

# ENGENDERING POSITIVE STUDENT ALCOHOL CULTURES IN UNIVERSITY RESIDENTIAL COLLEGES

AN ALCOHOL CULTURE CHANGE INITIATIVE





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# INTRODUCTION

The Engendering Positive Student Alcohol Cultures project was a health education and culture change initiative led by Victoria University in partnership with academics and health promotion practitioners from the University of New South Wales, the Burnet Institute and Talking Health Works. Peak industry bodies, University Colleges Australia and the Asia Pacific Student Accommodation Association (formerly known as the Australian College and University Housing Officers Association), supported the project.

According to VicHealth (2016b) health promotion includes the prevention of harm from alcohol. The VicHealth Alcohol Cultures Framework (2016; 2019) is a guide to public health action on drinking cultures and contributes to the VicHealth Alcohol Culture Change Initiative of which this project is a part. VicHealth (2016b:5-6) describe the framework as ‘...a conceptual tool for public health workers and those with an interest in shifting drinking cultures to reduce alcohol-related harm’ and to ‘... guide future efforts to build evidence-based strategies for alcohol harm reduction’. As such, the VicHealth Alcohol Cultures Framework informed this project.

The project interventions took a multicomponent approach with an overall focus on alcohol health promotion and alcohol education and literacy leading to positive alcohol culture change in four university residential college settings. The project design and implementation was underpinned by Freirean (1972a) critical educational methods, and incorporated elements of narrative pedagogy, with a focus on raising awareness to harms associated with cultures of excessive alcohol consumption, and alcohol policy review and actions to address harms. The project design met four specific project objectives. These objectives, informed by and consistent with VicHealth’s Alcohol and Culture Change Initiative objectives, were to create physical and/or social environments that:

1. Enable greater awareness of and facilitation of change within the ‘drinking cultures’ of tertiary students in university colleges / halls of residence.
2. Change the focus of social and leisure activities/behaviours within colleges from those that privilege a culture of excessive and/or frequent alcohol consumption to ones which foster ‘alcohol citizenship’ (support of lower-risk drinking).
3. Facilitate a learned ethos of moderation, civic responsibility.
4. Facilitate greater application of and adherence to

relevant regulatory instruments and policies in relation to alcohol consumption within an educational/residential environment.

The delivery of these objectives was in accordance with the VicHealth (2016) Alcohol Cultures Framework, which suggests that across Australia many drinking cultures exist, highlighting the need for targeted and tailored efforts for different subpopulations who engage in different drinking customs and practices. VicHealth’s (2016a) Alcohol Cultures Framework provides a lens for designing and implementing projects that seek to shift drinking cultures to reduce alcohol-related harms. The frames for intervention informed the design of the project interventions and the project’s evaluation (VicHealth 2016a, p. 7). VicHealth’s (2016) Alcohol Cultures Framework defines alcohol culture as ‘the way people drink, including the formal rules, social norms, attitudes and beliefs around what is and what is not socially acceptable for a group of people before, during and after drinking’.

Consistent with VicHealth’s (2016) Alcohol Cultures Framework the primary aim of this project was to influence alcohol culture in order to ‘reduce harm for the individual, their family, bystanders and the broader community’. VicHealth’s Alcohol Cultures Framework defines such a culture as:

“a supportive policy, physical and/or social environment where people do not feel pressure to drink; when alcohol is consumed it is done at levels of low risk; social pressure supports low-risk drinking and discourages high-risk drinking; occurrences of drinking are reduced; and intoxication is socially rejected (VicHealth 2016a, p. 6).”

VicHealth’s Alcohol Culture Change Initiative is an evidence-based approach to changing cultures of risky drinking within the Victorian population. The initiative aims to change cultures of risky drinking in Victoria. VicHealth funded nine intervention projects that work with different cultures of drinking across Victoria. The projects aim to change the way people drink alcohol. Many of the funded projects seek to do so by building a culture of peer-support for low risk drinking.

This health education project, led by Victoria University and funded by VicHealth under the Alcohol Culture Change Initiative, was informed by the above aims, it met the project deliverables and achieved its stated objectives.

# PROJECT DETAILS



## PROJECT TITLE

Engendering Positive Student Alcohol Cultures in university residential colleges



## PROJECT DATE

2017 -2019



## PROJECT LEAD

Associate Professor Tim Corney (Victoria University) compiled this report. It is based on the interventions, research and analysis conducted by a team of investigators led by Tim Corney. Members of the team are as listed below.



## PROJECT INVESTIGATORS

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The lead organisation for the project was Victoria University, based in Melbourne; Talking Health Works is a public health education consultancy; the Burnet Institute provided the digital intervention using a mobile/web-based technology known as the Mobile Intervention for Drinking in Young People (MIDY); University of New South Wales provided initial contextual research, gathering and analysing data from focus groups to inform the project interventions.

Key stakeholders in the sector supported the project. University Colleges Australia (UCA) is the peak body for university residential colleges in Australia. UCA, along with the Australian Association of University and College Housing Officers, now known as the Asia Pacific Student Accommodation Association (APSAA), provided financial in-kind contributions and participated in steering committee meetings. The National Association of Australian University Colleges (NAUUC, the national student body association) was consulted and expressed its support for the aims of the project.

### Assistance in compiling this report:

Adam Finlay (editing), Daveena Mawren (statistical analysis), and Brett Woods (independent evaluation)

# EXECUTIVE SUMMARY

## Project summary

This health education project targeted harmful alcohol cultures of periodic excessive consumption among tertiary students at four university colleges and/or halls of residences with approximately 1200 resident students. The project worked closely with college administrations and student leaders, with a focus on first year student enculturation into risky and/or harmful drinking cultures, such as: student orientation week (O'Week) drinking activities and other student run drinking events.

The project interventions took a multicomponent approach, trialling a number of interventions and activities. The overall methodology was informed by a critical and participatory-based narrative pedagogy (Freire 1972a). This included contextual research, a literature review and focus groups to explore student drinking and inform key campaign messages. An innovative digital intervention was trialled, known as the Mobile Intervention for Drinking in Young people (MIDY). It was offered to students at the four sites and supported by a targeted key message promotional campaign. A participatory student/administration co-review of college alcohol policies and regulatory measures was also undertaken using the method of Freirean (1972a) culture circles. The culture circles use a dialogical problem-posing approach. This approach uses an authentic student scenario to raise awareness to the risks and harms associated with cultures of excess alcohol consumption, to provide knowledge of harms and to address action for change. A project level evaluation was undertaken including the use of pre- and post-intervention surveys, interviews and an analysis of the culture circle interview data.

The overall goals of the project were to improve the drinking cultures within four university colleges / halls of residence settings in Victoria, and to enable awareness of harms and processes to ameliorate risks and harms associated with cultures of excessive consumption of alcohol. It is clear from the evaluative data that these goals have been met.

## Findings and achievements

Students and administrators reported an increased level of awareness and knowledge of the risks and harms associated with heavy and frequent alcohol consumption and articulated strategies to act to minimise risk and harm. The MIDY technology and key message campaign successfully engaged students and raised awareness of the risks and harms of cultures of excessive alcohol consumption. The Freirean culture circle method successfully enabled a participatory process of review of policies and regulatory measures concerning alcohol consumption in the colleges and enabled actions to minimise harm. The multicomponent approach and Freirean process was engaging, raised awareness, increased knowledge and provided a vehicle for addressing actions for change. The study suggests that the use of Freirean critical pedagogic methods, and in particular culture circles, may be useful in health literacy and health promotion interventions among hard-to-reach and at-risk cohorts in relation to awareness-raising and cultural change. This is consistent with the findings of Sharma (2001).



## Recommendations

The study recommends Freirean pedagogic methods as useful health education tools for raising awareness and minimising harms from excessive alcohol consumption in university residential contexts. In particular, the project recommends the use of culture circles in health literacy and health promotion interventions among hard-to-reach and at-risk cohorts in relation to awareness-raising and cultural change. The study suggests the further trialling and upscaling of Freirean pedagogic methods in health education with young people and university-age cohorts in relation to alcohol literacy. This is consistent with the findings of Sharma (2001).

The project rejects one-way, simplistic health messaging and recommends the active engagement of participants in health education processes; moving them from being the passive ‘object’ of a message campaign to being the living ‘subject’ of an education process. This is consistent with Freirean methods (1976, p. 4).

The project is critical of prescriptive health promotion methods with young people and university-age cohorts and

instead recommends contextual research and engagement to understand participant worlds and lived experiences, and associated social norms and cultural nuances, prior to undertaking health interventions. This is consistent with the literature (Hepworth et al. 2018; Dearfield, Barnum & Pugh-Yi 2017; Matthews 2014; Hutton 2012; Ickes 2011; Coleman & Cater 2005; Wallerstein & Bernstein 1988).

The project recommends that alcohol education with university students be participatory, and focus on actual and authentic lived experiences and issues. This project recommends the facilitating of a ‘problem-posing’ approach that challenges participants to question existing harmful drinking practices and social norms. This is consistent with the findings of Matthews (2014).

The project recommends a ‘community health education’ approach with university-age cohorts that focuses on cultural and structural issues at the community and sociopolitical level rather than a primary focus on individual behaviour change. This is consistent with the findings of Kanj and Mitic (2009); Sharma (2001); and Schofield et al (2014; 2016).



# BACKGROUND

## Issue to be addressed

Harmful alcohol use is a leading risk factor in the global burden of disease (WHO 2005). A resolution adopted by the World Health Organization (WHO 2005) urges member states ‘to develop, implement and evaluate effective strategies and programmes for reducing the negative health and social consequences of harmful use of alcohol’.

Alcohol is a significant part of Australian social and cultural life. However, periodic excessive consumption (beyond National Health and Medical Research Council guidelines) or ‘risky’ drinking is normalised for some groups, leading to public health concerns. Young adults attending university are a focus of alcohol health promotion, as heavy and frequent consumption levels place them at risk of harm or injury. Young adults living in university residential accommodation are at risk of harm from excessive alcohol consumption (Hallett et al. 2012; Kypri, Cronin & Wright 2005; Kypri et al. 2002).

According to the National Health and Medical Research Council (2009) the social consumption of alcohol is an integral part of Australian culture, where people drink ‘for enjoyment, relaxation and sociability’. Alcohol consumption in Australia is socially accepted and drinking to intoxication for some groups is normalised (VicHealth 2016b). However, the personal, health and economic costs associated with excessive and harmful consumption of alcohol (sometimes referred to as ‘risky’ or ‘binge’ drinking) are numerous. Some of these costs have been particularly detrimental to young people. For example, excessive consumption or risky drinking has been estimated to cause 31.5% of all deaths in 15–29 year olds in the developed world (Toumbourou et al. 2007).

First year university students are predominately young people in late adolescence. This period of transition is often marked by change. Monteiro et al. (2015, p. 1) describe these changes as ‘intense organic, mental and behavioural transformations, which are subject to social, cultural and environmental influences’. University students in Australia and New Zealand have been identified as especially vulnerable to harm from periodic excessive consumption of alcohol (Bloch & Ungerleider 1988; Roche & Watt 1999;

Sharma 2001; AIHW 2013; Dowling, Clarke & Corney 2006; Rickwood et al. 2011; Schofield 2014; Riordan, Scarf & Conner 2015a; Riordan et al. 2015b; Broderick 2017; Kypri et al. 2009; Hallett et al. 2013; Rickwood et al. 2011; Hallett et al. 2012; Burns 2015; Kypri, Cronin & Wright 2005; Hallett et al. 2014; AIHW 2013; Karam et al. 2007; Connor et al. 2014). Moreover, university student alcohol consumption is at levels that place students and others at risk of harm (Roche & Watt 1999; Kypri, Cronin & Wright 2005; Kypri et al. 2009; Rickwood et al. 2011; Hallett et al. 2012; Hallett et al. 2013; AIHW 2013; Hallett et al. 2014; Burns 2015).

According to the Australian Institute for Health and Welfare (AIHW 2013), young people of university age (18–24 years) are more likely to drink at harmful levels on a single occasion than other adult age groups and are at the highest risk for short- and long-term alcohol-related harm (AIHW 2013). Upon entering university and throughout first year, alcohol consumption increases (Kypri et al. 2002). There is a higher prevalence of hazardous drinking among university students compared to their non-student peers (Kypri, Cronin & Wright 2005). Riordan et al. (2015a&b) suggest that attending university is associated with excessive alcohol consumption and related harms and that ‘fresher’ or orientation week (‘O’Week’) activities are events that encourage and acclimatise students to a culture of excessive drinking. Riordan et al. (2016; 2018) suggest that a factor leading to elevated university student alcohol consumption is the number of alcohol-related social events.

Research suggests that living in a university residential college increases the risk of alcohol-related harm (Osborn, Thombs & Olds 2007; Kypri et al. 2009). Hughes (2012) found that excessive consumption of alcohol was normalised in residential colleges. The former Sex Discrimination Commissioner of the Australian Human Rights and Equal Opportunity Commission, Elizabeth Broderick undertook a review of University of Sydney colleges in 2017. Her report documented the reflections and experiences of over 1000 surveyed college residents and 600 interviewed college residents. The report



submitted that ‘alcohol plays an important part in the culture of College life and underpins a number of so-called College traditions’ (Broderick 2017, p. 28). This supported Schofield’s (2014) and Hughes’ (2012) statements of the ‘intrinsic’ nature of alcohol to the university residential college experience (Broderick 2017, p. 29). Drawing on the findings of Rickwood et al. (2011), Broderick (2017) suggests that 46.6% of university students were drinking at rates that are harmful and hazardous.

Further, the Australian Human Rights Commission’s 2017 report, *Change the Course* (AHRC 2017), reiterated that alcohol was a problem in both broader university and residential college settings, suggesting that it was often a contributing factor in students’ experiences of sexual assault and harassment. The report underscored the use of alcohol and peer pressure to engage in excessive drinking, especially in university residential settings, where it noted the existence of excessive drinking cultures, and highlighted these as areas to be addressed by universities and residential college administrations (AHRC 2017).

The Broderick report (2017) promoted the prioritisation of diversity and social inclusion in O’Week; emphasised the need for the professionalisation of event management and comprehensive training for staff; and detailed the indirect and direct pressure to drink alcohol experienced by college residents and the duty of care owed by college administrations to their students. Further, Broderick (2017) recommended instituting a common, national approach to addressing harm minimisation strategies and related college policies.

Riordan et al. (2015a, p. 525) suggest that the patterns of excessive alcohol consumption developed during O’Week flow on throughout the rest of the academic year. As a result, they suggest that ‘there is a clear need to develop interventions that take into account event-specific drinking and its potential flow-on effect’. Consistent with Riordan, Schofield (2014, p. 1), in the introduction to her report to the residential college peak body, University Colleges Australia, states plainly that:

**Given the high rate of serious, alcohol-related harm among university students, innovative interventions designed specifically to engage them in managing their own alcohol use and in minimising damage are urgently needed.**

Hepworth et al. (2018) identified that there is a general paucity of research on the efficacy of alcohol harm minimisation (practices and strategies) among university student cohorts. Leontini et al. (2017, p. 32) propose that residential college policies aimed at minimising harmful drinking ‘do not operate simply as regulatory influences’ but rather form a part of problematic drinking cultures. As such, they suggest that in this context there are ‘limited opportunities for minimizing harmful drinking’. Consumption of alcohol by adolescents at dangerous and harmful levels, described as ‘excessive consumption’, is





problematic in university residential colleges in Australia and internationally (Broderick 2017; Leontini et al. 2015; Schofield 2014; Kypri et al. 2009).

The body of knowledge documenting the rates and risks of excessive alcohol consumption in Australia and New Zealand for university students is growing. However, there is little documented evidence of ‘health interventions’ in residential colleges aimed to reduce, minimise or prevent this phenomenon (Riordan et al. 2015a&b; Schofield 2014; Hepworth et al. 2018). Individuals require knowledge about safe levels of consumption in order to make informed choices (Martin & Pritchard 1991) but research in this area reveals low levels of knowledge in relation to safe consumption practices (Dowling, Clarke & Corney 2006). Despite recent and widespread public health campaigns by governments regarding ‘drinking responsibly’ and the introduction in Australia of standard drink labelling (Hawks 1999), there are few studies examining the levels of knowledge or alcohol health literacy of Australian university students (Dowling, Clarke & Corney 2006; Schofield 2014).

Universities have been identified as model settings for health promotion generally (Crawford et al. 2007; VanKim et al. 2010). However, there appears to be a lack of documented health interventions in the literature focusing on identifying and reducing cultures of excessive alcohol consumption and related harms among Australian universities and residential colleges or the use of Freirean (1972a&b) methods in these settings (Kypri et al. 2009; Hepworth et al. 2016). This is an important focus of this project.

## Health literacy and education

The concepts of health literacy and health education are important to the underpinning assumptions of this project. The World Health Organization suggests that health education and literacy are broad concepts encompassing a range of activities; they are not narrowly focused solely on individuals or their behaviour but are aimed at addressing community-wide social and political factors.

Accordingly, health education is prefaced on health literacy and that experiencing good health is not just related to an individual’s literacy but also to broader community levels of health literacy. Kanj and Mitic (2009) suggest that levels of health literacy are related to levels of individual and community empowerment and control over the creation, use and dissemination of health information. Kanj and Mitic (2009, p. 12) assert that health literacy is complex and involves not just individuals, but also communities and their governance systems. Nutbeam (2000) suggests that health literacy is an outcome of health promotional activities that are educational and that health education is synonymous with health literacy.

Dearfield et al. (2017, p. 190), drawing on Freire’s critical pedagogy, suggest that health literacy is about facilitating a dynamic educative process where the participant is able to recognise and become aware of the particular ‘health’ problem in their world and ‘name and understand his or her body and its relationship to the world’. This is done, they suggest, in order for the participant to become a

**Health education, in this more comprehensive understanding, aims to influence not only individual lifestyle decisions, but also raises awareness of the determinants of health, and encourages individual and collective actions which may lead to a modification of these determinants. Health education is achieved therefore, through methods that go beyond information diffusion and entail interaction, participation and critical analysis. Such health education leads to health literacy, leading to personal and social benefit, such as by enabling effective community action, and by contributing to the development of social capital.**

(WHO 2019)

'knowing subject', aware and able to 'pass onto others' their knowledge of their health problem and engage in individual and community change to address the problem. This definition of health literacy is important for this project and, as such, the project is informed by Dearfield et al.'s (2017) interpretation of Freirean pedagogy in the context of health literacy and education.

## Critique of health promotion as information exchange

Research suggests that some forms of health promotion may not be educationally effective or conducive to health literacy: in particular, one-way health promotion messaging aimed at individual behaviour change (Wallerstein & Bernstein 1988; Nutbeam 2000). Researchers have been critical of some campaigns aiming to influence the harmful drinking practices of young people and university students (Hepworth et al. 2018; Ickes 2011; Matthews 2014; Hutton 2012; Wallerstein & Bernstein 1988). In particular, those that have overlooked contextual issues, such as the role of pleasure in alcohol consumption, and those that lack authentic engagement with young people about their drinking cultures (Hutton 2012; Osborn et al. 2007). Osborn et al. (2007, p. 119), suggest that while undergraduate university students are often the subjects of alcohol research or harm prevention strategies, they are also often consigned to the role of 'passive recipients' and as such are 'seldom regarded as collaborators in campus research endeavours seeking to reduce alcohol-related harm'.

Researchers such as Dearfield et al. (2017, p. 185) suggest that numerous health promotion interventions use prescriptive methods that 'do not seek to raise participant

consciousness about the contexts that affect their health' or seek to 'fully understand participants' concepts of health and health care, or motivations for wellness'. As a result, they have limited impact. As stipulated by Matthews (2014, p. 601), 'one way, top down and authoritarian' approaches to health education are flawed 'because providing learners with facts and information, presented as "dos and don'ts", has little effect on changing understanding or behaviour'. For health education interventions with young people, these discourses are related and important.

Dearfield et al. (2017, p. 191) are critical of health promotion and health care professionals that don't engage in a 'dialogue' with participants and would rather be 'prescribing ... or conveying information' and not 'communicating in a manner that reflects understanding of [participants'] perspectives and values'. They suggest using a Freirean model that 'involves expanding this discussion to a broader understanding of the social and economic conditions that affect health outcomes' and democratising the relationship between people and health providers to 'be more collaborative' (2017, p. 196).

Targeted communication campaigns with specific information are important and more successful than generic messaging aimed at the population as a whole (Jones & Donovan 2004). However, Coleman and Cater's (2005, p. 126) research suggests that there must be a significant level of contextual understanding of people's drinking behaviours and cultures, particularly those that are gendered, in order for information campaigns to deliver 'appropriate harm minimisation messages'. This is coupled with Hutton's (2012, p. 234) findings that while harm reduction strategies are valuable in addressing risky drinking in young people, and can influence decisions about behaviour and safety, they 'require a level of





**Instead of being preached to, youth become subjects of their own learning as they ask questions, explore the many levels of the problem, make decisions for their own choices, and share the seriousness of substance abuse with friends and their communities. (Wallerstein & Bernstein 1988, p. 385)**

consciousness on the part of the recipient’ – particularly in order for the recipient to ‘penetrate the contradictory messages, supportive of an alcohol industry and a high level of consumption’.

This work builds on earlier findings of Wallerstein and Bernstein (1988, p. 385), who were highly critical of alcohol and other drug health promotion campaigns with single generic health messaging aimed at young people as a whole population group, rather than specific and contextual messaging that recognises young people’s diversity and agency. They suggest that:

**‘just say no’ programs isolate students from their peer group and ignore larger social-economic realities that contribute to alcohol and drug abuse. Just saying no has become the panacea to a social problem whose solution is in fact far beyond individual will power (1988, p. 385).**

Wallerstein and Bernstein (1988, p. 381) are also critical of much alcohol health promotion with young people that narrowly targets individual behaviour change rather than social or environmental risks and does not include participant reflection or critique of ‘community norms and institutional policy’. They instead champion an approach to health education informed by Freirean (1972a&b) pedagogic methods that are participatory and empowering, raise participant awareness and are community focused.

Given the limitations of a health promotion model reliant on a one-way transfer of information, and attendant lack of authentic dialogue and participation by young people, a more critical, participatory and community-centred approach to health education and literacy has been called for (Wallerstein & Bernstein 1988, Labonté & Robertson 1996). This is consistent with Freirean (1972a, p. 53) methods which reject narrow education approaches that mirror ‘banking’ styles of information exchange focused on ‘depositing’ information with people but, rather, conceptualises health education not as a ‘transfer of information’ but as an ‘act of cognition’.

The World Health Organisation (see Kanj & Mitic 2009) has called for health education and literacy to enable both individual and community empowerment. This definition goes beyond a narrow interpretation of health promotion as focused on individual behaviour, and addresses the environmental, political and social factors that determine health. This conceptualises health promotion more broadly as ‘community health education’, undertaken via a critical praxis that aims to raise awareness of health determinants and inspire collective actions in relation to these.

In community-focused health education, health literacy is thus achieved through methods that reject simple information transmission and require genuine participant understanding built on community participation, dialogue, reflection, awareness and critical analysis. This reorientation of health promotion as a form of community health education leads to an empowered health literacy in participants and their communities, and is consistent with the pedagogic methodologies of educational activist Paulo Freire (1972a&b).



Freire (1972a, p. 97) is highly critical of undemocratic and non-participatory education methods that he describes as ‘manipulation, sloganizing, depositing, regimentation and prescription’. Freire (1972a&b) sees types of education prefaced on one-way information transfer as ‘banking’ and suggests that this style is oppressive and dehumanising of participants. For Freire (1971, p. 2), education is never neutral; it is either liberating or it is not and this ‘implies a theoretical stance on the educator’s part’ (1972b, p. 21). Freire sees the ‘literacy’ outcomes of education not just in the ‘literal’ sense of the meaning of words but in an understanding of one’s relationship to their community and the world (1972b, p. 29). This notion of ‘literacy’ is linked to Freire’s (1972b, p. 42) concept of ‘conscientization’ or critical consciousness. Freire (1972b, p. 42) suggests that literacy and conscientization are synonymous and occur simultaneously. This philosophy of education, suggests Williams (2009), moves the student from being the passive ‘object’ of an educational endeavour to being the living ‘subject’ of the education process, echoing Freire (1976, p. 4).

Matthews (2014, pp. 600–1) concludes that Freire’s pedagogic methods are useful in health education because they ‘ensure that learners have an opportunity to critically engage with health information rather than to simply be passive recipients of it’. She suggests that Freire’s pedagogy focuses learning on the ‘issues and real world experience of the learners’ by facilitating a problem-posing approach that challenges participants to question existing practices and social norms.

For Freire (1972a, p. 53) therefore, education is not a one-way transfer of information but a series of cognitive acts leading not just to individual change but also to cultural and structural change at the community and sociopolitical level (1972a, p. 48). Sharma (2001) suggests that Freirean approaches to alcohol health education are underutilised. As such, Freirean perspectives on health literacy and education inform this project.



# THE PROJECT

The impetus for this project emerged from the findings of a recent Australian Research Council Linkage study (Schofield 2014; Schofield et al. 2016) conducted in NSW and Victoria in the years 2011–2014. The study analysed students' drinking practices and alcohol policies in university residential colleges. Findings suggest that drinking among students is heavy and frequent, and in particular that drinking practices were integrated by students into college culture through micro-processes (activities, events, routines) and shaped by college administrative policies and organisational practices that supported a liberal framework to students' drinking.

Schofield (2014) suggests that these college policy frameworks are aimed at fostering 'alcohol citizenship' among students. However, drinking above the recommended national guidelines (NHMRC 2009) and harms linked to short-term heavy drinking (Hepworth et al., 2016; Leontini et al., 2015) prevailed. The Australian Research Council project concluded that:

**the organisational culture of university residential colleges [are] ... internally and deeply conflicted in relation to students' drinking [and harbour] a drinking culture that offered limited opportunities for students to engage in harm minimisation (Schofield 2014, p. 1).**

The Schofield (2014, p. 1) study made the following recommendation:

**Given the high rate of serious, alcohol-related harm among university students, innovative interventions designed specifically to engage them in managing their own alcohol use and in minimising damage are urgently needed.**

Therefore, a key problem addressed by this project was a lack of awareness (and actions to address this) on the part of college administrations, student leaders and incoming students of a disconnection between college policy frameworks designed to minimise harm from alcohol consumption and the continuation of harmful drinking practices by students.

While the project drew on a multicomponent approach to health promotion interventions, the primary method for addressing the problem was informed by Freirean (1972a&b) critical pedagogy. This health intervention method (Wallerstein & Bernstein 1988; Wiggins 2011; Sharma 2001; Sharma & Romas 2012; Dearfield et al. 2017) uses participant-based scenarios or 'stories' to reflect on alcohol-related harms and create critical dialogue on actions and change, facilitated through 'culture circles' (Freire 1972a&b; 1976). This method is consistent with the literature. Further, Hepworth et al. (2016) suggest that young people negotiate the roles and meanings attached to drinking practices. They draw on the work of Tutenges and Rod (2009) to note the importance of 'drinking stories' as a site for the negotiation of drinking-related actions. As Tutenges and Rod (2009, p. 367) suggest, narratives associated with drinking can be used to facilitate a 'creative exploration of possible identities'. This is a key focus of the project activities.

## Target population

The target population for this project were undergraduate university students, student leaders and administrators in residential university accommodation such as colleges and halls of residence. The student populations of the participating colleges were evenly divided by gender; that is, approximately 50% split between students identifying as male or female. The overwhelming majority of students were Australian residents and described as domestic students, although many were from rural and regional areas or from interstate, with the minority having previously resided in the same city as the college. There were also a small number of international students representing a



diverse range of countries of origin, language and cultural backgrounds. Students in the colleges were studying a wide variety of academic disciplines and courses broadly representative of their affiliated university.

The project generally sought to include all undergraduate students residing in the colleges participating in this initiative (approximately 1200 students across four sites; i.e. 300 per site) with a particular focus on first year undergraduate students (approximately 400 first year undergraduates; i.e. 100 per site). In relation to the project interventions overall and the broad project objectives to ‘facilitate a greater awareness of risks and harms and to facilitate change within the “drinking cultures” of tertiary students’, approximately 872 students and 12 administrative staff participated in the project. This included 732 students in the pre-and post-intervention surveys; 32 students in the contextual focus groups; 48 students in the key message focus groups; 60 student leaders in the culture circles and 12 administrative staff. Together, these cohorts were the focus of a project based on evidence of harm and the potential for change found in the literature.

In relation to the project objectives to ‘facilitate greater application of and adherence to relevant regulatory instruments and policies in relation to student alcohol consumption’, a particular focus was given to student leaders as agents of change. Student leaders of college clubs and societies are responsible for organising social and culture activities in the colleges and along with student Residential Advisors are recognised as influencers of college culture (Riordan et al. 2015a). As such, 60 student leaders across the four college sites participated in the project (numbers varied by site). In the literature, student

leaders are described as gatekeepers and carriers of student culture and influential on drinking culture. First year undergraduate students are particularly vulnerable to influence by student leaders (Riordan et al. 2015a). These cohorts typically engage in heavier and more frequent alcohol use and are more likely to adopt existing and harmful drinking cultures and practices (Riordan et al. 2015a).

College administration staff were also a focus. Schofield (2014) found a disconnect between student drinking activities and college policies and regulations concerning student drinking. As such, the heads and deputies of participating colleges and/or their various designates participated in the project, for a total of 12 administrative staff from across the four sites.

## Project setting and sites

The setting for the project was four university residential colleges and/or halls of residence. The four separate colleges / halls of residence were affiliated to differing universities geographically located within the broad metropolitan area of Melbourne or surrounding suburbs in the state of Victoria. The colleges/halls were of approximately similar size and number of undergraduate students, of similar student make-up and background, and the students studied similar academic disciplines.

The history of university residential colleges and halls of residence in Australia is diverse (Walker 2016; Corney 2016). At older universities, a large number of the early colleges were established as independent foundations – many of them by the mainstream churches – for the dual



purpose of providing residential college accommodation for university students and as theological halls for the training of clergy and laypeople. Many of these still function in this way, but there are many other types of halls of residence, particularly at the newer universities. Some of these are owned and operated by the affiliated university, while others may be owned or operated by for-profit private providers. The leadership and governance structures of these various types of residential college are equally diverse, including in staff and student leadership structures (Walker 2016; Corney 2016; Broderick 2017).

One of the roles of a university residential college is to support and assist students in their transition from school to university and from home life to independent living. Adolescence and young adulthood is generally regarded as a period of exploration of identity in the context of social and peer-based networks. This may include a range of new experiences including experimentation with alcohol and/or other drugs. In this period of transition, university residential colleges can play an important role in the provision of health and wellbeing information and support, along with an educative and preventative role, for example in assisting to minimise the potentially harmful outcomes of excessive alcohol consumption (Corney 2016; Broderick 2017).

Attending a university residential college can be a stimulating and rewarding experience that, along with a tertiary education, shapes the future life outcomes of students. However, this important period of transition and development can also be one where students encounter a number of challenges (Corney 2016). This period may

contain negative or traumatic personal experiences – academic or social – that may contribute to excessive alcohol use and related harms. Research suggests that some university students consume alcohol prior to the transition to higher education; however, there are a proportion of students who begin their alcohol use, or begin to consume more regularly, after starting tertiary study, with O’Week activities recognised as a ‘gateway’ to student drinking (Polymerou 2007; Riordan et al. 2015a).

## Project methodology

In general, the project interventions draw on a multicomponent approach to health promotion (Shinde et al. 2017; Mikkelsen, Novotny & Gittelsohn 2016). As a health education intervention, this project can be described as ‘action research’ (Hobson & Townsend 2014). This is a term for a variety of methodologies that involve a research cycle based on planning, acting on plans, reflecting on the actions, and modifying, renewing or continuing the planning towards further action. Freirean (1972a) notions of critical pedagogy as delivered in public health literacy and particularly in alcohol educational interventions (Wallerstein & Bernstein 1988; Sharma 2001; Sharma & Ramos 2012; Dearfield et al. 2017) inform the project. In particular, the project has drawn on Freire’s (1972a) method of ‘culture circle’ focus groups; these can likewise be described as a form of action research (see the section for AC5: Policy co-review, pp. 39–60).

The project evaluation was iterative and used a mixed-methods approach, drawing on quantitative and qualitative

methods to determine the efficacy, outcomes and value of the project. Miles and Huberman (1994, p. 10) suggest that the use of qualitative data in a mixed-methods study is useful to ‘validate, explain, illuminate or reinterpret quantitative data gathered from the same setting’. For more on the evaluative methods used in this project, see section 6 (pp. 61–64).

### Project logic and project evaluation plan

VicHealth encourages the use of ‘project logics’ for planning and evaluation purposes. This required mapping the project’s proposed and intended links between program actions (see the activity centre overviews later in this section) and the project goals - aims, objectives and outcomes (see below). The project logic is intended as a heuristic. That is, it does not represent everything that occurred in the project, but what it does represent is the linear relationship of action to outcome, which in turn is intended to articulate how project activities lead to intended impacts and outcomes.

La Trobe University were engaged by VicHealth to provide

a framework for the overarching evaluation of the Alcohol Culture Change initiative. They also provided guidelines for project evaluation plans and worked with the ACCI projects to develop their project logic. La Trobe University also developed common indicator questions for use by all Alcohol Culture Change projects as part of the initiative wide evaluation.

One of the purposes of a project logic is to provide a framework for determining the information required to assess whether the activities of the project have led to the intended outcomes. As such, the project logic has assisted with organising and interpreting the collected qualitative and quantitative data to demonstrate that the project has achieved its goals.

Further, the project logic informed the project evaluation plan. The project evaluation plan clearly articulates the rationale behind the project activities. An independent evaluator evaluated the project interventions using the project evaluation plan developed with La Trobe University.

## PROJECT GOAL



The overall goal of the project was to ‘improve the drinking cultures within four university colleges / halls of residence in Victoria’. The goals of the project were in line with the overall goals of the VicHealth (2016) Alcohol Culture Change Initiative. They are ‘to create physical and social environments that enable improvements in the way people drink, including the formal rules, social norms, attitudes and beliefs around what is and what is not socially acceptable for a group of people, before, during and after drinking’. In addition, a further project goal was to ‘raise awareness and reduce risk and harm associated with cultures of excessive consumption of alcohol’.

## PROJECT QUESTIONS



The following questions guided this project:

- What do students and administrators understand as the harms associated with excessive drinking cultures?
- What do students and administrators want to see in their residential community in relation to safe alcohol consumption cultures?
- How do students and administrators understand their own capacity to contribute to those cultures?

## PROJECT OBJECTIVES



The project objectives, in line with VicHealth’s (2017) Alcohol and Culture Change Initiative objectives, and informed by the VicHealth (2016a) Alcohol Cultures Framework, were to create physical and/or social environments that enabled:

1. Greater awareness of and facilitation of change within the ‘drinking cultures’ of tertiary students in university colleges and halls of residence.
2. Change the focus of social and leisure activities/behaviours within colleges from those that privilege a culture of excessive and/or frequent alcohol consumption, to one which fosters ‘alcohol citizenship’ (support of low-risk drinking).
3. Facilitate a learned ethos of moderation and civic responsibility.
4. Facilitate greater application of and adherence to relevant regulatory instruments and policies in relation to alcohol consumption within an educational/residential environment.

## PROJECT DELIVERABLES



The project delivered the following actions as part of meeting the project objectives:

- Contextual research including ethics approval processes, literature review, student and staff focus groups/interviews, data transcription, analysis and reporting.
- The Mobile Intervention for Drinking in Young people (MIDY), along with a targeted educational campaign.
- Co-review and develop college alcohol policies and regulatory measures, and make them accessible and visible to students.
- Project evaluation and reporting requirements.

## PROJECT ACTIVITIES



To enable the deliverables and achieve the project objectives, the study undertook the following activities. These project activities reflect the project canvas.

1. Co-design and implement a key message education campaign using the methodology of participative narrative pedagogy (Freire 1972a).
2. Implement an innovative momentary ecological intervention via mobile phone based technology (MIDY) (Wright, Dietze & Lim 2016).
3. Co-review and develop relevant policies and regulatory measures for reducing the opportunities for harmful alcohol consumption in colleges, and make them accessible and visible to students.

### Project conceptual frame

The conceptual frame diagram in Figure 1 graphically represents the deliverables, aims and objectives and the activities that led to the project outcomes.

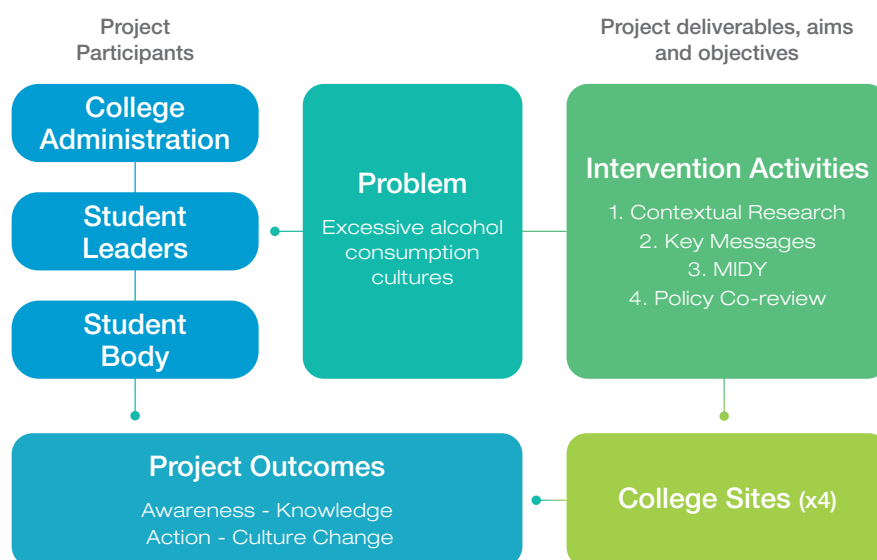


Figure 1: Project conceptual frame

Figure 1 shows the relationship of the various elements of the project: project aims and objectives; project intervention activities; problem to be addressed; project participants; project setting and the project outcomes. As such, the project intervention activities conducted in the college sites with college participants (students, leaders and administrators) to address the problem led to project outcomes of increased awareness and knowledge of the problem and actions to address the problem, leading to change.



## Project activities, deliverables and partners

The project activity areas described in this section coincide with the project deliverables outlined above and, taken together, these are designed to meet the project objectives outlined in the conceptual frame. While the project overall was coordinated by Victoria University (VU), various multicomponent project activities were undertaken by project partners, including Talking Health Works (THW),

the University of New South Wales (UNSW) and the Burnet Institute (BI). Project activities were also broken down into a project chronology of ‘activity centres’ (Figure 2). Project partner activity is further indicated in each activity centre description below, and corresponding diagrams represent these activities (figures 3–7). The activity centres correspond with the project timeline.

### ACTIVITY CENTRE 1: PROJECT ADMINISTRATION

- Relates to the administration of the entire project. VU, THW

### ACTIVITY CENTRE 2: CONTEXTUAL RESEARCH

- Review of literature on student alcohol use in university residential environments. VU
- Contextual focus groups undertaken at three sites. UNSW, VU
- Pre-intervention baseline survey undertaken at four sites. VU, THW (including questions from VicHealth evaluator, La Trobe University)

### ACTIVITY CENTRE 3: MIDY – KEY MESSAGES

- Co-design and implement a key message education campaign using the methodology of participative narrative pedagogy (Freire 1972a). VU, BI, THW

### ACTIVITY CENTRE 4: MIDY – INTERVENTION

- Implement an innovative momentary ecological intervention via mobile phone based technology (MIDY) (Wright et al. 2016). BI, VU, THW

### ACTIVITY CENTRE 5: POLICY CO-REVIEW – CULTURE CIRCLE INTERVENTION

- Co-review and develop college alcohol policies and regulatory measures, and make them accessible and visible to students. VU, THW

### ACTIVITY CENTRE 6: EVALUATION AND FINAL REPORTING

- Project evaluation and reporting requirements. VU, THW

### ACTIVITY CENTRE 7: KNOWLEDGE TRANSLATION

- Undertake knowledge translation activities. VU, BI, UNSW, THW
- Post-intervention survey undertaken at four sites. VU, THW (including questions from VicHealth evaluator, La Trobe University)

## Project activity chronology

Figure 2 provides a detailed picture of the activity centres (AC1–7), their chronology (June 2017 to June 2019); and the various sub-activity categories undertaken to achieve the project outcomes.

The next section then summarises the various activities undertaken, and their impacts and outcomes. Graphics also represent the detail of activities undertaken.

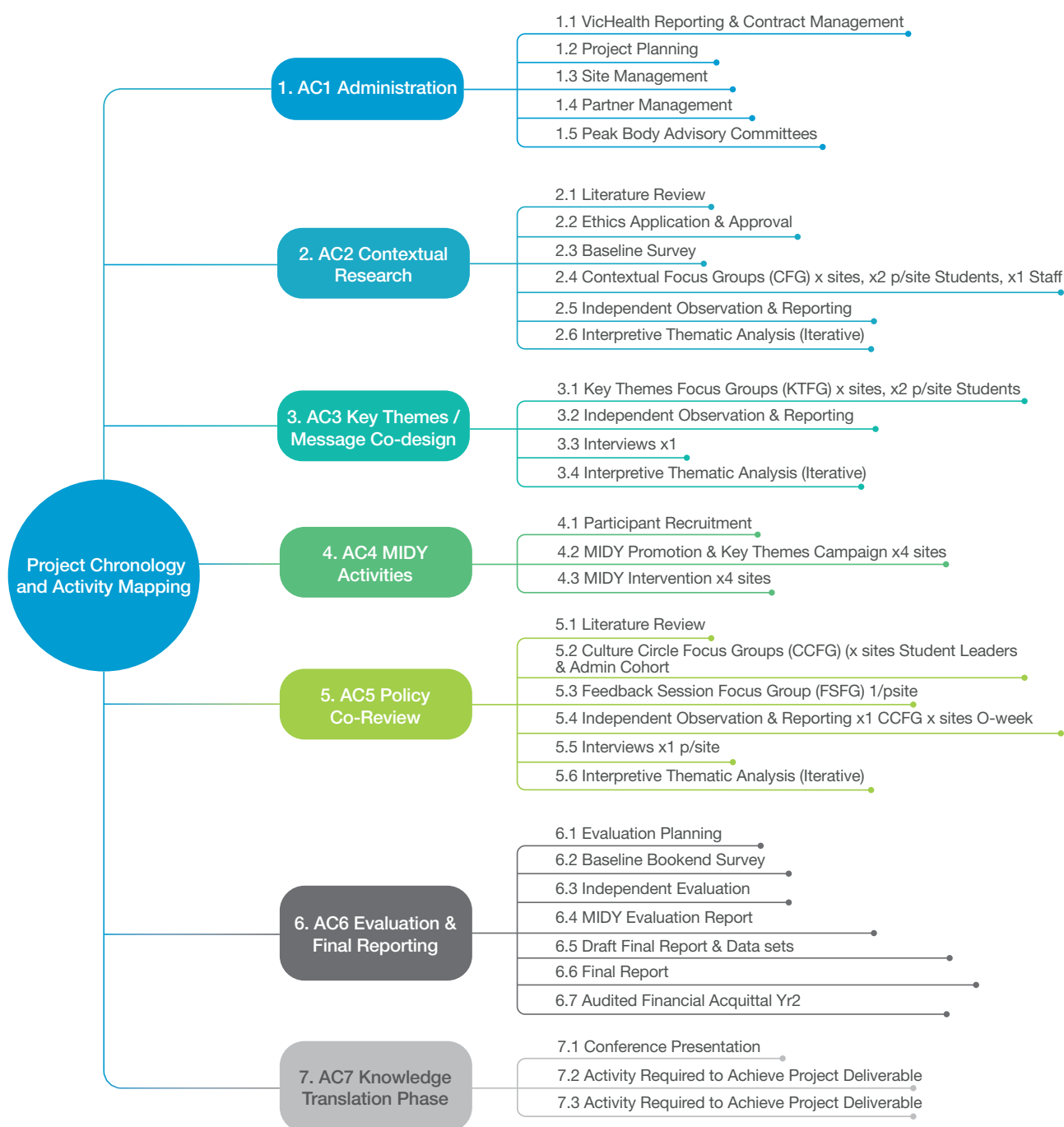


Figure 2: Activity centres (AC1–7) and project chronology (June 2017 – June 2019)

## AC1: Project administration

The project was administered by Victoria University with support from Talking Health Works and in collaboration with UNSW and Burnet Institute project staff. Administration included a range of activities such as overall project management; intervention activity planning and implementation; liaison with VicHealth and fulfilling regular reporting requirements; liaison with VicHealth’s project evaluators; attendance and reporting at community of practice meetings with other Alcohol and Culture Change Initiative projects; and regular reporting and communication with project stakeholders and the college administrations and student leaders.

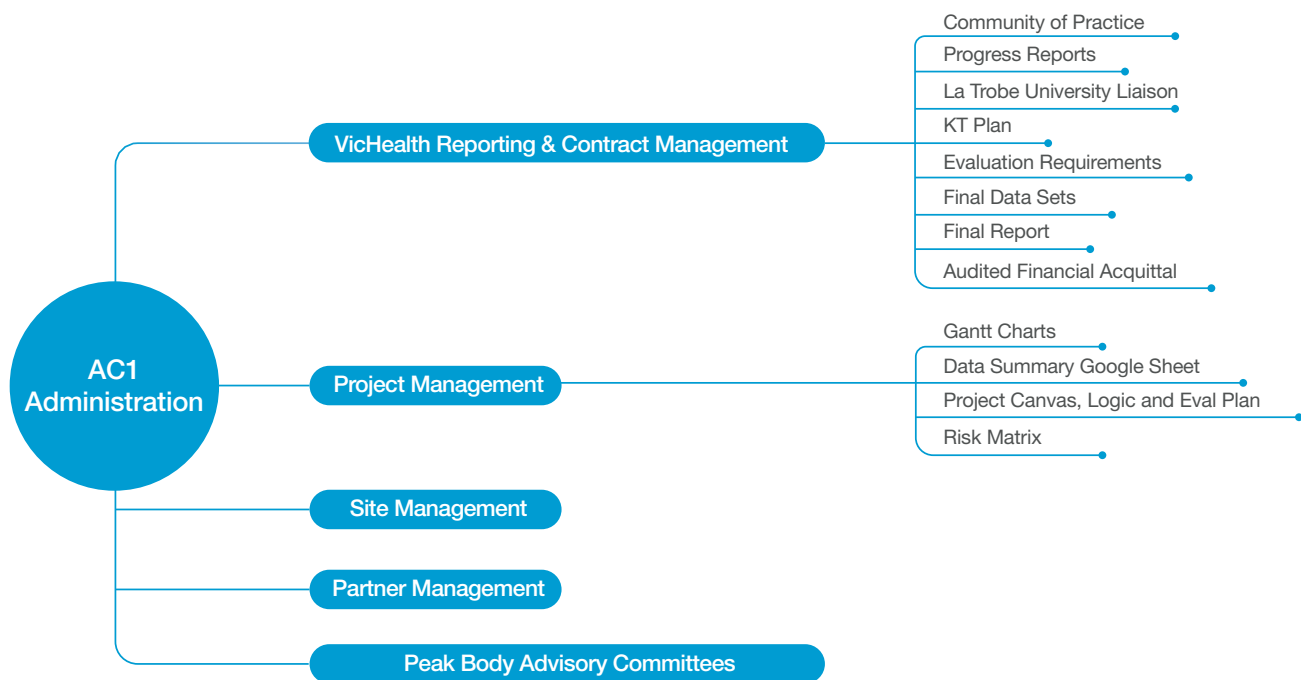


Figure 3: AC1 – Project administration





## AC2: Contextual research

An initial literature review was undertaken to inform the project design and enable the development of survey questions. Pre- and post-intervention surveys were administered and standard evaluation questions designed by La Trobe University for all VicHealth Alcohol and Culture Change Initiative projects were included in the surveys. A series of contextual focus groups were conducted to enable understanding of the project sites, alcohol culture and related issues. The literature review was also useful for informing the initial contextual focus group questions and the interview processes, including the methodology and project design.

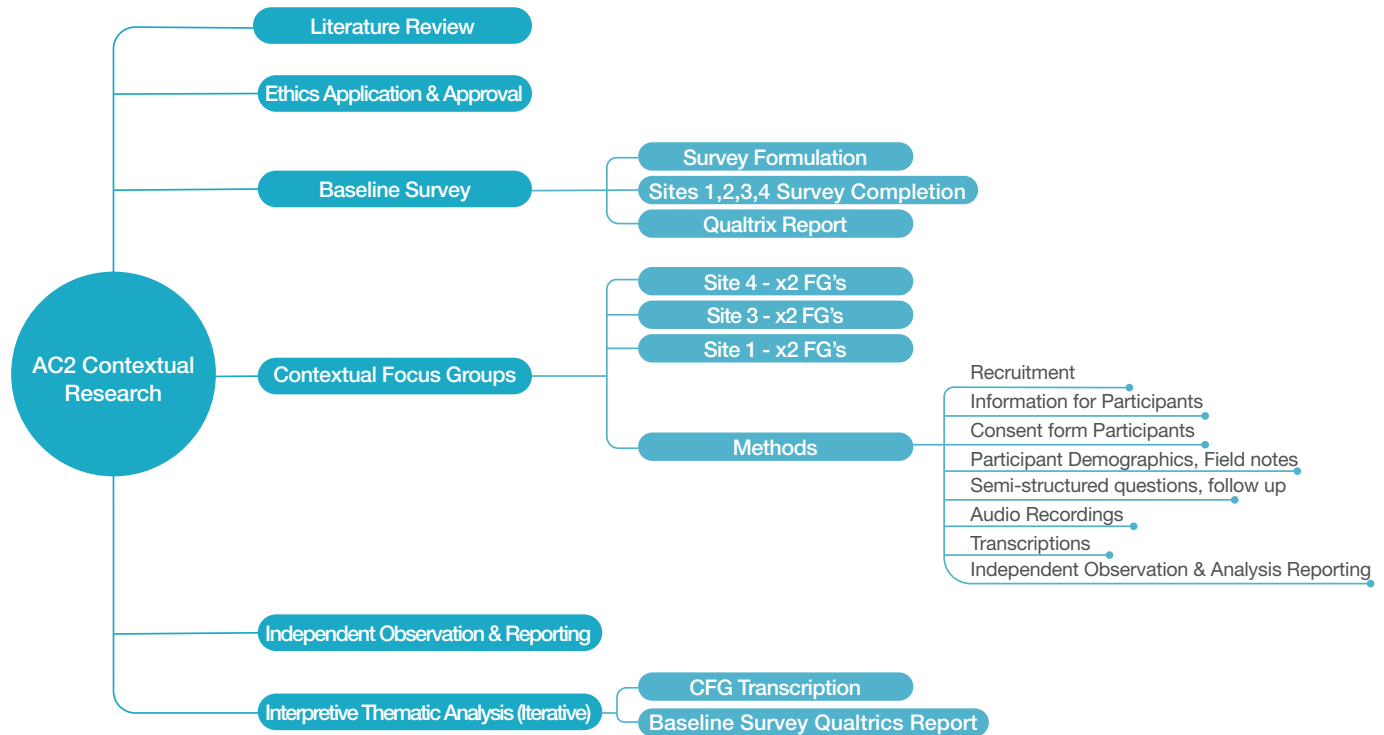


Figure 4: AC2 – Contextual research

## Summary of contextual research: focus group findings

A contextual study was conducted by Dr Rose Leontini of the University of New South Wales, assisted by researchers from Victoria University. The study was conducted in second semester of 2017 at three of the four college sites. All college sites were licensed, meaning alcohol could be purchased and/or consumed on site in accordance with the law. Five focus groups were conducted, with an average of between five and eight participants in each group. A total of 32 students participated in the contextual focus groups. The mix of gender was 17 men and 15 women; 29 of the participants were aged between 18 and 21 and three were over 21 years of age but under 31 (see Table 1).

## Findings

When it comes to students living in tertiary education residential accommodation, determining exactly how much they drink is difficult because of variables that are intrinsic to the temporal and spatial organisation of residential life, and the governance of alcohol at the institutional level (Leontini et al. 2015). Indeed, findings from the contextual study show that ‘how much’ and ‘how frequently’ residents drink turns less on students’ personal attitude and behaviour, and more on how their institution’s policies facilitate or regulate alcohol use and associated harms. Added to this are student perceptions of what ‘heavy’ or harmful drinking actually means. Studies on youth drinking, for example, show that self-reported drinking styles can be determined by associations with negative stereotypes (e.g. the ‘binge drinker’) or, conversely, behaviours believed to be desirable (e.g. alcohol, sport and masculinity, or femininity) and that foster the notion of being a ‘good drinker’ or ‘knowing their limits’ (Brown & Gregg 2012; Conroy & de Visser 2013). These impressions can be fostered by media, government discourse, or even health promotion (Hernandez, Leontini & Harley 2013). What is

‘normal’ or excessive drinking is also subjective; like many other students at university, alcohol use that exceeds the NHMRC (2009) recommendations for ‘low risk’ (no more than four standard drinks per drinking occasion) is nonetheless normalised by many students when it is not frequent.

**I’ve never been a big drinker anyway but if you were to take the past few months into consideration it would probably only be once or twice a week, and even then only between two and eight standard drinks on a night. (Site 1)**

In addition, these subjective understandings differ on the basis of context, location of drinking and the people students drink with, situation/occasion, opportunity and peer pressure. For some, a ‘good drinking night’ is at a ‘big’, organised event; for others it is ‘casual’ at ad hoc events that can lead to heavy drinking because the student does not set out to count the number of drinks they plan to actually have.

In light of these limitations, Table 1 outlines the approximate values cited by the students we interviewed regarding number of drinks and frequency of drinking while living in residential accommodation. We can not claim these to be mathematically accurate representations (or indeed representative of all students) for the reasons noted above. Our findings, described below, hone in on some of these difficulties by showing how the organisational policy and governance of alcohol in tertiary education residential accommodation fosters heavy and/or frequent drinking. This, we argue, has important implications insofar as it poses barriers to alcohol-related harm reduction.

Table 1: Overview of sites, focus groups and participants

Description	No	Further information
Number of sites	3	All Melbourne metropolitan area.
Sites at which alcohol consumed	3	All sites ‘licensed’, meaning alcohol can be purchased and consumed in accordance with the law.
Sites at which alcohol is permitted in private rooms and common areas	2	Site 3 permits drinking in own rooms but not in common areas.
Number of focus groups	5	5-8 participants per focus group.

Description	N.	Further information
Number of participants	32	
<b>Gender</b> Men Women	17 15	<b>M:F spread</b> 3 x focus groups roughly equal 1 focus group = 7:1; 1 focus group = 1:5
<b>Ethnicity</b> Anglo/Celtic Asian Other	24 6 2	
<b>Age</b> 18–21 23–31	29 3	
<b>Alcohol consumption</b> Drinkers Very moderate Abstainers	28 2 2	<b>Reported standard drinks per occasion</b> 2–10 1–2 0
<b>Frequency of consumption</b> Weekly Monthly	28 2	<b>Consuming 1 or more standard drinks per session</b> Between 1–4 times per week Between 1–7 times per month







## Four themes

The data was collected from five focus groups at three different sites and examined using thematic analysis (Guest 2012) involving identification of common concerns in the cohort. Initial themes were cross-checked with field notes, and discussions about emerging themes were held by the research team. The final selection of themes was based on frequency and relevance to the aims of the study (Guest 2012). Qualitative research draws on small samples of human experience that can be examined ‘in-depth’ (Miles & Huberman 1994). This contextual study was aimed at understanding student experiences of the use of alcohol in their residential institution, and how they made sense of the existence or absence of regulatory policies around alcohol use. In terms of feasibility, the sample size is appropriate for conducting an in-depth analysis of the focus group data, examining participants’ subjective understanding of alcohol use on campus, and providing a contextual backdrop to the intervention studies that followed.

The limitation of the small sample is that it precludes claims to generalisability.

For this study we adopted ‘purposeful’ sampling (Creswell 1998, pp. 118–20) for recruiting participants who have knowledge of the particular issue under investigation, who are willing to share with the investigators the degree of detail and depth required to enrich the study (Gray 2003, p. 101) and who can be available for interviews. The recruitment process is on the basis of ‘convenience’ insofar as it maximises opportunities for identifying suitable participants within the short timeline of the project (Wright & Sim 2002).

Focus group interviews were audio recorded, transcribed verbatim and analysed using thematic analysis. Four major themes were selected: cost of alcohol and convenience; events and expectations; drinking cultures; and organisational alcohol policy. The following are the site/focus group identifying labels for the contextual research only: S1, S2a, S2b, S3a, S3b.

## THEME 1: COST OF ALCOHOL AND CONVENIENCE

Cost is a large factor influencing drinking, and for this we need to consider cheap drinks at college events and the policy on storing alcohol in rooms, as well as the liberty to have small group get-togethers in rooms where alcohol is primarily consumed. Drinking in rooms is considered both 'pre-drinking' and just 'casual drinking'. Off-campus, the main factor shaping drinking volume and frequency is pubs close to the university/college campuses, and these pubs or any other venues offering cheap drinks, university nights and other promotions including discounts in bottle shops, are the most cited sources of alcohol. Taken together these are a part of the social determinants of heavy and/or frequent drinking among these students.

The heaviest drinking occurs in college: own rooms, others' rooms, common areas, events. The primary reasons are cost of alcohol and convenience, with ease of access to drinks on site and convenience being critical factors:

**We're pretty lazy ... like we all go to (street name) or here [college]. (S1)**

Students are permitted to consume alcohol in their own rooms, common rooms, and most common areas except the library and the formal dining room, where the only alcohol permitted is that supplied by the college. This freedom contributes to drinking frequently insofar as 'events' can be both planned and opportunistic as we outline under the next theme. Furthermore, the existence of such an 'unbounded' space open to the use of alcohol reinforces the normalisation of routine drinking; put simply, just as space is unrestricted so too is the timing of consumption.

**So most of the drinking would be done like floating around people's rooms and just socialising, going to different floors and seeing what everyone else is doing, and then go to the pub and drink. (S2b)**

Given that most drinking occurs in rooms this can lead to heavy drinking. Consumption in a club or pub reduces drinking on the basis of cost (paying becomes a kind of 'tax' on drinking), and because drinkers have to find their way back home in a relatively sober or 'safe' manner. On the other hand, student drinking in rooms does not involve any counting, it is cheap, and returning to their own room when intoxicated is relatively easy.

In residential accommodation, the cost of drinking is cheap because alcohol is either purchased in bottle shops, or subsidised at organised events, and sometimes free. Free drinks can be from 'shouts' by friends, or (though in moderation) at formal events organised by student clubs or the accommodation providers. While a prime determinant of drinking, cost is more likely to be factored by men, whereas women are more likely to select what and how much to drink based on the type of occasion. The latter leads to women opting for more expensive drinks, and therefore drinking less. Similarly, for some students, particularly women and/or students from international or non-English-speaking backgrounds, taste is an important factor in choice of alcoholic drinks, with implications for cost and therefore quantity of alcohol they are likely to consume. For example, cheap wine ('goon') and beer are not as popular among these students, leading them to drink less. However, these differences were small across the entire cohort interviewed; overall, spirits mixed with juice, for example, can be a cheap option for women, as is wine which can be bought and stored in their rooms.

## THEME 2: EVENTS AND EXPECTATIONS

Understanding the role of social 'events' or extracurricular activities in facilitating alcohol use in residential accommodation is important because, as the students noted unanimously, drinking is entirely social. Students drink to party, meet other students, boost their confidence as freshers, to enhance the experience of belonging, and to generally relax and enjoy their stay. Not all sites organise social events (formal or informal) in the same way or to the same degree, and not all social events include alcohol. However, in light of the many social events that include alcohol, students attend/participate with an expectation that there will be drinking at events.

An important finding under this theme is the degree of involvement students have with 'wet' and 'dry' events, and how they organise their drinking around each. Dry events are held mostly in the daytime and may be held away from the college, which means that many students can not attend (because, for example, they are in class); or these events are considered dry only for the duration of the event but not after, which is more likely to be typical of all-day events during O'Week. Some students will attend dry events but not as frequently as wet ones, and a small number said they do not attend dry events at all. There is, in addition, the expectation placed on dry events that they will have 'something special' to offer such as a guest speaker, an unusual activity, or food. However, dry events can also lead to heavy drinking; where dry events are anticipated, students tend to pre-drink in their own rooms or friends' rooms prior to attending. Alternatively, they 'try out' the event which, if uninteresting, is abandoned as they head for a nearby pub or for drinks in their rooms.

To be considered as such, 'events' do not have to be large or formally organised; indeed, the vast majority of drinking occasions are ad hoc social gatherings in students' rooms, on lawns, or in nearby pubs (the latter particularly in institutions in which alcohol is not permitted in common areas). In S3, for example, where alcohol is not permitted in common areas, most drinking occurs in students' rooms or off-campus altogether, and very little if any occurs at the nearby university campus, in spite of its licensed bars. S3 students were in fact reluctant to attend most university social events and bars, preferring city venues. Enjoying celebrations in commercial venues significantly impacts on budgets, and events such as dinners are not conducive to heavy drinking due to the physiological and financial impact of including meals in the event. International students are particularly reluctant to participate in O'Week events, which they believe to be too alcohol-centred; for those who reported participating, they were much less likely to drink heavily.

## THEME 3: DRINKING CULTURES

Understandings of 'culture' in relation to drinking vary among students, though this is not 'typified' among sites: student views on alcohol culture range from gendered ('it's like guys drink beer') to national/Australian culture ('Not growing up in Australia with the Australian drinking culture it was a new environment') to college culture ('yeah it's a bit of a different environment how you might have a drink at a college'). Some students are keen to foster a culture of 'casual drinks', by which they mean an intention to move away from 'a culture of intoxication' (Measham & Brain 2005) to a culture of moderation.

**We're just trying to create a culture that also includes social casual drinking that doesn't always have to go to the extreme. (S1)**

Different residential institutions also have their own institutional identities; for example, a history of academic excellence, or sporting elites, or prestigious extracurricular activities. For institutions and their residents, the legacy of their identity is passed down from one cohort of students to the next. For example, many residential institutions have, in latter years, attempted to reduce the legacy of a drinking culture. In our cohort, freshers described events in O'Week that were planned to foster moderate drinking. The participants described how they had first felt neither inclined nor pressured to drink heavily during O'Week, even where alcohol was available. Yet, at subsequent parties attended by senior students, they felt 'encouraged' to drink more and party harder: 'when all the seniors were there with the freshers, how crazy drunk everyone got then' (S1). As we show under the next theme, much of what is presumed to be the policies, rules and expectations around drinking and any associated harms is learned from other students by word of mouth, and from observation of events. As such, how seniors behave around alcohol use is conducive to the type of drinking culture that will be formed and maintained in a residential institution.



A critical finding in this study is the belief by participants that admission to their residential institution was conditional on being 'social': 'this is a social residential institution, so you should participate.' While they did not suggest that their institution insisted on students drinking, based on their observation of consumption among residents, the participants in our study interpreted this concept of 'social' to be a prerequisite for admission into college.

"Because they say that in [our institution] there's so many people that want to get in, there's so many [other institutions] ... which have such a different culture ... attending [this one] is a privilege and if you are attending you have to contribute to the culture." (S2a)

Sites at which there exists a strong 'college culture' are more likely to have a strong 'drinking culture', on the basis of students' desires to belong to an institution with a longstanding identity and reputation, a history of student control over social events and alcohol sales, and where the use of alcohol is permitted in common areas and private rooms. Taken together, these institutional characteristics act as a kind of 'organising principle' for students, whereby social, extracurricular activities are inextricably associated with alcohol or, at the very least, 'partying' of some kind. Given that this 'organising principle' is not as prevalent in residential accommodation institutions managed by the universities themselves (vis-a-vis privately owned institutions for example) and/or where alcohol is regulated more stringently, such as the ban on drinking in common areas, student heavy drinking culture within the latter category of accommodation appears to be less widespread. The 'organising principle' for an institutional drinking culture is rather dispersed and random, mostly evident among some small group or ad hoc student events held in rooms or off-campus. In addition, without an organised student club the historic 'legacy' of an institutional identity is not passed down from one cohort of seniors to a new cohort of freshers; there is less likelihood of fostering traditions such as drinking games, the existence of a campus bar, or student controlled alcohol sales, all of which are known to increase heavy drinking (Leontini et al. 2015).

## THEME 4: ORGANISATIONAL ALCOHOL POLICY

According to all the participants, there is limited written policy on alcohol use in their institution; most described policy as a set of rules intended to discourage drinking to get drunk or becoming so intoxicated as to pass out or harm others, or trashing the campus. Words used to describe this included [it is] 'understood', 'informal', 'not written anywhere', 'something you're told' by 'word of mouth' or 'chat' upon arrival and/or during O'Week. In some instances, close friends and 'buddies' are responsible for looking out for each other, particularly if one is intoxicated, but this appears to be an informal expectation that is not enforced. Some students believe there exist 'punishments' for causing harms to themselves or others, but again none could describe these or provide details. According to students in one institution, there is a 'handbook' on the subject of alcohol use but no one could recall the detail of it, and learning occurs 'as you go'. Other students 'remembered' (vaguely) having had an informal alcohol talk from senior students, particularly those involved in social committees.

Yet, also understood as institutional policy is students' entitlement and encouragement to self-regulate, and the freedom to drink in rooms and (where applicable) in common areas and off-campus, at informal social events and at formal events organised by students and institutions. All participants from S3, where drinking is not permitted in common areas, were aware of this regulatory requirement. However, as with other sites, none could recall being told – as part of their induction or introduction – about the existence of a policy on the use of alcohol while living in their institution. This impression about the non-existence of policies is reinforced across all sites by students seeing other residents being frequently intoxicated, their experience of high levels of noise from revellers on campus, and many ad hoc, small group parties in other students' rooms.

## Concluding summary of contextual research

The findings show that students in tertiary education residential accommodation drink heavily; that is, above the NHMRC guidelines for low-risk drinking, in the sense of quantity/number of standard drinks and frequency of drinking (NHMRC 2009). While there were variations to drinking among small cohorts of students, including moderate to non-drinkers, the data show that alcohol is understood to be an intrinsic aspect of university students' lives and residency.

Sites at which there exists a strong 'college culture' are more likely to also have a strong 'drinking culture', namely on the basis of students' desire to belong to an institution with a college identity, long history of student control over social events and alcohol sales, and where the use of alcohol is permitted in common areas and private rooms. Taken together, these college characteristics act as a kind of 'organising principle' for students, whereby all social, extracurricular activities are inextricably associated with

the use of alcohol. Our most critical finding, however, is that alcohol policies are neither known to students nor enforced. This applied across all sites and types of residential institutions where we conducted this study. This finding supports previous studies in similar contexts (Cremeens et al. 2011; Leontini et al. 2017; Leontini et al. 2015; Wall, BaileyShea & McIntosh 2012; Wechsler & Nelson 2008).

The significance of the contextual research findings is that, unless residential institutions develop relevant policies and mechanisms to effectively communicate and enforce policies that address the widespread and frequent use of alcohol among their residents, neither drinking levels nor their associated harms are likely to be reduced. This suggests that institutional alcohol policy can present barriers or opportunities for harm reduction in these contexts, depending on administrative efforts to address policy limitations and enforcement. The findings of the contextual research are relevant to and inform this study, in particular the policy co-review intervention.



## AC3: Key message formulation

The development of campaign materials was undertaken collaboratively with students in focus groups including an information video presentation made available online, hardcopy and electronic posters and flyers at the college sites, and social media posts.

The particular campaign messages that appeared on the campaign materials (flyers, posters and social media posts) were developed with students. The key messages that appeared on the posters and flyers were trialled in focus groups with students prior to the printing and publishing of campaign materials.

Posters appeared on college noticeboards, physical and virtual, and were posted in prominent places around the campus such as bedroom doors, hallways and corridors, toilets, bar areas and common rooms. An information flyer and link to the online video and MIDY registration process was provided to every newly enrolled student prior to O'Week 2018.

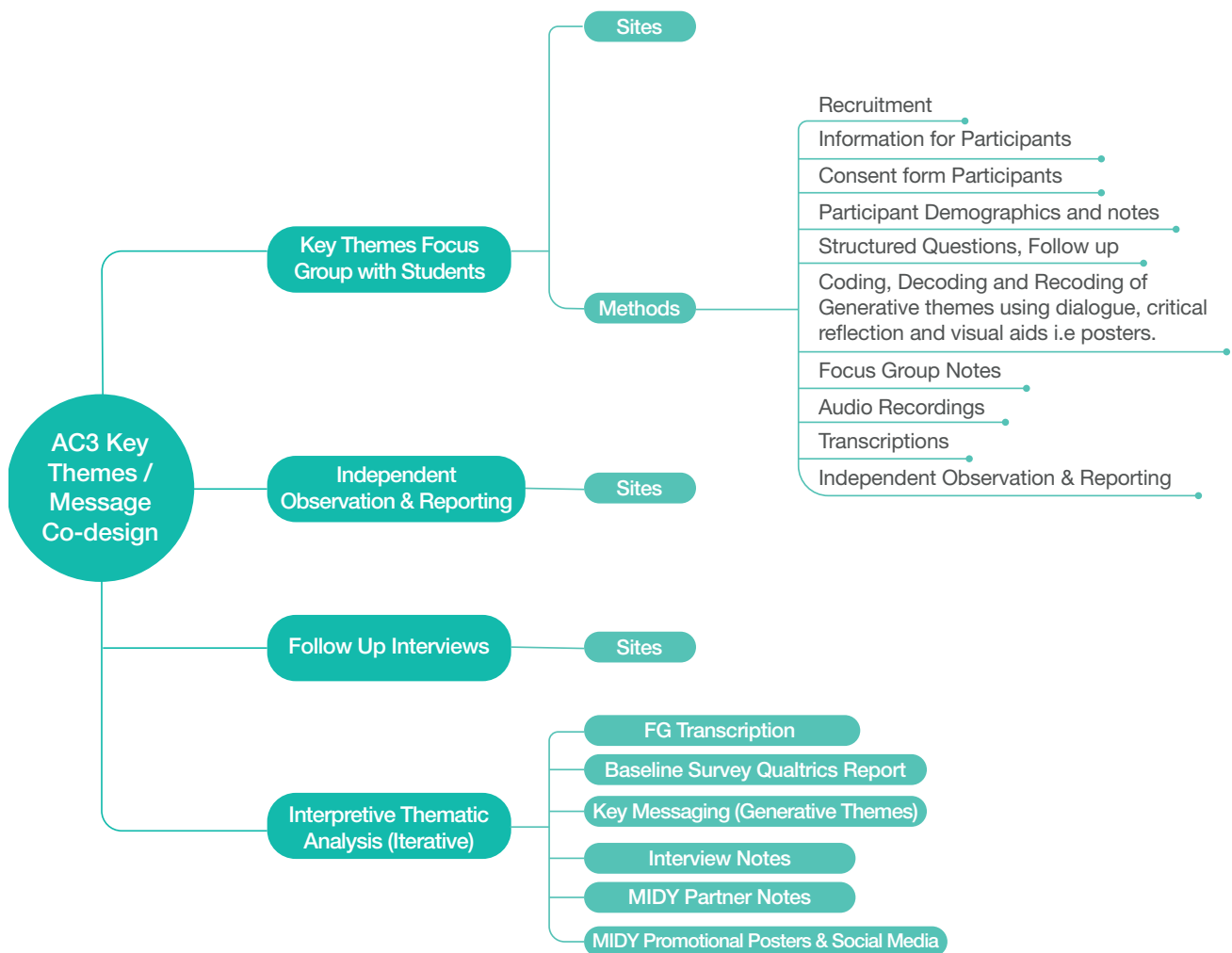


Figure 5: AC3 – Key message formulation



## AC4: Mobile intervention for drinking in young people (MIDY) promotion

As part of the multicomponent nature of the project, one of the deliverables included an innovative digital intervention for drinking in young people, known as MIDY. This was offered after undertaking contextual research activities with project partners, and via a literature review and focus groups to explore student-drinking culture and inform key messages.

MIDY was offered by the Burnet Institute to students in the four sites, and supported by a targeted promotional campaign undertaken in partnership with researchers from Victoria University and Talking Health Works. The campaign included co-design and development of materials such as onsite posters, social media posts and information exchange, and working collaboratively with student leaders and college administrations.

The overall goal of MIDY was to ‘improve the drinking cultures within four university colleges / halls of residence settings in Victoria’. The objectives of the MIDY intervention were in line with the objectives of the VicHealth Alcohol Culture Change Initiative ‘to create physical and social environments that enable improvements in the way people drink, including the formal rules, social norms, attitudes and beliefs around what is and what is not socially acceptable for a group of people, before, during and after drinking’. A further goal for MIDY was to raise awareness and to reduce risk and harm associated with cultures of excessive consumption of alcohol in colleges.

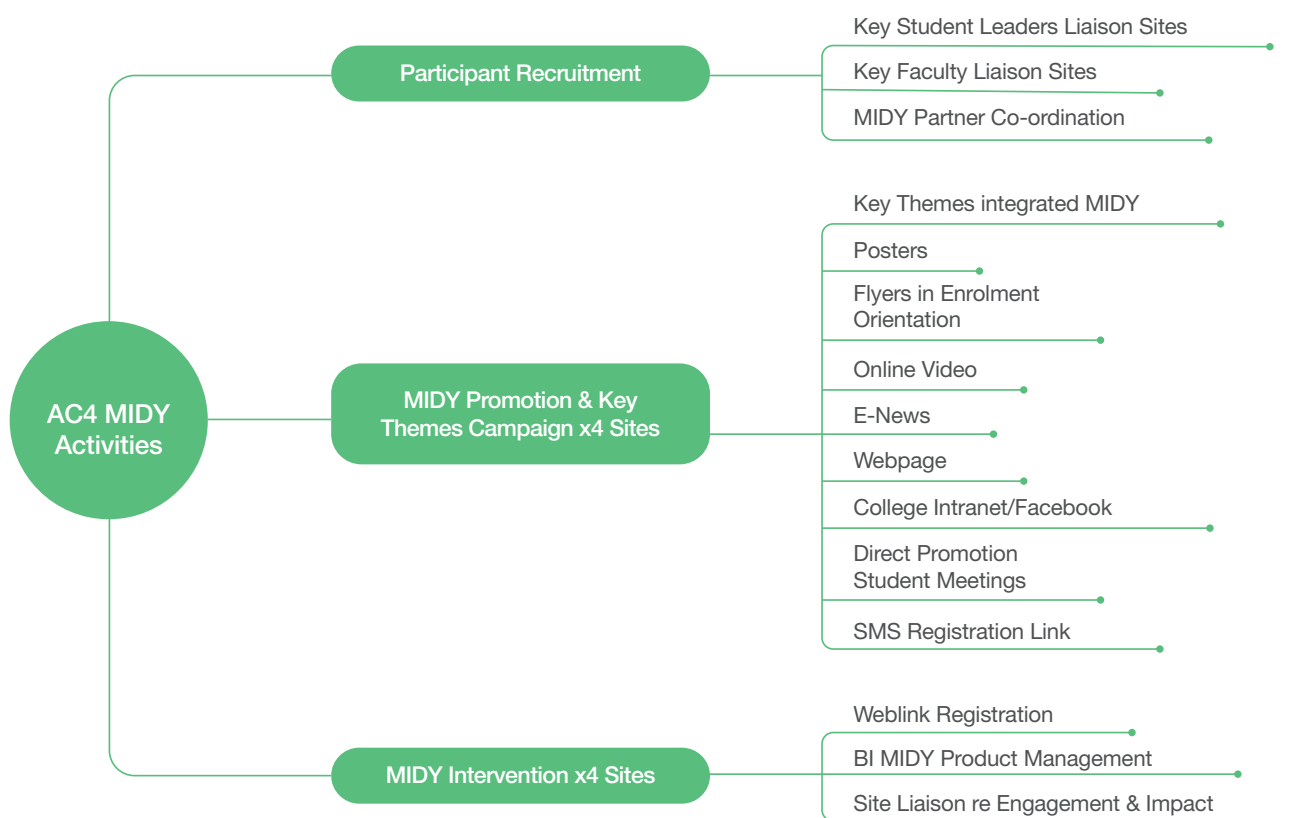


Figure 6: AC4 – MIDY promotion

## Promotion and use

The MIDY intervention was trialled during O'Week 2018, and in the weeks following O'Week in which there were a number of student-led social functions at which heavy drinking occurred. Participants were encouraged to sign up for MIDY through information provided to them. This information was provided to all first year students as part of their enrolment information, and to all returning students on entrance day. Information was distributed through student clubs and college administration promotion of MIDY directly to students and student leaders. A short descriptive video of how MIDY works and how to register was produced; links to the online video were distributed widely to students across the colleges. MIDY was also promoted directly to students through formal presentations and talks, advertisements placed around the campus on noticeboards, and posts on the college intranet, Facebook and other social media. This was replicated by college student clubs also posting MIDY promotional materials on their Facebook pages and other social media.

MIDY was promoted collaboratively through student leader and staff engagement, and campaign meetings with student leaders. Students helped to trial key messages and develop a range of print and online materials via focus groups. Materials were then displayed prominently in many campus spaces, and flyers and relevant links were provided to every newly enrolled student before O'Week.

The MIDY registration process via the online link included questionnaires and message content for the participants. The message content and key messages were refined in collaboration with the students taking part in the intervention. Focus group interviews were conducted with students prior to MIDY sign-up in order to fine tune and customise the message to the specific context and drinking culture of the college context.

MIDY participants were provided with initial instructions on how to register for a night. Those that registered were prompted each Thursday night with a reminder to register if there were any nights over the weekend that they planned to drink. This process included them sending a simple SMS message saying 'Drink' on the day, or they could register in advance by texting the name of the day of the week they intended to complete the intervention (e.g. 'Saturday' for the upcoming Saturday). Participants received a confirmation message once they had registered. The intention was to promote engagement with MIDY across O'Week and on subsequent occasions in the following weeks when alcohol was to be consumed or served as part of college social functions.

At 6pm on chosen intervention nights, participants received a short SMS asking them to complete their first survey, with a link to an online questionnaire hosted by the online survey tool SurveyGizmo. SurveyGizmo was chosen above other options due to mobile compatibility, visual appeal and range of question types. The 6pm pre-survey asked questions relating to their intentions for the night, including how much they planned to drink, spend and eat; a ranked list of particular adverse events they wish to avoid (e.g. vomiting, not being able to get home); planned mode of transport home; next day plans; alcohol consumption so far; mood; and the option of writing a message to themselves, to be sent back to them during the night.

At hourly intervals between 7pm and 2am, respondents were sent a shorter ecological momentary assessment (EMA) survey, which asks about current location, alcohol consumption since last survey, spending, mood and perceived drunkenness. Participants were also able to opt out of the intervention at the end of each survey if they were finishing their evening.



**At 6pm on chosen intervention nights, participants received a short SMS asking them to complete their first survey, with a link to an online questionnaire hosted by the online survey tool SurveyGizmo.**

At 11am the next day, participants were sent another SMS with a mobile survey link. This survey asked for any alcohol consumption and spending occurring after the final EMA, estimated total standard drinks and spending for the night, estimated volume of water consumed for the night, reporting of adverse events, ‘hangover’ experienced, and a ‘fun’ rating of the night. Following submission of each EMA survey throughout intervention nights, participants received a feedback SMS of motivational information tailored to their responses. Feedback SMSs during the night included information reminding participants of their original intentions or motivations, tips to avoid adverse consequences, or feedback relating to cumulative consumption or spending.

MIDY has a bank of over 15,000 messages contained in a matrix of variables related to information collected about and from participants during the EMAs. These messages were further tailored from the contextual research to correspond with different situational contexts that participants suggested that they might find themselves in throughout their drinking events associated with this campaign.

Messages were written and categorised according to gender as well as variables collected during the surveys, such as varying locational contexts (i.e. for a participant at a bar, as opposed to drinking at a home), times of night, mood, motivations reported, and combinations of planned drinking versus actual drinking, and planned versus actual spending.

For example, at 6pm, if the participant had indicated that they had not eaten, and had not made plans to eat, they received a message about why it is important to eat, with the particular message tailored by their own input as something they would like to avoid that night (as a proxy for motivation to reduce drinking). A participant who reported in their pre-survey that they’d like to avoid feeling

sick or vomiting received a message such as “Best way to not get sick tonight is to make sure you eat enough ASAP, and start with a big glass of water. Get on it!” and so on.

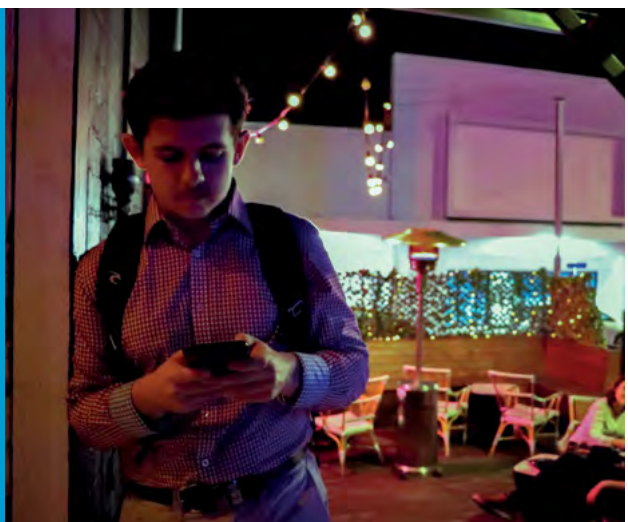
## Engagement

MIDY was particularly useful as a tool of engagement for the project as a whole, generating considerable initial interest from staff and students across the sites. Early discussion with student leaders were animated and enthusiastic about MIDY’s possibilities. Students engaged strongly in the key message development, participating in focus groups and attending meetings to co-design the campaign and promotion processes. Students creatively engaged, suggesting a range of key messages and ways to promote MIDY.

While those that used MIDY found it useful, there was also a degree of difficulty noted in regard to navigating the technology. Despite a widespread campaign using a variety of communication strategies, and strong endorsement and promotion by college administration and student leaders, overall take-up, registration and use of MIDY across the four sites was low. Levels of take-up may have been influenced by technological problems in the early release phase during O’Week. These issues led to the premature withdrawal of MIDY while the problems were rectified. A re-engagement strategy was embarked on late in the semester but it appeared that the earlier momentum from the O’Week promotion campaign had dissipated.

Data from MIDY indicate that only 32 users registered from colleges over the study period, and eight individuals used MIDY on a night out. Three used MIDY on two occasions each (total of 11 nights use overall). Participants completed an average of 3.7 hourly reports per night. The average number of drinks consumed by the users on their night was 3.1 standard drinks.

**Students creatively engaged, suggesting a range of key messages and ways to promote MIDY.**



## Post-MIDY survey

A post-project survey was undertaken in April 2019 across the four sites – 430 students responded to the question

**What year of college are you in?** and 140 students said they were in second year. This suggests that 33% of respondents were first year ‘fresher’ students in first semester 2018, participated in that year’s O’Week activities and were the target of the MIDY promotional campaign.

A further question asked students **Have you heard of MIDY and how did you hear about it?** Of the 244 who responded, 40 had heard about it, with the majority of these (22 respondents) saying they had heard about

MIDY from ‘a fellow student, student leader or college administration’ and a further 9 saying ‘a presentation or speaker’. Of the 23 respondents who said that they had used MIDY, 5 said that they found it ‘useful or very useful’. Given the very low use of online tools to manage alcohol consumption reported by participants generally, this is not surprising. When asked the broader question **Have you used a phone app or online program to help modify your drinking?**, 236 (94%) of the respondents included in our final analysis said no. The response to MIDY, then, can be seen as a relatively positive one given the overall lack of use of online tools in this area by the respondents.

Qualitative feedback from focus groups interviews with students suggests that students found the MIDY promotion engaging. When asked What do you recall of the MIDY promotion in O’Week and semester 1, 2018? responses included:

- The poster one-liner ‘sober mate in your pocket’ from the advertising.
- Posts on student club Facebook page.
- Remember last year’s student leaders spoke about it.
- Remember flyers in fresher packs.

However, when asked about engagement and registration, with What do you recall in regard to engaging and using MIDY? responses included:

- I thought it was useful but too many messages.
- A bit too hard to download, register for and engage with.
- A bit too much effort really for the return.

The take-up and use of MIDY across the sites was minimal despite the relative success and recall of the campaign messaging by students. When asked Why do you think MIDY wasn’t more widely used? responses included:

- Most college students don’t take their phones to social functions.
- We [student leaders] don’t encourage students to take their phones to turns [social events].

This suggests that while the MIDY promotion and key message campaign appears to have sufficiently informed students about MIDY, the difficulties with the actual technology and the cultural norms associated with not taking phones to social events worked against the take-up of MIDY more widely by students in the college settings.

When asked about MIDY, college administrations responded positively and saw it in a broader context as something that raised awareness to harms and was supportive of wider college initiatives to reduce risks and harms associated with excessive alcohol consumption cultures generally. When asked What is your [college administration] response to the MIDY intervention? college administration responses included:

- The students have certainly been complimentary of the alcohol project overall.
- The MIDY promotion definitely raised awareness to the need for people to manage their drinking and the issues of binge drinking.
- I think MIDY and the other interventions have been useful and has had an influence, we’ve seen change in the culture of drinking.
- MIDY and the Intervention has definitely been helpful and has complemented the work of the College.



## Conclusions

As remarked earlier, this all suggests that while take-up and use may have been low, the benefit of MIDY as an engagement and awareness-raising tool was high and in general terms was seen as a benefit to college efforts to reduce harm and risk for students.

The effectiveness of MIDY in changing alcohol consumption is being trialled in a larger (Burnet Institute) study. Preliminary results suggest that the intervention has no significant impact. However, further analysis of secondary outcomes is underway.

The MIDY development has benefited from this project and considerations for future modification and implementation of MIDY will take into account feedback from this study and into the larger trial.



## AC5: Policy co-review

The following section describes the methodology and methods used for the policy co-review activity. It begins with the background methodology (Freire's culture circles), explains and describes the themes that emerged from our focus groups and concludes with details of both the policy co-review findings for students and college administrators.

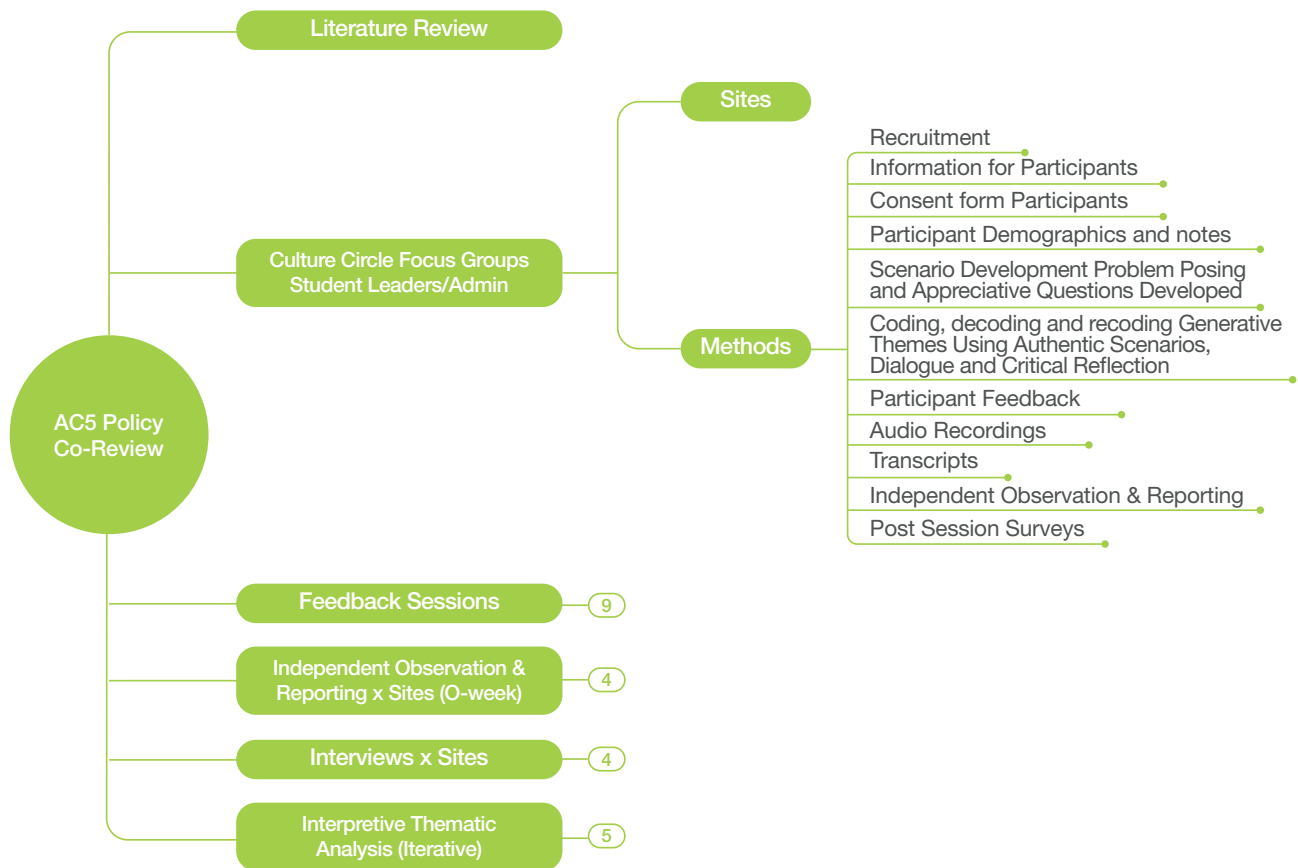


Figure 7: AC5 – Policy co-review activity







### **Culture circle methodology (narrative pedagogy)**

This project explores what students, living in university residential college accommodation, understand as the risks and harms associated with excessive consumption of alcohol, and the social and cultural forces influencing their alcohol knowledge and behaviour. The project explores student strategies to minimise harm and the relationship to policies and regulatory measures of college administrations. This process can be described as alcohol health education (Sharma 2001). The project used Freire's (1972a&b) pedagogic process known as a 'culture circle' to facilitate the policy co-review process across the college sites.

The culture circle is both a health education intervention and a qualitative action research method. Culture circles have much in common with qualitative research methods such as focus groups (Merton & Kendall 1946; Merton 1987; Bloor et al. 2002) and emancipatory research methodologies such as action research (Lewin 1946; Kemmis & McTaggart 1988). Culture circles also have close ties with emancipatory pedagogic practices such as those found in the Scandinavian and Nordic folk schools, known as 'folkbildning study circles' or people's learning circles (Rasmussen 2013; Torstensson 1994), and in Gramsci's (2007) factory study circles.

Using Freire's (1972a&b) 'culture circle methods', the project asked participants to reflect on and share their experience of cultures of excessive consumption of alcohol or 'risky' drinking. Participants were asked to reflect, problem-pose and dialogue (Freire 1972a) about what the risks and harms might be; what and who might influence their awareness and knowledge of the harms; how they perceive their ability to connect with and appreciatively (Cooperrider et al. 2008) contribute to and promote alcohol

cultures that minimise harm; and what might limit and or enhance their contributions in their residential community in relation to policy, regulatory or structural responses from the residence administration (Monteiro et al. 2015).

Using Freirean problem-posing in culture circles (i.e. the posing of problems and clarifying questions) raises participant awareness to issues; at the same time, the culture circle proceedings (dialogue of the participants) are recorded, thematically analysed and fed back to participants – thus, research is undertaken. Sharma (2001) describes Freire's educational methods in the context of alcohol health promotion and literacy as underutilised.

### **Freire and culture circles**

Freire's (1972a&b; 1976) culture circles are an innovative, participant-centred research and education process. Freire (1976, p. 140) describes these variously as 'research groups' or 'discussion groups'. The culture circle is framed not by traditional classroom contexts but is more analogous to a focus group in an adult learning environment (Knowles 1970). Freire's culture circles appear to build on the ideas of Gramsci (see 2007) and his factory study circles, which enabled workers to educate themselves and politically organise (Mayo 2008).

Freire's culture circles also have a strong affinity with the Scandinavian and Nordic folk school movements known as 'folkbildning study circles' or people's learning circle (Rasmussen 2013; Torstensson 1994). Brophy (2001) suggests that the folkbildning study circle is emancipatory; a vehicle for empowerment and social change; values equality, democracy and cooperation among participants; utilises the experiences of ordinary people to create knowledge; and is highly participatory and informal in contrast with formal education systems.

Freire (1976, p. 42) also describes the development of his culture circles in contrast to formal educational environments.

**We launched a new institution ... a 'culture circle', since among us a school was a traditionally passive concept. Instead of a teacher, we had a coordinator; instead of lectures, dialogue; instead of pupils, group participants; instead of alienating syllabi ... 'codified' learning units [themes].**

The Freirean (1972a&b; 1976) culture circle is a period of intense dialogue that gives participants the opportunity to gather in small focus groups to reflect on shared problems (problem-posing); question and engage in deep conversational encounters (dialogue); and focus on key issues (generative themes) experienced in participants' own lives and the lives of those in the wider community to which they belong. This is done with the ultimate purpose of raising awareness (consciousness or 'conscientization') in order to act on these issues (problem-solve) to transform them and to bring about positive change.

The dialogue within a culture circle is a critical encounter and requires reflection on one's own and others' accounts of their lived experiences; it is addressed to one another and to the wider community. Freire describes dialogue thus:

"Dialogue cannot be reduced to the act of one persons 'depositing' ideas in another, nor can it become a simple exchange of ideas to be 'consumed' by the participants in the discussion. Nor yet is it a hostile, polemical argument between [those] who are committed ... to the imposition of their own truth. Dialogue ... is an act of creation; it must not serve as a crafty instrument for the domination of one [person] by another (Freire 1972a, pp. 61–2)."

This Freirean notion of dialogue, suggests Stewart, Zediker and Black (2004), is indebted to Buber (1958; Avnon 1998) and is similarly holistic, where a participant's development occurs only in the context of a mutual relationship with others in the context of a community.

Accordingly, Freirean (1972a) dialogue and critical reflection is stimulated through group 'problem-posing', aided by the use of 'codification' of 'generative themes' – the recording and documenting of the key concepts, issues and problems of the participants. These codified 'themes' are re-presented and can take many forms, such as a diagram using still pictures, video, a dramatic act or play and/or accompanying narrative, representative scenario or story (Sharma & Romas 2012, p. 254). These representative narratives or scenarios are an authentic summation of the participants' reflected stories of their real and lived experiences. This process can be described as story-based learning and has strong parallels with theories of narrative pedagogy and is consistent with the findings of Tutenges and Rod (2009) in regard to the importance of 'drinking stories' as a site for the negotiation of drinking-related actions (O'Loughlin 2016; Goodson & Scherto 2011; Deniston-Trochta 2003; Arnett 2002).



Freire (1972a, p. 61) defines dialogue within the culture circle process as:

**the encounter in which the united reflection and action of the dialoguers is addressed to the world which is to be transformed ... [it] is an encounter among participants to name the world.**

Freire (1976) contends that facilitating dialogue with participants is fundamental to the educator's role in the consciousness-raising process, saying that the role of the educator is to give participants the instruments with which they can teach themselves. This, he concludes, 'identifies learning content with learning process' (1976, pp. 48–9).

Freire (1972a, p. 27–8) ascribes the liberating power (Shor & Freire 1986) of his praxis-driven pedagogy to its consciousness-raising potential, arguing:

"One of the gravest obstacles to the achievement of liberation is that oppressive reality absorbs those within it and thereby acts to submerge [people's] consciousness ... To no longer be prey to its force, one must emerge from it and turn upon it. This can be done only by the means of praxis: reflection and action upon the world in order to transform it."

In this sense the curriculum or methodology of Freirean (1972a) pedagogy when used in health promotion is not focused solely on content, but rather on a transformative and empowering process of critical dialogue leading to 'acts of knowing' for participants. This process, grounded in Freirean notions of praxis (Wallerstein & Bernstein 1988), is an action and reflection continuum (Torres & Mercado 2004) enacted within the culture circle method.

### Phases of a culture circle

The elaboration of 'acts of knowing' take place in what Freire describes as the *círculo de cultura* or culture circle (1972b, p. 38). It is the vehicle through which his pedagogic

theories are applied and the theoretical context in which his critical pedagogic method takes place (1972b, p. 38). Freire (1976, p. 42) describes the process:

"In the culture circles we attempted through group debate either to clarify [name/rename] situations or to seek action arising from that clarification. The topics [themes] of these debates were offered by the groups themselves ... some of the themes were repeated from group to group. These subjects [themes] were schematized [codified] as far as possible and [re]presented to the groups with visual aids and in the form of dialogue."

Freire (1972a&b; 1976) outlines his culture circle method in a number of his early publications. In the introduction to *Education: the Practice of Freedom* (Freire 1976, p. viii), Goulet provides a succinct description of the five phases of the culture circle method. Freire (1976, pp. 49–53) elaborates on these phases further in the chapter titled 'Education and Conscientizacao', describing in detail how the phases relate to his pedagogic approach and in particular his literacy method. The phases are broken into two parts; the first is described as 'pre-literacy' and encompasses phases 1 and 2 (Figure 8). These are focused on contextual research, engagement and understanding of the participant's environment and their particular situation and or problems. Phases 1 and 2 include the collection of data followed by analysis and codification into generative themes to be used in the following part of the process. The second part of the process encompasses phases 3, 4, and 5 of the culture circle (Figure 8).

The three phases associated with coding, decoding and recoding are fundamental to the culture circle process, and form the iterative action and reflection continuum inherent in the process. Freire (1972a, pp. 60–95) makes clear in Chapter 3 of *Pedagogy of the Oppressed* that for the contextual research (phase 1) and generative themes (phase 2) to be consistent with the pedagogic method, they must contain the elements of coding (phase 3), decoding (phase 4) and recoding (phase 5) within them also. In this sense the method is an action and reflection continuum.



Figure 8: Phases of Freire's culture circle approach

## CONTEXTUAL RESEARCH

1  
‘observation’ and ‘listening’  
– understand the ‘universe of  
the people’

## GENERATIVE THEMES

2  
or ‘topics’ identified or  
‘schematised’

## CODIFICATION OF THEMES

3  
into pictorial stories also  
described as ‘naming’ or  
‘clarifying’

## DE-CODIFICATION OF THEMES

4  
using ‘problem-posing /  
critical reflection / dialogue’

## RE-CODIFICATION OF THEMES

5  
aimed at ‘cultural action’,  
also described as ‘re-naming’

## POST-LITERACY

6  
self-sustained movement for  
change in the participant’s  
situation

The corresponding post-literacy (phase 6) wasn’t named by Freire as a ‘phase’, but he does use the term ‘post-literacy’ (1976; 1970) to describe the period after the culture circle has been undertaken. Others such as Elias (1975) and Stromquist (2014) have elaborated on this final phase, suggesting that it relates to the reproduction and sustainability of the method by participants themselves, and in relation to facilitators and participants feeding back their learnings and actions to the wider community.

Therefore, a Freirean (1972a&b) pedagogical approach to health education in concert with Wallerstein and Bernstein (1988) is concerned with challenging participants through problem-posing to critically examine and raise awareness to their situation, enabling them to act on their situation, to transform their social and cultural worlds.

### Adaption of the culture circle process

While Freire (1972a&b) encapsulates the culture circle as a

small group of ‘participants’ up to a maximum of 20 (1972a, p. 88) the optimum size of the group is not predetermined. It is this flexibility in approach that leads Newman (1993) to suggest that Freire’s culture circle method is less focused on technique and more concerned with a philosophical approach. Newman (1993) goes on to suggest that the methodological phases of the culture circle are adaptable and should be contextualised to the setting in which they are being used. Interestingly Freire (1976, p. 42) describes the phases of the culture circle as malleable and not strictly linear, suggesting that ‘the steps mentioned are not so rigidly separated as their description implies’ (1973, p. 142). Allman (1988, p. 95) concurs, suggesting that for Freire’s methods to be authentic they must be worked out with participants ‘in accord with the cultural and historical context’. As such there are numerous variations on the phases as they have been adapted to the various contexts in which Freire’s methods have been enacted (Sharma & Romas 2012).



## The role of the culture circle facilitator

Freire (1976) describes the facilitator of the culture circle as an ‘educator’. This educator role is defined in stark contrast to the traditional role of teacher in traditional classroom environments:

**The educator’s role is to fundamentally enter into dialogue with the [participant] about concrete situations and simply to offer the instruments with which they can teach themselves ... This teaching cannot be done from the top down, but only from the inside out, by the [participant] themselves with the collaboration of the educator. This is why we searched for a method that would be the instrument of the learner as well as the educator ... identifying learning content with the learning process.**  
(Freire 1976, pp. 48–9)

Aronowitz and Giroux (1986) describe the facilitator of the Freirean method as a ‘transformative intellectual’. Danilo Chaib (2010, pp. 44–5), writing from the perspective of using music as a generative theme in a culture circle, outlines the role of the facilitator as a coordinator. He

suggests that each culture circle has a coordinator who attempts to maintain the egalitarian nature of the dialogue, both among participants and between participants and the coordinator. Within the culture circle a pedagogical space is created by the coordinator to allow participants to ‘develop their voices’ in a ‘respectful and affirming environment’. He also suggests that the configuration of the physical space is also important to enable face-to-face engagement and eye contact among the participants allowing for facial as well as verbal communication to be acknowledged and to capture the ‘curiosity and imagination’ of participants.

Chaib (2010, pp. 44–5) goes on to suggest that the challenge for the culture circle facilitator is to maintain the group’s focus without disempowering ‘the voices of participants in the dialogue’. The focus can be maintained, he suggests, by the facilitator asking ‘problem-posing’ questions and providing opportunity for ‘all views [to] be voiced freely and safely’, creating an ‘equality of differences’. He states that as each participant contributes to the dialogic process all contributions must be ‘equally listened to and considered’. This includes the facilitator, whose opinion is ‘only as valid as the participants’ and is not to be regarded as being of a ‘higher value’.

The policy co-review process in this project was undertaken across the four sites using the Freirean culture circle process. The following data was collected from the culture circle focus groups and evidences the transforming nature of the process for participants. Figure 9 outlines the process as used in this project.



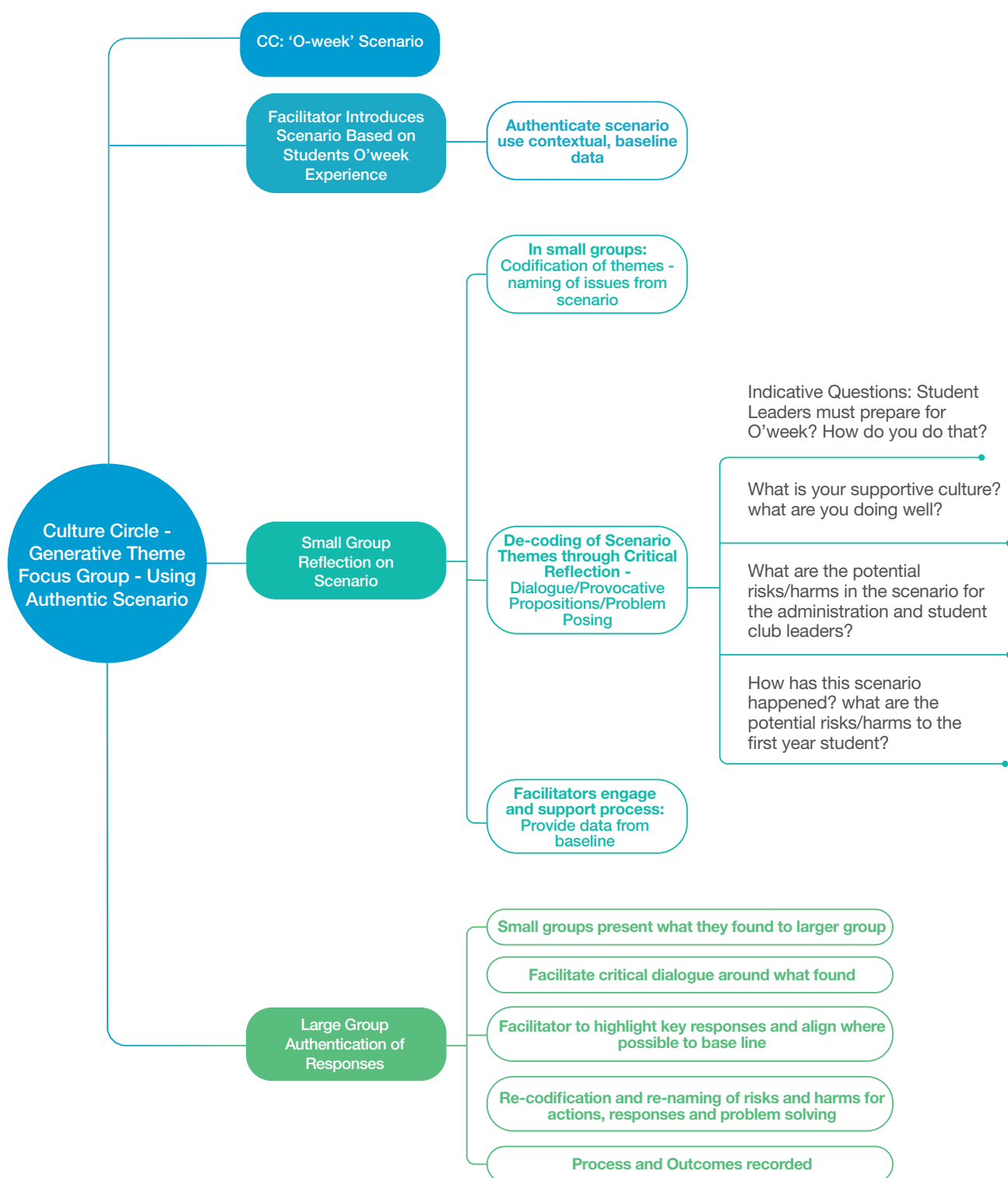


Figure 9: Culture circle process overview



## Findings: Culture circles – Policy and regulatory co-review

### SUMMARY

The following outlines the method undertaken to deliver the policy co-review intervention. The number of culture circles, participants (student leaders and college administrators) and the various findings from across the four college sites are reported. The culture circle enabled deep reflection on the culture and embedded issue of excessive alcohol consumption in the colleges. It raised awareness among the participants to the harms, and enabled critical review of current policies and regulatory measures or the lack thereof. It enabled an educative process regarding alcohol health and facilitated actions toward alcohol cultural change to be considered and implementation strategies to be proposed.

The policy co-review process was focused on the objective to **‘facilitate a greater awareness of risks and harms and to facilitate change within the “drinking cultures” of tertiary students’** and to **‘facilitate greater application of and adherence to relevant regulatory instruments and policies in relation to student alcohol consumption’**. As such, a particular focus was given to student leaders as agents of change and college staff as administrators of policy and regulatory procedure. The student leaders of college clubs and societies are responsible for organising social and culture activities in the colleges and along with student Residential Advisors are recognised as influencers of college culture. As such, 60 student leaders across the four college sites participated in eight culture circle focus groups. The student leader cohorts were the focus of the culture circles based on evidence of harm and the potential for change found in the literature. Student leaders are carriers of student culture and have been shown to be the gatekeepers and initiators of drinking cultures (Riordan et al. 2015a). First year undergraduate students are particularly susceptible to the influence of student leaders (Riordan et al. 2015a). These cohorts typically engage in heavier and more frequent alcohol use and are more likely to adopt existing and harmful drinking cultures and practices (Riordan et al. 2015a). In relation to college administrators, Schofield (2014) found a disconnect between student drinking activity and college administrations responsible for alcohol policies and regulations. As such all college heads and deputies and/or their various designates participated in the process, with 12 senior administrative staff participating in focus groups and/or interviews from across the four sites.

### METHOD

A series of Freirean culture circles were undertaken with student leaders and college administration staff at four residential Melbourne colleges. Recruitment was purposeful (Creswell 1998, pp. 118–20), targeting participants with knowledge of the particular issue, who were available and who were in a position to be able to reflect on and enable cultural change within the college sites.

Data was obtained from a total of nine culture circle focus groups (two per site approx.) with 60 student leaders and interviews with 12 senior administrative staff using the health education methodology of Freire (1972a; 1976). The culture circle focus groups were conducted onsite in the college setting. While the college administrative staff remained stable over this period, college student leaders changed as new teams were elected/appointed between semester 2, 2017, and semester 1, 2019. All student leaders who participated were undergraduate students between the ages of 18–21 years; all were in their second or third year of an undergraduate degree. As student leaders they were either representatives of their college student club, elected by the student body and responsible for organising student events, or they were college recognised leaders who had applied and been appointed by the college administration to undertake various responsibilities on behalf of the college as residential advisors.

The focus group data was collected using a combination of audio recording and note taking in relation to responses to the culture circle scenario; questions were posed and critical dialogue ensued, consistent with a Freirean (1972a; 1976) approach. Audio recordings were transcribed and fed back to participants for authentication and review. A

thematic analysis of the data was conducted using a dualistic approach of deductive and inductive techniques (Fereday & Muir-Cochrane 2006). The combined technique enabled the capture of naturally emerging themes from the data as well as key themes that aligned with the project objectives of **awareness, knowledge, action** and **change**. These themes, while being the project's primary outcome objectives for the health education intervention across the four college sites, are consistent with the broad outcomes of health promotion and education interventions generally (WHO 1986; 1998, pp. 1–4) and in particular for exemplar health education interventions such as Health Promoting Schools (Whitman & Aldinger 2009).

The identified themes and sub-themes are displayed graphically (see the following figures in each section) in order to depict relationships and enhance the conceptualisation of key factors. Direct verbatim quotes related to the themes are also presented in corresponding colours for ease of interpretation.

## KEY FINDINGS

- Student leaders and college administration acknowledged the harms associated with drinking cultures at the colleges and in particular, the vulnerability of first year college students to harmful drinking.
- College administrations encouraged student leaders to be accountable for the drinking cultures. Student leaders recognised the influence of their roles and endeavoured to 'model' responsible alcohol consumption to the student body.
- Student leaders initiated a range of new and revised policy and regulatory processes to minimise the harms from cultures of excessive consumption, such as:
  - introducing social activities that were not focused solely on alcohol consumption.
  - modelling responsible alcohol consumption and observing responsible service of alcohol (RSA) guidelines.
  - providing or renewing input into alcohol education programs at the colleges.
  - facilitating the introduction of student peer-run alcohol awareness talks/seminars.
  - monitoring behaviour/culture at events with alcohol.
- Actionable changes were made at the colleges:
  - Student leaders and administration reported a renewed mutual respect in relation to responding to harms.
  - Renewed levels of trust were reported between the student body and the college administration.
  - A reduction in the 'party culture' and renewed focus on RSA guidelines was observed by student leaders and the administration at the college.
  - Alternative events were planned and implemented where alcohol was not a focus and where pressure to drink was minimised.
  - Non-alcoholic alternatives, particularly the provision of water and/or increased accessibility to water, were noted.

# RESULTS

## Student results

Across all the culture circles, five key themes emerged. The four intervention themes of awareness, knowledge, action and change were identified and a fifth naturally emerging theme of culture circle process was noted. Under these theme headings various sub-themes are explored.

### 1. Awareness

There was wide acknowledgement from student leaders across all participating colleges that excessive alcohol consumption was associated with a range of risks and harmful effects.

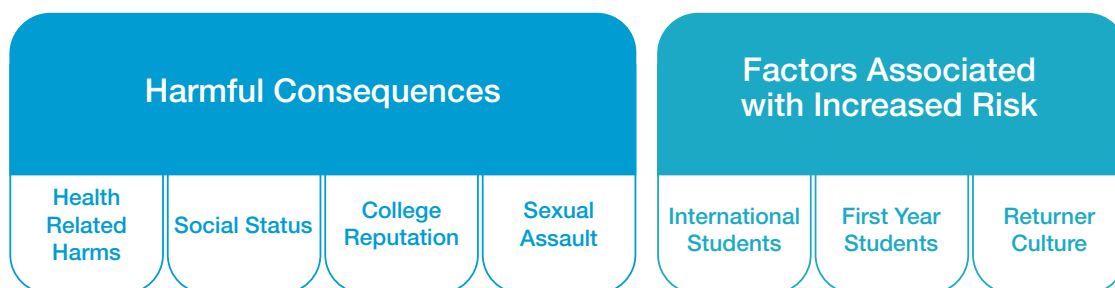


Figure 10: Risk of harm

Student leaders acknowledged a potential risk of harm to physical and mental health. This included the realisation that health-related harms ranged from alcohol-related physical injuries to chronic diseases, poor mental health and coping skills. Student leaders also recognised the potential harmful consequences of 'binge' drinking to the reputation and viability of student organisations and the colleges themselves.

Across all colleges, student leaders recognised an alcohol culture and disclosed an underlying expectation on students to consume alcohol and to drink excessively. They also recognised that students who declined to participate in the alcohol culture and related activities risked social isolation. In spite of the benefits of living in college (social connectedness, perceived safety) a group or 'gang mentality' toward drinking remained an issue for many students.

Student leaders also realised that social pressure to drink was considerably higher for first year students ('freshers') at the college, and that risk of harm increased due to their lack of experience and knowledge of the effects of alcohol. Student leaders acknowledged that, in particular, a number of first year students were experiencing independence from home life, and for international students Australian culture, for the first time. Student leaders noted that the accepted culture of excessive alcohol consumption and group pressure, particularly from returning students ('returners'), put these first year students at particular risk of physical harms, as well as potential damage to their personal reputation.

Student leaders acknowledged the drinking patterns and culture set by older returning students. The returner culture of drinking to excess placed additional pressure on new or vulnerable students to partake in harmful drinking. Some student leaders identified a potential for a false sense of security or perceived sense of safety at the college due to the close-knit community feel. Students noted that drinking to excess, even among trusted peers, increased the risk of aggression and sexual assault. Students leaders acknowledged that excessive drinking and associated harms put the student club and college reputation at risk. A responsibility to protect the public image of the college, particularly among the media and across the universities, was observed among the student leaders.

## HARMFUL CONSEQUENCES

My roommate went to hospital not long ago from drinking too much. (Site 4: Focus group 1)

Standing up to a group, the dominant culture, would affect your reputation. What if the other person is from a popular group in the building? It could ruin your reputation. You have to come back to this building and live in it, and see that person again and again. (Site 4: Focus group 1)

In general, bad behaviour is not forgotten. (Site 2: Focus group 1)

I think sometimes that feeling of security and safety [in college] is not actually an accurate one at times. But on the whole I think you feel a lot safer here than in external kind of drinking environments. But, yeah, definitely our sense that we're always safe is maybe a little bit misjudged. Just wanted to put that out there. (Site 1: Focus group 2)

It's not only the reputation of our college with other students hearing about it or whatever, it's also, could this turn into something that in some way [the college] is now seen as a negative place? (Site 1: Focus group 2)

## FACTORS ASSOCIATED WITH INCREASED RISK

Because Australian drinking and excessive drinking is so much a part of the Australian culture, when students come to [college], particularly international students, they are not prepared. (Site 4: Focus group 1)

Returners tend to pressure freshers more than they do other returners – these freshers generally tend to be more susceptible to that pressure. (Site 3: Focus group 1)

They (first years) might not have drunk much before and not really understood like the effects of drinking a whole bottle of scotch as opposed to like a bottle of beer, they might not have understood the difference. (Site 3: Focus group 1)

If you come from a very strict background or upbringing and you don't have much freedom, to suddenly have all this freedom, all this independence. You can do whatever you want, so you take advantage of that, to a degree. (Site 4: Focus group 1)



## 2. Knowledge

The dominant drinking culture at the college was a central point of discussion among student leaders. Participants disclosed that events, activities and traditions centred on alcohol and acknowledged that this contributed to a permeation of alcohol/party culture throughout the college. The lack of alcohol-free events and the lack of provision of alternative non-alcohol-focused activities and non-alcoholic beverages at college events was acknowledged as an issue. Students saw that the dominant drinking culture contributed to the isolation of some students, particularly those who did not want to drink. It was also identified that the lack of alcohol-free or alternative social events contributed to the social pressure to drink.

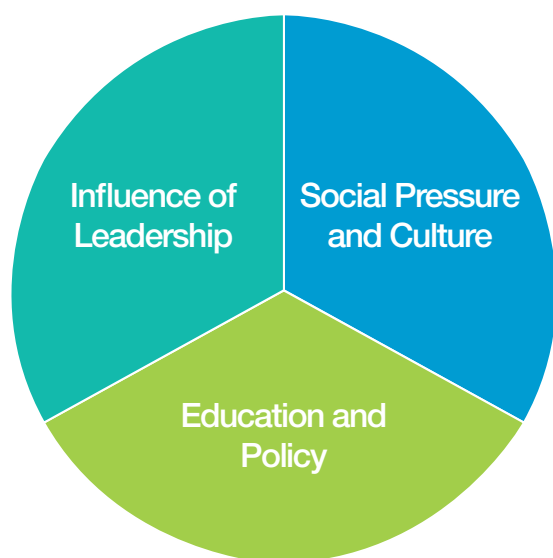


Figure 11: Leadership, social pressure and education

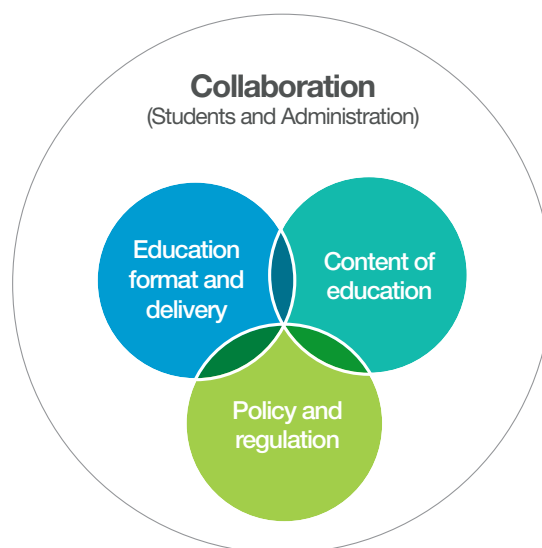


Figure 12: Collaboration

Student leaders realised the potential influence (positive and negative) of those in student leadership roles, and also senior and returning students, on drinking culture at the college. Some student leaders had previously engaged in discussions with younger students around alcohol following inappropriate behaviour at college events and felt the feedback was well received. This realisation of their impact on the college culture was motivating to student leaders to enact change. In particular, several participants identified a need for the student leadership to cultivate ‘community support’ type responses at the college and in developing and delivering alcohol knowledge and risk awareness education programs or seminars.

Although college administrations were providing incoming students with some information on alcohol and on college policies around alcohol consumption, student leaders reflected that students did not retain the information. Participants attributed this to the mode of delivery and the lack of engaging and relevant content. Student leaders endorsed the idea of student-led, peer-to-peer alcohol education across the college sites. Leaders felt that dynamic group discussions and the opportunity to learn from the experiences of their peers would facilitate relevant information and effective learning. The timing of the education was also emphasised, with participants recommending engaging new and incoming students early, such as O’Week or even prior.

Importantly, student leaders identified a ‘disconnect’ between the student body and the college administration. Student leaders felt that this disconnect was due to a lack of a nuanced understanding on the part of the administration of student needs. Participants emphasised the importance of student ‘buy-in’ when designing policy and regulatory responses to alcohol issues and how best to communicate and educate students about policy and regulation in regard to alcohol.

In particular, student leaders felt that current policy and communication wasn’t effective in addressing binge drinking culture due to an overly authoritative nature of delivery and absence of student leader participation. Participants felt that developing and communicating policies in collaboration was paramount to the success of alcohol-related policies, and further, that the policies should integrate into peer-based education and discussion around alcohol at college.

## SOCIAL PRESSURE AND CULTURE

Some people choose to live here for the drinking/party culture. (Site 3: Focus group 1)

... some people would be alienated if they have different opinions [about alcohol] so if you're not wanting to drink or you don't want to do that beer bong you can slowly get alienated from a group. (Site 3: Focus group 2)

Sort of just general communal things like peer pressure, mob culture, there's probably a fair bit of it. (Site 1: Focus group 2)

## INFLUENCE OF LEADERSHIP

People tend to change their drinking behaviour based on other people's reactions and comments. (Site 3: Focus group 1)

People who are given feedback [by student leaders] have shown a willingness to change their drinking behaviour. (Site 3: Focus group 1)

Responsible drinking by [student] leaders, particularly in a public space. (Site 2: Focus group 2)

It's not as if the college policies aren't read at all because I think we all know them. But I think reading them in a book is very different from our student leadership going through them [with us]. (Site 1: Focus group 2)

I think it's really important to make sure that those policies are pushed through in a way that's accessible and well understood so there's no convoluted aspects of them. (Site 1: Focus group 2)

## EDUCATION AND POLICY

Education is the key I think to managing peoples drinking. (Site 2: Focus group 1)

I think education is useful, maybe using some videos, like an introduction as well as Q&A, so students feel like they can ask questions and have them answered, so they are not being talked at, they are being included. (Site 4: Focus group 1)

They [admin] think they can snap their fingers and say, 'No smoking in the building, or no smoking on the terraces and no drinking.' Well, then it is people drinking in their rooms that we [student leaders] don't know about and getting wasted and ambulances called, and all of that sort of thing. (Site 4: Focus group 1)

### 3. Action

Over the course of the intervention, student leaders described efforts at taking greater responsibility for the drinking culture at the college. Several student leaders reported changes to their own behaviour in order to model responsible consumption of alcohol and to show students that alcohol was not necessarily synonymous with or ‘conducive to fun’.

Across all colleges, student leaders initiated several changes to college social activities. For example, alternative non-alcohol-related activities were organised at social events (such as ‘dress up’ themes). These were established to shift the focus from alcohol and drinking. Several participants reported having ‘alcohol-free spaces’ at events and in some cases hosting ‘alcohol-free events’. Some also reported that they avoided scheduling alcohol events around dates associated with high excitement (e.g. after exams). Students reported proactive efforts to maintain RSA standards, such as labelling standard drink measures, and providing food at events as well as non-alcoholic beverages, making water more accessible and not continuing to serve intoxicated students at functions.

Student leaders described taking accountability for drinking culture at the college. These leadership processes varied across colleges, as did their effectiveness. Many student leaders reported taking the lead in ongoing alcohol education at the college, while others focused on fostering a supportive environment among the student body through constructive feedback on behaviour and promotion of college values. Practical initiatives such as posters and visual information displays, such as drawing lines on ‘college’ cups to indicate standard drink measures, were also reported.

A number of revisions to policies and regulations were also reported at some colleges. For instance, student leaders reported that drinking utensils such as ‘beer bong’ were no longer available, safe common spaces to drink were introduced to minimise drinking in rooms, RSA standards were introduced to student functions and non-student bar staff engaged. Several students reported more consultation with the college administration.

Having leaders sober and in control whilst having fun showing people that alcohol isn’t a necessary ingredient. (Site 3: Focus group 2)

Delegate most of the powers to the [student] leadership, which I think is a positive because it means we’re enforcing it, not them [administration]. If they’re enforcing it I think people are less inclined to listen to what admin says. (Site 1: Focus group 2)

Have activities and things to do during events with alcohol that don’t revolve around drinking. (Site 3: Focus group 3)

Alcohol talks run by peers rather than a ‘stern talk’ by the admin. (Site 3: Focus group 3)

We try and educate [freshers] as they come in. (Site 1: Focus group 3)

Education, whether it be formal or informal, on mixing drinks, standard drinks, peer pressure – like, it’s okay to say no. (Site 4: Focus group 3)

Maintaining a busy schedule in O’Week. Thus preventing large periods of time to consume alcohol. (Site 3: Focus group 3)

It’s a new thing having the number of standards in a cup of punch and [knowing] exactly what’s in it. (Site 1: Focus group 2) [standard drink measures]

Hiring bartending services so that [we] can have people who aren’t associated with the college serving alcohol. (Site 1: Focus group 2)

People who are given feedback [by leaders] have shown a willingness to change their drinking behaviour. (Site 3: Focus group 1)

#### 4. Change

Following the raising and implementation of many of the aforementioned actions, student leaders reported a change in their own feelings of accountability towards the culture at the college. Participants observed a change in drinking culture with less focus on alcohol as well as more cohesiveness throughout the student body. Importantly, students also acknowledged that shifting culture at the college was a gradual process that would need ongoing attention and review.

So we got student leaders looking out for students, engaging people so that they're not drinking in their rooms, moderating service of drinks so like RSA and everything, student leaderships with vision, fostering group mentality. (Site 3: Focus group 2)

I'm more conscious of whether the [freshers] are seasoned drinkers or unseasoned, whether they've learnt to drink or not ... suddenly we've got a bit of a handle on a bunch of students that perhaps have never drunk before and we might just be a little bit more focused on looking out for them, particularly in O'Week. (Site 1: Focus group 3)

I think – maybe it's just a feeling I have. But, the residents, in general, have a good relationship with the [student leaders]. They're comfortable enough ... Yeah. They're not scared to ask for help ... in the case of an emergency, even though they know they might get into trouble, they still call [us] because they are comfortable ... And, we always try to be helpful and support them, and I think they know that. But ... when I first moved in, I didn't feel that way. (Site 4: Focus group 3)

In a way like O'Week is [now] sort of the safest environment to drink in – well obviously you can't speak for other colleges but for here we have 13 sober [student leaders] and how many committee people there are like over 20 people. (Site 3: Focus group 2)

Intoxicated people turned away from the bar. Everyone at the bar is very well trained and they all have an RSA [certificate]. We're all looking out for each other. (Site 1: Focus group 2)





## 5. Process of culture circles

Students expressed a positive endorsement of the culture circle methodology, particularly the use of scenarios or authentic 'stories' as enablers of the narrative learning process of the intervention. Participants described the culture circles as 'eye opening' and highlighted the value in being able to exchange experiences and learnings with their peers. Several participants felt this process would be of use to them and their future alcohol discussions with new students and with training of student leaders in college. They reported that they were keen to replicate the method in student leader training and group meetings. In particular, participants described the process as a useful manner in which to 'contextualise' realistic situations and felt it would be a useful method to adopt in their own peer-to-peer education talks.

We could use this [culture circles] as training showing people how much pure alcohol they are putting in their system by showing them how to read the labels on alcohol bottles including the standard drinks and alcohol percentages. (Site 4: Focus group 1)

The stories in [the culture circles] are very relatable. (Site 4: Focus group 1)

The story was almost like certain people here. (Site 4: Focus group 1)

This process has been very useful. (Site 4: Focus group 1)

We liked the process. We really liked having the story. We think it's a really good thing to contextualise this idea of 'you can drink too much', with a very realistic situation that really shows the affects not just on yourself but on everyone around. Because I think that's something that [college based] alcohol education doesn't always cover as much. (Site 1: Focus group 2)

So, we thought it [culture circle process] could be connected to our O'Week [alcohol] talk, incorporated in. Make [O'Week] a bit more interactive rather than just being talked at would be a good thing. (Site 1: Focus group 2)

[The culture circle] makes us recognise what we are doing well and what we need to keep implementing. (Site 3: Focus group 1)

I would like us [student leaders] to think about how we continue to engage with [the culture circle facilitators] in whatever capacity that might be. (Site 3: focus group 1)

We [student leaders] will definitely use [culture circle] ideas and group process again when we hand over to new student leaders at the end of the year. (Site 3: Focus group 3)

## College administration results

### 1. Awareness of risk of harm

Senior administrative staff from the four college sites participated in the process and acknowledged a culture of drinking to excess existed at the colleges. In concert with student leaders, the administration identified numerous risks of harm associated with drinking cultures and recognised that alcohol was embedded in the college culture. Similarly to the discussions observed among student leaders, staff recognised the social and physical consequences of harmful drinking patterns, as well as the vulnerability of first year students and international students to the social pressure to drink to excess. The administration also recognised that international students were particularly vulnerable and that Australian drinking culture generally was new to them.

Physical harm to students was the predominant concern raised by the college administrations, particularly in regard to sexual assault and the safety of students. The alcohol-focused student culture of the colleges was perceived by administrations to be harmful to college reputations. The administration acknowledged that first year students and international students were at increased risk of harm due to their recent exposure to drinking culture. In particular, the influence of returning students on younger, recently arrived cohorts was widely acknowledged as a key contributor to harmful drinking practices.

The administration were aware of the potential damage to the reputation of the college, citing adverse media and the posting of embarrassing or dangerous alcohol-related behaviours as harmful to the public image of the college and, in particular, the concerns of the wider university and the ongoing relationship of colleges with their affiliated university. They also recognised ramifications in the confidence of the parent body in relation to the safety of resident students. The cost of hazardous alcohol consumption at the college was also evidenced in the financial obligations of the college in such things as attending to damaged property and ambulance call-out fees.

## HARMFUL CONSEQUENCES

Stakeholder backlash e.g. parents, community, university. (Site 4: Focus group 1)

There are bodily harms experienced by all students from excessive consumption e.g. broken bones cuts and grazes, vomiting and nausea, post drinking illness e.g. headaches etc. (Site 4: Focus group 1)

The men don't necessarily think that their behaviour when they're drunk is aggressive. But the women are saying that it is. So I think, that's about an educative thing with young men 'Do you understand how what you're doing is perceived?' (Site 3: Focus group 1)

We [admin] are drawing a direct link between this sort of behaviour [sexual assault] and the context of binge drinking, making a very direct correlation. (Site 3: Focus group 1)

Sporting traditions such as sculling after sporting wins – especially if alums [former college residents] are coaching and pass on those traditions is an issue for us. (Site 1: Focus group 1)

The [VicHealth] project has raised awareness to the issues of drinking cultures and the harms across the whole college. (Site 2: Focus group 1)

Enrolment numbers at risk, impacts finances [of the college]. (Site 2: Interview 2)

## FACTORS ASSOCIATED WITH INCREASED RISK

We need to ensure that [student leaders] are the ones who are not putting the pressure on young students to drink. (Site 3: Focus group 1)

[Female student leaders] say they recognise when a [fresher] female student has had too much to drink and is vulnerable. That is that she isn't aware that somebody could take advantage of her because she's had too much to drink. So they will sit with that young woman and make sure that somebody doesn't take advantage and we will make sure she gets back to her room. (Site 3: Focus group 1)

Returners are a risk and influence the [drinking] culture. (Site 3: Focus group 1)

[Freshers] they have not set their own limits to their drinking. (Site 4: Focus group 1)

... our first year students are vulnerable and your work [the project] with us has shown that, particularly the initial survey research and your follow up interviews with student leaders. These have been helpful for us in this regard and opening up a conversation with student leaders about risk and harms in this area. (Interview 2)

## 2. Knowledge

College culture and established drinking patterns were discussed at length. Current 'standard' practices such as pre-drinking before events was raised and staff expressed concerns related to associated harmful drinking behaviour. The college administration noted a difficulty in facilitating a change in these drinking patterns. The difficulty was attributed to the permeation of an alcohol culture throughout the college and absence of strong student leadership. Participants felt that student leaders were 'highly influential' in positive and negative ways in the college and that encouraging awareness of risks and harms and the consequences associated would lead to greater accountability for minimising harmful drinking behaviour as an effective method of reducing binge drinking. Administrations were optimistic that an aware and knowledgeable leadership would have a positive influence on changing the drinking culture at college.



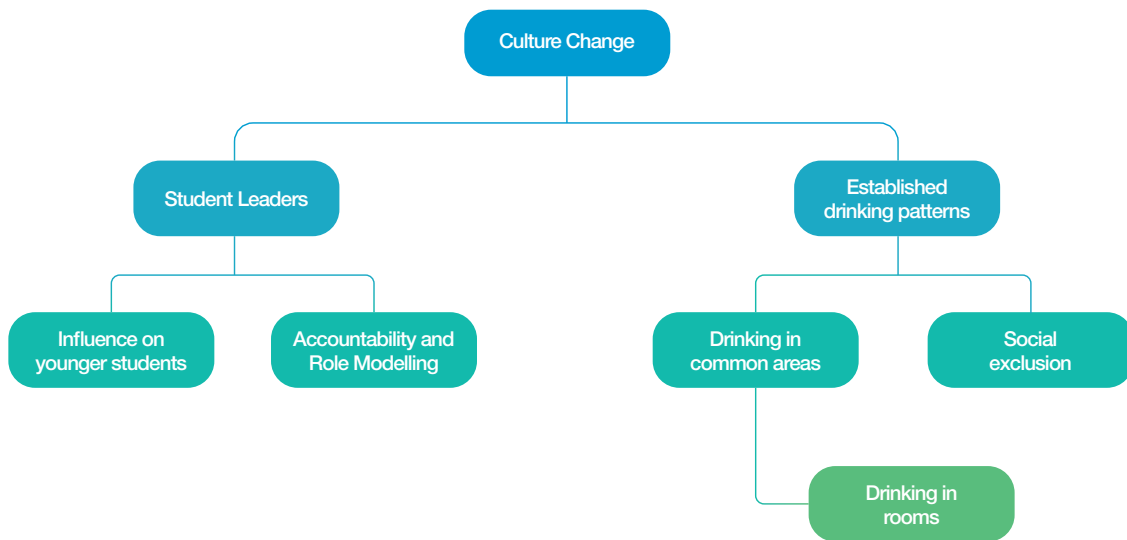


Figure 13: Culture change

Additionally, administrations agreed that most of the current alcohol awareness and education initiatives that they were providing at college were not effective and that information was not retained by students. A need for better engagement with students and involvement from student leadership in the development of education programs and communication strategies was highlighted. Similarly, administrations noted that complementary regulations and policy around alcohol would also require support from the student leadership to be effectively communicated and implemented.

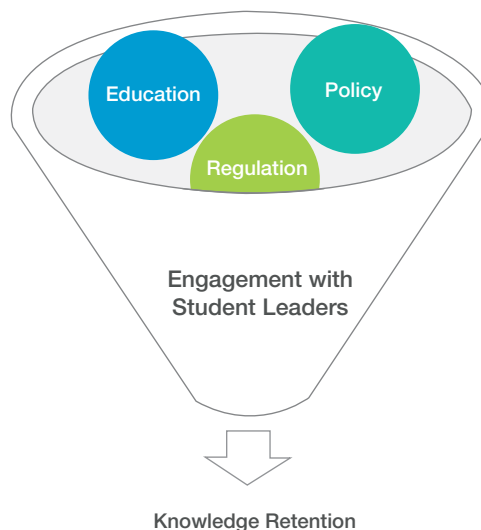


Figure 14: Engagement and knowledge retention

[Current externally provided alcohol program] It engages them. It's fun. But it doesn't actually help them hold onto the core message that they need to change their behaviour. (Site 3: Focus group 1)

[Alcohol] Education has to be integrated into the values and the culture of the college if we're going to do that, it requires a significant amount of time, integration – It's got to be repeated. (Site 3: Focus group 1)

[Student leaders] need help in knowing how to disperse room parties and closing the windows/doors, shutting down the music etc. (Site 4: Focus group 1)

More information and strategies for [leaders] in giving them [students] a warning on keeping the noise down and controlling room parties. (Site 4: Focus group 1)

Students need to be encouraged to look out for each other, we need a community wide approach. (Site 4: Focus group 1)

They [student leaders] needed to acknowledge the influence of [returning] second and third year students.

(Site 1: Focus group 1)

Need to harness the influence of the returners and use that power in a positive way. (Site 1: Focus group 1)



### 3. Actions

Across the colleges, staff described the introduction of processes to minimise the harms of binge drinking culture. For instance, food was provided at college events, as well as clear and consistent rules around using standard drink containers and following RSA guidelines. Primarily, however, the administration reported using the influence of student leaders to impact drinking behaviour at college. Student leaders were encouraged to be accountable for the drinking culture and to set an example of responsible drinking practice. A concerted effort was also made to work with student leadership to focus on college values in disciplinary matters around alcohol, to encourage a culture of respect rather than introducing punitive restrictions or penalties.

They [students] now have signs saying a plastic cup full of beer is this many standard drinks. A plastic cup full of cider is this many standard drinks. So it's actually good that they'd done that. (Site 3: Focus group 1)

[Post intervention] Re the 'punch' bowl it was clear that they weren't using garbage bins anymore, and in fact they were using standard drink measures. And they were actually putting signs on the edge of the bar saying what the contents of the punch was and how many standard drinks it was. (Site 3: Focus group 1)

The liquor licensing arrangements are there to help us regulate and control the space. And it's pretty clear they're not our rules. They're the rules of the state government. (Site 3: Focus group 1)

Try to educate them [student leaders] and make them accountable, challenge them, encourage them to minimise harm and so on. (Site 3: Focus group 1)

At all black tie, formal dinner – Pre-drinks are now provided by the College with food e.g. sushi, sausage rolls etc. (Site 1: Focus group 1)

For O'Week 2019 alcoholic 'punch' is no longer to be served in a large container into which students dip a plastic cup. Punch still served but students have to pay for it – it is served from behind the bar in line with RSA standards and displays the number of standard drinks in the punch. (Site 1: Focus group 1)

Red Frogs come along to events occasionally. (Site 1: Focus group 1)

Installed water taps (two) on campus to make water more available at events. (Site 1: Focus group 1)

We have been increasing our involvement [in education], both as staff and with external speakers with expertise, providing lectures and information to our residence in this area. (Site 2: Focus group 1)

We have encouraged student leaders to be taking more responsibility in regard to event management, safety of residents and observing standard drink measures and general RSA guidelines at all events where alcohol is served. (Site 2: Focus group 1)

With student leaders we have introduced social activities and events into the calendar where alcohol is not served and is not the focus. (Site 3: Focus group 1)

O'Week leaders don't drink during O'Week activities and this is also the case for the wider student leadership during this time. (Site 1: Focus group 1)

Training for [student leaders] in how to handle a party that has gotten out of control. (Site 4: Focus group 1)

Admin provide [student leaders] as a safe point of contact for when/or if a situation occurs. (Site 4: Focus group 1)

## 4. Change

Following the intervention, the level of change observed by staff varied across the different colleges. All administrative staff from across the colleges reported implementing actions to address the drinking culture and reduce binge drinking. Several positive changes were reported. In some colleges an overall change in culture was described, with improvements in the trust, respect and willingness of student leaders to work cooperatively with administration and the general student population. At some colleges, the administration also noted a reduction in incidents of property damage and more initiative and accountability from student leaders.

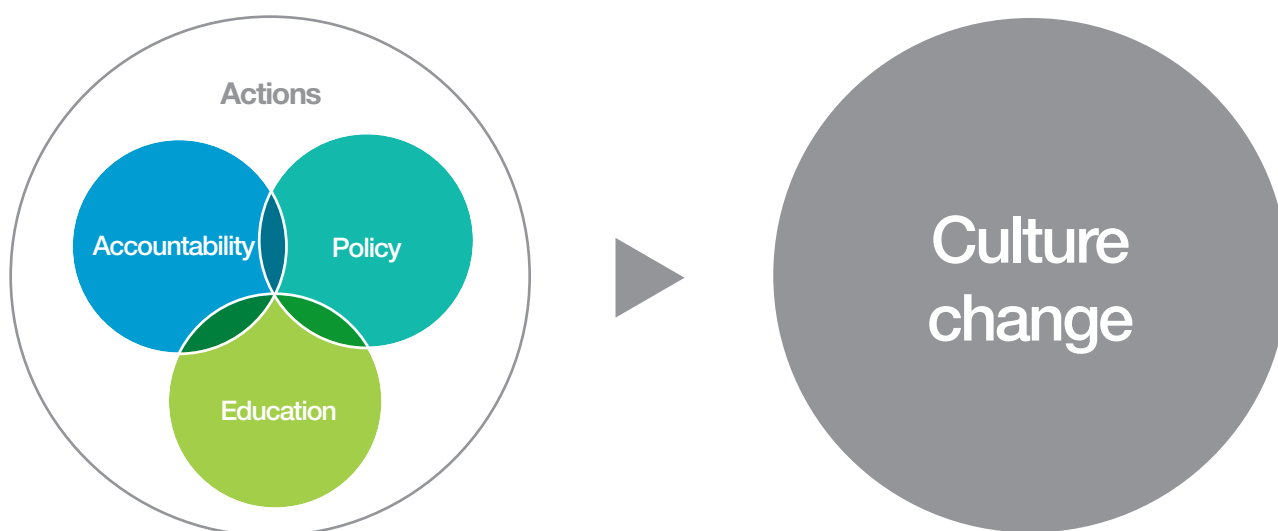


Figure 15: Actions and culture change

Noticeable difference this semester in student body and leadership group since intervention. (Site 3: Focus group 1)

[Since intervention] students more respectful of college and administration. Less maintenance requests, less damage after social functions involving alcohol. (Site 3: Focus group 1)

Intervention has definitely been helpful and has complimented the work of the college. (Site 3: Focus group 1)

Since our last focus group intervention in semester 1 [students] are better, students more responsible, less focus on alcohol than previously. (Site 3: Focus group 1)

MIDY definitely raised awareness and focus groups were well received. (Site 3: Focus group 1)

Talking to [student leaders] about current policies and reviewing them like the ban on alcohol in public spaces – will make a safer environment. (Site 4: Focus group 1)

RA process for talking to the party host about inappropriate behaviour after events and learning from issues that come up. (Site 4: Focus group 1)

Student leaders have recognised that they can be very influential, particularly on incoming residents. (Site 1: Focus group 1)

There have been noticeable differences this year in the student body and in the student leadership since the project began. (Site 1: Focus group 1)

## 5. Culture circle process

The culture circle process was highly regarded by students and staff. Staff reported a ‘noticeable difference’ in student attitudes to alcohol as well as towards the college administration as a result. The effectiveness of the process was attributed to the engaging and accessible content and delivery of the ‘scenarios’ presented in the culture circle. A number of participants highlighted the value in establishing a dialogue and empowering the students themselves to develop solutions to problems rather than having them prescribed by the administration. Further, staff reported that the process and scenarios could be used again as part of training and education for incoming student leaders.

Sharing the issue, amplifying it, offering it as a story to the incoming leaders, makes it more accessible. Will definitely use it [the process] again. (Site 3: Focus group 1)

I like the different ways you engaged with us [students] and draw out the real circumstances, and it sits in and around all the things that we’re describing around the narrative, dialogue, sharing, its empowering. We will incorporate this [process] into next year’s leadership training. (Site 3: Focus group 1)

I think your interventions have been useful and has had an influence and we’ve seen change in culture. (Site 3: Focus group 1)

The students have certainly been complimentary of the project. (Site 3: Focus group 1)

I think [students] being able to have those difficult [alcohol] kind of discussions about a story – it takes it out of the rules, regulations, policy and puts it into [students] personal experiences – is important. (Site 3: Focus group 1)

The [process] has allowed [students] to enter into alcohol conversations in a way that is harder when it’s about rules and regulations. (Site 2: Focus group 1)

Yes our [freshers] are vulnerable and your work with us has shown that, particularly the initial survey research and your follow-up interviews with student leaders. These have been helpful for us in this regard and opening up a conversation with student leaders about risk and harms in this area. (Site 2: Focus group 1)

## Policy change and implementation in educational settings

The process of transferring important concepts and ideas into health promoting policy, cultural change and related activities is complex. Whitman and Aldinger (2009) suggest that there is no consensus or agreed definition regarding the process of policy implementation in health promotion. However, for the purposes of this report, ‘implementation’ is defined according to Fixsen et al. (2005, p. 5). They suggest that:

“Implementation is defined as a specified set of activities designed to put into practice an activity or program of known dimensions ... implementation processes are purposeful and ... independent observers can detect the presence and strength of the ... activities.”

Whitman and Aldinger (2009, p. 22) identify a key factor in the process of promoting policy change in educational settings. They suggest that to be able to communicate a ‘concept’ that will motivate people to ‘think differently’ and to ‘take action’ is paramount. For example, the link between an institutional response such as a health promoting school and students ‘learning’ about health is well evidenced (Viljoen et al. 2005). This is consistent with a Freirean (1972a) pedagogical approach to culture change that sees health promotion interventions as educational and responses as collective across whole communities and structures. The project has demonstrated policy change outcome and implementation consistent with Fixsen et al. (2005) and Whitman and Aldinger’s (2009) definition.

# EVALUATION AND REPORTING

## AC6: Evaluation and final reporting

Evaluation and final reporting activities are described in Figure 17 and below. The pre- and post-survey data and analysis is provided in the results and discussion in section 7 (pp. 67–84).

An independent evaluation of the project was conducted and detail has been provided in section 6 (pp 63).

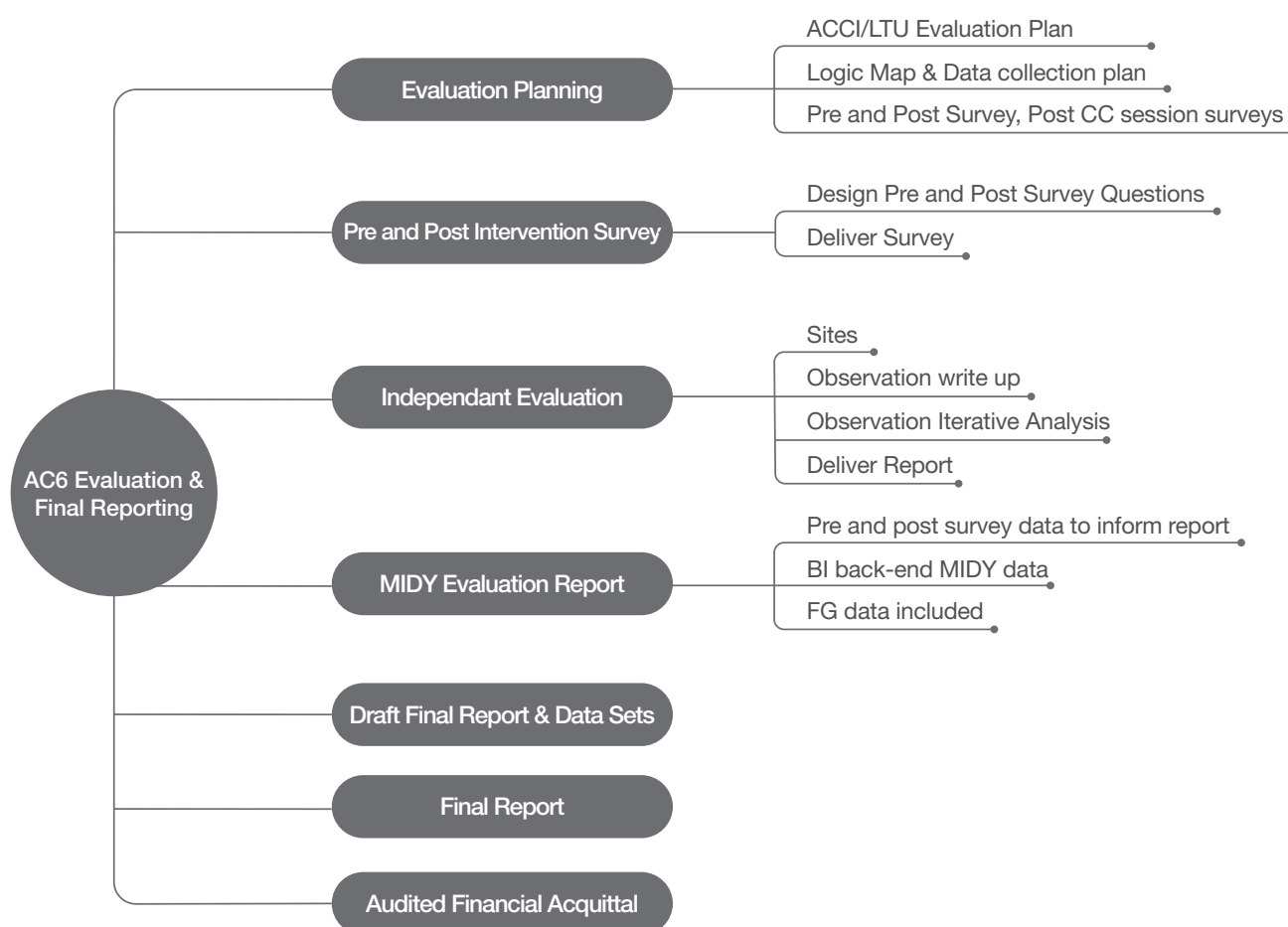


Figure 16: Evaluation and reporting activity



## Evaluation method

The project used a mixed-methods approach to its evaluation, drawing on quantitative and qualitative methods to determine the efficacy, outcomes and value of the project. The evaluation reflects the project logic.

As a health education intervention this project can be described as action research (Hobson & Townsend 2014), a term for a variety of methodologies that involve a research cycle based on planning, acting on plans, reflecting on the actions, and modifying, renewing or continuing the planning towards further action. The project has drawn upon Freire's (1972a) method of critical pedagogy and the use of 'culture circle' focus groups; these can be described as a form of action research. Central to this methodology is an ongoing and concurrent monitoring and evaluation cycle that is critical for identifying progress and built into the process as participant feedback loops. This is referred to as iterative or formative evaluation. This form of continuous monitoring and evaluation enables critical reflection (awareness-raising) to take place on the intervention actions in situ. It enables learnings (pedagogy) to be identified as the project unfolds and for participant experiences (narratives) to be validated as they are shared and explored.

Such a methodology allows project facilitators and participants to assess the outcomes and effectiveness of an intervention as it progresses. In this sense, the

project methodology also allows evaluation to occur as part of the intervention process itself. For example, this form of ongoing monitoring and evaluation helps culture circle focus group participants to identify issues, propose alternatives and learn from each other as the process is taking place. In essence, Freire's (1972a) critical pedagogy is an action research learning tool with built-in monitoring, self-assessment and both formative and summative evaluation.

Regular monitoring and evaluation of project stages against project goals, using the project logic and evaluation plan, gave further help to refining project activities and tracking projected timelines. This informed the qualitative and quantitative evaluations of end-of-project outcomes and outputs (Taylor & Balloch 2005). The project welcomed the opportunity of working with La Trobe University as the overarching evaluator appointed by VicHealth. This informed the process outlined above and included a survey with indicator questions developed by La Trobe University. A pre-intervention cohort undertook the survey across the college sites prior to the project. Following the intervention, the survey was administered again to a post-intervention cohort. A pre/post study measures the occurrence of an outcome before and again after a particular intervention is implemented (Thiese 2014). As such, pre/post-surveys are useful in demonstrating the immediate impacts of an intervention.

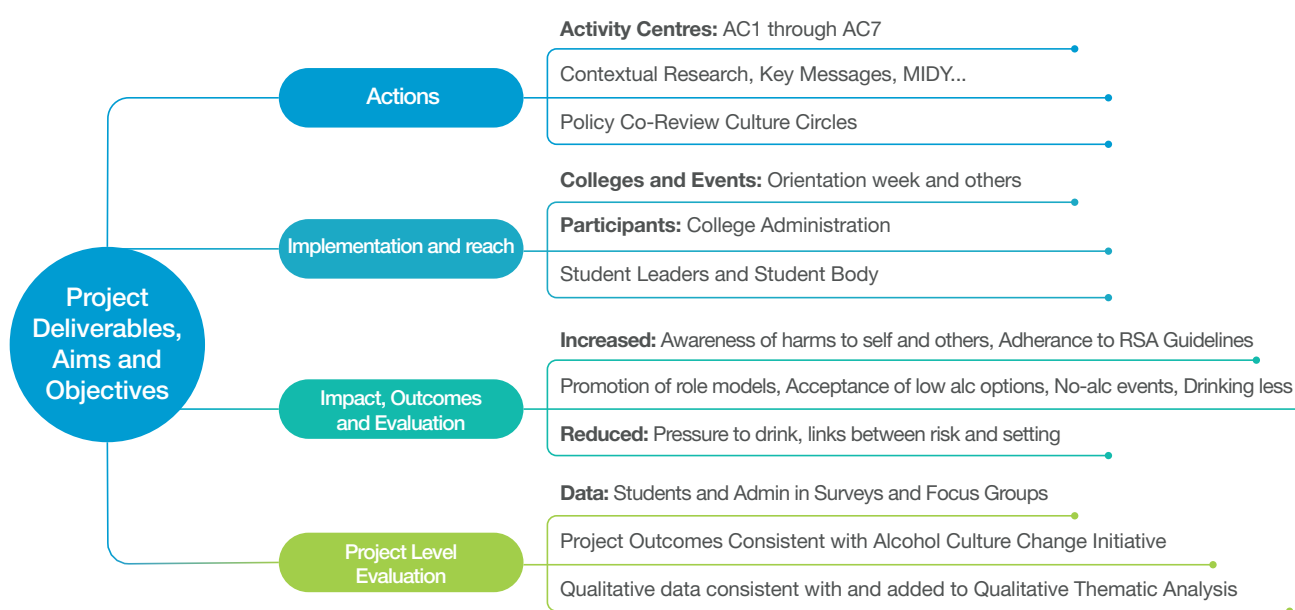


Figure 17: Project evaluation conceptual frame

## Independent evaluation

The project engaged an independent evaluator to observe and monitor progression of the project.

Independent observers are recommended as part of health promotion evaluation (Whitman & Aldinger 2009; Fixsen et al. 2005). The independent evaluator in this case undertook a number of activities throughout the course of the project including independent observation, surveying and interviewing participants and recording project interventions. The evaluator was provided with access to quantitative and qualitative survey data, and statistical and thematic analysis, including post-session evaluative survey data and participant responses. The evaluator undertook

independent interviews with key staff, student leaders, stakeholders and project participants from across the project sites.

This independent evaluation used the project's program logic and evaluation framework to assess the project at three levels – (1) process/actions; (2) impacts; (3) outcomes – in relation to project objectives and deliverables. The independent evaluator confirmed that the project was undertaken and activities were delivered as planned with students and administrators in four university colleges and/or halls of residence. The evaluator confirmed that the project team delivered each of the project deliverables, in line with the project activities.

### Specifically, the evaluator:

- observed the contextual research conducted through a literature review and student and administration focus groups and interviews
- confirmed that the project team co-designed key messages and promotional campaigns for the MIDY intervention with students
- confirmed that the project team facilitated culture circle focus groups and policy co-review sessions across all of the sites, engaging student leaders and administration staff in identifying and revising policies and regulatory measures
- confirmed that the project team delivered ongoing evaluation and feedback processes that informed the project on an iterative basis and collected evaluative measures through the initial pre-intervention baseline survey in 2017 and post-intervention survey in 2019, and undertook post-session surveys following the culture circles
- confirmed that the project team implemented all of the actions identified in the project plan and achieved outcomes representative of cultural change across the project sites
- identified impacts that achieved an increase in awareness around the risks and harms of excessive alcohol consumption
- identified an amplification of factors that influence positive cultural change and the revision and improvement in policy and regulatory measures and frameworks to support safe drinking cultures.

Overall, the participants' responses in culture circles, responses in pre- and post-intervention surveys, the post-culture circle session surveys and the independent evaluator's interviews with key stakeholders across the

sites confirm that the project interventions have positively affected awareness and introduced cultural and regulatory changes limiting excessive alcohol consumption across the four sites in this project.







# DISCUSSION AND IMPLICATIONS

## Awareness of risks and harms and action toward change

The project's qualitative data reveals that project interventions raised participant awareness to alcohol cultures and risks, enabling them to reflect and articulate potential harms from excessive alcohol consumption. Importantly, student leaders identified and reflected on the personal, physical, psychological and social harms that they had observed or experienced. Participants identified potential harms to the social and community life of the college or hall of residence through the exclusive nature of drinking cultures and potential harms to college reputation and property. (See further detailed analysis and documentation of awareness of risks and harms, and project findings and levels of impact, in the AC5: Policy co-review results section, pp. 39–60).

The pre- and post-intervention surveys reveal that the project interventions successfully raised awareness about the risks associated with excessive alcohol consumption cultures. Survey respondents in 2019 were significantly less likely to report that binge drinking was associated with post-game celebrations than students in 2017 (31.0% vs 54.7%). Across the sites, there was a reduction in respondents witnessing 'drunken, unpleasant behaviour' (63.5%) when compared to students in 2017 (86.8%). Respondents in 2019 were significantly more likely to report that binge drinking was harmful when compared to students in 2017 (85.8% vs 94.0%). (See further detailed analysis and documentation of project findings and levels of impact represented in the pre-and post-survey presentation later in this section.)

Over the course of the intervention, student leaders and administrators described efforts at taking greater responsibility for the drinking culture at the college. Several student leaders reported changes to their own behaviour in order to model responsible consumption. Across all the

colleges, student leaders initiated changes to college social events and activities. For example, alternative non-alcohol-related activities were organised at social events.

## Policy implementation

Stafford and Keric (2017) propose robust justifications for university administrations, and associated bodies such as residential colleges, to enforce wide-ranging alcohol policies on staff and students. These rationales include duty of care and occupational health and safety obligations, along with liquor licensing and responsible service regulations, the general reduction of risk and minimising of harm through controls on promotion and acceptance of funding or subsidies from alcohol retailers or the alcohol industry.

However, Stafford and Keric (2017) suggest that there are 'few examples of clear and comprehensive alcohol policies' in Australian universities, particularly referring to alcohol, its service, consumption and management, and where they do exist such policies vary widely.

Stafford and Keric (2017) also suggest that there has been little action or indeed consensus to ensure a common approach to preventing harm from alcohol within the university and higher education sector. They go on to suggest that for the implementation of alcohol policies to be successful they should be 'tailored to university contexts', and developed in consultation with stakeholders such as staff and students. Policies should be communicated through relevant dissemination strategies and should include education, training and the provision of referral options to support services for those effected. Consistent application of policies is crucial and they require ongoing monitoring, evaluation and periodic



review. This project provides evidence of successful policy implementation and change as defined by Stafford and Keric (2017).

The 2019 post-intervention survey highlights the policy and regulatory actions and cultural change enacted through the project interventions and culture circle process. One-fifth of students returning to college in 2019 reported that they had observed a reduction in binge drinking at the college. Educational initiatives had been implemented, with students in 2019 indicating that education regarding the harms of binge drinking was provided by both the college administration (60.9% vs 46.7% in 2017) and the student leaders (50.6% vs 29.4% in 2017). Freirean culture circle methods used within the project successfully enabled a participatory process of review of policies and regulatory measures concerning alcohol consumption in the colleges. The Freirean culture circle method enabled actions and strategies to be implemented to minimise harm. The Freirean method was well received overall and students and staff articulated its usefulness and their willingness to continue its use beyond the project, confirming cultural change. (Further detailed analysis and documentation of project findings and levels of impact can be found in the AC5: Policy co-review report section, pp. 39–60).

## MIDY

MIDY was useful early in the life of the project as an engagement tool with the sites, enabling initial conversations about project buy-in with key staff and students stakeholders. Early discussions with student leaders were animated, and leaders were enthusiastic about MIDY's possibilities for enabling student engagement; students added their own voice and

suggestions, such as the 'personification of MIDY' to the design process. This enabled strong participation in the key message co-design activities and MIDY promotional campaign. However, the technology was difficult to master quickly and led to early dissatisfaction and disengagement with the tool. This was coupled with cultural norms that discouraged students taking or using phones at social events. While those that used MIDY found it useful, there was also a degree of difficulty registered by participants concerning navigation of the MIDY registration process and difficulty with the ongoing use of the platform once signed up. (Further detailed analysis and documentation of MIDY project findings and levels of impact represented can be found in the MIDY report section under AC4, pp. 34–38).

## Limitations

The project is limited to four sites, these sites are located in a large city attached to large universities, and opportunities for students to consume alcohol beyond the college or university context are numerous and various. Research on participants' drinking patterns, experience and knowledge prior to attending university and living in college was limited, as was their consumption patterns and influences beyond the university residential environment. The pre-intervention survey identified the limited use of online or digital avenues to reduce or control drinking by participants. This is a significant finding and worthy of further exploration in relation to future health promotion endeavours in the digital/virtual space. The independent evaluation identified potential limitations in the translation of awareness-raising from student leaders to the general student body. Further research is required to determine the ongoing sustainability and long-term effects of the project to the settings.



## Pre- and post-intervention surveys

### OVERVIEW

The pre- and post-survey data has been statistically analysed and is provided here as part of the project results, discussion and implications section.

Surveys were administered to students living at four college sites in Melbourne in second semester, 2017, and again in first semester, 2019, post O'Week. The surveys examined drinking culture at the participant's college, student awareness of the harms of binge drinking, and policies and procedures in place at the college to minimise binge drinking; surveys also asked participants to reflect on changes at the college.

A total of 732 students undertook the survey; 274 college students participated in the 2017 survey and 458 in 2019. Due to attrition and inconsistent responding, the final sample sizes were reduced to 214 for 2017 and 252 for 2019 respectively. There were no significant differences in demographic characteristics observed between the two cohorts. All quantitative data was analysed in SPSS version 25. A thematic analysis was conducted on the qualitative responses.

### SAMPLE SIZE AND RESPONSE RATE

In 2017, a total of 274 students started the pre-intervention survey. Due to missing data (defined as completing only the demographics portion of the survey or less), 60 respondents were excluded from the analysis. The remaining 214 students were included in the analysis with some minimal missing data observed throughout 32 responses ( $n$  fluctuates  $\pm 32$ ).

In 2019, a total of 458 college students started the survey; 66 were excluded due to missing data. Among the final sample of 392 students,  $n = 140$  respondents ceased the survey after completing questions around social drinking patterns and behaviour at the college. The remainder of the analysis comprised 252 students.

### STATISTICAL ANALYSIS

Patterns in responses to individual survey items were examined via frequencies, percentages and means. Chi-squares were obtained to assess significant differences between cohorts (2017 and 2019 students). Where sample sizes and cell counts were small ( $< 5$ ), categories were collapsed and Fisher's exact test was obtained as a robust equivalent to the chi-square. Additional chi-square analyses were conducted to examine whether there were significant differences in responses between 2017 and 2019 cohorts, across gender (male vs female) and year level (first year vs second, third and fourth year). A Bonferroni correction was applied to control for the multiple tests conducted ( $\alpha = .05/3 = .017$ ) and adjusted standardised residuals (ASRs) were examined to account for the variation across group sizes. Findings with an ASR  $> \pm 2$  and  $p < .017$  were considered significant.

## DEMOGRAPHIC CHARACTERISTICS

The demographic characteristics of all responding college students in 2017 and 2019 are presented in Table 2. Over one-third of the respondents in 2019 had been in the same college residence for at least one year ( $n = 167$ , 42.6%) and a minority ( $n = 26$ , 6.6%) reported living on the college residence since 2017. There were no significant differences in demographic characteristics between the 2017 and 2019 cohorts ( $p > .05$ ).

Table 2: Demographic characteristics of responding college students

	2017 n(%)	2019 n(%)
<b>Gender*</b>		
Male	76 (35.5)	161 (41.1)
Female	133 (62.1)	221 (56.4)
Other/rather not say	2 (0.9)	4 (1.0)
<b>Year at college*</b>		
First year	112 (52.3)	224 (57.1)
Second year	79 (36.9)	132 (33.7)
Third year	18 (8.4)	30 (7.7)
Fourth year	4 (1.9)	5 (1.3)
<b>Do you drink alcohol?</b>		
Yes	197 (92.1)	356 (90.8)
No	17 (7.9)	36 (9.2)

\*Missing data

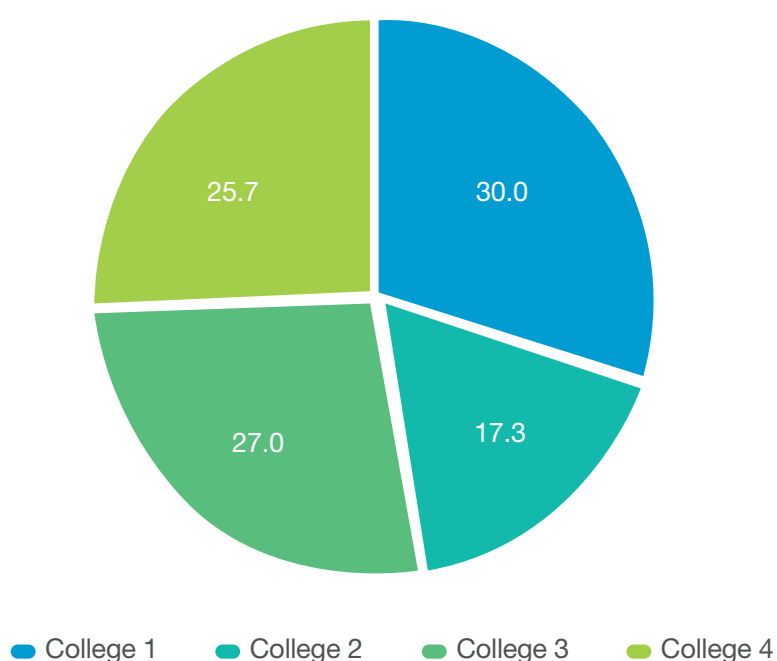


Figure 18: Percentage breakdown of total respondents in 2019 by college

## Summary of key findings

### CHANGE IN DRINKING CULTURE AT COLLEGE

- One-fifth of students returning to the college in 2019 reported they had observed a reduction in binge drinking at the college.
- Both 2017 and 2019 cohorts of students reported that socialising with other college students was an important part of their life, however:
  - respondents in 2019 were significantly less likely to report witnessing drunken/unpleasant behaviour (63.5%) when compared to students in 2017 (86.8%)
  - students in 2019 were significantly more likely to report trying to control the amount of alcohol consumed when compared to students in 2017 (90.4% vs 83.2%)
  - students were significantly less likely to report that binge drinking was associated with post-game celebrations (31.0% vs 54.7%).
- Respondents in 2019 were significantly more likely to report that binge drinking was harmful when compared to students in 2017 (94.0% vs 85.8%).
- Compared to the first year students in 2017, first years in 2019 were less likely to report that:
  - students participating in post-game drinking after male sporting events were mostly male (32.7% vs 52.7%).
  - students participating in post-game drinking after female sporting events were mostly female (18.7% vs 36.6%).

### CHANGE IN THE AWARENESS OF POLICIES AROUND BINGE DRINKING AT COLLEGE

- Just over half of respondents in 2019 indicated that the college administration had policies and procedures in place to prevent binge drinking (n = 130, 52.8%).
- In comparison to respondents in 2017, students in 2019 were significantly more likely to indicate that education regarding the harms of binge drinking was provided by college administration (60.9% vs 46.7%) and student leaders (50.6% vs 29.4%).
- Students in 2019 were also significantly more likely to report that their college had programs in place to minimise binge drinking (41.4% vs 26.6%)

### GENDER SPECIFIC DIFFERENCES BETWEEN 2017 AND 2019 COHORTS

- Male students in 2019 were significantly more likely to report trying to control the amount of alcohol consumed, when compared to 2017 males (74.7% vs 93.1%).
- Male students in 2019 were more likely to indicate awareness of college provided programs to minimise drinking when compared to male students in 2017 (50.0% vs 27.6%).
- Male students in 2019 were significantly less likely to report that **not** drinking was discouraged at college social events, compared to male students in 2017 (4.9% vs 19.4%).
- In comparison to female students in 2017, female respondents in 2019 were significantly more likely to report never seeing drunken/unpleasant behaviour at college (40.1% vs 9.4%).



## YEAR LEVEL SPECIFIC DIFFERENCES BETWEEN 2017 AND 2019

- Compared to first years in 2017, first year students in 2019 were:
  - more likely to indicate trying to control their alcohol consumption (81.1% vs 91.9%)
  - more likely to disclose that binge drinking was harmful (83.0% vs 93.5%)
  - less likely to report that binge drinking occurs on the college (71.9% vs 87.5%).
- However, first year students in 2019 were also more likely than 2017 first years to report drinking with other college students at social events (54.4% vs 45.6%).
- Older students (second, third and fourth year) in 2019 were significantly more likely to report that the college provided programs to minimise binge drinking compared to older students in 2017 (42.9% vs 23.8%).

### Drinking patterns on college residences

More than half of respondents who started the 2019 survey (n=393) reported socialising with other students at the college every day (n = 214, 54.5%). The drinking patterns and social behaviour at the college, described for the 2017 and 2019 cohorts, are presented in Appendix 1 (tables 3 and 4).

Both 2017 and 2019 cohorts of students reported that socialising with other college students was an important part of their life, (86.3% vs. 90.8% respectively,  $X^2=8.58$ ,  $p=.011$ ). However, in comparison to 2017, respondents in 2019 were significantly less likely to report witnessing drunken/unpleasant behaviour (63.5% vs 86.8%,  $X^2 = 33.49$ ,  $p < .001$ ).

Reports of drunken/unpleasant behaviour varied across gender and year level. Female respondents in 2019 were significantly more likely to report fewer incidents ('never') of drunken/unpleasant behaviour in comparison to female respondents in 2017 (9.4% vs 40.1%,  $X^2=33.95$ ,  $p<.001$ ). (Figure 19).

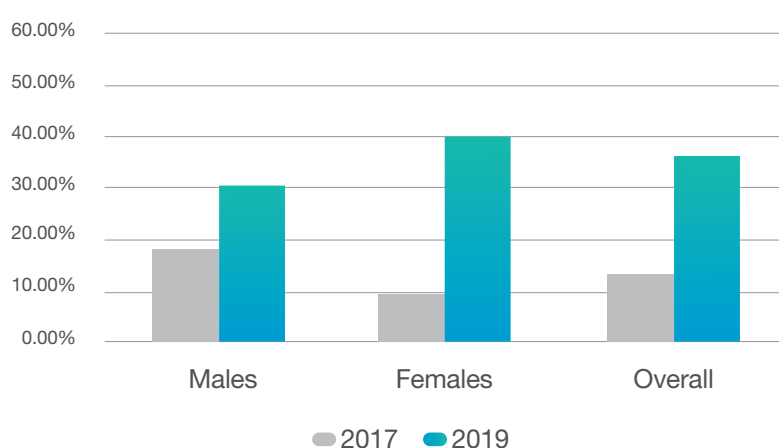


Figure 19: Gender breakdown:  
Disclosed never seeing drunken/unpleasant behaviour at college

In comparison to first year college respondents in 2017, first year students in 2019 reported significantly fewer ('never') incidents of drunken/unpleasant behaviour on college (13.8% vs 47.1%,  $X^2 = 31.98$ ,  $p < .001$ ) (Figure 20).

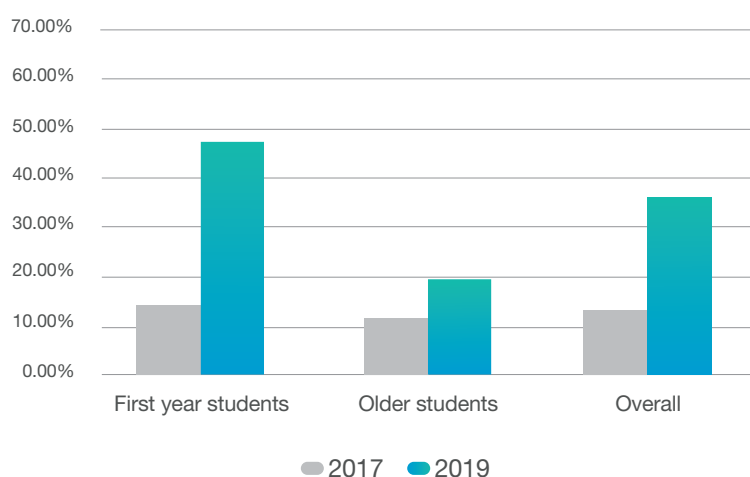


Figure 20: Year level breakdown: Disclosed never seeing drunken/unpleasant behaviour at college

Additionally, significantly fewer male students in 2019 reported that **not** drinking when socialising with residents at their college/hall was discouraged, when compared to male students in 2017 (4.9% vs 19.4%,  $X^2 = 10.98$ ,  $p = .004$ ) (Figure 21).

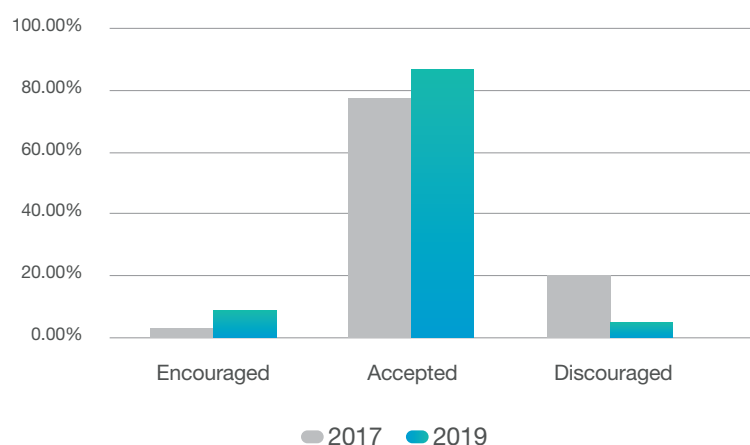


Figure 21: Male students: Is **not** drinking encouraged accepted or discouraged at social events?

Similarly, older college students in 2019 were significantly less likely to report that **not** drinking at social events at the college was discouraged, compared to older college students in 2017 (3.2% vs 17.2%,  $X^2 = 11.30$ ,  $p = .004$ ) (Figure 22).

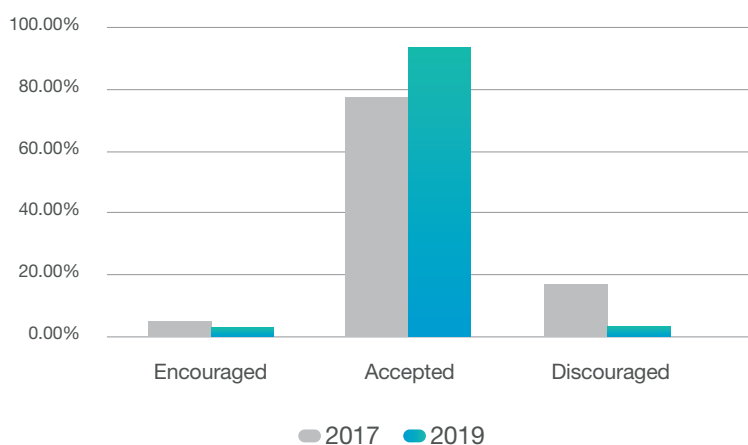


Figure 22: Older students: Is **not** drinking encouraged, accepted or discouraged at social events?

## Alcohol awareness and harm prevention

Student awareness of alcohol and harm prevention programs at the college in 2017 and 2019 is outlined in Appendix 1 (Table 5). Among the 158 students in 2019 who had been at the college for more than one year, one-fifth ( $n = 32$ , 20.3%) reported a reduction in binge drinking at the college. Similarly, more than half ( $n = 88$ , 55.7%) felt that staff or student leaders had made changes to minimise the harms of binge drinking. When asked about the positive changes put in place around alcohol consumption (see the following verbatim quotes) students reported educational programs, increased discussion around alcohol and culture shifts.

### VERBATIM QUOTES: CHANGES MADE TO MINIMISE HARMS OF BINGE DRINKING

- You can tell that the college is making students aware of past cases where binge drinking has caused problems and they don't want it to continue to happen.
- There is more education provided around consumption of alcohol in a safe manner.
- The opportunities to do so are still there, but the culture and education in fresher's minds mean we are well educated and can have fun without being overly restricted.
- People recounting previous experiences.
- Sobriety is encouraged.
- People are more educated on the behaviours and consequences of binge drinking.
- Traditions have been changed.
- Culture change, and better educated O'Week Leaders who impose better college culture during Orientation Week.
- More pressure from administration and less pressure to drink from the student committee and RAs.
- More other options available, improved attitudes towards drinking.
- More of an emphasis on behaving responsibly around the college – students know that alcohol impacts this so are more likely to moderate their drinking.
- Less hazing, good awareness, little to no pressure from older students.
- I think we have made an effort to bring the focus at events away from the alcohol, we had a much more comprehensive alcohol talk at the start of the year.
- I believe that there has been a push towards less drinking focused events.
- Heightened awareness facilitated by the authorities.
- Better awareness.
- Although I am not too certain on the formality of programs designed to reduce binge drinking, staff and student reports have indicated a decrease in binge drinking and a strong discouragement of irresponsible drinking behaviour.
- There has been an increase in awareness campaigning.

In comparison to 2017 results, respondents in 2019 were significantly more likely to report that binge drinking was harmful (94.0% vs 85.8%,  $X^2 = 9.39$ ,  $p = .002$ ) and significantly more likely to report that their college had programs in place to minimise binge drinking (41.3% vs 26.5%,  $X^2 = 11.18$ ,  $p = .001$ ) (figures 23 and 24).

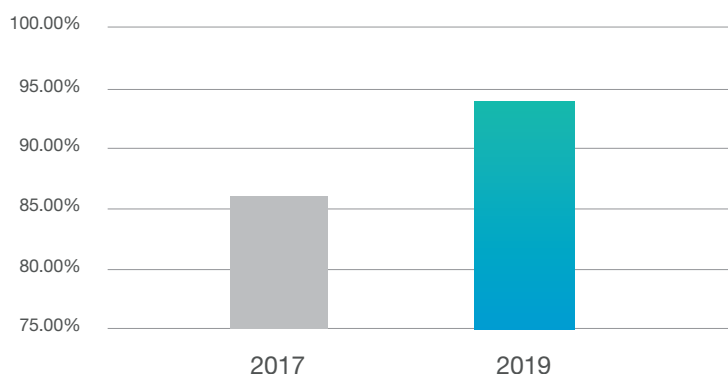


Figure 23: Do you think binge drinking is harmful?

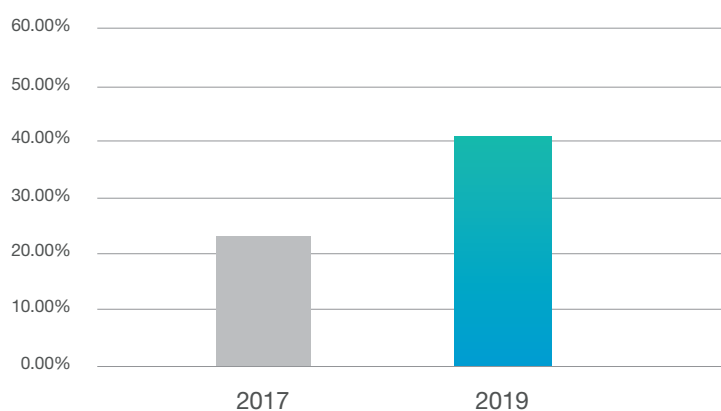


Figure 24: Does your college provide programs to minimise binge drinking?

When examining differences across gender, male students in 2019 were more likely to report that the college provided programs to minimise drinking when compared to male students in 2017 (50.0% vs 27.6%,  $X^2 = 9.046$ ,  $p = .003$ ).

Significant differences were also observed across year level. In comparison to 2017, first years in 2019 were more likely to report that binge drinking was harmful (83.0% vs 93.5%,  $X^2 = 7.22$ ,  $p = .007$ ) and significantly less likely to report that binge drinking occurs on the college (71.9% vs 87.5%,  $X^2 = 9.33$ ,  $p = .002$ ). First year students in 2019 were also significantly less likely to report that an alcohol-free week was scheduled during the semester social calendar (17.2% vs 59.8%,  $X^2 = 51.062$ ,  $p < .001$ ). Meanwhile, older students in 2019 were significantly more likely to report that the college provided programs to minimise binge drinking compared to older students in 2017 (63.6% vs 36.4%;  $X^2 = 8.18$ ,  $p = .004$ ).





## O'Week

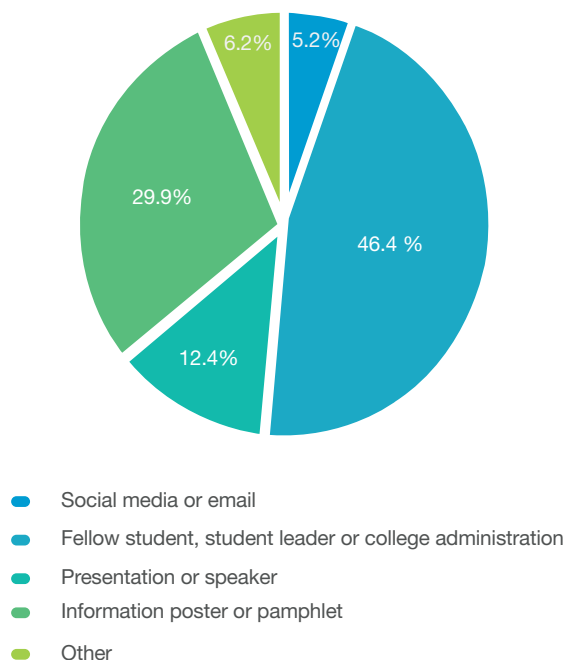
A total of 213 participants in the 2019 survey responded to questions regarding alcohol consumption during O'Week. Most students in 2019 reported that alcohol-free events were scheduled during O'Week (n = 206, 81.7%). Half of respondents (n=126) disclosed drinking less or the same amount of alcohol during O'Week. Of these students, nearly half (n=57, 45.2%) attributed the reason to the activities offered during O'Week or information provided by the residence or college.

The following verbatim quotes outline other reasons disclosed by students who reported drinking less or the same during O'Week (excluding those who generally never drink or did not attend).

### VERBATIM QUOTES: REASONS FOR DRINKING LESS OR THE SAME AS USUAL DURING O'WEEK

- I was a leader, however the activities we ran didn't require anyone to drink (especially alcohol-free events).
- Stigma.
- I was an O'Week leader and could not drink during the week.
- Because I have made a firm decision about how much alcohol I'm willing to consume and social norms don't change that.
- I was an orientation week leader and was sober the whole week.
- I didn't feel comfortable drinking in a new setting with people I didn't know that well yet.
- Because I was still exploring my limits – 1st time drinking at parties.
- There were more events of drinking than in an average week at school. This is to be expected as it is O'Week and isn't fully reflective of the year as a whole.
- Don't really like the taste of alcohol unless it's mixed with a fruity taste.
- I didn't feel like drinking around people I didn't know well.
- Not really that involved in O'Week as a senior so minimal impact.
- I'm concerned about my own health.
- This year I was lucky enough to be a part of the student leadership team and helped run and organise O'Week for the freshers. Being extremely busy with organisation I found that I never felt I could be bothered drinking and preferenced a good night's sleep. I also really came to understand that drinking copious amounts doesn't always lead to an enjoyable night and often found myself having the most fun when completely sober. During my O'Week last year I definitely found I was drinking more than usual as there were constantly events on almost every night.
- Drinking events were scheduled more regularly than a standard week.
- It's O'Week. A time to let loose and have fun.
- Fun without it.
- Drinking was a good opportunity to let loose and meet fellow peers.
- I like the taste of alcohol.
- i usually only have a few drinks. i only occasionally drink.
- Because I was underage and there were plenty of sober events.
- Because the events had less alcohol provided.
- I always drink a lot.
- There were hundreds of very fun, friend building activities which didn't involve alcohol.
- Good mix of alcoholic and non-alcoholic events.
- Because I know how many drinks I can tolerate.
- I normally drink in front of my family who will definitely take care of me. I would not drink the same in their absence cause i can't trust friends to take care of me in any expected situation like my family would do.

Students also reported that ‘alcoholic punch’ was provided during O’Week (n = 157, 62.3%). Of these students, most students reported that the punch was served in standard drink containers (n=115, 73.7%) from behind the bar. Although only 35 students disclosed that alcoholic punch was not served behind the bar, only 5 reported that standard drink containers were provided for self-serve. Additionally, over one-quarter of students in 2019 reported that drinks at O’Week events were being served in red plastic college cups (n = 72, 28.6%) and a total of 56 (22.2%) were informed about the number of standard drinks in the cup. Figure 26 illustrates the commonly reported methods used to inform students about the number of standard drinks in a red plastic college cup.



*Figure 25: How did you receive information about the number of standard drinks in a red plastic college cup?*



## Student leaders' influence on drinking culture

Figure 27 shows that students are aware of the influence of student leaders on drinking culture and that in 2019 the majority of student leaders either actively discouraged drinking games and traditions or neither encouraged nor discouraged them.

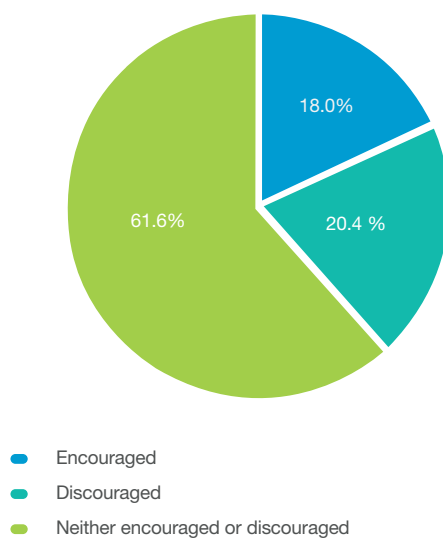


Figure 26: Extent that student leaders encourage drinking games/traditions during O'Week

At social events, water was more freely available in 2019 compared to 2017 (90.0% vs 33.6%,  $\chi^2 = 158.283$ ,  $p < .001$ ) (Figure 27).

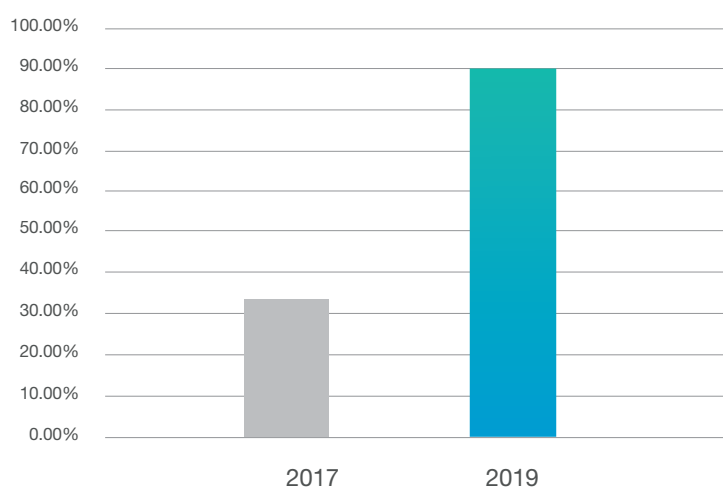


Figure 27: Water is freely available at social events

In addition, in comparison to 2017, respondents in 2019 were significantly more likely to report non-alcoholic alternatives were provided at college social events (82.7% vs 31.6%,  $X^2 = 123.942$ ,  $p < .001$ ) (Figure 28).

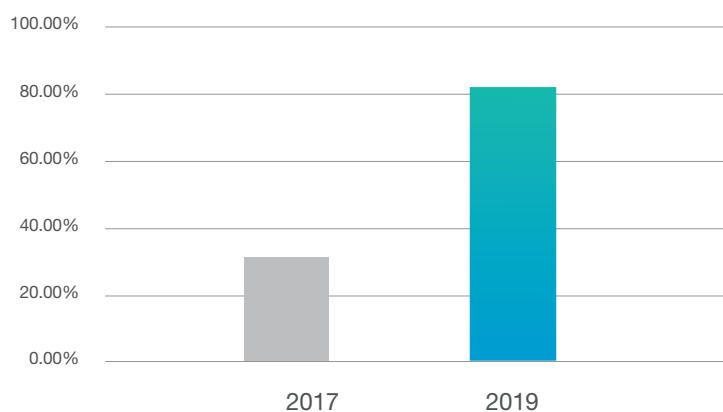


Figure 28: Soft drinks and non-alcoholic alternatives are served at social events

Students in 2019 were significantly more likely to report trying to control the amount of alcohol consumed (90.4% vs 83.2%,  $X^2 = 6.64$ ,  $p = .010$ ).

When looking at gender differences, significantly more male students in 2019 reported trying to control the amount of alcohol consumed, compared to 2017 males (74.7% vs 93.1%,  $X^2 = 11.58$ ,  $p = .001$ ) (Figure 29).

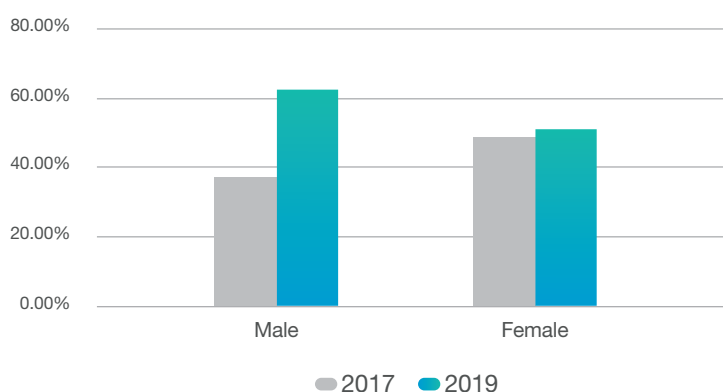


Figure 29: Students who endorsed trying to control the amount of alcohol consumed, by gender





Similarly, first year students in 2019 were more likely to indicate trying to control their alcohol consumption, compared to first years in 2017 (81.1% vs 91.9%,  $X^2 = 6.78$ ,  $p = .009$ ) (Figure 30).

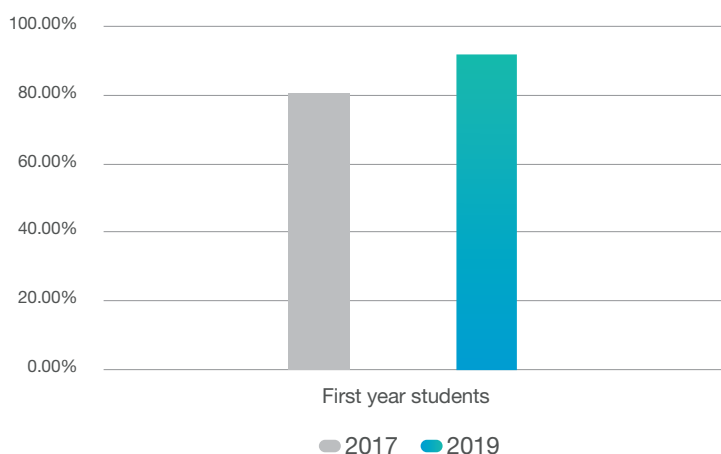


Figure 30

However, in comparison to 2017, first year students were also significantly more likely to report drinking with other college students prior to social events in 2019 (54.4% vs 45.6%,  $X^2 = 5.90$ ,  $p = .015$ ). Interestingly, first years in 2019 were also less likely to be aware of free hot food being provided at the college social events (66.1% vs 46.4%,  $X^2 = 10.09$ ,  $p = .001$ ) and significantly less likely to be aware that hot food was served at all during the social events at college (71.2% vs 46.4%,  $X^2 = 16.06$ ,  $p < .001$ ).



## Drinking culture and college sports

Student disclosure of drinking culture at the college in 2017 and 2019 are presented in Appendix 1 (Table 6).

In comparison to 2017, the 2019 students were significantly less likely to report that binge drinking was associated with post-game celebrations (31.0% vs 54.7%,  $X^2 = 26.13$ ,  $p < .001$ ). Further, significantly fewer 2019 respondents reported that it was mostly males participating in post-game binge drinking after male sports (40.1% vs 53.7%,  $X^2 = 8.51$ ,  $p = .004$ ) (Figure 31).

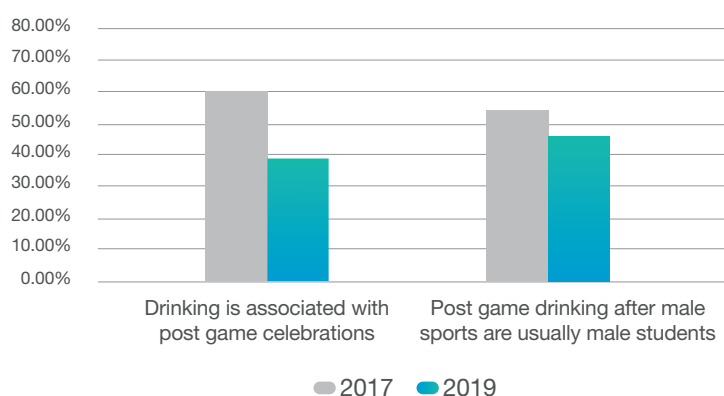


Figure 31: Change in drinking culture between 2017 and 2019

First year students in 2019 reported significant differences in drinking patterns between male and female students, when compared to the responses of first years in 2017 (Figure 32). In particular, first year students in 2019 were more likely to report that males drink less when females are present, compared to first years in 2017 (18.7% vs 6.3%,  $X^2 = 8.54$ ,  $p = .003$ ).

Similarly, first year students in 2019 were significantly less likely to report that students participating in post-game drinking after male sporting events were mostly male (32.7% vs 52.7%,  $X^2 = 10.60$ ,  $p = .001$ ) and vice versa for female sports (36.6% vs 18.7%,  $X^2 = 10.64$ ,  $p = .001$ ).

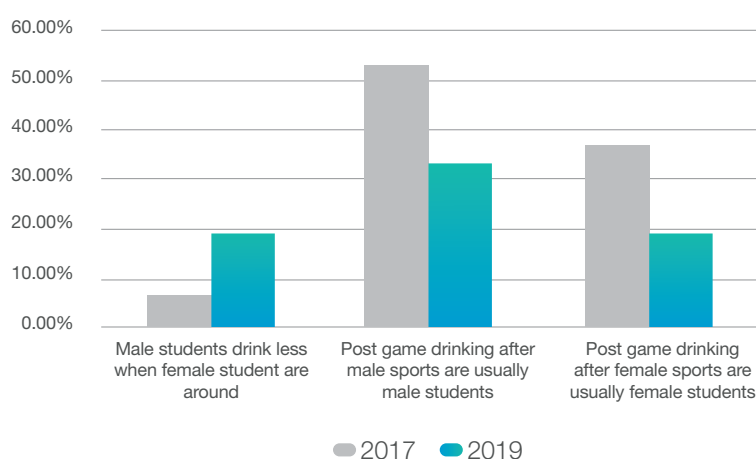


Figure 32: Significant changes in first year responses ( $p < .017$ )

In comparison with first year students from 2017, first year students in 2019 were also significantly less likely to report that post-game drinking may cause harm to those who participate (30.7% vs 46.4%,  $X^2 = 6.80$ ,  $p = .009$ ).

## College policies around alcohol consumption

Table 7 in Appendix 1 presents student knowledge of college procedures and policies around binge drinking among the 2017 and 2019 student cohorts (n=246). Just over half of respondents in 2019 indicated that the college administration had policies and procedures in place to prevent binge drinking (n = 130, 52.8%). Students who reported that policies around binge drinking were communicated across the college referred to information sessions during O'Week (n = 29) and presentations and talks throughout the year (n = 14) and the college handbook (n = 8).

In comparison with 2017 students, significantly more students in 2019 disclosed that education regarding the harms of binge drinking was provided by student leaders (50.6% vs 29.4%,  $X^2 = 21.15$ ,  $p = .002$ ) and college administration (60.9% vs 46.9%,  $X^2 = 9.21$ ,  $p = .002$ ) (Figure 33).

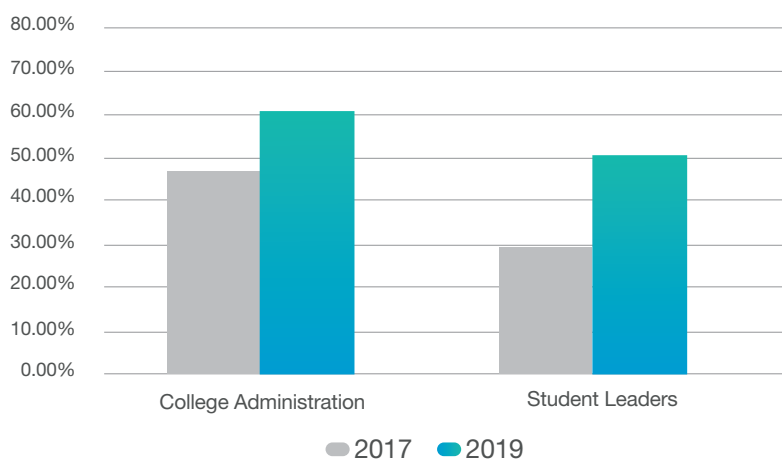


Figure 33: Education provided at the college around the harms of binge drinking



## Open-ended questions: – Thematic analysis

All open-ended responses from the 2019 survey were collated and a thematic analysis was conducted to identify common patterns in the data. Three distinct themes of education and policy, culture change and social drinking patterns emerged from the data. A comparative analysis was also conducted to examine the change in policies in place at the college to minimise binge drinking between 2017 and 2019.

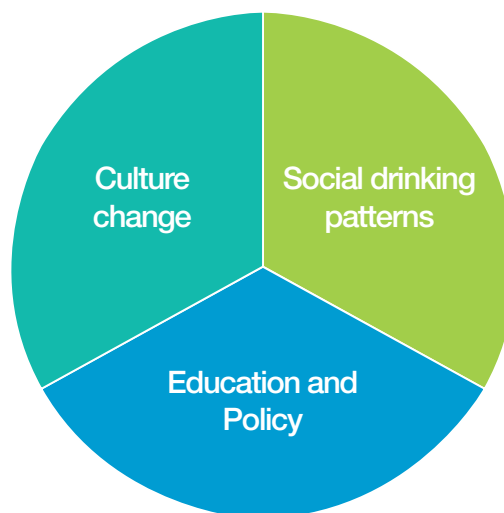


Figure 34: Thematic analysis – emergent themes

### EDUCATION AND POLICY

As part of the project, alcohol awareness campaigns were conducted throughout the colleges. Several students described their effectiveness and attributed the success to the focus on responsible alcohol consumption and learning from previous alcohol-related incidents. Corresponding policies were implemented at the college to promote responsible alcohol consumption. For instance, several students reported a ban on drinking utensils such as 'beer bongs' and the introduction of the 'water wagon' for students that had consumed too much alcohol at college events. Most students expressed support for education. More openness in discussing alcohol-related issues was observed among the student body, as well as a heightened awareness of the impact of alcohol.

### CULTURAL CHANGE

A decline in the social pressure to consume alcohol when socialising at the college was reported. Specifically, students reported more social activities at the college that did not focus on alcohol and less 'hazing' from older students and pressure to drink excessively. Notably, students reported that traditions that centred on alcohol had changed and that 'sobriety was encouraged'.

### SOCIAL DRINKING PATTERNS

Students indicated a diverse range of attitudes towards social alcohol consumption. Several students described health conscious approaches to alcohol consumption, choosing to either abstain or minimise their alcohol intake. Students described cautionary approaches to drinking in large social groups and chose to prioritise their safety over excessive alcohol consumption.



## Key themes from the 2019 student responses in the post-intervention survey

### EDUCATION AND POLICY

Give talks on alcohol harm and harm reduction at the beginning of the year – no beer bongs / excessive drinking allowed – this issued clearly at the start of the year and written in the handbook.

There is more education provided around consumption of alcohol in a safe manner.

People are more educated on the behaviours and consequences of binge drinking.

More of an emphasis on behaving responsibly around the college – students know that alcohol impacts this so are more likely to moderate their drinking.

### CULTURE CHANGE

Although I am not too certain on the formality of programs designed to reduce binge drinking, staff and student reports have indicated a decrease in binge drinking and a strong discouragement of irresponsible drinking behaviour.

Less hazing, good awareness, little to no pressure from older students.

More [alternative] other options available, improved attitudes towards drinking.

I think we have made an effort to bring the focus at events away from the alcohol, we had a much more comprehensive alcohol talk at the start of the year.

### SOCIAL DRINKING PATTERNS

I normally drink in front of my family who will definitely take care of me. I would not drink the same in their absence because I can't trust friends to take care of me in any expected situation like my family would do.

I know how much I like and how much is a safe amount too, I wasn't going to drink more just because it was O'Week.

I want to stay healthy, and not drinking in O'Week is the least I can do.

## Policies in place at the college aimed at reducing binge drinking

In both 2017 and 2019 surveys, students described the types of policies introduced at the college to reduce binge drinking. In 2017, a focus of policies reported by students centred on restricting drinking utensils associated with excessive and quick alcohol consumption such as 'beer bongs', and punitive or 'disciplinary' responses for breaking 'rules'. However, students in 2019 described more education on alcohol consumption and involvement from student leaders in the promotion of responsible alcohol consumption. Although students still reported 'rules' around alcohol in 2019 (i.e. 'no sculling'), they also disclosed more awareness and communication around alcohol consumption at the college and role modelling from the student leadership such as 'dry' student leaders at events. The introduction and awareness of RSA guidelines by students was a noticeable change in 2019.

## Comparative themes in relation to college alcohol policies: 2017 vs 2019

### 2017

No drinking games allowed.

No binge drinking paraphernalia allowed on campus; no games encouraging binge drinking allowed to be organised by student leaders or college representatives; non-drinking alternatives always provided (i.e. soft drinks at parties, cafe crawls instead of bar crawls throughout semester).

Rules surrounding practises that promote the quick and excessive consumption of alcohol such as beer bongs and danger cans are banned at college and 99% of students respect this rule.

No danger cans, beer bongs etc are allowed. If seen the resident will be logged (discipline action).

### 2019

They just say all the time, its ok not to drink at like GMs [student meetings] and things.

The student leaders and admin educate students on the harms of drinking, but emphasises self-control rather than intervening in how much people drink. Only when people cannot control themselves do they intervene.

Control of alcohol supply, awareness of all parties, RSA trained bar staff, RAs and first responders always at parties, presentations to increase awareness of alcohol abuse.

No drinking games allowed. Logging system and potential community service for drunk and disorderly conduct.

Responsible service of alcohol at events, and creating a culture where everyone looks out for each other.

## Concluding comments on the pre- and post-surveys

The pre- and post-intervention surveys were undertaken by 732 students across four residential sites in Melbourne in 2017 prior to the intervention and again in 2019 post the intervention activities taking place. The surveys examined drinking cultures in the residences; student awareness of the harms of excessive alcohol consumption; and policies and other regulatory procedures in the residences to regulate and minimise harm from alcohol. The 2019 survey also asked participants to reflect on changes at their college. The pre- and post-intervention survey data has been statistically analysed and presented as part of the project results.

The pre- and post-intervention surveys evidence that the project's interventions successfully raised awareness of risk and led to change in excessive alcohol consumption cultures. Across the sites, there was a reduction in respondents witnessing 'drunken, unpleasant behaviour' (63.5%) in 2019 compared to students in 2017 (86.8%). Survey respondents in 2019 were significantly less likely to report that binge drinking was associated with post-game celebrations than students in 2017 (31.0% vs 54.7%). Respondents in 2019 were significantly more likely to report that binge drinking was harmful when compared to students in 2017 (85.8% vs 94.0%). The 2019 post-intervention survey highlights the policy and regulatory actions and cultural change enacted through the project interventions and culture circle process. One-fifth of students returning to college in 2019 reported that they had observed a reduction in binge drinking at the college. Educational initiatives had been implemented, with students in 2019 indicating that education regarding the harms of binge drinking was provided by both the college administration (60.9% vs 46.7% in 2017) and student leaders (50.6% vs 29.4% in 2017). These findings evidence cultural change and the minimising of harm across the sites over the project period.



# CONCLUSION AND RECOMMENDATIONS

## Conclusion

The overall goal of the ‘Engendering Positive Student Alcohol Cultures’ project was to improve the drinking cultures within four university colleges / halls of residence settings in Victoria, enabling awareness of harm and processes to ameliorate harm associated with cultures of excessive consumption of alcohol. It is clear from the evaluative data that these goals have been met.

While the body of knowledge documenting the rates and risks of excessive alcohol consumption in Australian university residential settings is growing, the project identified limited documented evidence of ‘health interventions’ in these settings aimed to reduce, minimise or prevent this phenomenon (Riordan et al. 2015a&b; Schofield 2014; Hepworth et al. 2018). The project’s multicomponent approach has gone some way toward addressing this gap.

Individuals require knowledge about safe levels of consumption in order to make informed choices (Martin et al. 1991). The project found that participants, while consuming heavily, had low knowledge of standard drink measures and safe levels of consumption. The project has endeavoured to meet these challenges. A recommendation of this report is the targeted and ongoing education of university student cohorts regarding standard drink measures and safe levels of consumption as a harm minimisation strategy.

The project literature review suggests that some forms of health promotion may not be educationally effective or conducive to health literacy; in particular, one-way health promotion messaging aimed at individual behaviour change (Wallerstein & Bernstein 1988; Nutbeam 2000). Some recent research (Osborn et al. 2007, p. 119) suggests that university students are often consigned to the role of ‘passive recipients’, overlook contextual issues and lack authentic engagement (Hepworth et al. 2018; Ickes 2011;

Matthews 2014; Hutton 2011; Wallerstein & Bernstein 1988). In contrast, this project has evidenced strong engagement and participation, specifically engaging students through the use of their own authentic experiences and drinking stories. A recommendation of the project is the importance of cohort participation and the strength of participatory action research approaches to health promotion with university students.

The literature evidences a number of complementary approaches to health education and literacy using action research based methods in educational settings with young people (Warren et.al 2019; McCuaig et.al 2019). A recommendation of this research is the further exploration of complementary approaches to problem posing (Freire 1972a), that may lead to elevated intervention outcomes. In particular, the use of the following complementary approaches:

1. Appreciative Inquiry (Cooperrider & Whitney 1999) as a complementary post-Lewinian action research method and culture change intervention in health promotion and education with young people (Murphy et al. 2004; Marsillo 2007; McAdam & Mirza 2009; Moore & Charvat 2007; Maritz & Coetzee 2012; Morris & Atkinson 2018);
2. Interactive Drama and Community Theatre (Boal 1985; Mitchel & Freitag 2011; Ahrens, Rich & Ullman 2011; Maritz & Coetzee 2012) as a model to upscale narrative pedagogic approaches in health promotion and elevate critical consciousness, awareness, and knowledge and action outcomes, particularly in university student cohorts;
3. Action Groups (Holdsworth 2000; Holdsworth et al. 2001; Warren et.al 2019) used to engage and empower students to undertake participatory change processes in institutional educational contexts; and



4. Boundary Spanning (McCuaig et.al 2019; Williams, 2002; 2011) and the ‘spanners’ roles of networker, innovator, interpreter, communicator and organiser as analogous to the role of facilitators in Freirean culture circle methods.

In regard to project outcomes, participants reported an increased level of awareness and knowledge of the risks and harms associated with heavy and frequent alcohol consumption. Participants also articulated and implemented strategies to minimise risk and harm. The MIDY digital intervention and key message campaign successfully engaged students and raised awareness to the risks and harms of cultures of excessive alcohol consumption, despite low take-up of the MIDY application. The pre-intervention survey identified the limited use of online or digital avenues to reduce or control drinking by participants. This is a significant finding and worthy of further exploration in relation to future health promotion endeavours in the digital/virtual space.

Freirean culture circle methods successfully enabled a participatory process of review of policies and regulatory measures concerning alcohol consumption in the colleges. The Freirean culture circle method also enabled actions and strategies to be implemented to minimise harm. The Freirean method was well received overall and students and staff articulated its usefulness and their willingness to continue its use beyond the project.

As a multicomponent, health education and culture change initiative informed by Freirean (1972a) methodologies, the project met its four specific objectives. It has enabled a ‘greater awareness’ and ‘facilitated change’ within the drinking cultures of students in four university residential colleges/halls. It has successfully enabled student leaders and administrative staff within the four participating

settings to challenge the focus of social activities from those that privilege a culture of excessive alcohol consumption, to ones that foster ‘alcohol citizenship’ and support lower-risk alternatives. The project has facilitated a health promotion, education and culture change process that has enabled the implementation of student-led actions that foster an ethos of moderation and responsible drinking. This process has led to policy and regulatory review and renewal and has seen strategies to implement change, both proposed and trialled. The multicomponent approach and Freirean process was engaging, raised awareness, increased knowledge and provided a vehicle for addressing actions for change.

## Findings and recommendations

The findings of the study suggest that the use of Freirean critical pedagogic method, and in particular culture circles, has been useful in the context of this project, and may be useful in health literacy and health promotion interventions among further hard-to-reach and at-risk cohorts in relation to awareness-raising and cultural change. This is consistent with the findings of Sharma (2001) concerning authentic and participatory approaches to health education and Freirean methods in particular. Further research is required to determine the ongoing sustainability and long-term effects of the project within the settings. The research suggests further exploration in regard to scalability of the project’s findings and in particular the implementation of Freirean methods through the offering of organised training of student leaders and other key stakeholders in university residential college contexts. The project recommends targeted and ongoing health education and literacy in regard to standard drink measures and safe levels of alcohol consumption for university-aged young people generally and in particular those living in university residential accommodation.







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# APPENDIX



# APPENDIX

**Table 3: Social drinking patterns in college**

	2019 *(n=392)			2017 (n=205)			Sig (p<0.17)
	Never n (%)	Rarely/ Occasionally n (%)	Often/ Every time n (%)	Never n (%)	Rarely/ Occasionally n (%)	Often/ Every time n (%)	
<b>In the past 3 months, how often when socialising with students from your college/hall:</b>							
Did you have an alcoholic drink when you were socialising?	45 (11.5)	187 (47.7)	160 (40.8)	17 (8.3)	107 (52.4)	80 (39.2)	
Did you drink 5 or more drinks in a session when you were socialising?	79 (20.2)	198 (50.5)	115 (29.3)	33 (16.1)	104 (50.7)	68 (33.2)	
Did you drink 11 or more drinks in a session when socialising?	190 (48.5)	181 (46.1)	21 (5.4)	81 (39.5)	100 (48.8)	24 (11.7)	
Have you felt influenced to have a drink or drink more?	115 (29.3)	226 (57.7)	51 (13.0)	48 (23.6)	126 (62.1)	29 (14.1)	
Have you felt influenced to <b>not</b> drink or drink less?	145 (37.0)	217 (55.4)	30 (7.7)	75 (36.6)	112 (54.6)	18 (8.8)	
Have you seen drunken behaviour, including unpleasant or abusive talk, fighting or aggression?	143 (36.5)	213 (54.3)	36 (9.2)	27 (13.2)	135 (66.2)	42 (20.6)	*
<b>When socialising with students from your college/hall not drinking is ...</b>							
	<b>Discouraged</b>	<b>Accepted</b>	<b>Encouraged</b>	<b>Discouraged</b>	<b>Accepted</b>	<b>Encouraged</b>	
	20 (5.1)	348 (88.8)	24 (6.1)	23 (11.2)	173 (84.4)	9 (4.4)	
<b>How many times in the past 3 months did you start a conversation about the way alcohol is used?</b>							
	M(SD)			M(SD)			
	2.49 (3.49)			2.57 (4.93)			

\* Missing data throughout.



**Table 4: Social drinking patterns continued**

	2019 *(n=392)		2017 (n=205)		Sig (p <.017)
	Disagree/ Don't know	Agree	Disagree/ Don't Know	Agree	
Socialising with students from my college / hall of residence is an important part of my life; I'd miss it if I didn't do it.	36 (9.2)	356 (90.8)	28 (13.7)	177 (86.3)	*
When socialising with students from your college / hall of residence getting drunk every now and then is okay.	112 (30.6)	254 (69.4)	59 (28.8)	146 (71.2)	
Having pre-drinks (drinking before you go out to a party/club/event) is a normal part of alcohol consumption when socialising with students from your college / hall of residence.	32 (8.7)	334 (91.3)	8 (3.9)	197 (96.1)	
Buying rounds of drinks is a normal part of drinking when socialising with students from your college / hall of residence.	165 (45.1)	201 (54.9)	85 (41.5)	120 (58.5)	

\* Missing data throughout.



**Table 5: Harm prevention and alcohol awareness**

	2019 (n=252)			2017 (n=204)			Sig (p <.017)
	Yes n (%)	No n (%)	Don't Know n (%)	Yes n (%)	No n (%)	Don't Know n (%)	
Do you think having 4 or more standard drinks on a single occasion is binge drinking?	84 (33.3)	145 (57.5)	23 (9.18)	74 (36.3)	114 (55.9)	16 (7.8)	
Do you think binge drinking is harmful?	237 (94.0)	6 (2.4)	9 (3.6)	175 (85.8)	26 (12.7)	3 (1.5)	*
Do you think there is binge drinking at college?	194(77.0)	29 (11.5)	29 (11.5)	176 (86.3)	19 (9.3)	9 (4.4)	
Does your college actively educate regarding harms associated with binge drinking?	153 (60.7)	58 (23.0)	41 (16.3)	106 (52.0)	78 (38.2)	20 (9.8)	
Does your college provide programs to minimise binge drinking?	104 (41.3)	79 (31.3)	69 (27.4)	54 (26.5)	114 (55.9)	36 (17.6)	*
• Are there alcohol-free days in the college O'Week calendar?	177 (71.4)	71 (28.6)		131 (64.2)	52 (25.5)	21 (10.3)	
• Is there an alcohol-free week during the semester social calendar?	72 (28.6)	128 (50.8)	50 (19.8)	127 (29.9)	61 (29.9)	18 (8.8)	*
• Have you used personal strategies to modify your drinking?	127 (50.8)	103 (41.2)	20 (8.0)	111 (54.4)	86 (42.2)	7 (3.4)	
• Have you used a phone app or online program to help modify your drinking?	7 (2.8)	236 (94.4)	7 (2.8)	6 (2.9)	194 (95.1)	4 (2.0)	*
• Have you used a phone app to determine if you are over .05?	13 (5.2)	228 (90.5)	8 (3.2)	22 (10.8)	177 (86.8)	5 (2.5)	

\* Missing data throughout.

## Table 6: Alcohol consumption at sporting events

	2019 *(n=243)			2017 (n=214)			Sig (p <.017)
	Yes n (%)	No n (%)	Don't Know n (%)	Yes n (%)	No n (%)	Don't Know n (%)	
Do pubs or clubs sponsor college sporting teams?	107 (43.8)	29 (11.9)	108 (44.3)				
Are pubs or licensed venues encouraged to advertise on college campus?	44 (18.2)	63 (26.0)	135 (55.8)				
As a spectator, is it the norm to drink alcohol before, during or after college sporting events?	41 (16.9)	103 (42.4)	99 (40.7)	37 (17.3)	136 (63.6)	41 (19.2)	
As a player, is it the norm to drink alcohol after college sporting events, such as football or cricket?	67 (27.8)	66 (27.3)	108 (44.8)	57 (26.6)	98 (45.8)	59 (27.6)	
Are there drinking games or traditions associated with being in a sporting team like football or cricket?	90 (37.2)	36 (14.9)	116 (47.9)	89 (41.6)	57 (26.6)	67 (31.3)	
Is binge drinking associated with post-game celebrations?	75 (31.0)	42 (17.4)	125 (51.7)	117 (54.7)	53 (24.8)	44 (20.6)	*
Do you think post-game drinking may cause harm to those who participate?	84 (34.7)	56 (23.1)	102 (42.1)	89 (41.6)	74 (34.6)	51 (23.8)	*
Do you think that post-game drinking may cause harm to others?	76 (31.4)	72 (29.8)	94 (38.8)	76 (35.5)	85 (39.7)	53 (24.8)	
After male sporting events, are those participating in post-game drinking mostly male?	97 (40.1)	13 (5.4)	132 (54.5)	115 (53.7)	23 (10.7)	76 (35.5)	
After female sporting events, are those participating in post-game drinking mostly female?	65 (26.9)	23 (9.5)	154 (63.6)	76 (35.5)	38 (17.8)	99 (46.3)	
Do you think the gender balance of groups at social or sporting events impacts the amount of alcohol consumed?	78 (32.2)	67 (27.7)	97 (40.1)	80 (37.4)	78 (36.4)	56.2 (26.2)	
Do you think that males drink less when females are present?	41 (17.7)	101 (41.6)	101 (41.6)	24 (11.2)	128 (59.8)	62 (29.0)	
Do student leaders contribute to the drinking practice at college?	93 (38.4)	53 (21.9)	96 (39.7)				
Do 2nd and 3rd year students influence the drinking practices of first year students?	102 (42.1)	63 (26.0)	77 (31.8)	111 (51.9)	69 (32.2)	33 (15.4)	

\* Missing data throughout.

**Table 6B: Alcohol consumption at college social events**

	2019 *(n=250)			2017 *(n=214)			Sig (p <.017)
	Yes n (%)	No n (%)	Don't Know n (%)	Yes n (%)	No n (%)	Don't Know n (%)	
Events							
Are alcoholic drinks served in standard drink containers at social events organised by students?	153 (61.4)	42 (20.6)	37 (18.1)	125 (61.3)	42 (20.6)	37 (18.1)	*
Are low alcohol drinks such as light beer served?	134 (53.8)	35 (14.1)	80 (32.1)	130 (60.7)	44 (20.6)	40 (18.7)	
Do students drink light beer?	106 (42.6)	58 (23.3)	85 (34.1)	96 (44.9)	68 (31.8)	50 (23.4)	
Are soft drinks or non-alcoholic alternatives served?	206 (82.7)	12 (4.8)	31 (12.4)	67 (31.6)	91 (42.9)	54 (25.4)	*
Are soft drinks provided for free?	97 (39.0)	86 (34.5)	66 (26.5)	187 (87.4)	17 (7.9)	10 (4.7)	*
Is water freely available and easily accessible?	224 (90.0)	7 (2.8)	18 (7.2)	72 (33.6)	103 (48.1)	39 (18.2)	*
Do students get intoxicated/drunk at social events?	221 (88.8)	7 (2.8)	21 (8.4)	201 (93.9)	6 (2.8)	7 (3.3)	
If a student is intoxicated, are they supported by student leaders or staff?	208 (82.5)	7 (2.8)	33 (13.1)				
Are intoxicated/drunk students turned away from the bar or not served?	153 (61.9)	12 (4.8)	82 (32.9)	194 (90.7)	10 (4.7)	10 (4.7)	
Is there bar service at social events?	207 (83.8)	11 (4.5)	29 (11.7)	114 (53.3)	47 (22.0)	53 (24.8)	
Do bar staff have an RSA (responsible service of alcohol) qualification?	199 (80.6)	1 (0.4)	47 (19.0)				
When staff are behind the bar do they also consume alcohol while serving?	16 (6.6)	164 (67.2)	64 (26.2)				
Is security provided during social events?	119 (48.2)	58 (23.5)	70 (28.3)				*
Is hot food served during social events?	174 (69.9)	13 (5.2)	60 (24.1)	132 (61.7)	60 (28.0)	21 (9.8)	
Is hot food free at social events?	122 (49.0)	74 (29.7)	52 (20.9)	127 (59.3)	60 (28.0)	26 (12.1)	

\* Missing data throughout.



	2019 *(n=250)			2017 *(n=214)			Sig (p <.017)
	Yes n (%)	No n (%)	Don't Know n (%)	Yes n (%)	No n (%)	Don't Know n (%)	
Leisure							
Do you drink with other students in college rooms or corridors before social events?	205 (82.3)	42 (16.9)		187 (87.4)	27 (12.6)		*
Are you aware of drinking games happening before, during or after social events?	219 (88.0)	28 (11.2)		197 (92.1)	17 (7.9)		
Do you feel pressure to drink alcohol at college?	37 (14.9)	210 (84.3)		49 (23.0)	164 (76.6)		
Is it harder to control your drinking after you have had a few drinks?	120 (48.2)	124 (49.8)	106 (49.5)	107 (50.0)			
When drinking, do you like to control how much you drink?	225 (90.4)	21 (8.4)		178 (83.2)	35 (16.4)		*
Do you feel the need to make an excuse when you are not drinking?	77 (30.9)	169 (67.9)	82 (38.3)	131 (61.2)			

\* Missing data throughout.

**Table 7: Policies and procedures in place at the college**

	2019 *(n=246)		2017 (n=214)		Sig (p<.017)
	Yes n (%)	No/ Don't Know n (%)	Yes n (%)	No/ Don't Know n (%)	
Does the college administration have policies or procedures to prevent binge drinking?	130 (52.8)	116 (47.2)	104 (48.6)	110 (51.4)	
If yes, do the policies prevent binge drinking?	68 (35.2)	125 (64.8)	127 (59.3)	87 (40.7)	*
Are the policies clearly communicated?	101 (43.2)	133 (56.8)	85 (39.7)	129 (60.3)	
Does the college administration provide education about the harms associated with binge drinking?	148 (60.9)	95 (39.1)	100 (46.7)	114 (53.3)	*
Do student leaders have strategies to prevent binge drinking?	129 (53.1)	114 (46.9)	101 (47.2)	113 (52.8)	
Do student leaders provide education about binge drinking?	123 (50.6)	120 (49.4)	63 (29.4)	151 (70.6)	*

\* Missing data throughout.

