B, ●●●]
Too few robust studies to rate effectiveness —or mixed results ?	**ENV-4** Prohibit alcohol use/service at campus social events [##, B, 0] **ENV-5** Establish amnesty policies[2] [#, F, ●●●] **ENV-8** Require Friday morning classes[2] [#, B, ●●] **ENV-9** Establish standards for alcohol service at campus social events [#, B, ●●●] **ENV-10** Establish substance-free residence halls[2] [#, F, ●●] **ENV-13** Prohibit beer kegs [C = #, S/L = ###, B, ●●●] **ENV-18**[†] Establish minimum age requirements to serve/sell alcohol [##, B, ●●] **ENV-19** Implement party patrols [##, B, ●●●] **ENV-26** Increase cost of alcohol license [##, B, ●] **ENV-29** Prohibit home delivery of alcohol [##, B, ●●] **ENV-31** Enact noisy assembly laws [##, B, 0]	**ENV-6** Implement bystander interventions[2] [#, F, ●]	**ENV-2** Require alcohol-free programming[2] [#, F, ●●] **ENV-20** Implement safe-rides program[2] [##, F, ●●] **ENV-34** Conduct shoulder tap campaigns [##, B, ●●] **ENV-35** Enact social host property laws [##, B, 0] **ENV-38** Require unique design for state ID cards for age < 21 [##, B, ●●●]

Legend

Effectiveness rating, based on estimated success in achieving targeted outcomes:
★★★ = Higher
★★ = Moderate
★ = Lower
? = Too few robust studies to rate effectiveness—or mixed results

Barriers:
= Higher
= Moderate
= Lower
C/S/L = Barriers at the college/state/local levels

Public health reach:
B = Broad
F = Focused

[a] = New intervention (2019)
[b] = Intervention changed position in the matrix

Research amount/quality:
●●●● = 5 or more longitudinal studies
●●● = 5 or more cross-sectional studies or 1 to 4 longitudinal studies
●● = 2 to 4 studies but no longitudinal studies
● = 1 study that is not longitudinal
0 = No studies

*See box on page 3 for details on the revision and update. See brief descriptions and additional ratings for each environmental-level strategy on the summary table beginning on page 19.

[1]**Effectiveness** ratings are based on estimated success in achieving targeted outcomes. **Cost** ratings are based on a consensus among research team members of the relative program and staff costs for adoption, implementation, and maintenance of a strategy. Actual costs will vary by institution, depending on size, existing programs, and other campus and community factors. **Barriers** to implementing a strategy include cost and opposition, among other factors. **Public health reach** refers to the number of students that a strategy affects. Strategies with a broad reach affect all students or a large group of students (e.g., all underage students); strategies with a focused reach affect individuals or small groups of students (e.g., sanctioned students). **Research amount/quality** refers to the number and design of studies (see legend). [2]Strategy does not seek to reduce alcohol availability, one of the most effective ways to decrease alcohol use and its consequences.
[†]Research amount decreased from original *CollegeAIM* because studies indirectly measuring the approach were replaced with a fewer number of direct studies since published.

Appendix L: Turnitin Report

538062:Temper_Research_Report_Final.docx

ORIGINALITY REPORT

12%	11%	4%	%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

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