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STUDENT CULTURE AND BINGE DRINKING:

An investigation of the relationship between student culture and binge drinking behaviour within the

University of Waikato halls of residence student population.

A thesis

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by

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ABSTRACT

New Zealand student culture has had a strong tradition of alcohol use. Research, both in New Zealand and internationally, has identified halls of residence student drinkers as at more risk of alcohol-related harm than their same age non-resident and non-student peers. This research project investigates the relationship between student culture and binge drinking behaviour within the University of Waikato's halls of residence student population. It combines qualitative and quantitative methods encompassing focus groups, individual face-to-face interviews, and a survey questionnaire completed by sixty percent of the resident student population. The resulting data are set within the context of existing literature on student drinking behaviour and student culture, and the analysis is undertaken using a combination of grounded theory and statistical analysis.

The study reveals that binge drinking behaviour was viewed by the majority of residents as a normal component of student culture, with one-half of male residents who drink and one-third of female drinking residents becoming intoxicated on a weekly basis. Contrary to the popular perception that student drinking behaviour is an uncontrolled activity however, the majority of residents' practised 'controlled intoxication' while drinking. Overall, most residents enjoyed their drinking experiences and showed a high level of tolerance towards many alcohol-related harms. There is clear evidence that resident drinking behaviour impacts adversely upon residents, with one-half of residents having experienced academic and/or physical harms, and twenty percent reporting sexual encounters they later regretted. One-third of residents had also felt unsafe due to the drinking behaviour of others.

Adopting the precepts of a social-ecological approach, this thesis argues that a range of multi-level harm-minimisation strategies targeting resident drinking behaviour are required, in conjunction with renewed efforts to effect change in the New Zealand drinking culture. Fifteen alcohol-intervention initiatives are recommended which variously target the *individual drinker*, the *halls of residence environment*, the *institutional environment*, and the *local community drinking environment*. The *national drinking environment* is also pursued through recommendations advocating legislative change to make it an offence to be intoxicated in a public place, and through social marketing strategies which encourage peer feedback, the shaming of intoxicated behaviour, and the continued emphasis on the association between drinking and its adverse effects.

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LIST OF ABBREVIATIONS

ACSO Accommodation and Conference Services Office,

University of Waikato

ALAC Alcohol Advisory Council (of New Zealand)

AUDIT Alcohol Use Disorders Identification Test

BAC Blood Alcohol Content (0.08 g represents 80 milligrams of

alcohol per 100 millilitres of blood).

CBD Central Business District

IATFAOSAI Inter-Association Task Force on Alcohol and Other

Substance Abuse Issues (US)

IPRU Injury Prevention Research Unit, University of Otago.

HANZ Hospitality Association of New Zealand.

MOH Ministry of Health.

NIAAA National Institute on Alcohol Abuse and Alcoholism (US).

NZ New Zealand.

NZUSA New Zealand Union of Students' Associations

RTDs Ready To Drink drinks.

SBI Screening and Brief Intervention.

SHORE Centre for Social and Health Outcomes Research &

Evaluation.

SPSS Statistical Package for the Social Sciences

WHO World Health Organization

1 INTRODUCTION: ALCOHOL AND CULTURE

Universities possess an identifiable culture.... Drinking is viewed as an intrinsic aspect of this culture and is often presented as a more defining feature of being a student than academic work. (Adam, Welch, Pendlebury, & Merritt, 2000, p.vi)

The excessive use of alcohol has had a long tradition within tertiary student culture (Wechsler & Nelson, 2008). Research has identified that New Zealand students binge drink at rates much higher than their non-student New Zealand peers (Kypri, Cronin, & Wright, 2005a) and university halls of residence accommodation has been identified as a binge drinking environment (Adam et al., 2000; Kypri, Langley, & Stephenson, & 2005b). This research project will investigate the relationship between student culture, student drinking environments, and student drinking behaviour at the University of Waikato halls of residence¹.

The first chapter in this thesis will explore binge drinking behaviour, student culture, and the role of alcohol within New Zealand culture. Chapter 2 will summarise the research literature findings detailing the drinking behaviour of New Zealanders and New Zealand tertiary students. A description of the research methodology and data collection processes utilised during this research project is outlined in Chapter 3. The research findings are presented in Chapters 4 through to 7. Chapter 4 outlines resident drinking behaviour and Chapter 5 describes resident binge drinking behaviour. Chapter 6 details residents' understandings of

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¹ Fourteen research aims were developed to guide the research under the four areas of 'resident drinking behaviour', 'resident binge drinking behaviour', 'student culture' and the 'binge drinking environment'. A list of the research aims are presented in Chapter 3, p.49.

student culture and Chapter 7 summarises residents' perceptions of the drinking environment.

The discussion of the research results is provided in Chapters 8 through to 10. A comparison between resident *drinking behaviour* and previous research findings is outlined in Chapter 8. Chapter 9 discusses the impact of the *environment* upon resident drinking including the halls of residence environment, the tertiary institution environment, and the local drinking environment. Chapter 10 details the relationship between *student culture* and resident drinking behaviour. Finally, *recommendations* arising from the research findings are outlined in Chapter 11.

This chapter will now undertake a brief tour of the history of binge drinking behaviour and the role of alcohol within New Zealand culture. The response of the Alcohol Advisory Council of New Zealand to counteract the social and economic costs associated with New Zealanders' excessive drinking behaviour is detailed. Finally, the chapter will explore the relationship between student culture and student drinking behaviour.

1.1 Binge Drinking

The term *binge drinking*² is now widely used to refer to heavy-drinking behavior [sic].... The term was initially introduced in the 1990's to describe college student alcohol use in a study of Massachusetts colleges.... Since then its usage has increased dramatically. (Wechsler & Nelson, 2001a, p.287)

² Italics in original.

Historically the term binge drinking was used to refer to the excessive consumption of alcohol over a number of days, but more recently the term has been used to describe the excessive consumption of alcohol over a short period of time, usually lasting hours, that commonly leads to intoxication³ (Carey, 2001). Since the 1990's the term binge has been also associated with the excessive use of food (binge eating) and shopping (a shopping binge) (Wechsler & Nelson, 2001a). Binge drinking culture is the acceptance and promotion of the excessive use of alcohol through the beliefs, customs, and expectations of a group (National Institute on Alcohol Abuse and Alcoholism [NIAAA], 2002a).

The excessive use of alcohol has been documented throughout the history of Western culture, from the time of Roman banquets (Engs, 1995) through to the 'gin drinking epidemic' of early eighteenth century England (Coffey, 1966). Societies have come to recognize that the excessive use of alcohol can be a source of both pleasure and harm, and have often endeavoured to minimize the impact of alcohol-related harm through mechanisms of law, custom, and religion (Room, 1997). Historically many societies placed restrictions on who could drink, with women, children, and often young males forbidden from consuming alcohol (Room, 1997).

In New Zealand excessive alcohol use was first documented⁴ during the 1830's when the community living in the Bay of Islands developed an international reputation for drunkenness and lawlessness (Hargreaves, 2000). This situation became so problematic that one of the first legislative acts of Governor Captain Hobson and his Legislative Council in 1842 was to prohibit the distillation of

³ A research-based definition of binge drinking behaviour will be detailed in Chapter 2.

⁴ In 1733 sailors aboard the ship Endeavour also brewed and consumed beer in the Fiordland region.

spirits for drinking (De La Mare, 1981). During the second half of the 1800's drunkenness continued to be a significant problem in New Zealand society and consequently a strong New Zealand temperance movement developed (Stewart, 1997). In 1917, the New Zealand government introduced a six o'clock closing time for all on-licence bars as a war-time measure (and as a response to the temperance and prohibition movements) and this law was not amended until 1967 with the introduction of a ten o'clock closing time (Ministry of Culture and Heritage, 2008). During this period from 1917 through to 1967, licenced hotels were the dominant drinking venue and New Zealand males continued to be the primary consumers of alcohol⁵ (Stewart, 1997). The tradition of the 'six o'clock swill' was developed as many male drinkers attempted to consume as much alcohol as they could before licenced premises closed at six o'clock (Stewart, 1997). During this time many bars removed tables, and often chairs, to allow more drinkers to fit into a premise before the six o'clock closing time. An example of this development is given by Bollinger (1967) in his review of the 1945 New Zealand Royal Commission investigation into the sale of alcohol in New Zealand:

First target [of the Commission] was the 'vertical swill' type bar. Even the official report from the Justice Department condemned this institution, and blamed it jointly with six o'clock closing for much excessive drinking.

Witness after witness urged the need for tables and chairs in bars. (p. 97) Bollinger also commented that submissions were made to the Royal Commission recommending the provision of food with alcohol as a civilising and moderating influence.

⁵ Hotels were not considered to be venues that respectable women would be seen in (Stewart,

1997).

In New Zealand, the extension in 1967 of the national liquor licensing hours from 6.00 pm to 10.00 pm "marked the beginning of greater access to alcohol.... [and] the growth in other licenced venues such as restaurants, sports-clubs, and night-clubs" (Stewart, 1997, p.392). Concurrently the "changing roles and expectations for women who were moving increasingly into the paid work-force and out of the domestic sphere, also marked a shift in their drinking" (Stewart, 1997, p.392). As women joined male drinkers in pubs, clubs and restaurants, a new pattern of drinking behaviour developed.

Between the 1980's and the current first decade of the 2000's the drinking patterns and attitudes of New Zealanders changed dramatically with an increase in the alcohol consumption of female drinkers (Habgood, Casswell, Pledger, & Bhatta, 2001), youth/young adult drinkers (Alcohol Advisory Council, 2003b & 2007a), and amongst some New Zealanders, a growing acceptance of binge drinking behaviour (Ministry of Health, 2008a). A recent survey of New Zealander's drinking attitudes found that one-quarter of New Zealanders aged eighteen years and above, and one half of New Zealanders aged twelve to seventeen years, agreed that it was okay to get drunk as long as it was not every day, and one in ten drinking New Zealanders reported that they consumed alcohol with the intention to get drunk (Alcohol Advisory Council, 2005a).

Similar to the New Zealand experience, significant changes in drinking behaviour have occurred over the past thirty years across a number of Western countries. In Australia, Dr Bill Glasson the President of the Australian Medical Association has stated that today's young Australians indulge in binge drinking behaviour to a greater extent than any previous generation of Australians (Medical News, 2004).

Similar increases in binge drinking behaviour have been reported in the United Kingdom (Alcohol Concern, 2003; Hayward & Hobbs, 2007), the United States (Substance Abuse and Mental Health Services Administration, 2007), and Canada (Stockwell, Pakula, MacDonald, Buxton, Zhao, & Tu, 2007).

Measham and Brain (2005) have argued that the late twentieth century surge in United Kingdom binge drinking behaviour has not been a recent 'repackaging' of historical/traditional binge drinking behaviour but a new and distinct postindustrial pattern of drinking. A number of researchers have proposed that this new pattern of binge drinking behaviour has been the result of a combination of influences including the liberalisation of laws restricting the sale and supply of alcohol (Measham, 2006), the development of night-time economies founded upon alcohol consumption (Hayward & Hobbs, 2007), a new 'culture of intoxication' that grew out of the 1990's dance and drug culture (Measham & Brain, 2005), and the response of the alcohol hospitality industry to the challenges of the 1990's drug and dance culture (Measham & Brain, 2005). Researchers have also identified the changing role of women within society (Lyons & Willott, 2008; Stewart, 1997), and the globalisation and industrialisation of the production and marketing of alcoholic beverages (Research New Zealand, 2006; Room, 1997), as significant factors impacting upon late twentieth and early twenty-first century binge drinking behaviour.

Room (1997) discussed the impact of the industrialisation of alcohol production within Western societies, from its origins as a specialised commodity produced for domestic markets, to it now being produced in industrial factories and distributed (and marketed) globally through a network of national and multi-

national corporations. The World Health Organisation in its *Global Status Report* on Alcohol (2001b) stated that as the total sale of alcohol products in developed countries reached a plateau, corporations began to intensify their efforts to establish new markets in developing countries⁶ and among constituencies such as women and young people who have traditionally abstained or consumed very little alcohol⁷. Room (1997) stated that the increasing promotion of free trade agreements between countries is allowing alcohol to be supplied internationally in the same manner as any other market commodity. Babor et al., (2003) have argued that alcohol is not an ordinary consumer commodity, as it is a product that creates a significant social and financial cost to society. An example of the growing concern regarding the globalisation of the world alcohol market is reported by Assunta (2006), who has speculated that as alcohol corporations look to increase alcohol sales within Asian countries (who have traditionally been low consumers of some alcohol products), these countries will in turn experience an increase in levels of alcohol-related harm⁸.

The marketing of alcohol is now a global industry that is targeted at local markets through an integrated mix of strategies including television, internet, radio and print advertisements, and by the association of alcohol brands with sports, lifestyles, and consumer identities (Babor et al., 2003). The World Health Organisation report on *Alcohol and Young People* (2001a) has commented "marketing plays a critical role in the globalisation of patterns of alcohol use among young people, and reflects the revolution that is occurring in marketing in general. Corporations as diverse as Nike, Kraft, and Intel have demonstrated to

⁶ Similar observations have been made of the tobacco industry (Assunta, 2006)

⁷ A number of researchers have suggested that the development and promotion of RTD drinks by alcohol producers have been a strategic development to target female and young adult drinkers (Measham, 2006)

⁸ Saxena (1997) has raised similar concerns regarding developing countries.

the business world the value of brands" (p. 10). Gual and Colom (1997) have suggested that the growing coherence of international alcohol marketing may contribute towards an increasing international convergence of world drinking patterns.

Within contemporary Western culture alcohol researchers have often differentiated between 'wet' and 'dry' drinking cultures (Research New Zealand, 2006). New Zealand, Australia, the United Kingdom, Canada, the United States, and the Scandinavian countries have been described as dry drinking cultures⁹, and are typified by lower alcohol consumption per capita, more acute alcohol usage, more consumption of beer or spirits, and more drinking in less socially controlled environments. In contrast, the southern European countries of Italy, France and Spain, have been described as wet drinking cultures¹⁰ and are associated with higher alcohol consumption per capita and more frequent drinking behaviour. The use of alcohol within wet drinking cultures has traditionally been associated with more socially controlled environments, for example the consumption of wine at meals and as a component of family/community social gatherings (Gual & Colom, 1997). It has been within dry drinking cultures that the contemporary manifestations of binge drinking behaviour have most strongly developed (Research New Zealand, 2006).

Measham (2006) has argued that the contemporary increase in binge drinking behaviour in the United Kingdom has been supported by the liberalisation of laws regulating the sale and supply of alcohol and the resulting expansion of an alcohol-based leisure industry. Liberalisation has included the extension of on-

⁹ This style of drinking has also been labelled the 'Northern European' drinking style. ¹⁰ This style of drinking has also been labelled the 'Southern European' drinking style.

licence drinking hours to twenty-four hours a day and the increased availability of stronger alcohol products alongside a reduction in supply controls. The freeingup of alcohol laws in the United Kingdom was undertaken with the intent of imposing a Southern European wet style of frequent moderate drinking upon a traditional dry style of weekend binge drinking (Measham, 2006). The outcome has been that English drinkers now have more opportunities to binge drink. In New Zealand a similar liberalisation of the sale and supply of alcohol was undertaken "in response to changing societal expectations, including increases in leisure options, overseas travel and domestic tourism" (Stewart, 1997, p.392). The 1989 Sale of Liquor Act expanded the number and types of outlets allowed to sell beer and wine to include cafes, corner stores and supermarkets, alongside the traditional bars, restaurants, and off-licence wholesale outlets (Ministry of Justice, 2007). The 1999 Amendment Act allowed supermarkets to sell beer as well as wine, permitted alcohol sales on Sundays, and lifted on-licence restrictions regarding opening hours to allow the possibility of twenty-four hour trading. The 1999 amendment to the Sale of Liquor Act also lowered the minimum legal age for the purchase of alcohol in New Zealand from twenty years to eighteen years of age. New Zealand has no minimum legal drinking age.

Alongside the liberalisation of alcohol laws in the United Kingdom there has also been the parallel development of a night-time leisure economy based upon the provision of alcohol within city centres (Hayward & Hobbs, 2007). The central feature of this night-time economy has been the commercial exploitation of pleasure through an explosion in the number of pubs, bars, dance clubs, cafés, and restaurants all serving alcohol (Measham & Brain, 2005). A similar night-time leisure economy has grown in New Zealand with the number of on-licence liquor

licences¹¹ in New Zealand increasing by one-half from 5067 in 1995 to 7918 in 2005 (Ministry of Justice, 2005). During this same period there was also an increase by one-third in the number of New Zealand off-licence liquor licences from 3436 to 4568. Measham (2006) comments that the expansion of the nighttime hospitality industry has also required an increase in the disposable income available to (post-industrial) consumers to support this evening economy. Room (1997) has argued that the principles of consumerism underlying the liberalisation of liquor laws and the development of night-time economies have increasingly promoted the sale of alcohol as if it were the same as any other consumer commodity and that the responsibility for any problems arising from the misuse of alcohol have been labelled the problem of the individual consumer. The intoxicated consumers of the night-time leisure economy who create social disturbances and who come to the attention of the health and justice services are increasingly viewed as faulty consumers rather than the products of an economic system that promotes alcohol consumption and intoxication (Hayward & Hobbs, 2007).

Measham & Brain (2005) propose that the timing and the antecedents of the current 'culture of intoxication' in the United Kingdom lie in the "emergence of the British acid house and rave scene which developed into what has become known as the 'decade of dance' from 1988 to 1998" (p.266). The frequent use of stimulant drugs by participates in the United Kingdom dance culture lead to the normalisation of a drug use amongst many young adults. Measham and Brain suggest that over time alcohol use was integrated with drug use to create a new leisure/entertainment lifestyle based upon a culture of intoxication. This new

¹¹ An on-licence licence is required to sell alcohol within a pub/bar, club, café, and restaurant.

culture of intoxication was characterised by altered states of consciousness, the result of excessive alcohol and/or drug use, and was freely accessible to both male and female participants.

In New Zealand the culture of intoxication, or to use the vernacular the culture of 'getting out of it', has arguably been influenced by illicit drug use. Cannabis usage became popular in New Zealand during the 1970's and continues to be easily available (SHORE, 2008). Cannabis is the second 12 most popular recreational drug in New Zealand with a 1998 study finding that 43% of males and 27% of females aged 18 to 24 years had used cannabis (Ministry of Health, 2001). During the 1990's, New Zealand experienced an increase in amphetamine-based drug use that has remained high (Adamson, Sellman, Deering, Robertson, & de Zwart, 2006; Wilkins & Sweetsur, 2008). At the beginning of the 2000's legal 13 party pills also became increasingly popular, with a 2006 survey reporting that one in five New Zealanders aged 13 to 45 years had used them (SHORE, 2006b).

Measham & Brain (2005) also propose that the response of the alcohol hospitality industry in Britain to the increasing use of party drugs by young adult consumers during the decade of dance was influential in integrating alcohol into this culture of consumption. To compete with the growing dance/drug culture the English alcohol hospitality industry was required to transform itself from a traditional base of male beer drinkers, into an industry that catered for a new generation of young, mixed gender, culturally diverse, and drug wise consumers. To achieve this transformation the industry had to reinvent both its premises and its products. The

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¹² Excluding tobacco.

¹³ In 2007 they were made illegal.

transformation of licenced premises was characterised by a move away from the local working class pub into a modern 'chrome and cocktails' bar/restaurant/club with glass and lighting attracting a new customer base back from dance clubs, gyms, and shopping centres. At the same time the transformation of alcohol products was characterised by the development of sweet tasting colourful RTD¹⁴ drinks, 'buzz' drinks containing legal stimulants such as caffeine and guarana, and 'shot' drinks for instant hits of alcohol.

The changing role of women has also been significant in influencing the transformation of Western society drinking culture (Lyons & Willott, 2008; Measham, 2006). Historically female drinking behaviour had been restricted by societal fears that the excessive use of alcohol by women would adversely affect their social and family responsibilities (Wilsnack & Wilsnack, 2002). As the role of women in Western society has expanded to allow for greater freedoms, women have increasingly joined men in becoming significant consumers of the night-time leisure economy (Day, Gough, & McFadden, 2003; Hayward & Hobbs, 2007; Wilsnack, Vogeltanz, Wilsnack, & Harris, 2000). During this time the stigmatisation associated with female intoxication in many Western countries has been reducing (Wilsnack & Wilsnack, 2002) and the portrayal of female drinking in the media (Lyons, Dalton, & Hoy, 2006). Similarly in New Zealand the role of women has changed considerably with an increase in the number of women working and financially independent (Statistics New Zealand¹⁵, 2005), the number

¹⁴ RTD stands for Ready To Drink. These drinks include all premixed spirit-based drinks with less than 23% of alcohol content.

¹⁵ Statistics New Zealand is a New Zealand government department.

of women enrolled in tertiary education¹⁶ (Education Counts¹⁷, 2008a), and the number of women consuming alcohol (Ministry of Health, 2007a).

In New Zealand in 2003, Dr Mike MacAvoy the Chief Executive of the Alcohol Advisory Council commented that:

The biggest challenge facing the Alcohol Advisory Council of New Zealand and the community is making changes to what is now a well established Kiwi culture of drinking. New Zealand has evolved a culture of drinking that accepts excessive drinking as being part of a "work hard, play hard" ethic, and supports it through its stories, its humour and its behaviour. (Alcohol Advisory Council, 2003a, p.3)

1.2 Contemporary Alcohol Use in New Zealand and the Public Health Response

Alcohol advertising is clearly successful in achieving a behavioural outcome favourable to the alcohol industries. A challenge for public health practitioners is therefore to mount social marketing messages that are salient, relevant, believable and attractive to their audiences (Roche, Snow, Duff, Crosbie, & Lunnay, 2005).

As demonstrated above, alcohol is the most widely used recreational drug in New Zealand (Ministry of Health, 2004). Over the past twenty-five years there have been significant changes in New Zealanders' drinking patterns including how much they are drinking, who is drinking, and what they are drinking.

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¹⁶ Since the early 1990's female rates of enrolment in tertiary education have surpassed male rates (Education Counts, 2008a).

¹⁷ Education Counts is a division of the New Zealand Ministry of Education.

In 1983 New Zealanders' total consumption of alcohol per head of population¹⁸ peaked at 12 litres. This was followed by a period of gradual decline in alcohol consumption until 1997 when total consumption dipped to 8.3 litres per head of population. Since 1998, New Zealanders total consumption of alcohol has been steadily rising and in 2005 was reported at 9.3 litres per head of population (Ministry of Health, 2007a).

New Zealand males traditionally, and currently, consume alcohol more frequently and in greater quantities than their female counterparts (Alcohol Advisory Council, 2004a; Ministry of Health, 2007a; Wyllie, Millard, & Zhang, 1996). However, New Zealand female drinking patterns have been changing over recent years, with female drinkers increasing their levels of alcohol consumption (Habgood et al., 2001), their frequency of drinking (Casswell & Bhatta, 2001), and their frequency of drunkenness (Field & Casswell, 1999). In the most recent national study New Zealand female drinkers matched male drinkers in their rates of drinking large¹⁹ amounts of alcohol on a typical drinking occasion²⁰ (Ministry of Health, 2007a).

Since the early 1990's New Zealanders' preferred choice of alcohol has also been changing. Statistics New Zealand provide figures on the annual total volume of alcohol available for consumption in New Zealand and these figures are traditionally used to monitor trends in New Zealanders' drinking behaviour.

These figures show that while beer still remains the most popular alcoholic

¹⁸ New Zealanders aged over the age of 15 years.

¹⁹ A large amount of alcohol was designated as seven or more standard drinks for a male and five or more standard drinks for a female.

²⁰ Female drinkers typical drinking occasions were still less frequent than male drinkers and their overall volume of alcohol consumption remained less than male drinkers.

beverage, with sixty-six percent of the total beverage available for consumption in 2007, beer has been in decline since 1992, when its proportion of alcohol availability reached a peak of eighty-two percent (Statistics New Zealand, 2008). The total volume of wine available for consumption in New Zealand increased from 2001 to 2006, but in 2007 dropped by one percent to nineteen percent of the total beverage available. The biggest change in New Zealanders' choice of alcoholic beverages since 1996 has been the steady increase in the consumption of premixed spirit-based RTD drinks (Alcohol Advisory Council, 2008a). In 1997, the ratio of spirits and premixed spirit-based drinks by volume was evenly split. Since this time the demand for premixed spirit-based drinks has continued to increase and the latest 2007 figures show that RTD drinks now account for eighty-six percent of all spirits products²¹.

Although alcohol often provides a great deal of pleasure to many drinkers, it is also responsible for the creation of a wide range of harm, including physical and mental health problems, relationship and family difficulties, injury and death on roads, assaults and domestic violence, work absenteeism and impaired work performance, and other non-traffic-related injury and mortality (Alcohol Advisory Council & Ministry of Health, 2001). In 2000, it was estimated that four percent of all New Zealand deaths were attributable to alcohol consumption (Connor, Broad, Rehm, Vander Hoorn, & Jackson, 2005). Easton (2002) estimated that the social costs of alcohol-related harm in New Zealand are between one and four billion dollars a year. This figure includes costs of an estimated one billion dollars in lost productivity, \$655 million in costs to the public health sector, \$240 million for crime and related costs, and \$200 million in costs to the social welfare

²¹ Further information detailing New Zealanders' drinking behaviour will be presented in the following chapter.

System. Babor et al., (2003) in their landmark text *Alcohol: No Ordinary*Commodity have argued that alcohol is not an ordinary consumer commodity and the benefits connected with the production, sale, and use of alcohol come at an enormous cost to society. They state that a range of strategic interventions is required to minimise alcohol-related harms, including regulating the physical availability of alcohol, pricing and taxation measures, modifying the drinking context, regulating the promotion of alcohol, education and public health strategies, enforcement, and treatment services.

In New Zealand the *National Alcohol Strategy 2000-2003*^{22 23} was formulated with the aim of reducing the effects of alcohol-related harms upon individuals, families, and society (Alcohol Advisory Council & Ministry of Health, 2001). The National Alcohol Strategy is founded upon the principle of 'harm minimisation' and the three strategy areas of 'supply control', 'demand reduction', and 'problem minimisation' (Ministry of Health, 2007b). Alcohol harm minimisation policy recognises that while the elimination of high-risk drinking behaviour is desirable, it is not always possible, and therefore a range of strategies are required to minimise the personal, social and economic costs associated with high-risk alcohol use. 'Supply control' utilises strategies that control the availability of alcohol through the use of regulation and enforcement. 'Demand reduction' promotes strategies that encourage the reduced and responsible use of alcohol through education, public health initiatives, and cultural change campaigns. 'Problem minimisation' involves strategies that aim to reduce the problem effects arising from alcohol misuse through the provision of

²² The National Alcohol Strategy is currently under review and a consultation document has recently been published by the Ministry of Health (2008b). It is anticipated that a new National Alcohol Strategy will be published in 2009.

Alcohol Strategy will be published in 2009.

23 The National Alcohol Strategy is situated within the New Zealand *National Drug Policy* 2007-2012.

treatment services, emergency services, and rehabilitation services. Initiatives within these three strategy areas variously focus upon the individual drinker, the drinking environment, and upon society as a whole.

The Alcohol Advisory Council (2005b) reported that the successful implementation of the National Alcohol Strategy would require a significant change in New Zealand's drinking culture and in 2005 launched the 'It's not the drinking: it's how we're drinking' advertising campaign within radio, television, and print media. This cultural change initiative is based upon a 'Stages of Change' model²⁴ (Prochaska, Velicer, Rossi, Goldstein, Marcus, & Rakowski, 1994) and the second stage of this model (the contemplative stage) promotes awareness of the connection between a behaviour and its consequences. Dr Mike MacAvoy, the Chief Executive of the Alcohol Advisory Council, discussed this stage of the cultural change initiative:

The first step to change is to get people to link that [drinking] pattern with harms, and at the moment many don't recognise that connection. We're not likely to get behaviour change if no-one thinks it's their problem. So that is what our advertising campaign will do at first. (2005b, p.3)

Dr MacAvoy continues:

The programme is a long-term strategy. It's not a silver bullet that'll solve the problem overnight and we've never painted it as such. Just as the drink driving and seatbelt campaigns took several years to succeed, so too will this strategy take time to impact. (2005b, p.4)

²⁴ The Stages of Change model includes six stages of change including 'pre-contemplation' (no acknowledgement that there is a problem requiring change), 'contemplation' (awareness that there is a problem but no readiness to make a change), 'determination' (wanting to change), 'action' (undertaking change), 'maintenance' (maintaining change), and 'relapse' (abandoning change).

The strategic vision of the Alcohol Advisory Council is to achieve "a New Zealand drinking culture that supports the moderate use of alcohol so that whanau²⁵ and communities enjoy life, free from alcohol harms" (Alcohol Advisory Council, 2008b, p.2). Within the National Alcohol Policy young New Zealanders have been identified as a high risk drinking group due to the frequency of their heavy-drinking behaviour (Alcohol Advisory Council & Ministry of Health, 2001). The most recent New Zealand national alcohol survey undertaken by the Ministry of Health (2007a), found that young New Zealanders aged between 18 to 24 years consumed the largest amounts of alcohol per drinking occasion and also experienced the highest levels of alcohol-related harms. The New Zealand Alcohol Advisory Council in their Strategic Plan 2008-2013 prioritised young New Zealanders aged between 12 to 24 years as a targeted population within the 'cultural change' initiative (Alcohol Advisory Council, 2008b). New Zealand research has identified that within the 18 to 24 year old age group, New Zealand university students drink more heavily than their non-student peers (Kypri et al., 2005a), suggesting that New Zealand tertiary students are a high risk drinking population.

1.3 Student Culture

Student culture is the values, beliefs, attitudes, rituals, and activities that shape how students interact with and make meaning of their collegiate world²⁶. It exerts a powerful force on many aspects of college life ... because it influences the kinds of people with whom a student spends time and the values and attitudes to which the student is exposed. An

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²⁵ Whanau is the New Zealand Maori language word for family.

²⁶ In the US the terms college and university are both used to identify a tertiary education (degree) provider, and in this context the phrase 'collegiate world' is used to describe the experience of college life.

institution's student culture shapes students' perceptions and behaviours ... influencing their patterns of ... socializing; contributing to their tacit understandings about what activities on campus are status-enhancing or status-degrading; and informing them of the norms that determine acceptable behaviour. (Cumings, Haworth, & O'Neill, 2001, p.33)

In 2006, forty-six percent²⁸ of New Zealanders aged eighteen to nineteen years and thirty-three percent²⁸ of New Zealanders aged twenty to twenty-four years were enrolled in tertiary education (Education Counts, 2008a). For many new university students, tertiary education represents a developmental milestone of moving away from dependence upon family into growing adulthood and independence (Baer, 2002). As a part of this developmental process, it is necessary for students to develop an understanding of the new tertiary student culture into which they are entering. Read, Archer and Leathwood (2003) note that before students have even attended their first lecture they will have begun the process of confronting and negotiating the (largely unwritten) 'rules of the game' of student culture. Once students have arrived on campus they are socialised into a common campus-based student culture (Rabow & Duncan-Schill, 1995).

Although there are some variations in student culture between tertiary institutions, at a national level student culture has been found to be a recognisable identity (Love, Boschini, Jacobs, Hardy, & Kuh, 1993).

Ashmore, Griffo, Green, & Moreno (2007) in their review of US college student culture identified the two dominant subcultures within student culture as 'academic' and 'sociosexual'. The academic subculture is the official aspect of

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²⁷ 23% were enrolled in a University institution at a Bachelors degree level or above.

²⁸ 19% were enrolled in a University institution at a Bachelors degree level or above.

student culture and concerns student learning and academic development. This academic component of student culture is particularly valued by university teachers, administrators, and students' parents. The sociosexual subculture is the unofficial aspect of student culture and concerns how and with whom a student should socialise. Ashmore, Del Boca and Beebe (2002) describe the sociosexual subculture as "the culture of partying, playing, and partner pursuing" (p.887). They have argued that the sociosexual subculture is a central facet of student culture and that alcohol use is inextricably intertwined within it. To be a successful student within the sociosexual component of student culture involves alcohol use and students who do not use alcohol can be viewed as not fully involving themselves in the experience of being a student. Vicary and Karshin (2002) commented that alcohol use and "drunkenness have often been seen by some as a right of passage for students" (p.301). The US National Institute on Alcohol Abuse and Alcoholism (NIAAA) reported that alcohol use has long been a dominant theme within student culture:

The tradition of [student] drinking has developed into a kind of culture -beliefs and customs - entrenched in every level of college students' environments. Customs handed down through generations of college drinkers reinforce students' expectation that alcohol is a necessary ingredient for social success. These beliefs and the expectations they engender exert a powerful influence over students' behaviour toward alcohol. (NIAAA, 2002a, p.1)

Tucciarone (2007) explored the portrayal of U.S. student college culture within popular culture movies commenting that the majority of movies depict a version of student culture that fails to acknowledge the academic focus and intellectual

development of student life. Analysis of the popular 1978 movie National Lampoon's Animal House posited excessive alcohol use, pranks and/or destruction of property, male/female relationships, and sexual activity as central themes within the movie's narrative of student life. Clapp, Ketchie, Reed, Shillington, Lange, and Holmes (2008) have also commented that "the infamous Toga party, immortalized in the film Animal House, has long represented an archetypical college party – a wild sexualized bacchanal" (p.509). Tucciarone suggests that many college themed movies continue to perpetuate an alcohol (sociosexual) dominated narrative of student culture.

In New Zealand there has been a long association between student culture and student drinking behaviour (Alcohol Advisory Council, 2004d). Elworthy (1990) reported that since the formation of the University of Otago in 1869²⁹, student alcohol use has been a central theme of many student activities and as early as 1894 graduation ceremonies at the University were banned due to 'riotous student behaviour'. McLachlan (2006) added that "by 1900 the common view held by the Dunedin public, whether accurate or not, was that students as a whole were dissolute and drunken rouses.... This kind of public attitude has been commonplace throughout the University's history" (p.26). Similarly, at the University of Auckland during the 1960's and 1970's "students who simply wanted a good time asserted their place in the city with pub crawls and mass motorbike rides.... Bar patrons resented the annual takeover of their regular haunts by students, and publicans complained of the mess and breakages" (Hercock, 1994, p.87). Arguably, alcohol use by students has been a common theme at all New Zealand universities.

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²⁹ The University of Otago was New Zealand's first university.

Within the media there are frequent headlines and articles detailing the problem of New Zealanders' binge drinking behaviour and student binge drinking behaviour is frequently a focus of these articles. For example, a search of the New Zealand Herald newspaper for the month of April 2008 revealed ten articles associated with binge drinking issues. An April 14th article entitled, *Binge Drinking What Can We Do About It*, is a typical example of media reports covering student drinking behaviour (McCornmick, 2008). This article begins with the paragraph:

There has been a great deal of recent media attention on youth drinking, binge drinking in particular, and the well known harmful effect of abusing alcohol. Starting with the infamous "Undie 500" which televised [university] students running wild, fuelled by excess quantities of alcohol, there's been an ongoing series of alarming headlines. (p.9)

Similarly, information detailing student drinking behaviour is increasingly available on the World Wide Web. An example on the web site www.unifriend.org³¹ describes New Zealand student drinking culture at the University of Auckland:

Are engineering students really drunk all the time? Well, no, but at certain times you'd be hard pressed to believe that. Drinking is what the faculty is famed for, and it's easy to see why – sometimes Euler-Cauchy equations make a bit more sense when you're under the influence. The infamous 'Kegs in the Park' drinking marathon is the biggest event of the year for drinkers, with said kegs being consumed before a trek through Albert Park

³¹ This is a New Zealand student-based website providing information about New Zealand universities, tertiary courses, and student life.

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³⁰ The Undie 500 is an annual student car race, where students from the University of Canterbury travel to the University of Otago in old cars purchased for \$500 or less. Although the race rules strictly prohibit the driver of the vehicle from drinking and driving, it is common for car passengers to drink heavily.

en route to an extensive pub crawl.... These events aren't compulsory, but the beer is cheap and they're close to campus, so you'd need a pretty good excuse. (Uni-Friend, 2008)

These types of articles, both in the media and on the World Wide Web³², continue to reinforce the narrative of student culture as an alcohol (sociosexual) focused lifestyle.

Within student culture, student accommodation has historically played a significant role in orientating new students to the student lifestyle (Murrell & Denzine, 1998). Residential 'colleges' were the main provider of student accommodation in English speaking countries until the 1960's when the growth of tertiary education lead to the establishment of new 'halls of residence' to accommodate the growing number of students (O'Hara, 2006). Traditionally in New Zealand, student tertiary accommodation is used by young New Zealand students who have recently left high school and are in their first year of study. With the growing internationalisation of New Zealand tertiary education since the late 1990's (Education Counts, 2008b), larger numbers of international students have also been residing in tertiary student residences.

Vasquez and Rohrer (2006) have noted that "residence halls have the potential to naturally and intentionally become the classroom outside of the classroom" (p. 231). Residential accommodation can directly support student academic development (the traditional academic narrative within student culture) through the provision of tutorship and 'living learning' communities (Edwards & McKelfresh, 2002; Inkelas & Weisman, 2003; Pike, 1999; Zhao & Kuh, 2004),

³² Also see Rosenberg, 2008.

and indirectly through the provision of pastoral care (Smith & Rodger, 2005), peer academic support (Inkelas & Weisman, 2003), and an increased sense of student integration within the tertiary institution (Arboleda, Wang, Schelley, & Whalen, 2003; Pike, Schroeder, & Berry, 1997). Residential accommodation also supports the sociosexual narrative within student culture through the social activities (both formal and informal) and dominant social norms of the residence (Alva, 1998; Harford, Wechsler, & Seibring, 2002b; Larimer, Irvine, Kilmer, & Marlatt, 1997; Ozegovic, Bikos, & Szymanski, 2001). Baer (1994) outlines the key processes involved:

One of the primary social influence variables on college campuses is the setting where individuals live. Many young people live in group housing, such as dormitories or fraternities, where social contact is frequent. When drinking is common in these settings, so is the modelling for drinking, the persuasion to partake, and the availability of alcohol. (p.43)

Harford, Wechsler, and Muthen (2002a) assessed the results of US students participating in the 1993, 1997, and 1999 College Alcohol Studies³³ and found that students living in on-campus resident accommodation were more likely than students living off-campus to report socialising with friends and endorsing alcohol/parties as an important activity in student culture. The authors also reported that students living in mixed gender resident accommodation sustained higher rates of alcohol-related harms than students living in single sex resident accommodation. A number of other US studies (Baer, 1994; Presley, Meilman, & Leichliter, 2002; Wechsler, Lee, Kuo & Lee, 2000a) and New Zealand studies (Adam et al., 2000; Kypri et al., 2005b) have also found that students living in

³³ These studies assessed students at over one-hundred colleges across the US.

student residences are significantly more likely to drink more heavily than their non-resident student peers. Accordingly, halls of residence students are identified as a high risk student drinking population.

The US National Institute on Alcohol Abuse and Alcoholism, in its landmark paper A Call to Action: Changing the Culture of Drinking at U.S. Colleges (NIAAA, 2002a) recognised the complexity of student drinking behaviour and recommended an adaption of the Social Ecological Model to assess the multitude of influences impacting upon student drinking. The Social Ecological Model³⁴ is a systems-based theory used to identify the multiple levels of influence that impact upon an individual's behaviour. Bronfenbrenner (1977) was an early developer of this model who identified four major levels of influence upon an individual which he detailed as individual, organisational, community and intercultural. Bronfenbrenner (1999) commented that "it is a basic premise of [social] ecological systems theory that [individual] development is a function of forces emanating from multiple settings and from the relations between these settings" (p.17). Stokols (2000) has discussed the value of using the Social Ecological Model in the development of community health promotion initiatives, as the model allows researchers to assess not only the individual and their physical/social/organisational environment but also how the system elements interact with each other. The Social Ecological Model has been utilised to investigate a range of issues including violence (Dahlberg & Krug, 2002), education (Matheson & Achterberg, 2001), family and work (Grzywacz & Marks, 2000), and sexual activity (Small & Luster, 1994).

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³⁴ This model is sometimes also referred to as simply the 'Ecological Model'.

In addressing the issue of student alcohol use, the NIAAA (2002a) recommended a '3-in-1' social ecological model that focused upon the individual, the student body as a whole, and the university institution and its surrounding community. The first component of this model focuses upon the individual student including his/her genetic and psychological make-up, drinking history, family background, and drinking attitudes (DeJong & Langford, 2002). The student body component identifies the student culture within which the individual must interact and includes the dominant academic and sociosexual subcultures described by Ashmore et al., (2007). The institutional component incorporates the university's policies on alcohol use and discipline, the management of on-campus social events and bars, and the management of residential accommodation (DeJong & Langford, 2002). The community component includes the management of off-campus bars, liquor outlets, sporting and social clubs, and the enforcement of local/national liquor laws (Hingson & Howland, 2002)³⁵.

1.4 Summary

The excessive use of alcohol has been documented throughout New Zealand's history. Over the past thirty years there has been a significant change in New Zealanders' drinking behaviour with more female and young adult New Zealanders' drinking excessively. The role of alcohol within New Zealand culture has also changed during this time, with the deregulation of the sale and supply of alcohol, the development of night-time alcohol-based leisure economies within city centres, and a growing acceptance of binge drinking behaviour amongst segments of the New Zealand population. In response to these changes the

³⁵ To allow for a more detailed analysis of the influences affecting resident drinking behaviour, the current study expanded the social ecological model from three to six levels of influence (see Figure 3.1, p.88).

Alcohol Advisory Council has initiated a number of 'supply control', 'demand reduction', and 'problem minimisation' strategies aimed at changing the New Zealand drinking culture. New Zealand student culture has had a strong tradition of student drinking behaviour associated with it and research has identified student drinkers as being more at risk of alcohol-related harms than their same age non-student peers.

The following chapter will now present an overview of recent research detailing New Zealanders' drinking behaviour and tertiary students' drinking behaviour.

2 INTRODUCTION: DRINKING BEHAVIOUR

Having explored a little of the broader social and historical context within which student drinking is embedded, it is necessary now to develop an understanding of concepts which are key to the thrust of this thesis, before examining existing research on the topic. This chapter will review the debate surrounding the use of the term 'binge drinking' within the research literature. It will go on to explain why this research project will use the term binge drinking when describing 'acute excessive alcohol usage', and will use the term 'heavy episodic drinking' when comparing specific drinking behaviour results across studies. This chapter will then review the research literature detailing drinking behaviour of New Zealanders, New Zealand tertiary students, and international tertiary students.

2.1 Binge Drinking and Heavy Episodic Drinking

Research investigating alcohol usage and binge drinking behaviour has traditionally utilised a drink counting methodology (Alcohol Advisory Council, 2004b; Wechsler, Lee, Kuo, Seibring, Nelson, & Lee, 2002a)³⁶. This is a research practice which poses a number of difficulties when attempting to compare results across international studies, because a range of ethanol levels are used internationally to quantify the measurement of a standard alcoholic drink or 'standard drink' as it is more commonly known (Miller, Heather, & Hall, 1991; Turner, 1990). For example, a standard drink of alcohol in New Zealand (Alcohol Advisory Council, 2004c) and Australia (Ministerial Council on Drug Strategy, 2006) is defined as the equivalent of 10 grams of ethanol. In the United Kingdom a standard drink is defined as 8 grams of ethanol (Gill & Donaghy, 2004), in

³⁶ Some previous research has also utilised the 'AUDIT' Alcohol Use Disorders Identification Test (Babor et al., 2001). This current research project incorporated three AUDIT questions within the Drinkers' Questionnaire Survey (see section 3.4.3).

Canada 13.6 grams of ethanol (Canadian Public Health Association, 2006), and in the US between 12 grams of ethanol (Turner, 1990) and (more recently) 14 grams of ethanol (NIAAA, 2007a). When comparing non-New Zealand studies, given the international variance, whenever possible this project will use the total grams of ethanol consumed as a measure of comparison, rather than the number of standard drinks consumed.

Within the research literature there have been a variety of terms used to describe problematic drinking behaviour (Carey, 2001) including 'binge' drinking (Wechsler, Dowdall, Davenport, & Castillo, 1995), 'heavy episodic' drinking (Injury Prevention Research Unit [IPRU], 2007), 'large' drinking (Ministry of Health, 2007a), and 'risky' drinking (Australian National Health and Medical Research Council, 2007). Within the research literature there has been ongoing debate about the total volume of alcohol consumption necessary to constitute problematic drinking behaviour (Broughton & Molasso, 2006; Jackson, 2008) and the most appropriate 'term' to describe this behaviour (Vicary & Karshin, 2002).

In the US, one of the most influential studies of student drinking behaviour is the Harvard School of Public Health College Alcohol Study, which has assessed the drinking behaviour of college students at 120 colleges in 40 states: 1993, 1997, 1999, and 2001 (Wechsler et al., 2002a). The Harvard study set a criterion of five or more drinks³⁷ for males (≥70g ethanol) and four or more drinks for females (≥56g ethanol) as a definition of binge drinking behaviour. In 2000, in response to the binge drinking criteria set by the Harvard study, the US Inter-Association Task Force on Alcohol and Other Substance Abuse Issues [IATFAOSAI] issued a

³⁷ In the US a standard drink of alcohol is measured as 14 grams of ethanol (National Institute on Alcohol Abuse and Alcoholism, 2007a).

statement asking for member associations, independent researchers and government agencies to refrain from using the term binge drinking:

except as it is generally and historically used to denote a prolonged (usually two days or more) period of intoxication $(BAC \ge 0.08)^{38}$ that interferes with the student's ability to perform customary social and academic obligations and responsibilities. (IATFAOSAI, 2000, p.1)

The task force argued that the term binge drinking was being used too liberally by both alcohol researchers and the media, and this over use of the term was unnecessarily labelling large numbers of students as binge drinkers. In reply, Wechsler and Nelson (2001a) responded that the meaning of the term binge drinking had evolved over the preceding twenty years and it was now commonly understood and used by the general public (including the media) to describe 'acute excessive alcohol usage'. In response to this debate, the US National Institute on Alcohol Abuse and Alcoholism issued a binge drinking criteria of five or more drinks for a male (≥70g ethanol) and four or more drinks for a female (≥56g ethanol), within an approximate two hour period³⁹ (NIAAA, 2007b).

In Australia, the Australian National Health and Medical Research Council (2001) previously used the term binge drinking and set a criterion of seven or more drinks per drinking occasion for a male (≥70g ethanol) and five or more drinks for a female (≥50g ethanol). Recently the Council issued a draft review of the Australian drinking guidelines recommending the use of the term 'risky drinking' rather binge drinking, and also a reduction in the total volume of alcohol used to define risky drinking behaviour (Australian National Health and Medical Research Council, 2007). In the United Kingdom, the term binge drinking is

³⁸ BAC stands for Blood Alcohol Content and '0.08' represents 80 milligrams of alcohol per 100 millilitres of blood.

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³⁹ This drinking criterion is comparable to a BAC of 0.08.

widely used and commonly defined as the consumption of eight or more drinks for a male (≥64g ethanol) and six or more standard drinks (≥48g ethanol) for a female (Measham & Brain, 2005).

In New Zealand a number of terms have been used in recent years to identify problematic drinking behaviour but more recently a number of organisations have moved away from the use of the term binge drinking when reporting research results. For example, in 1997 the Alcohol Advisory Council's study of youth drinking defined problematic drinking as 'binge drinking' behaviour and set a criterion of five or more drinks (≥50g ethanol) on a single occasion (Alcohol Advisory Council, 1997). In 2003, the Alcohol Advisory Council's national alcohol study defined adult problematic drinking as 'binge or risky drinking' behaviour and set a criterion of seven or more drinks (≥70g ethanol) on a single occasion (Alcohol Advisory Council, 2004c). In 2004, the Ministry of Health national health survey used the term 'large drinking' and set a criterion of seven or more drinks per drinking occasion for a male (≥70g ethanol) and five or more drinks for a female (≥50g ethanol) (Ministry of Health, 2007a). The majority of research investigating tertiary student drinking behaviour in New Zealand has been undertaken by the University of Otago Injury Prevention Research Unit and in recent years they have used the term 'heavy episodic drinking' behaviour and set a threshold of seven or more drinks per drinking occasion for a male (≥70g ethanol) and five or more drinks for a female (≥50g ethanol) (IPRU, 2005 & 2007).

Carey (2001) reviewed the use of the term binge drinking and the five/four drink criteria within the US research literature. Carey argued that the advantage of

persisting with the use of the term binge drinking was that the term was succinct and generally well understood by the public, and that the advantages of persisting with the five/four drinking criteria were that research had identified a consistent association between this simple and easily assessed criterion and a wide range of alcohol-related harms (Jackson, 2008). In turn, Carey's suggested that the disadvantage of persisting with the use of the term binge drinking in conjunction with the five/four criteria, was that "the five/four binge definition becomes conflated with a dangerous level of intoxication" (2001, p.285), whereas not all drinkers who consume five/four drinks experience intoxication and/or alcoholrelated harms. At an individual level this definition does not take into account a variety of factors including size/weight, tolerance to alcohol, food usage, and the speed of alcohol consumption. Carey (2001) surmises that "it may be that more problems than benefits arise from using the term binge drinking 40 to refer to the heavy episodic drinking characteristic of college-aged youth" (p.285) and "that one solution is to adopt the term *heavy episodic drinking* for research purposes.... [as it] does retain the high volume, periodic frequency connotation of binge drinking and is consistent with the precedent set by the Journal of Studies on Alcohol" (p.286).

This research project will utilise the term binge drinking when discussing the concept of 'acute excessive alcohol usage' as it is now commonly understood by the public (Wechsler & Nelson, 2001a). Following the recommendation of Carey (2001) and the practice of the University of Otago Injury Prevention Research Unit, this research project will use the term heavy episodic drinking behaviour when comparing student drinking behaviour across studies. Heavy episodic

⁴⁰ All quote italics are original.

drinking will be defined as seven or more drinks for a male (\geq 70g ethanol) and five or more drinks for a female (\geq 50g ethanol)⁴¹.

2.2 New Zealand General Population Drinking Behaviour

In recent years, a number of national surveys have assessed the drinking behaviour of New Zealanders (Alcohol Advisory Council, 2004a; Alcohol Advisory Council, 2007a; Habgood et al., 2001; Ministry of Health, 2004; Ministry of Health, 2007a; Wyllie et al., 1996). The most recent of these national studies was undertaken in 2004 as a component of the Ministry of Health's New Zealand Health Behaviours Survey and assessed the drinking behaviour of New Zealanders aged between 12 and 65 years (Ministry of Health, 2007a). An overview of the 2004 survey findings is detailed below, with attention given to the age grouping of 18 to 24 year olds.

Overall, 81.2% of New Zealanders reported consuming alcohol in the previous twelve month period. Amongst 18 to 24 year olds, the percentage of alcohol users increased to 87.7% for males and 85.8% for females. Wine (79.2%) was the most popular alcohol consumed by New Zealand drinkers, followed by beer (74.3%), spirits (72.9%), and RTD drinks (45.9%). Spirits (86.1%) were the most popular alcohol of choice reported by 18 to 24 year olds, followed by beer (80.9%), RTDs (75.6%), and wine (68.2%)⁴². Drinkers aged 18 to 24 years old were significantly more likely than all other age groupings to report the use of spirits and RTDs.

41 The recommendation of an approximate two hour drinking period criterion as suggested by the

US NIAAA (2007) was published after the collection of the current study data in 2006. ⁴² Data on New Zealanders preferred choice of alcohol across the variables of both age and gender was not available.

Survey participants were asked to report how frequently they consumed alcohol⁴³, with 30.2% reporting alcohol use less than once a week (18-24's, 26.2%), 38.2% reporting one to two times a week (40.1%), 16.2% reporting four to six times a week (18.3%), and 15.4% reporting seven or more times a week (15.4%).

The 2004 survey defined the consumption of seven or more drinks for a male and five or more drinks for a female as the consumption of a 'large' amount of alcohol. This standard of large drinking was described as hazardous drinking and associated with an increased risk of alcohol-related harm. Overall, 24.7% of drinkers reported consuming a large amount of alcohol on a typical drinking occasion. No significant gender differences were found in large drinking behaviour on a typical drinking occasion. Significant differences were found across age groupings, with 18 to 24 year olds (54.1%) reporting the largest proportion of large drinkers (males 56.5% and females 51.5%) on a typical drinking occasion.

Assessment of large drinking behaviour on a weekly basis revealed significant age and gender differences, with male drinkers (19.7%) almost twice as likely as female drinkers (11.1%), and drinkers aged 18 to 24 years (34.2%; males 42.4% and females 25.2%) significantly more likely than were all other age groupings to report large drinking behaviour on a weekly basis.

Weekly drunkenness was reported by 9.5% of drinkers. Significant gender and age grouping differences were found, with male drinkers aged 18 to 24 years (34.5%) significantly more likely than were all other gender/age grouping to

⁴³ The survey defined a drinking occasion as the consumption of alcohol at one location; therefore, the consumption of alcohol at three different locations in one evening would have been recorded by the survey as three drinking occasions.

report weekly drunkenness, followed by males aged 25 to 34 years (17.4%), and females aged 18 to 24 years (16.1%).

Drinkers reported that their private home (92.0%) was the most common location where they consumed alcohol. Significant differences in the location of drinking were found across age groupings with drinkers aged 18 to 24 years significantly more likely than all other age groupings to have consumed alcohol in a nightclub (70.6%), and significantly less likely than all other age groupings⁴⁴ to have consumed alcohol in a restaurant/café (59.3%).

A summary of drinking results for New Zealand drinkers aged 18 to 24 years reveals that they are significantly more likely than were all other age groupings to drink large amounts of alcohol on both a typical drinking occasion and on a weekly basis, to drink enough alcohol to feel drunk at least once a week, to consume spirits and RTDs, and to drink in a nightclub. Eighteen to 24 year olds, along with 25 to 34 year olds, were also more likely to consume a large amount of alcohol in a pub/hotel/tavern, and less likely than were all other age groupings to drink in a restaurant/café. Although no significant differences were found in the proportion of 18 to 24 year old male drinkers and female drinkers consuming a large amount of alcohol on a typical drinking occasion, male drinkers were significantly more likely than were female drinkers to consume a large amount of alcohol on a weekly basis, and male drinkers were twice as likely to drink to intoxication on a weekly basis than were female drinkers.

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⁴⁴ Excluding 12-17 year olds who cannot legally purchase alcohol in a restaurant, café, or coffee shop.

2.3 New Zealand Tertiary Student Drinking Behaviour

To date there have been seven studies in New Zealand that have investigated the drinking behaviour of New Zealand tertiary students. Four of these studies were undertaken before the current research project commenced in 2005, and include two studies at the University of Otago in Dunedin in 2000 and 2002, and two studies at the University of Waikato in Hamilton in 2000 and 2001. Since the commencement of this current project a 2004 study at the University of Otago has been published and two National Tertiary Student Health studies have been undertaken in 2005 and 2007.

Published articles are available for the 2000 University of Otago study (Kypri, Langley, McGee, Saunders, & Williams, 2002; Paschall, Kypri, & Saltz, (2006), 2002 University of Otago study (Kypri et al., 2005a; Kypri & Langley, 2003; Kypri, et al., 2005b; Kypri, Stephenson, & Langley, 2004; Langley, Kypri, & Stephenson, 2003; McGee & Kypri, 2004), 2004 University of Otago study (Kypri, Paschall, Maclennan, & Langley, 2007), and the 2005 National Tertiary Health Study (Kypri, Paschall, Langley, Baxter, Cashell-Smith, & Bourdeau, 2009). Research reports are available summarising the results of the 2000 University of Waikato study (Adam et al., 2000), 2001 University of Waikato Study (Donavan, McEwan, & Nixon, 2001), and the 2004 University of Otago study (Maclennan, 2005). Although published results are not yet available for the 2007 Tertiary Student Health Study, a summary report of both the 2005 and 2007 National Tertiary Health studies, indentifying the results of the University of Waikato student sample who participated in the two studies, is available (IPRU, 2005 & 2007).

The University of Waikato 2000 Study

The 2000 University of Waikato study assessed the alcohol consumption of 493 University of Waikato drinking students⁴⁵ (Adam et al., 2000). Sixty-one percent of male drinking students reported consuming seven or more drinks and 61.8% of female drinking students reported the consumption of five or more drinks, on a typical drinking occasion. Forty-one percent of drinking students reported that they consumed alcohol two or more times a week, 38.8% reported consuming alcohol two to four times a month, and the remaining 19.9% reported consuming alcohol monthly or less. Excessive alcohol consumption was found to be significantly associated with being male, a first year student, of non-Asian ethnicity, and living in a hall of residence. First year students were also significantly more likely than were other students, to report experiencing a range of alcohol-related harms.

The University of Waikato 2001 Study

The 2001 University of Waikato study assessed the drinking behaviour of 363 drinking students residing in the three⁴⁶ large University of Waikato on-campus halls of residence; Bryant Hall, Student Village, and College Hall (Donavan et al., 2001). The majority of students residing in these three halls of residence were New Zealanders enrolled in their first year of study and living away from home for the first time. Fifty-nine percent of drinking male residents reported the consumption of seven or more drinks and 78.1% of drinking female residents reported consuming five or more drinks, on a typical drinking occasion. Seventy-two percent of drinking residents reported drinking two or more times a week,

⁴⁵ Students residing in the halls of residence comprised 21.9% of the research sample.

⁴⁶ The fourth smaller on-campus halls of residence of Orchard Park was not included in the study as its resident population was significantly different from the other three halls, having a large number of international students and very few first year students.

18.4% reported two to four times a month, and 9.9% reported monthly or less.

Male residents were found to drink significantly more frequently than female residents. The halls of residence was the setting where the majority of drinking residents reported they most frequently consumed alcohol and where they consumed the largest amounts of alcohol. Male residents were found to be significantly more likely than female residents to experience a range of alcohol-related harms including fighting, ending up in a sexual situation they were unhappy about, engaging in unplanned sexual activity, travelling with a driver who was intoxicated, and impaired academic performance. Drinking residents also reported second-hand alcohol effects, with one-third reporting that they were woken up by other drinkers on a weekly basis.

The University of Otago 2000 Study

In 2000 at the University of Otago in Dunedin, 1480 tertiary students living in the twelve University halls of residence were surveyed at the beginning of the academic year and a sub-sample of 967 students was followed up six months later (Kypri et al., 2002). A total of 83.2% of students reported consuming alcohol in the previous four week period. Amongst drinkers, male students were found to drink more frequently and consume more alcohol per occasion, than were female students. Sixty percent of male drinking students (52.0% across all male students) reported consuming seven or more drinks and 58.2% of female drinking students (46.0% across all female students) reported consuming five or more drinks, on a typical drinking occasion. Analysis of student drinking levels across the twelve halls of residence revealed significant differences between halls, with the mean number of drinks consumed on a typical drinking occasion varying from 1.3 drinks in the lowest consumption hall, to 9.0 drinks in the heaviest consumption

hall. The alcohol-related problems⁴⁷ most frequently reported by male students were blackouts, followed by difficulty in concentrating, emotional outbursts, and fights. In order of frequency, for female residents it included blackouts, emotional out-bursts, difficulty in concentrating, and fights. The findings of the six month follow up survey revealed that an increased level of alcohol consumption was significantly associated with lower age, Maori ethnicity, smoking, cannabis use, high levels of alcohol-related negative consequences, and higher levels of drinking in the student's hall of residence. Paschall et al., (2006) assessed the relationship between the drinking behaviour of students participating in the 2000 Otago study and their academic schedules, and reported that heavy-drinking students were significantly less likely than lighter drinking students to schedule academic classes on a Friday.

The University of Otago 2002 Study

The 2002 University of Otago study surveyed a random sample of 1,564 students using a web-based questionnaire survey (Kypri et al., 2005b). Ninety-one percent of students reported they had consumed alcohol at least once in the previous twelve month period. Amongst male drinking students, 50% reported consuming seven or more drinks and 47% reported drinking to intoxication, in the previous week. Amongst female drinking students, 49% reported consuming five or more drinks and 43% reported drinking to intoxication. Students of European or Maori ethnicity were found to be significantly more likely to drink to intoxication than students of Asian, Pacific Island, or other ethnicities. Students who lived in a residential hall setting tended to drink more heavily per drinking occasion than students living in other accommodation settings, with this difference being

⁴⁷ Experienced over the previous three month period.

⁴⁸ 20% of the sample population.

particularly pronounced for female students. Excessive alcohol use was also found to be significantly associated with lower age. McGee and Kypri (2004) reported that the most common alcohol-related problems reported by students were hangovers, blackouts, vomiting, heated arguments, and emotional outbursts. Missing class and problems with concentration in class were the most commonly reported academic effects from drinking.

Using data from the same survey, Langley et al., (2003) found that students experienced a wide range of second-hand effects⁴⁹ due to other students' consumption of alcohol. Sixty percent of students reported that their study or sleep had been interrupted, forty percent of students reported they had had to take care of a drunken student, and one-third of students reported they had been insulted or humiliated. One-quarter of students reported experiencing unwanted sexual advances, and fifteen percent reported being pushed, hit or otherwise assaulted by others who had been drinking⁵⁰.

Further analysis of the 2002 study by Kypri and Langley (2003) compared students' perceptions of drinking norms with actual student drinking norms and found that the majority of students overestimated the incidence of heavy-drinking amongst their student peers. Norm misperception was found to be positively related with student drinking behaviour, with the heaviest drinkers most likely to overestimate the incidence of heavy episodic drinking by their peers.

Kypri et al., (2005a) compared the drinking results of 17 to 24 year old students participating in the 2002 University of Otago study with the drinking results of 17

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⁴⁹ Over a four week period.

⁵⁰ The 2000 and 2001 University of Waikato studies did not evaluate the second-hand drinking effects of 'being insulted/humiliated' or 'physically assaulted'.

to 24 year old New Zealanders participating in the 2002/3 New Zealand Health Survey (Ministry of Health, 2004a). The prevalence of hazardous drinking behaviour amongst students was found to be almost twice as high as their non-student peers.

The University of Otago 2004 Study

The 2004 University of Otago study assessed the drinking behaviour of 1254 first year students residing within the twelve University of Otago halls of residence⁵¹ (Maclennan, 2005). Ninety-four percent of residents reported that they had consumed alcohol in the previous four week period. International residents were significantly more likely to report abstinence, with 22% of Asian residents and 11% of 'Other' nationalities reporting they had not consumed alcohol in the previous four week period. A total of 60% of male residents and 55% of female residents were assessed as being intoxicated during the previous week. Residents of European and/or New Zealand Maori ethnicities were found to be significantly more likely to drink to intoxication than residents of other ethnicity groupings. Considerable variation in rates of intoxication was found between the twelve halls of residence, with a low of 14% in one hall and a high of 71% in another hall. Further analysis of resident drinking behaviour revealed a strong relationship between pre-university drinking behaviour and university drinking behaviour. The author suggested that much of the variation in drinking status between halls of residence may be explained by residents' pre-university drinking status. Alcohol-related problems were found to be more common amongst males than females, and amongst residents of European and/or Maori ethnicity.

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⁵¹ At the University of Otago a number of these university student residences are referred to as Colleges however for purposes of consistency the term halls of residence will continue to be used.

Further analysis of the 2004 survey data (Kypri et al., 2007) revealed that onlicence premises accounted for one-half of all alcohol consumed by residents,
followed by one-third in the halls of residence, and ten percent in student
flats/houses. Drinking in a licenced premise was found to be particularly
associated with intoxication amongst male residents. Explanatory variables
positively associated with drinking to intoxication included prior hazardous
drinking behaviour, being a first year student, and a greater than average
prevalence of hazardous drinking behaviour within a resident's hall of residence.

The 2005 New Zealand Tertiary Student Health Study

The 2005 Tertiary Student Health Study (IPRU, 2005; Kypri et al., 2009) surveyed 3,300 students across six New Zealand University campuses and six polytechnic colleges, utilising a randomised web-based questionnaire survey. A total of 451 University of Waikato students⁵² participated in the survey, of which 88% of female students (88% nationally) and 91% of male students (88% nationally) reported alcohol usage in the previous twelve month period. Drinking on more than two occasions per week was reported by 8% of female students (9% nationally) and 17% of male students (18% nationally). The recent consumption of seven or more drinks was reported by 70% of University of Waikato male students and five or more drinks reported by 63% of female students. The most frequent alcohol-related effects reported by University of Waikato students in the previous four week period were hangovers, followed by emotional outbursts, and vomiting. Nationally, the strongest predictor of heavy episodic drinking behaviour amongst students was prior heavy episodic drinking while at high school.

⁵² 12% reported residing in the University halls of residence accommodation.

The 2007 New Zealand Tertiary Student Health Study

The 2007 Tertiary Student Health Survey (IPRU, 2007) surveyed over 3000 students across eight New Zealand University campuses utilising a web-based questionnaire survey. A total of 504 University of Waikato students⁵³ participated in the survey, with 88% of female students and 91% of male students reporting alcohol use in the previous twelve month period. Drinking on more than two occasions per week was reported by 14% of Waikato female students and 23% of male students. The recent consumption of seven or more drinks was reported by 77% of University of Waikato male students and five or more drinks reported by 69% of female students. The most frequent alcohol-related effects reported by University of Waikato students in the previous four week period were hangovers, followed by emotional outbursts, and vomiting.

2.4 International Student Drinking Behaviour

A review of the international research literature reveals that there is a wide range of research investigating tertiary student drinking behaviour, much of it undertaken in the US. It is difficult to make direct comparisons between the international research literature, due to variations in the measurement of drinking behaviour and environmental factors. Internationally, key differences occur in legal drinking ages, the measurement of alcohol 'standard drink' units, and levels at which heavy episodic/binge drinking is defined.

 53 17% reported residing in the University halls of residence accommodation.

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Given the large number of US-based studies assessing tertiary student drinking behaviour, this summary will overview the findings of the four Harvard College Alcohol Studies, a review study of five national surveys (O'Malley & Johnston, 2002), and a recent review study of peer-reviewed articles published over a tenyear period investigating student drinking behaviour (Presley et al., 2002).

The Harvard School of Public Health College Alcohol Study has assessed the drinking behaviour of tertiary students across one hundred and twenty US colleges/universities on four occasions; 1993, 1997, 1999, and 2001 (Wechsler, Davenport, Dowdall, Moeykens, & Castillo, 1994; Wechsler, Dowdall, Maenner, Glednill-Hoyt, & Lee, 1998; Wechsler et al., 2000a; Wechsler et al., 2002a). Binge drinking⁵⁴ criterion were defined as five or more drinks for a male (≥ 70 g ethanol) and four or more drinks for a female (≥56 g ethanol), over a two week period. These four studies revealed that a remarkably consistent 44% of university students binge drink. The authors of the most recent 2001 study noted that the national profile of university students had been changing over time, with more female students, more part-time students, more students of colour, and more students of non-traditional age attending university. The addition of these newer students was found to support lower rates of binge drinking behaviour (Wechsler et al., 2002a). The authors of the 2001 study assessed the drinking behaviour of traditional university students, aged eighteen to twenty-three years, never married, and living independently of their parents, and found that 51.5% reported binge drinking behaviour (55.5% of male students and 48.0% of female students). A further breakdown of this traditional university student group revealed that 60.5%

⁵⁴ Original drinking label.

of white male students and 54.3% of white female students were binge drinkers, as were 75.1% of fraternity members and 62.4% of sorority members.

O'Malley and Johnston (2002) reviewed five large US studies⁵⁵ that included university students within their research sample. The review of the five studies noted very similar findings across the surveys despite some differences in survey structures, with approximately 80% of students drinking and approximately 40% of students classified as heavy/binge drinkers. Heavy/binge drinking behaviour was found to be higher amongst male students than it was amongst female students, and amongst white students. Longitudinal data showed that while in high school, pre-university students had lower rates of heavy-drinking behaviour than those students who did not go on to university. Although both groups increased their heavy-drinking behaviour after leaving high school, university students' drinking behaviour increased distinctly and was found to surpass their non-student peers⁵⁶.

Presley et al., (2002) reviewed published articles and reports assessing US tertiary student drinking behaviour over the previous ten year period. The authors found that the variables most associated with heavy episodic drinking behaviour were

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Including the Core Institute Alcohol and Drug Use Survey, assessing university students during 1992-1994 (Presley, Meilman, & Cashin, 1996); the Monitoring the Future Survey, a longitudinal study of high school students that now includes university students within its sample (Johnston, O'Malley, & Bachman, 2000); the National College Health Risk Behavior Survey, a study of university students undertaken in 1995 by the Division of Adolescent and School Health, National Center for Chronic Disease Prevention and Health Promotion (Center for Disease Control and Prevention, 1997); the National Household Survey on Drug Abuse, a yearly survey of US households (Gfroerer, Greenblati, & Wright, 1997); and the first three Harvard College Alcohol Studies (Wechsler et al., 1994; 1998; 2000a).

⁵⁶ A number of US studies have identified that US tertiary students drink more heavily than their non-student peers (O'Malley and Johnston, 2002; Timberlake, Hopfer, Rhee, Friedman, Haberstick, Lessem, et al., 2007) and this result has been found to be more pronounced for female students (Dawson, Grant, Stinson, & Chou, 2004).

that of being male, white, living in fraternity or sorority housing accommodation, and being involved in athletics/sporting activities.

Other International Studies

In Canada, Gliksman, Adlaf, Demers, and Newton-Taylor (2003) undertook a large study of sixteen tertiary institutions and revealed that 62% of tertiary students reported binge drinking behaviour⁵⁷ (72% of drinking students) within a previous eight to twelve week period. Male students were found to be more likely to consume binge drinking amounts than female students. Binge drinking behaviour was found to increase with the level of importance students attached to recreational activities and decrease when students reported being more academically oriented. Drinking students living in university residential accommodation were found to be more likely to binge drink (70%) than their non-resident colleagues (60%). Canadian students have been found to drink more heavily than their US student peers (Kuo, Adlaf, Lee, Gliksman, Demers, & Wechsler, 2002).

Roche and Watt (1999) evaluated the drinking patterns of Australian tertiary students across three universities and found that 44% of male drinking students and 47% of female drinking students reported binge drinking behaviour⁵⁸ on a typical drinking occasion. Forty-nine percent of male drinking students and 21% of female drinking students reported drinking to intoxication at least once a week.

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⁵⁷ Binge drinking criteria were assessed as five or more drinks on a drinking occasion for both male and female drinkers. No information was given on the measure of a standard drink to provide a 'grams of ethanol' total.

provide a 'grams of ethanol' total.

58 Binge drinking criteria were assessed (using a standard drink measure of 10 grams of ethanol) as $7 \ge \text{drinks}$ for males ($\ge 70g$ ethanol) and $5 \ge \text{drinks}$ for females ($\ge 50g$ ethanol).

Gill (2002) reviewed eighteen studies evaluating student drinking behaviour in the United Kingdom and found that student binge drinking levels⁵⁹ appeared to exceed those of their peers in the general UK population and their US student counterparts. Gill also commented that there appeared to be a growing 'gender convergence' of student drinking behaviour, with female drinking behaviour starting to match male student drinking levels.

Karam, Kypri, and Salamoun (2007) reviewed articles published during 2005 and 2006 assessing tertiary student alcohol use outside of North America (including African, Asia, Australasia, Europe, and South America) and concluded that tertiary students in many countries were at an elevated risk of heavy-drinking behaviour. The prevalence of student hazardous drinking behaviour in Australasia, Europe and South America appeared similar to the drinking behaviour of students in North America, but students in Africa and Asia appeared to present lower levels of hazardous drinking behaviour. The authors recommended that more comprehensive studies with systematic methodologies and standard measures of drinking behaviour were required to yield stronger comparable results between countries.

2.5 Summary

Recognising ongoing debates around the appropriate terminology to use in this sub-field, this research project will use the term binge drinking when discussing 'acute excessive alcohol usage' and use the term heavy episodic drinking behaviour when describing the consumption of seven or more drinks per drinking occasion for a male drinker (\geq 70g ethanol) and five or more drinks for a female

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⁵⁹ There was a great deal of variation between studies in the measurement and definition of binge drinking behaviour.

drinker (≥50g ethanol). Existing research shows that within New Zealand, drinkers aged 18 to 24 years are significantly more likely than all other age groupings to drink in a heavy episodic manner and to consume enough alcohol to feel drunk at least once a week. Tertiary students (aged 18 to 24 years) have been found to drink more heavily than their non-student peers. Approximately one-half to three-quarters of New Zealand students regularly drink in a heavy episodic manner and New Zealand students of European and/or Maori ethnicity have been found to drink more heavily than their other ethnicity peers. Students experience a wide range of alcohol-related harms due to their drinking behaviour. The data shows that New Zealand students consume alcohol at rates comparable to their counterparts in Australia, North America, and Europe.

The following chapter will now outline the research theory and methodology used, by the current research project, to collect data investigating the attitudes and drinking behaviours of residential student's at the University of Waikato halls of residence.

3 METHODOLOGY

This chapter details the *research theory* and *methodology* utilised within the research project. A summary of the *data collection process* and the *research population* is presented. Finally, this chapter discusses *ethical issues* arising from the research process and outlines the *development* (research genealogy) of the research project in light of the researcher's previous work and research experience. To begin this chapter will present the fourteen research *aims* that guided the research project.

3.1 Research Aims

The fourteen research aims are organised under the four areas of resident drinking behaviour, resident binge drinking behaviour, student culture, and the binge drinking environment.

Resident Drinking Behaviour

- To determine resident student drinking patterns including the frequency of drinking, the location of drinking, the quantity of drinking, periods of time spent drinking, and the choices of alcohol consumed.
- ii. To determine resident students' understandings of a 'standard drink'.
- To determine the frequency of drinking-related harms experienced by resident students who drink.
- To determine the frequency of drinking related harm imposed on others by resident students who drink.

Resident Binge Drinking Behaviour

- To use existing official New Zealand guidelines in conjunction with the drinking patterns discerned in this research to determine the extent of binge drinking behaviour amongst the resident student population.
- ii. To determine any differences and/or similarities between the level of binge drinking behaviour in the resident student population and the rates of binge drinking behaviour reported in previous New Zealand and international tertiary student alcohol studies.

Student Culture

- i. To identify resident students' understanding of student culture.
- To identify how resident students gain their understandings of student culture.
- To identify the role of student alcohol use as a component of student culture.
- iv. To determine whether resident students perceive any differences between halls of residence student culture and student culture more generally.

Binge Drinking Environment

- i. To identify what resident students define as 'binge drinking' behaviour.
- To determine resident students' attitudes towards binge drinking behaviour.
- iii. To identify connections between student culture and binge drinking.
- iv. To identify the influencing factors from both within the halls of residence setting and external to the halls of residence setting, that may support the establishment and maintenance of resident student binge drinking behaviour.

3.2 Methodological Considerations

In 2001, the researcher participated in a research project which utilised a quantitative questionnaire survey to assess the drinking patterns of halls of residence students at the University of Waikato (Donavan et al., 2001). At the conclusion of the study, it was the researcher's opinion that the addition of focus group and one-to-one interviews, both preceding and following the questionnaire survey, would have allowed a more detailed investigation into the attribution of meaning residents attached to their drinking behaviour. Based upon the experiences of the 2001 research project, I decided that the current research project would utilise a combination of qualitative and quantitative methodologies. Patton (1997) argues that the social science research field "has come to recognise that, where possible, using multiple methods - both quantitative and qualitative — can be valuable, since each has strengths and one approach can often overcome weaknesses of the other" (p. 267). Qualitative and quantitative methodologies, are often associated with respectively, interpretive and positivist/structural philosophies (Jureidini & Poole, 2000).

Brewer and Hunter (2006) comment that "the decision to adopt a multi-method approach to measurement affects not only measurement but all stages of research. Indeed, multiple measurement is often introduced explicitly to solve problems at ... [various] stages of the research process" (p. 9). The use of focus group interviews and one-to-one interviews during the first phase of the data collection process allowed the researcher to explore the research aims with residents and residential staff, and to provide a foundation for the development of the questionnaire schedule. The use of a quantitative questionnaire survey during the second phase of the data collection process enabled the researcher to collect and

analyse data on a large proportion of the resident population and identify patterns of behaviour and attitudes. The inclusion of focus group interviews and one-to-one interviews during the third and final phase of the data collection process enabled the researcher to gain residents' and residential staff's understandings of the questionnaire survey results and allowed the opportunity to continue refining concepts arising from the data.

Brewer and Hunter (2006) comment that "data collecting in multi-method research, as in single-method research, is a selective process to be controlled primarily by the researcher's theoretical formulation of the problem.... The multi-method approach does not imply that ... all the types [of methods] must be employed in every study" (p. 64). My theoretical position is situated within a social constructivist epistemology. This position assumes that "any theoretical rendering offers an *interpretive*⁶⁰ portrayal of the studied world, not an exact picture of it" (Charmaz, 2006, p. 10). The decision to utilise qualitative methods, both preceding and following the questionnaire survey, provided multiple detailed understandings of the research issues under investigation, and enabled a collaborative interpretation of the various meanings extrapolated from the research data, further refining the key concepts arising from the data.

3.2.1 Phase One

Phase one of the data collection process involved qualitatively-based focus group interviews and one-to-one interviews. This methodology is founded upon an inductive (exploratory) view of the relationship between theory and research, and an interpretivist epistemological position, stressing an understanding of the social

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⁶⁰ Italics in original.

world through an examination of the interpretation of that world by its participants (Bryman, 2004). Using one-to-one interviews (Legard, Keegan, & Ward, 2003) and focus group interviews (Tonkiss, 2004) during the first phase of data collection allowed the researcher the opportunity to explore the issues of residents' drinking from a resident's perspective. Minichiello, Aroni, Timewell and Alexander (1990) have commented that "if the researcher develops theories which are not grounded in the informant's experience of social reality, then he or she runs the risk of constructing and imposing on that informant ... [an alternative] view of their reality" (p. 94).

Grounded theory was used to guide the collection and analysis of the qualitative data and included the principles of 'coding/categories', 'constant comparison', 'theoretical saturation', and 'theoretical sampling' (Glaser & Strauss, 1999).

The principle of coding allows the researcher to structure the interview data into retrievable arrangements, which over time, are then organised within emerging categories. Categories are central themes that arise from the research data and contribute to the development of theory concepts. Charmaz (2006) comments on the relationship between coding categories and theoretical concepts:

Categories are major and minor. Which categories does a researcher raise to theoretical concepts? Consistent with grounded theory logic, you raise the categories that render the data most effectively....These categories contain crucial properties that make data meaningful and because of their theoretical reach, incisiveness, generic power, and relation to other categories....For constructivists, theoretical concepts serve as interpretive frames. (p.139)

The principle of constant comparison refers to the ongoing monitoring of all new data with the developing codes/categories and being mindful of the contrasts emerging between codes/categories. Green (2005) comments that "as coding becomes more selective, it concentrates on the key codes [and categories] that have been identified as core to the emerging theory" (p.85). Theoretical saturation is reached when the collection of new interview data does not provide any further component codes/categories. Glaser (1978) describes the process of theoretical saturation:

Theoretical saturation of a category occurs when, in coding and analysing, no new properties emerge and the same properties continually emerge as one goes through the full extent of the data. Thus when one is in the field and feels he [sic] has saturated a category in one situation, he probably has, and is not slighting it to go on to sample for incidents on other categories. (p.53)

Theoretical sampling allows the researcher to undertake purposeful in-depth interviews with specific individuals, or groups of individuals, that contribute to the refining of theory, rather than the boosting of the sample size.

Theoretical sampling is the process of data collection for generating theory whereby the analyst jointly collects, codes, and analyses his [sic] data and decides what data to collect next and where to find them, in order to develop his theory as it emerges. This process of data collection is *controlled*⁶¹ by the emerging theory. (Glaser, 1978, p.36)

Bleakley (2005) has commented that this qualitative data collection process allows the researcher to identify dominant narratives arising out of the research data.

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⁶¹ Italics in original.

The computer software programme QSR-N6 was utilised to manage and analyse the qualitative data. The researcher transcribed all the focus group and in-depth interview recordings and undertook all the QSR-N6 data input. This included formulating the relevant data categories and codes. In total, thirteen categories were used within the QSR-N6 programme to arrange eighty-seven data codes. A summary of the thirteen data categories is given in Table 3.1.

Table 3.1 Interview data coding categories

Coding Categories

- 1. Resident drinking patterns and drinking terminology
- 2. Influences impacting upon resident drinking patterns
- 3. Binge drinking culture
- 4. Moderate drinking
- 5. Non-drinking
- 6. Halls of residence culture
- 7. Student and university culture
- 8. Residents keeping safe while drinking
- 9. The role of advertising
- 10. International students
- 11. Residential staff
- 12. Residential staff views on issues
- 13. Non-student drinking patterns

3.2.2 Phase Two

Phase two of the data collection process involved a quantitative self-completion questionnaire survey. This methodology is based upon a deductive view of the

relationship between theory and research, and a positivist epistemological position (Bryman, 2004). Schuman and Presser (1996) comment on the continued popularity and research strength provided by questionnaire surveys:

Surveys continue to flourish in number and influence. The reason for their success is simple. They combine two things: the ancient but extremely efficient method of obtaining information from people by asking questions; and modern random sampling procedures.... When the speed of computer processing and the power of multivariate analysis are added to the more basic ingredients of questions and samples, the whole can yield information and insights impossible to obtain in any other way about a large population. (p.1)

Two questionnaire survey schedules, a drinkers' questionnaire schedule and a non-drinkers' questionnaire schedule, were developed for this phase of the data collection process. Both questionnaire schedules utilised a closed question format with a limited number of answer options enabling the survey data to be analysed using a range of statistical tests. The computer software programme Statistical Package for the Social Sciences (SPSS-12) was used to analyse the questionnaire data.

As both the drinkers' questionnaire and the non-drinkers' questionnaire did not provide any interval/ratio data, but a range of either nominal/categorical datum, dichotomous data, or ordinal data, non-parametric statistical tests were used to undertake the statistical analysis. Assumption testing for non-parametric tests is not as critical as for parametric tests though the requirements of random sampling, an independence of test sample groups, and a similar shape (and variability) across response distributions must be ensured (Coakes, Steed, & Dzidic, 2006).

Non-parametric tests do not require that responses are normally distributed (Yates, 2004). As the administration of the questionnaire survey involved a census of the entire halls of residence population, issues of sampling error were minimised (Bainbridge, 1992). A probability level of 0.05 was used to assess the significance of the data analysis tests. A summary of the non-parametric statistical tests used for data analysis is listed below.

Nominal/Categorical Data and Dichotomous Data

The Pearson's Chi-square statistic and the Crammers' V test statistic were utilised to assess the relationship between two sets of nominal/categorical data (e.g., residents' most common drinking day of the week and residents' halls of residence). The Pearson's Chi-square statistic and the Crammers' V test statistic were also utilised to assess the relationship between a set of nominal/categorical data and a set of dichotomous data (e.g., residents' favourite alcoholic drink and residents' gender). On occasions when ordinal data did not meet the criterion for other statistical analysis tests, then the Pearson's Chi-square statistic and the Crammers' V test statistic were implemented to assess the relationship between a set of nominal/categorical data and a set of ordinal data (Coakes et al., 2006).

Ordinal Data

The Mann-Whitney U test statistic was utilised to assess differences between ordinal data question responses (e.g., dependent variable: number of drinks residents' consume on a typical drinking occasion) across dichotomous data groupings (e.g., independent variable: resident gender). This test was used to test the null hypothesis that the two independent variable groupings (i.e., male and female residents) had identical question response distributions, against the

alternative hypothesis that the two independent variable groupings differed in their question response distribution. This non-parametric test is equivalent to the parametric independent group t-test test (Coakes et al., 2006)

The Wilcoxon Signed-Rank *W* test was used to assess differences in the same sample group's response to two ordinal variable questions (e.g., all residents' attitudinal responses to a statement commenting on male drunken behaviour, compared with the same grouping of all residents' attitudinal responses to a statement commenting on female drunken behaviour). This test was used to test the null hypothesis that the two ordinal variable questions (e.g., the two statements commenting on male and female drunken behaviours) had identical distribution responses against the alternative hypothesis that the two ordinal questions differed in the question response distribution. This non-parametric test is equivalent to the parametric repeated measures t-test (Coakes et al., 2006).

The Kruskal-Wallis analysis of ranks *H* test statistic was utilised to assess differences between ordinal data responses (e.g., dependent variable: number of alcoholic drinks residents consume in town) across three or more categorical data groupings (e.g., independent variable: residents' hall of residence). This analysis was used to test the null hypothesis that the three or more independent variable groupings (e.g., halls' of residence groupings) had identical question response distributions against the alternative hypothesis that at least two of the independent variable groupings differed in the distribution of their question responses. This non-parametric test is equivalent to the parametric one-way between groups ANOVA test (Coakes et al., 2006).

The Spearman's rank-order statistic was utilised to assess the relationship (association) between two sets of ordinal data (e.g., the number of drinks residents consume on a typical drinking occasion and the number of hours residents spent drinking on a typical drinking occasion). This non-parametric test is equivalent to the parametric bivariate Pearson's r correlation (Coakes et al., 2006).

3.2.3 Phase Three

The qualitative methodology underlining the phase three one-to-one interviews and focus group interviews is a replication of the phase one methodology described previously.

3.3 Research Population

The research population was drawn from the 790 resident students, 29 residential staff, and 3 residential managers living on campus at the three fully-catered halls of residence at the University of Waikato, Hamilton, New Zealand. The three fully catered halls of residence include Bryant Hall, Student Village, and College Hall. A breakdown of the halls of residence population is shown in Table 3.2. In 2006, approximately 10,000 equivalent full-time students were enrolled at the University of Waikato and international students comprised approximately one-quarter of the total student population.

Table 3.2 Research population across halls of residence

	Bryan	nt Hall	Student	Village	College	e Hall	Tot	al
Population	% row	(n)	% row	(n)	% row	(n)	% row	(n)
Resident	24.6	(194)	35.9	(284)	39.5	(312)	100	(790)
Residential Staff	24.1	(7)	34.5	(10)	41.4	(12)	100	(29)
Manager	33.3	(1)	33.3	(1)	33.3	(1)	100	(3)
Total	24.6	(202)	35.9	(295)	39.5	(325)	100	(822)

Residents are University of Waikato students who pay to live on campus in one of the three fully catered halls of residence. Residential staff are senior students who pay to live in the halls of residence setting and are employed by the University of Waikato to take a leadership role with the resident students. The residential managers are employed full-time by the University of Waikato to oversee the management of the halls of residence and also live on campus in separate housing adjacent to the halls of residence setting.

The demographics of residents and residential staff living within the halls of residence setting varies throughout the academic year, as some residents leave the halls of residence and are subsequently replaced by new residents. Information made available by the University of Waikato Accommodation and Conference Services Office (ACSO) provided demographic data for residents as at September 2006. The data included resident gender, ethnicity, and age, but not the year of study a resident was enrolled in (ACSO, personal communication, December 4th, 2006). Of halls of residence residents 62.0% were female and 38.0% were male. Ages ranged from 17 years (0.7%) to 26+ years (3.4%), with 34.4% being 18 years, followed by 19 years (24.9%), 20 years (15.1%), 21 years (8.8%), 22 years

(7.2%), and 23-25 years (5.5%). While 53.4% of residents identified as New Zealand European, the remaining residents' ethnicity encompassed Asian/Chinese⁶² (16.4%), New Zealand Māori and European (7.6%), Pacific Island (5.0%), Other Ethnicities (4.9%), New Zealand Māori (4.6%), North American (4.1%), and European $(3.9\%)^{63}$.

Data Collection

Table 3.3 provides a timeline of the three data collection phases.

Table 3.3 Data collection timeline

2006 ^a	Data Collection Phases	Group and Interview Numbers
March - April	Phase One: Focus Group Interviews	1 Managers group
		1 Residential staff group
		8 Residential groups
June	Phase One: In-Depth Interviews	12 Resident interviews
September	Phase Two: Questionnaire Survey	501 Questionnaire participants
October	Phase Three: Focus Group Interviews	1 Manager group
		3 Residential staff groups
		3 Resident groups
October - November	Phase Three: In-Depth Interviews	6 Resident interviews

^a The 2006 academic year commenced February 27th and ended November 11th. The teaching recess breaks were between the 17th -28th April, 26th June – 7th July, and 21st August – 1st September.

grouping.

63 The ethnicity groupings were presented by the ACSO office as a combination of 'ethnicity' and 'nationalities' groupings.

61

⁶² The ACSO data was unable to separate Chinese residents from within the Asian ethnicity

Copies of the ethical applications submitted to the University of Waikato Faculty of Arts and Social Sciences Ethics Approval Committee for each phase of data collection are shown in the Appendixes⁶⁴.

3.4.1 Phase One Focus Groups Data Collection

A total of ten focus groups were undertaken during the first phase of the data collection process. One focus group was comprised of the three residential managers and a second focus group was comprised of nine residential staff selected from across the three halls of residence. The remaining eight focus groups comprised resident students including two Bryant Hall resident groups, three Student Village resident groups, and three College Hall resident groups.

3.4.1.1 Focus Group Selection

Residential Manager Group. The three residential managers were selected by virtue of their positions. A formal letter of invitation was given to the managers inviting them to participate in the focus group discussion group, along with a focus group information sheet and consent form⁶⁵. Over the previous year the researcher had maintained contact with the residential managers regarding the proposed research project and all three hall managers had indicated their support of the study.

Residential Staff Group. In March 2006 the researcher attended staff meetings with the residential staff at each of the three halls of residence to discuss the research project and to invite staff to participate in the residential staff focus group

The phase one in-depth interviews application is show in Appendix B.

⁶⁴ The phase one focus group application is shown in Appendix A.

The phase two questionnaire survey application is show in Appendix C.

The phase three focus group and in-depth interview application is shown in Appendix D

⁶⁵ All focus group participants and in-depth interviewee's were provided an Information Sheet and a Consent Form to sign. See Appendixes A-D.

discussion. Interested staff provided their contact details. Utilising the grounded theory principle of theoretical sampling, seven residential staff were selected to participate in the focus group interview based upon a balance of gender, halls of residence, and number of years as a staff member. A letter of invitation was sent to the seven residential staff inviting them to participate in the study⁶⁶. Residential staff not chosen to participate in the focus group interview were sent an email thanking them for their interest and informing them that the focus group had been filled.

Resident Groups (n=8). At the beginning of the 2006 academic year, as a part of the halls of residence resident orientation programme, residents were brought together in hall groups for a number of information lecture sessions. During one of these lecture sessions five minutes was made available to the researcher to outline the research project being undertaken in their halls of residence during 2006. In April the researcher held a number of information sessions in each of the three halls of residence dining rooms during a meal period. A brief outline of the research project was provided and residents interested in participating in a resident focus group interview were invited to come up and talk with the researcher. All interested students were given an invitation letter, and a focus group information sheet and consent form⁶⁷.

The initial research proposal outlined the undertaking of three residents' focus group interviews. This included one resident focus group at each of the three halls of residence. However, following the grounded theory principles of theoretical saturation of data and constant comparison of data, the researcher

⁶⁶ See Appendix A.⁶⁷ See Appendix A.

found that a further five resident focus group interviews were required⁶⁸. A summary of the eight resident focus groups is shown in Table 3.4.

Table 3.4 Phase one resident focus groups

Gender	Drinking status	(n)	Hall
Female	Drinkers & 1 non-drinker ^a	(6)	SV
Male	Drinkers	(6)	ВН
Mixed gender	Drinkers & 1 non-drinker	(6)	СН
Mixed gender	Drinkers	(6)	ВН
Mixed gender	Drinkers	(7)	SV
Mixed gender	Drinkers	(6)	SV
Mixed gender	Drinkers	(6)	СН
Mixed gender	Drinkers	(5)	СН

^a Only two non-drinking residents were available for the focus group interviews (four non-drinking residents were also interviewed during the one-to-one interviews).

3.4.1.2 Focus Group Procedures

The managers' focus group interview and the residential staff focus group interview were both held in the Student Village meeting room. The residents' focus group interviews were held in the corresponding halls of residence meeting room. The focus group interviews took approximately 50-60 minutes to complete and were tape-recorded. At the end of the interview, information identifying the on-campus counselling service was made available to interview participants⁶⁹. Food was provided, in the form of chocolate, for focus group participants as this was a customary practice within the halls of residence setting.

⁶⁸ A threshold of theoretical saturation was reached after eight focus group interviews.

⁶⁹ This was a standard procedure at the end of all focus group interviews and in-depth interviews in case any personal issues may have arisen for interviewees during the course of the interview.

The goal of the focus group interviews was to gain a resident and a residential staff perspective on the four areas of student drinking, binge drinking, student culture, and the binge drinking environment. A range of open-ended discussion questions were developed from the four research area aims⁷⁰. Using the principles of semi-structured interviewing, the discussion questions were used as a guide rather than as a structured interviewing schedule, and the interview discussion was allowed to flow freely as long as the topics of discussion remained broadly within the realms of the four research aim areas. The researcher would, in general, ask questions focused around one research area at a time until a level of theoretical saturation was achieved.

3.4.2 Phase One In-Depth Interviews Data Collection

In all, twelve resident in-depth interviews were undertaken, involving four residents from each of the three halls of residence.

3.4.2.1 In-Depth Interview Selection

In July the researcher held a number of information sessions in each of the three halls of residence dining rooms during meal periods. A brief outline of the research project and the in-depth interviews was discussed and an invitation offered for interested residents to come forward and talk with the researcher. Interested residents were given an invitation letter, an in-depth interview information sheet, and a consent form⁷¹. The consent form requested a range of demographic information including gender, number of years at university, if the resident was a domestic student or an international student, and whether the

⁷⁰ See Appendix A.⁷¹ See Appendix B.

student consumed alcohol or not. Those students who indicated that they consumed alcohol were also asked to identify themselves as either a 'lighter drinker' (one who rarely gets intoxicated when drinking) or a 'heavier drinker' (one who sometimes gets intoxicated when drinking). Using the grounded theory principle of theoretical sampling, residents were selected to represent a balance of halls of residence, gender, and drinking behaviour (including non-drinking). A summary of the selected in-depth interviewees' demographic information is shown in Table 3.5 and indicates that the researcher was able to obtain a good sample selection. The research design, of selecting in-depth interviewees from a self-selected volunteer group, risked the potential of sample bias. It was the researcher's experience that male drinking residents were often more forthcoming in volunteering to discuss their drinking experiences than other resident groups, therefore the researcher's request for and selection of female residents, non-drinking residents, and light drinking residents, helped to balance this volunteer bias.

3.4.2.2 In-depth Interview Procedures

Each in-depth interview was held in the resident's corresponding hall of residence meeting room. Each interview took 40-60 minutes to complete and was taperecorded. At the end of the interview, information identifying the on-campus counselling service was made available to the resident. Snack food, in the form of chocolate, was provided for the in-depth interviewees.

Similar to the phase one focus group interviews, the aim of the in-depth interviews was to gain a resident perspective on the four areas of student drinking, binge drinking, student culture, and the binge drinking environment. The in-

depth interviews utilised the same open-ended discussion questions and question procedures as the focus group interviews⁷².

Table 3.5 Phase one resident in-depth interviewees

Gender	Drinking status	Hall
Female	Non-drinker	SV
Female	Non-drinker	СН
Female	Moderate	СН
Female	Moderate	ВН
Female	Heavy	SV
Female	Heavy	СН
Male	Non-drinker	ВН
Male	Moderate	ВН
Male	Moderate	SV
Male	Heavy	SV
Male	Heavy	СН
Male	Heavy	ВН

3.4.3 Phase Two Questionnaire Survey Data Collection

In September 2006, a total of 501 residents (60.9% of the population) participated in the questionnaire survey. This total included 422 residents who completed the drinkers' questionnaire survey schedule⁷³ and 79 residents who completed the non-drinkers' questionnaire survey schedule⁷⁴. Further information detailing the survey sample is outlined on page 75.

 ⁷² See Appendix A.
 ⁷³ See Appendix E.
 ⁷⁴ See Appendix F.

3.4.3.1 Questionnaire Development

The drinkers' questionnaire schedule and the non-drinkers' questionnaire schedule were developed using a combination of new questions arising from the phase one interview data and by replicating questions (for purposes of comparison) used in previous alcohol surveys (Alcohol Advisory Council, 2005a; Babor et al., 2001⁷⁵; Donavan et al., 2001; IPRU, 2005;).

Drinkers' Questionnaire Development

The drinkers' questionnaire consisted of ninety questions and required approximately ten minutes to complete. An overview of the topics covered in the drinkers' questionnaire schedule is shown in Table 3.6 and Table 3.7. During July and August the drinkers' questionnaire was pilot tested on three resident focus groups at College Hall. The focus group interviews involved the interviewees completing the questionnaire schedule and then the researcher facilitating discussion on how interviewees experienced the questionnaire. This discussion included questions on the format and length of the questionnaire, the topics covered within the questionnaire, and the structure of individual questions. The fourteen new survey questions assessing resident drinking limits (see Table 3.7, q.39-52) was the section of the drinkers' questionnaire that required the most development during the pilot testing period. This testing focused upon the appropriateness of the fourteen questions in relation to resident drinking behaviour.

⁷⁵ Babor et al., (2001) review the 'AUDIT' Alcohol Use Disorders Identification Test.

Table 3.6 Drinkers' questionnaire schedule topics

Question topics	Related content	Question	References
Safe Drinking			
Safe drinking	Use of food, non-alcoholic drinks,	3-9	Donavan (2001).
practices	transport, friends, watching drinking.		
Alcohol Effects			
Positive effects of	Relaxation, buzz, meeting people	10-12	ALAC (2005a).
alcohol use			
Negative effects of	Bills, vomit, accident, aggression,	53-65	Donavan (2001).
alcohol use	passed out, sexual, drink driving,		
	academic		
Second-hand alcohol	Being woken up, baby-sitting others,	35-38	Donavan (2001).
effects	feeling unsafe, being bothered		
Attitudes			
Attitudes to	Drunkenness, blackouts, frequency,	13, 16, 17,	ALAC (2005a).
intoxication	intention of drinking	20	
Attitudes to	Pre-mediated drunkenness, social	18, 19, 21,	New questions.
alcohol	issues, gender issues	22	
Attitudes to	Drunkenness in the community	33	IPRU (2005).
community			
Attitudes to	Frequency, amount, reasons,	23-26, 84,	New questions.
binge-drinking	drunkenness, self-assessment, resources	85	
Student Culture			
Student culture	Pre-knowledge, role of alcohol, halls of	27-32, 34	New questions.
	residence rules		
Demographics			
Demographic	Gender, age, year of university study,	86-90	Donavan (2001).
information	hall of residence, ethnic identity		

Table 3.7 Drinkers' questionnaire schedule topics continued

Question topics	Related content	Questions	References
Drinking Behaviour			
Standard drink	Knowledge and counting drinks	14, 15	New questions.
behaviour			
Drinking limits	Limits when residents slow down or	39-52	New questions.
behaviour	stop their drinking		
Drinking	Frequency of drinking, six or more	2, 78, 80	AUDIT questions
behaviour	drinks, blackouts		
Drinking	Choice of alcohol, time drinking,	1, 67, 69,	New questions.
behaviour	frequency leave the hall, drinking	73, 74, 75,	
	outside the hall, drunkenness,	79, 81, 82,	
	drinking pattern, friends drinking,	83	
	enjoy drinking		
Drinking	Typical drinking, largest in four	66, 70, 71,	Donavan (2001).
behaviour	weeks, place of drinking, drinking	72, 76, 77	
	days		
Drinking	Last drinking occasion	68	ALAC (2005a) &
behaviour			Donavan (2001).

Non-Drinkers' Questionnaire Development

Following Donavan et al., (2001) non-drinking was defined as a resident not having consumed any alcohol in the previous twelve month period. The non-drinkers' questionnaire consisted of thirty-six questions and required five to ten minutes to complete. The non-drinkers' questionnaire schedule included twenty-five questions taken from the drinkers' questionnaire and eleven extra questions investigating specific non-drinking issues. An overview of the topics covered in the non-drinkers' questionnaire schedule is shown in Table 3.8. In August the

non-drinkers' questionnaire was pilot tested during two in-depth interviews with non-drinking College Hall residents. The in-depth interviews involved the interviewees completing the questionnaire schedule and then the researcher facilitating discussion regarding how the interviewee experienced the questionnaire. This discussion included questions on the format and length of the questionnaire, the topics covered within the questionnaire, and the structure of individual questions. The survey questions assessing pressure to drink within the halls of residence setting (see Table 3.8, q.25-28) was the area of the non-drinkers' questionnaire schedule that underwent the most development during the pilot test period.

Table 3.8 Non-drinkers' questionnaire schedule topics

Question topics	Description of questions	Questions ^a	References
Alcohol Effects			
Second-hand alcohol	Being woken up, baby-sitting	17-20	Donavan (2001).
effects	others, feeling unsafe	(35-38)	
Attitudes			
Attitudes	Drunkenness, frequency	1 (13),	ALAC (2005a).
intoxication		3 (17)	
Attitudes	Gender issues	4 (21),	New questions.
alcohol		5 (22)	
Attitudes	Drunkenness in the community	15 (33)	IPRU (2005).
community			
Attitudes	Frequency, amount, reasons,	6-9	New questions.
binge-drinking	drunkenness	(23-26)	
Student culture			
Student culture	Pre-knowledge, role of alcohol,	10-14 (27-	New questions.
	halls of residence rules	32), 16 (34)	
Non-Alcoholic Events			
Non-alcoholic events	Hall organised events, Waikato	21-24, 29,	New questions.
	Student Union organised events	30	
Drinking Friends			
Drinking friends	Socialising with drinking friends,	25-28	New questions.
	pressure to drink alcohol		
Demographics			
Demographic	Gender, age, year of university	32-36	Donavan (2001).
	Gender, age, year of university study, hall of residence, ethnic	32-36 (86-90)	Donavan (2001).
Demographic			Donavan (2001).

^aBracketed numbers represent corresponding question numbers in the drinkers' questionnaire schedule.

3.4.3.2 Questionnaire Administration

Following discussions with a number of residential staff and residents, it was decided that if the questionnaires were delivered en masse to residents in their accommodation blocks, it was highly likely that the questionnaire would become a focus of resident discussion. To avoid collusion and to encourage honest accurate responses, the halls of residence dining room area during meal periods was chosen as the venue and time to invite residents to complete the questionnaire survey. Administering the questionnaire in the dining room during these times allowed the researcher an opportunity to invite residents to participate in the study and to answer any questions residents may have about the study. Residents completing the questionnaire were asked to sit at the back of the dining room by themselves and complete the questionnaire in privacy. Survey participants were given a chocolate fish⁷⁶. It was also decided that entry into a draw for an I-pod music player would be offered to all hall residents who participated in the survey. One I-pod player would be made available at each of the three halls of residence and the winner's name would be drawn in the hall dining room once the survey was completed.

The questionnaires were distributed in two stages. The first stage involved the researcher administering the questionnaires from the hall dining room area over a two day period and the second stage involved a mail out of questionnaires to residents who had not completed a questionnaire during the first stage.

⁷⁶ A chocolate fish is regularly used in the halls of residence to reward resident participation.

First Stage Questionnaire Administration

The researcher sat in each halls of residence dining room area during meal times over a two day period⁷⁷. While in the dining room the researcher would periodically make an announcement to residents briefly outlining the survey and inviting any interested residents to complete the questionnaire. Residents undertaking the questionnaire were given an information sheet⁷⁸ and either a drinkers' questionnaire 79 or a non-drinkers' questionnaire 80. Residents were asked to complete the questionnaire at the back of the dining room area where there was space and privacy available to them. Once completed, the surveys were placed into a locked collection box. Residents were given a chocolate fish and were offered the opportunity to enter into a draw to win an I-pod music player. All residents wishing to be entered into the I-pod draw had their name highlighted on a resident list. The questionnaire information sheet reassured residents that it was not possible to link the resident names on the I-pod competition list with the completed questionnaires. The researcher's experience was that all residents submitting a questionnaire asked to be entered into the I-pod draw. Maintaining the competition list was valuable in that it stopped residents from completing more than one questionnaire to enter into the I-pod draw (or to gain a second chocolate fish) and it also provided a record of those residents who had not yet completed the survey and required the second stage questionnaire mail out.

Second Stage Questionnaire Administration

Having completed two days in the halls of residence, on the third day a letter of invitation to participate in the survey, along with an information sheet and

⁷⁷ I was unable to administer the questionnaire at College Hall during the second day evening meal period as a special function was being held in the dining room area at that time.

 ⁷⁸ See Appendix C.
 ⁷⁹ See Appendix E.
 ⁸⁰ See Appendix F.

questionnaire, was sent to all residents who had not yet completed a questionnaire⁸¹. These letters were delivered through the halls of residence internal mail system. Residents receiving the invitation letter were given three days to complete the questionnaire and place it into a locked survey box held in the halls of residence office. Residents who completed the questionnaire were given a chocolate fish by the halls of residence office secretary and invited to enter into the I-pod draw. At the end of the fifth day the survey closed and the researcher collected all completed questionnaires. The researcher then returned to the halls of residence two days later during a meal period and a draw was held in the hall dining room area to present the I-pod player prize.

3.4.3.3 Questionnaire Survey Sample

A total of 501 residents', 60.9% of the total resident population, completed the questionnaire survey. The survey sample had a gender profile very closely matching the total halls of residence population (see Table 3.9).

Table 3.9 Questionnaire survey sample across gender

<u> </u>	Survey sa	mple	Total research po	pulation
Gender	% column	(n)	% column	(n)
Female	60.7	(304)	62.0	(507)
Male	39.3	(197)	38.0	(312)
Total	100.0	(501)	100.0	(822) ^a

^aThis total does not include the three residential managers, as they did not participate in the survey.

⁸¹ See Appendix C.

Table 3.10 shows a breakdown of the survey participants across the three halls of residence. These results indicate that Bryant Hall and Student Village residents were slightly over represented in the survey sample and College Hall residents were slightly under represented. This difference across the halls of residence is most likely explained by the fact that the researcher was unable to administer the questionnaire during the evening meal on the second day of the survey administration period at College Hall.

Table 3.10 Questionnaire survey sample across halls of residence

Survey sample		ample	Total research population	
Gender	% column	(n)	% column	(n)
Bryant Hall	26.5	(133)	24.6	(201)
Student Village	39.9	(200)	35.9	(295)
College Hall	33.6	(168)	39.5	(325)
Total	100.0	(501)	100.0	(822) ^a

^aThis total does not include the three residential managers

Table 3.11 presents the ethnic identity of the questionnaire respondents and Table 3.12 the age distribution. In both cases there is a close, but not exact match with the total research population, e.g. New Zealand residents are slightly over-represented, as are 18 and 19 year olds.

Table 3.11 Questionnaire survey sample across ethnicity groupings

-	Survey sa	ample	Total research	population
Ethnicity	% column	(n)	% column	(n)
NZ European	58.4	(292)	53.4	(437)
Asian/Chinese ^a	12.8	(64)	16.4	(135)
NZ Māori	7.8	(39) ^d	4.6	(38)
NZ Māori and European	7.0	(35)	7.6	(63)
Pacific Island	5.0	(25)	5.0	(41)
European	3.2	(16)	3.9	(31)
North American	3.0	(15)	4.1	(34)
Other	2.8	(14)	4.9	(40)
Total	100.0	(500) ^b	100.0	(822) ^c

^a The survey sample also separated Chinese residents' (8.2%, n = 41) from other Asian residents' (4.6%, n = 23). The ACSO data was unable to separate these two categories.

Seventy-five percent of survey respondents reported they were enrolled in their first year of study, followed by 8.8% of residents in their second year of study, 7.8% of residents in their third year of study, 2.8% of residents in their fourth year of study, and 5.4% of residents were undertaking graduate study. Although corresponding total research population comparison data was not available, discussion with the residential managers indicated that sample appeared reasonably representative of the halls of residence population.

One resident failed to indicate their ethnicity

^c This total does not include the three residential managers

^d More residents self identified as NZ Māori in the survey sample than were indicated in the general resident population data provided by the ACSO office. This difference may be explained by the fact that the ACSO data had been collected 10 months earlier from the resident accommodation application forms and it is possible that some residents with Māori ethnicity may have changed their ethnic identification to Māori during the intervening 10 month period.

Table 3.12 Questionnaire survey sample across age

	Survey sa	ımple	Total research	population
Age	% column	(n)	% column	(n)
17	0.4	(2)	0.7	(6)
18	41.5	(208)	34.4	(282)
19	28.1	(141)	24.9	(204)
20	10.8	(54)	15.1	(123)
21	6.4	(32)	8.8	(72)
22	5.6	(28)	7.2	(59)
23-25	4.2	(21)	5.5	(45)
26+	3.0	(15)	3.4	(28)
Total	100.0	(501)	100.0	(822) a

^a This total does not include the three residential managers

Of the total 501 residents who completed the questionnaire survey, 84.2% of residents completed the drinkers' questionnaire indicating that they had consumed alcohol at least once in the previous twelve month period and 15.8% of residents completed the non-drinkers' questionnaire indicating that they had not consumed alcohol in the previous twelve month period.

3.4.4 Phase Three Focus Group Data Collection

The third phase of data collection included seven focus group interviews. One focus group was comprised of the three residential managers. The remainder of groups included one residential staff group and one resident group from each of the three halls of residence.

3.4.4.1 Focus Group Selection

Residential Managers Group. A letter of invitation was sent to the three residential managers inviting them to participate in a second follow-up focus group interview⁸².

Residential Staff Groups (n=3). A letter of invitation was sent to each residential staff member inviting them to participate in a residential staff focus group interview at their hall⁸³. The original research proposal outlined the undertaking of one residential staff focus group combining all three halls of residence but following the grounded theory principle of theoretical sampling, the researcher decided that the data collection process would be enhanced if a separate residential staff focus group interview was undertaken at each of the three halls of residence. The undertaking of separate groups allowed the researcher to explore any similarities and/or differences in residential staff experiences across the three halls of residence. Residential staff who had participated in the March residential staff focus group were eligible to participate in the October focus group. A summary of the residential staff focus groups is shown in Table 3.13.

Table 3.13 Phase three residential staff focus groups

Hall	Gender	Drinking status	(n)
ВН	Mixed gender	Drinkers	(5)
SV	Mixed gender	Drinkers	(7)
СН	Mixed gender	Drinkers and one non-drinker	(5)

See Appendix D.See Appendix D.

Resident Groups (n=3). Three resident focus group interviews (one in each hall) were undertaken following the same procedures as were used in the April group interviews⁸⁴. Using the grounded theory principle of theoretical sampling residents were selected to represent a balance of gender. The researcher also attempted to gain a balance of drinking and non-drinking residents but the researcher was only able to gain one non-drinking resident to participate in a resident focus group. A summary of the resident focus groups is shown in Table 3.14.

Table 3.14 Phase three resident focus groups

Hall	Gender	Drinking status	(n)
ВН	Mixed gender	Drinkers	(6)
SV	Mixed gender	Drinkers & 1 non-drinker	(5)
СН	Mixed gender	Drinkers	(7)

3.4.4.2 Focus Group Procedures

The procedures undertaken during the seven focus group interviews were a replication of the first phase focus group interview procedures⁸⁵. In addition to being asked the discussion questions utilised during the phase one interviews, focus group participants were also asked to comment on a sample of results from the phase two questionnaire survey. The grounded theory principle of theoretical saturation was used to guide the focus group discussion.

See Appendix A.See Appendix A.

3.4.5 Phase Three In-Depth Interviews Data Collection

A total of six follow-up in-depth interviews were undertaken with residents who had participated in the phase one in-depth interviews.

3.4.5.1 In-Depth Interview Selection

The researcher sent an email to the original twelve resident in-depth interviewees asking if they would be interested and available to participate in a follow-up interview. A copy of the information sheet and consent form was included with the email⁸⁶. A follow-up email was sent three days later. A total of six interviewees responded indicating that they were available to participate in a follow-up interview (a summary is shown in Table 3.15).

Table 3.15 Phase three in-depth interviewees demographic information

Gender	Drinking Level	Hall
Female	Non-drinker	SV
Female	Moderate	ВН
Female	Non-drinker	SV
Male	Moderate	ВН
Male	Heavy	SV
Male	Heavy	СН

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⁸⁶ See Appendix D.

3.4.5.2 In-Depth Interview Procedures

The procedures undertaken during the six resident in-depth interviews were a replication of the phase one in-depth interview procedures⁸⁷. In addition to being asked discussion questions utilised during the phase one interviews, focus group participants were also asked to comment on a sample of results from the phase two questionnaire survey. The grounded theory principle of theoretical saturation was used to guide the in-depth interview discussion.

3.5 Development of the Research Project

My interest in the general topic area was initially fostered during my employment as an alcohol and drug counsellor for Rotorua Hospital and subsequently Waikato Hospital during the late 1980's and early 1990's. In 1997, my appointment to the position of residential manager of Student Village halls of residence at the University of Waikato appeared to signal a change in career focus, but ultimately drew upon the knowledge and experiences associated with my years as a counsellor. Student drinking behaviours in the halls for which I was responsible had caused a degree of alarm prior to my arrival and, despite the implementation of pro-active measures intended to minimise problem behaviours, student drinking continued to be a cause of consternation. In 1999, I contacted an alcohol health promotion worker at Waikato Hospital to discuss my ongoing concerns about resident students' drinking behaviour within the halls of residence and in 2000, we jointly initiated a research project designed to assess drinking behaviours amongst the general University of Waikato student population (Adam et al., 2000). The following year, with the aim of building upon the findings of the 2000 study, I initiated and participated in a research project focusing specifically upon

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⁸⁷ See Appendix B.

the drinking behaviour of University of Waikato halls of residence students (Donavan et al., 2001). Although both the 2000 and 2001 research projects provided valuable information, large gaps in our knowledge of the phenomenon persisted and resident student drinking behaviour within the University of Waikato halls of residence continued to be a problem.

In 2005, I transferred to the position of Residential Manager at Orchard Park, which is a self-catered on-campus accommodation facility housing 110 students. As such, the resident student population profile at Orchard Park tends to be comprised of older students, more advanced in their studies and less inclined to view university as a predominantly social experience. Orchard Park therefore does not experience the same levels of problematic drinking behaviours, but my continuing involvement with other residential managers on campus ensured that my cognisance of, and disquiet concerning halls of residence students persisted. I considered that further research into the phenomenon was imperative and had also resolved to embark on doctoral studies. The latter appeared to offer an ideal opportunity for the former and this project is the result of that serendipitous alignment. Its genesis was further confirmed by my selection as a recipient of a 2005 D.V. Bryant Postgraduate Research Scholarship⁸⁸. A condition of the scholarship was that the recipient undertook a postgraduate research project investigating an area of life within the University of Waikato 'preferably with particular and specific applicability to the halls of residence'⁸⁹. My intended research fitted perfectly within these parameters, given that it aimed to investigate further not simply the incidence, but also the dynamics of resident student

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⁸⁸ The scholarship is provided by the University of Waikato in recognition of the D.V. Bryant Trust gifting Bryant Hall to the University of Waikato in 2004.

⁸⁹ Other than this stipulation, the scholarship provider has had no influence over the development of the research project, nor has it any claim over the ownership of the research findings.

drinking behaviour, thereby building upon the knowledge provided by the two previous University of Waikato studies. I envisage that the findings obtained from this research project will contribute to the development of further alcohol harm minimisation strategies within the University of Waikato halls of residence setting.

3.6 **Ethical Issues**

Throughout the research project, I have been employed in the position of residential manager of Orchard Park halls of residence, a part-time position of twenty hours per week. As the manager of Orchard Park, I did not have any responsibility for, or contact with, the residents of Bryant Hall, Student Village, and College Hall. Access to the halls' residents was negotiated with the hall residential managers, the University of Waikato Group Manager of Student Services, and subject to the ethical oversight of the University of Waikato Faculty of Arts and Social Sciences Human Research Ethics Committee⁹⁰. It was my experience during interactions with the halls' residents that they were unaware that I was the Manager of Orchard Park and knew me simply as a doctoral researcher. They therefore were unlikely to have felt obligated to participate in the research. I did however have a collegial relationship with the three hall managers and when meeting with them, I took great care to be explicit as to whether we were meeting to discuss research matters, or meeting to discuss collegial hall management matters.

The University of Waikato Student and Academic Services Division supported the research through the provision of resources including photocopying of

⁹⁰ Four 'Ethics Applications' were undertaken throughout the course of the study and are shown in Appendices A, B, C, and D.

questionnaires, chocolate bars for the in-depth interviewees and focus group participants, chocolate fish for the questionnaire participants, and three I-pods for the questionnaire prize draw.

All information gained from the phase one and phase three interviews in the form of written notes and tape recordings is held by the researcher in a secure filing cabinet in his office at the University of Waikato. All completed questionnaires gained from the phase two survey are also held by the researcher in his office. All electronic data including transcriptions of interview tape recordings and questionnaire survey data are held in the researcher's password protected lap-top computer.

To maintain confidentiality, the focus groups were held in a private meeting room within the halls of residence. Focus group participants were asked to respect each other's privacy and not to share information disclosed by others in the group.

Group participants were told to share only information they felt comfortable about and were informed that they had the right to decline to answer any question. It was acknowledged that the topic of alcohol usage could have been potentially sensitive and/or upsetting for research participants. For this reason the contact details of the University of Waikato counselling service were provided at the end of all interview sessions.

3.7 Strengths and Limitations of the Study

Strengths

Strengths of the current study included the combined use of qualitative and quantitative methods during the data collection process, the resident response rate

(60%) to the questionnaire survey, and the number of focus group (17) and one-to-one interviews (18) undertaken during the phase one and phase three data collection stages.

Patton (1997) has argued that the combined use of quantitative and qualitative methods allows for triangulation of the research data. In the current study, the use of focus group and one-to-one interviews during the first phase of the data collection process allowed exploration of the research aims and provided a foundation for the development of the questionnaire schedule. The administration of the questionnaire survey during the second phase enabled the collection of data from a large proportion of the resident population which compared favourably with other New Zealand student drinking studies (Kypri et al., 2009; Maclennan, 2005)⁹¹. Finally, the use of focus group and one-to-one interviews during the final phase of data collection allowed an opportunity to gain residents', and residential staff's, understandings of the questionnaire survey results. Together, the seventeen focus group interviews and eighteen one-to-one interviews, in conjunction with the questionnaire survey data, enabled the researcher to triangulate the research findings and to achieve a theoretical saturation⁹² of the research data (Glaser, 1978). This combined use of qualitative and quantitative methods provided a significantly more comprehensive account of the terrain than either method could have achieved individually.

The influences impacting upon resident drinking behaviour are multiple and complex (as will be discussed in the following chapters). The use of the Social

⁹¹ Kypri et al., (2009) reported a 63% response rate and Maclennan (2005) reported a 65% response rate.

⁹² Theoretical Saturation is achieved when the collection of new data does not provide any new key research concepts or any further coding categories.

Ecological Model (NIAAA, 2002a) provided the researcher with a valuable framework to use in identifying the variables affecting resident drinking and to explore how these variables interact with each other. The researcher expanded the NIAAA (2002a) three-level model to a six-level model – identifying the individual drinker, the peer group environment, the halls of residence environment, the institution/student culture environment, the local community drinking environment, and the national drinking environment/culture. The six-level Social Ecological Model also provided the researcher with a framework for discussion of the research findings within the thesis. Future research utilising the Social Ecological Model could add a seventh outer-level to identify international-influences that affect New Zealand.

When presenting the research findings (at conferences and in lectures) the researcher found the Social Ecological Model to be a very effective method of visually presenting the six-levels of influence impacting upon resident student drinking behaviour. A visual representation of these levels and the variables contained within them is detailed in Figure 3.1.

Limitations

As with any research, there were limitations with this project. They included problems around the reliability of data based on self-reporting, anomalies in the presentation of two survey questions, and the applicability of these research findings to other student populations.

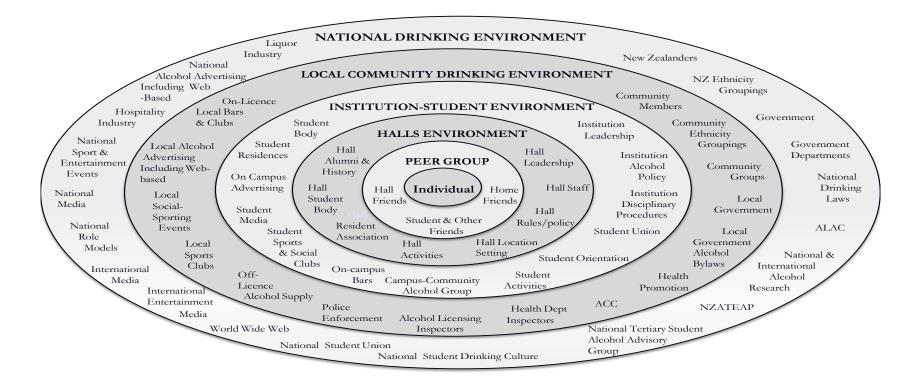


Figure 3.1 Social ecological model - six levels of influence impacting upon resident drinkers

International research has identified that students often under-report the amount of alcohol they consume, due to underestimating the number of standard drinks contained within drink containers (e.g. a bottle of RTD spirits or a bottle of beer) (White, Kraus, McCracken, & Swartzwelder, 2003; White, Kraus, Florn, Kestenbaum, & Mitchell, 2005). To enhance the reliability of residents correctly assessing their alcohol consumption, the Drinkers' Questionnaire schedule provided a visual guide of common drink containers and the number of standard drinks within those containers (Kypri et al., 2002). To encourage honest responses the drinking residents' questionnaire survey was anonymous and was administered in an area where respondents could sit in privacy, but could also be supervised to ensure that residents did not discuss responses.

It was unfortunate that in the current study the Drinkers' Questionnaire schedule question assessing the 'frequency of resident drinking behaviour' (q.2) did not include response options⁹³ that matched previous New Zealand survey questionnaires and the omission was not discovered until after the surveys had been completed. As a consequence, only a limited statistical comparison between the frequency of resident drinking in the current study and previous New Zealand surveys could be undertaken. A further problem arose with the Drinkers' Questionnaire schedule question assessing the 'number of drinks' a resident consumed (q.66) in that it included an unequal range of 'ordinal' response options⁹⁴. This unequal 'ordinal' range of response options meant that it was not possible to undertake more complex statistical analysis utilizing the 'number of

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⁹³ The current study response options where adapted from the AUDIT test and included the response options 'never', 'less than monthly', '2-4 times a month', '2-3 times a week', and 4 or more times a week.

⁹⁴ Question 66 was replicated from Donavan et al., (2001). The first three response options included two intervals (i.e. 1 or 2 drinks, 3 or 4 drinks, and 5 or 6 drinks) and the third response option included three intervals (i.e. 7 to 9 drinks).

drinks consumed' as a variable. This question could have included either a range of equal 'ordinal' response options (i.e. 1-2 drinks, 3-4 drinks, 5-6 drinks, 7-8 drinks) or a range of 'interval/ratio' response options (i.e. 1 drink, 2 drinks, 3 drinks) (Bryman, 2004).

The current study investigated the relationship between student culture and binge drinking behavior within the University of Waikato halls of residence student population. Some of the research findings are similar to the University of Otago halls of residence studies (Kypri et al., 2002; Maclennan, 2005). It is not possible however to know if the current study findings are applicable or transferrable to other university halls of residence student populations due to a lack of published research data⁹⁵. It is likely that further analysis of the National Tertiary Health surveys (IPRU, 2005 & 2007) will identify similarities and differences between universities' halls of residence student populations.

The current study's combined use of quantitative and qualitative research methods provided a rich source of research data. A limitation of this mixed-methods approach is that it proved to be a very time-consuming exercise as a significant amount of time was required to gather and analyse both types of data. It is a limitation of the current study that a fuller analysis of the research data was not able to be undertaken due to time constraints. This limitation is of particular relevance to the qualitative data, as a more detailed analysis of the 17 focus group interviews and 18 in-depth interviews could have provided further insight into resident drinking behaviour.

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⁹⁵ Currently, research data is only available detailing the drinking behaviour of University of Otago and the University of Waikato, halls of residence students.

These constraints notwithstanding, the following four chapters present an account of the data and the resultant findings.

4 RESULTS: RESIDENT DRINKING BEHAVIOUR

Resident Drinking Behaviour Research Aims:

- To determine resident student drinking patterns including the frequency of drinking, the location of drinking, the quantity of drinking, periods of time spent drinking, and the choices of alcohol consumed.
- ii. To determine resident students' understandings of a 'standard drink'.
- iii. To determine the frequency of drinking-related harms experienced by resident students who drink.
- iv. To determine the frequency of drinking related harm imposed on others by resident students who drink.

This chapter will present a combination of both quantitative data and qualitative data addressing the four research aims related to *resident drinking behaviour*. The following three result chapters will respectively present data addressing the research aims related to resident binge drinking behaviour, student culture, and the binge drinking environment. Quantitative data will be identified within the result chapters by referencing to the relevant survey questionnaire number and qualitative will be identified by referencing to a focus group discussion or a one-to-one interview.

This chapter will begin by detailing the proportion of drinking residents and non-drinking residents who participated in the study. The chapter will then present data outlining resident drinking patterns, resident experiences of drinking related harms, and the second-hand drinking effects experienced by residents.

Proportion of Drinking and Non-Drinking Residents 4.1

Of the halls residents who completed the questionnaire, 84.3% were identified as drinkers⁹⁶ and 15.7% were classified as non-drinkers⁹⁷. New Zealand residents reported the highest rate of alcohol usage (New Zealand Maori residents 94.9%, New Zealand European residents 91.8%, and New Zealand Maori and European residents 91.4%), and residents from Asia (60.9%) and China (29.3%) reported the lowest rates of alcohol consumption (see Table 4.1).

Table 4.1 Rate of alcohol consumption across ethnicity groupings

	Alcoho	Alcohol consumption in the previous 12 months							
	Yes		No						
Ethnicity	% within row	(n)	% within row	w (n)					
NZ Maori	94.9	(37)	5.1	(2)					
NZ European	91.8	(268)	8.2	(24)					
NZ Maori and European	91.4	(32)	8.6	(3)					
European	87.5	(14)	12.5	(2)					
North American	86.7	(13)	13.3	(2)					
Other Ethnicities	85.7	(12)	14.3	(2)					
Pacific Island	80.0	(20)	20.0	(5)					
Asian	60.9	(14)	39.1	(9)					
Chinese	29.3	(12)	70.7	(29)					
Total	84.4	(422)	15.6	(78) ²					

^a One non-drinking resident failed to indicate their ethnicity.

No significant association was found between a resident reporting alcohol usage and their gender or the hall of residence in which they resided.

⁹⁶ These residents completed the Drinkers' questionnaire indicating that they had consumed alcohol at least once during the previous twelve month period. ⁹⁷ These residents completed the Non-Drinkers' questionnaire.

To ensure statistical robustness when evaluating ethnicity as a variable amongst drinking residents, the nine ethnicity groupings listed in the table above are reduced (due to low cell count numbers) to four ethnicity groupings including New Zealand European residents, New Zealand Maori residents, Other Ethnicity residents, and Asian residents⁹⁸.

4.2 Residents Preferred Choice of Alcohol

A significant association (V = 0.59, p < .001) was found between a resident's preferred choice of alcohol (q.1)⁹⁹ and their gender (Chi-square $\chi^2 = 150.35$, df = 4, p < .001). The majority of male residents (59.1%) reported beer as their preferred alcohol of choice followed by pre-mixed spirits¹⁰⁰ (18.1%). In contrast, the majority of female residents (51.2%) reported pre-mixed spirits as their preferred alcohol choice, followed by wine (20.4%) and self-mixed spirits (16.4%). A summary of resident responses is shown in Table 4.2.

Discussion with female residents about their use of pre-mixed spirit drinks revealed that they consumed these drinks for a variety of reasons. Commonly they found the taste of a pre-mixed spirit drink preferable to the traditional female drink of wine, or the traditional male drink of beer. Female drinkers also discussed their concerns about drinking spiking incidents and commented that they preferred drinking from a bottle, in contrast to an open glass, as they could

residents in the Asian group is statistically low at 26 but this ethnicity grouping consistently responded differently on almost all survey questions and therefore required a separate grouping arrangement.

 $^{^{98}}$ New Zealand European residents will remain as one group (n = 268). The two groupings of New Zealand Maori and New Zealand Maori and European will be joined to form a New Zealand Maori group (n = 69). The four groupings of European, North American, Other Ethnicities, and Pacific Island will be joined to form an Other Ethnicities group (n = 59). The two groupings of Asian and Chinese will be joined to form an Asian group (n = 26). The number of drinking residents in the Asian group is statistically low at 26 but this ethnicity grouping consistently

⁹⁹ The question number will refer to the Drinkers' questionnaire survey unless stated otherwise. ¹⁰⁰ RTD drinks.

more easily protect the top of their bottle from drink spiking. A number of female residents also preferred the standardised alcohol content of a pre-mixed drink, rather than relying upon somebody else to pour them a spirit-based drink (which could hold an unknown volume of spirit-based alcohol within it).

Table 4.2 Residents preferred alcohol of choice across gender

	-		-			
	Fen	nale	M	Male		
	%		%	%		
Preferred alcohol	column	(n)	column	(n)	column	(n)
Pre-mixed spirits	51.2	(128)	18.1	(31)	37.8	(159)
Wine	20.4	(51)	4.7	(8)	14.0	(59)
Self-mixed spirits	16.4	(41)	15.2	(26)	15.9	(67)
Beer	6.4	(16)	59.1	(101)	27.8	(117)
No favourite drink	5.6	(14)	2.9	(5)	4.5	(19)
Total	100.0	(250)	100.0	(171)	100	(421)

Cost, Content, Taste and Brand of Alcohol

the brackets.

Although some residents reported that they had a particular brand of alcohol they preferred (or identified themselves with), most residents reported that pricing was the main factor they considered when purchasing alcohol.

I always just go to the alcohol store and get a \$10 dozen [of beer], just the cheapest dozen I can find. It doesn't bother me. It all tastes the same to me. If I could afford the good stuff I would but I don't really have the money to want to spend it on classy beer. (BH, male) 101

¹⁰¹ The bracketed information at the end of each quote will utilise the initials SV (Student Village), BH (Bryant Hall), and CH (College Hall) to identify the hall of residence from which the interview originated. A focus group discussion will be identified by the term 'focus group' included within

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A number of residents reported that when purchasing alcohol, in addition to pricing, they would also consider the percentage of alcohol content or number of standard drinks contained within a product, to ensure they were getting the best value for their money.

Like you can get Smirnoff Ice Red, but everyone buys Black because there is more alcohol in them and they are the same price. Like the red one tastes better but the black one has more alcohol and you are like, oh why would I [buy the red]. (SV, male)

A second resident also commented:

I get these 12% [alcohol] rum and cokes, in these little cans. These small V cans. It says 2.4 standard drinks per drink on it. 2 1/2 beers packed into this little can. You don't need many of those to have a good night. (BH, male)

When choosing between various brands of alcohol, taste was not always an influencing factor for some residents.

By the time you have had a few [drinks], the difference in taste drops a huge amount. (SV. male)

A female resident also commented:

I think sometimes maybe guys have more of a taste of what they drink.

Like they like the taste of beer, they actually enjoy drinking more than the girls. The girls drink to have a good time more. (SV, female)

Although drinkers' alcohol purchasing decisions were often based upon price, drinkers never-the-less had a good understanding of the brand image associated with the particular products of alcohol they were considering purchasing.

Sometimes this brand preference was expressed not in what brand residents would purchase but in what brand they would not purchase.

4.3 Frequency of Resident Alcohol Usage

Forty-three percent of drinking residents reported (q.2) consuming alcohol two or more times a week, including 6.2% who reported drinking four or more times a week. A significant gender difference was found in the frequency of male and female drinking (Mann-Whitney U, z = -4.05, p < .001). Fifty-five percent of male residents reported drinking at least twice per week, including 9.9% of males who reported alcohol use four or more times a week. In contrast, 35.1% of female residents drank at least twice per week, including 3.6% who drank four or more times a week. A summary of resident responses is shown in Table 4.3. No significant difference was found in the frequency of resident drinking across the four ethnicity groupings. Fifty-five percent of drinking residents reported (q.77) that Saturday was the day of the week that they typically consumed the largest amount of alcohol, followed by a Thursday (25.5%) and a Friday (17.2%).

Table 4.3 Frequency residents report consuming alcohol across gender

			•			
<u> </u>	Fen	nale	M	Male		
Frequency of	%		%		%	
resident drinking	column	(n)	column	(n)	column	(n)
4 or more times a week	3.6	(9)	9.9	(17)	6.2	(26)
2-3 times a week	31.5	(79)	45.0	(77)	37.0	(156)
2-4 times a month	54.2	(136)	37.4	(64)	47.4	(200)
Less than monthly	10.8	(27)	7.6	(13)	9.5	(40)
Total	100.0	(246)	100.0	(171)		

A significant difference was found in the frequency of drinking across the three halls of residence (Kruskal-Wallis H = 11.67, df = 2, p < .005). Residents living at College Hall halls of residence were found to have the largest proportion of residents drinking two or more times a week (52.5%), followed by Student Village (44.5%), and Bryant Hall (30.1%). Table 4.4 provides a summary.

Table 4.4 Frequency residents report consuming alcohol across the three halls of residence

	Colleg	College Hall		t Village	Bryant Hall			
Frequency	%		%		%			
of Drinking	column	(n)	column	(<i>n</i>)	column	(n)		
4 or more a week	7.8	(11)	6.8	(11)	3.4	(4)		
2-3 times a week	44.7	(63)	37.7	(61)	26.9	(32)		
2-4 times a month	38.3	(54)	47.5	(77)	58.0	(69)		
Less than monthly	9.2	(13)	8.0	(13)	11.8	(14)		
Total	100.0	(141)	100.0	(162)	100.0	(119)		

4.4 The Quantity of Alcohol Residents Are Consuming

Drinking residents reported (q.66) consuming a median of seven to nine drinks on a typical drinking occasion (see Table 4.5). Analysis showed no significant difference in the number of drinks residents consumed on a typical drinking occasion across the three halls of residence.

A significant association was found between the number of drinks a resident consumed on a typical drinking occasion and the frequency a resident reported drinking (Spearman's $r_s = .467$, p < .001). Residents who consumed larger

amounts of alcohol were also more likely to drink more frequently. This correlation was significant for both female residents (Spearman's $r_s = .412$, p < .001) and male residents (Spearman's $r_s = .471$, p < .001).

Table 4.5 Number of drinks residents consume on a typical drinking occasion

Number		Cumulative		Cumulative	
of	% of	% of	% of	% of	
drinks	drinkers	drinkers	all residents	all residents	(<i>n</i>)
1 or 2	7.6	7.6	6.4	6.4	(32)
3 or 4	6.7	14.3	5.6	12.0	(28)
5 or 6	20.4	34.7	17.2	29.2	(86)
7 to 9	32.8	67.5	27.5	56.7	(138)
10 to 12	12.8	80.3	10.8	67.5	(54)
13 to 15	12.4	92.6	10.4	77.9	(52)
16 to 18	3.8	96.4	3.2	81.1	(16)
19 to 21	1.9	98.3	1.6	82.6	(8)
22 or more	1.7	100.0	1.4	84.0	(7)
Total	100.0		84.0		(421)

A significant gender difference was found in the number of drinks male and female residents reported consuming on a typical drinking occasion (Mann-Whitney U, z = -5.95, p < .001). As shown in Table 4.6, female residents consumed a median of seven to nine drinks and males residents a median of ten to twelve drinks on a typical drinking occasion.

Table 4.6 Number of drinks residents consume on a typical drinking occasion across gender

	Gender									
		Female			Male					
Number		Cumulative			Cumulative					
of	% of	% of	% of	% of	% of	% of				
Drinks	drinkers	drinkers	all females	drinkers	drinkers	all males				
1 or 2	7.6	7.6	6.3	7.6	7.6	6.6				
3 or 4	8.8	16.4	7.2	3.5	11.1	3.0				
5 or 6	25.6	42.0	21.1	12.9	24.0	11.2				
7 to 9	38.4	80.4	31.6	24.6	48.6	21.3				
10 to 12	8.8	89.2	7.2	18.7	65.3	16.2				
13 to 15	8.0	97.2	6.6	18.7	84.0	16.2				
16 to 18	1.6	98.8	1.3	7.0	91.0	6.1				
19 to 21	0.8	99.6	0.7	3.5	96.5	3.0				
22 or more	0.4	100.0	0.3	3.5	100.0	3.0				
Total	100.0		82.2ª	100.0		86.8				

^a One female resident did not indicate the number of drinks consumed.

A significant difference was also found in the number of drinks residents consumed on a typical drinking occasion across the four ethnicity groupings (Kruskal-Wallis H = 16.03, df = 3, p = .001). New Zealand Maori residents, New Zealand European residents, and Other Ethnicity residents consumed a median of seven to nine drinks, and Asian residents five to six drinks. A summary of resident responses is shown in Table 4.7.

Table 4.7 Number of drinks residents consume on a typical drinking occasion across ethnicity

				Ethr	nicity			
	NZ		NZ	; =	-		_	
	Маоі	i	Europe		an Othe		Asia	า
Number	%		%		%		%	
of drinks	column	(n)	column	column (n)		column (n)		(n)
1 or 2	8.7	(6)	5.6	(15)	6.9	(4)	26.9	(7)
3 or 4	4.3	(3)	5.6	(15)	10.3	(6)	15.4	(4)
5 or 6	14.5	(10)	23.1	(62)	19.0	(11)	11.5	(3)
7 to 9	24.6	(17)	34.0	(91)	36.2	(21)	34.6	(9)
10 to 12	18.8	(13)	12.3	(33)	10.3	(6)	7.7	(2)
13 to 15	11.6	(8)	13.4	(36)	12.1	(7)	3.8	(1)
16 to 18	5.8	(4)	3.7	(10)	3.4	(2)	0.0	(0)
19 to 21	5.8	(4)	1.1	(3)	1.7	(1)	0.0	(0)
22 or more	5.8	(4)	1.1	(3)	0.0	(0)	0.0	(0)
Total	100.0	(69)	100.0	(268)	100.0	(58)	100.0	(26)

One-third of residents (33.0%) reported (q.67) that they would typically drink for up to three hours, a second one-third of residents (34.0%) reported drinking for four hours, and the remaining one-third of residents (33.0%) reported drinking for five or more hours. A significant association was found between the number of drinks a resident consumed on a typical drinking occasion and the period of time a resident reported drinking (Spearman's $r_s = .562$, p < .001). Residents who consumed larger amounts of alcohol were also more likely to drink for longer periods of time. No significant gender difference was found in the period of time male and female residents reported drinking on a typical drinking occasion.

The questionnaire survey (q.81) asked residents if their drinking behaviour had altered since attending university, 64.3% reported their drinking had increased, 24.8% that their drinking had stayed the same, and 11.0% that their drinking had decreased. No significant association was found between a resident's response to the question and their gender or their ethnicity grouping.

4.5 Drinking Setting

Two-thirds of drinking residents (69.9%) reported (q.72) that the halls of residence were the setting where they drank most often, followed by a friend's flat (16.6%), a night-club or pub (6.6%), a family home (4.3%), and elsewhere (2.6%). No significant association was found between where a resident would most often drink and their gender, or the hall's of residence in which they resided.

Two-thirds of residents (64.4%) also reported (q.72) that the halls of residence were the setting where they consumed their largest amounts of alcohol, followed by a friend's flat (19.0%), a night-club or pub (8.1%), a family home (4.0%), elsewhere (3.8%), and a sports club (0.7%). No significant association was found between where a resident consumed their largest amounts of alcohol and their gender, or the hall's of residence in which they resided.

One-third of residents (32.1%) reported (q.73) that once they start drinking in the halls of residence they would always leave the hall and continue socialising elsewhere and a further 31.4% of residents reported that they would leave the hall seventy-five percent of the time (see Table 4.8). A significant gender difference was found in the frequency male and female drinking residents left the hall and continued socialising elsewhere (Mann-Whitney U, z = -3.32, p = .001). The

largest grouping of female drinking residents (39.4%) reported that they would always socialise elsewhere after drinking in the halls of residence. In contrast, 21.6% of male drinking residents reported that they would always socialise elsewhere after drinking in the halls of residence. Overall, 67.9% of female and 57.3% of male drinking residents would leave the hall and socialise elsewhere at least seventy-five percent of the time. No significant association was found between the frequency that a resident left their hall to socialise elsewhere and their ethnicity, or the hall of residence in which they resided.

Table 4.8 Frequency residents report leaving the hall and socialising elsewhere across gender

Frequency residents	Fen	nale	le Ma		Total	
leave the Hall and	%		%		%	
socialise elsewhere	column	(n)	column	(n)	column	(n)
Always	39.4	(97)	21.6	(37)	32.1	(134)
75% of time	28.5	(70)	35.7	(61)	31.4	(131)
50% of time	13.8	(34)	19.3	(33)	16.1	(67)
25% of time	13.4	(33)	15.8	(27)	14.4	(60)
Never	4.9	(12)	7.6	(13)	6.0	(25)
Total	100.0	(246)	100.0	(171)	100.0	(417)

Residents explained that the cost of alcohol and the convenience of having friends living close by were the two main reasons why residents undertook most of their drinking within the halls of residence setting.

R¹⁰²: Why does it [the drinking] occur in the hall mostly?

-¹⁰³Because it's cheaper.

-Yeah.

R: Any other reasons?

-It's an instant party.

-People just come together real fast. (SV, focus group)

A resident discussed his drinking in the halls of residence.

R: Where would you do most of your drinking?

In the hall here first because that is cheaper, and then go into town to have a few. Other times I have gone into town and I have not been prepared here and [I] have had to spend money to get to that, up to ten (beers) into me.

R: So that is quite deliberate to get some alcohol into you here before you have gone [into town]?

Yeah.

R: How many [beers] might you have got into you before you have gone [into town]?

Probably about six or seven, maybe, depending upon how much I have brought. Perhaps maybe if it was a night out, I might have brought cheaper beer and more of it perhaps.

R: And when you are in town how much would you drink there?

Maybe two or three because they are quite expensive. But during O-week when there were promotions on, you would drink more because of the pricing.

-

 $^{^{102}}$ R indicates the researcher speaking.

¹⁰³ Dashes (-) represent successive focus group participants speaking.

R: On those evenings when you left here [for town] would you say you were drunk when you left here?

Yes, but not excessively. But yes, in a good mood. (BH, male)

When asked to comment on why female residents were more likely than male residents to travel into town and continue socialising, residents remarked that female residents would often drink alcohol as part of a social experience and going into town was seen as an extension of this socialising experience. In contrast, it was explained that some male residents would often drink alcohol for the sake of drinking and therefore moving on into town was not seen as such a necessary component of their drinking experience.

R: And the [survey] finding that females are more likely than males to go to town, what meaning do you make of that?

-Girls like to dance probably more than boy. They go to clubs to dance and stuff.

- -Girls like to dress up [and] then go around town.
- -Yeah definitely.
- -Sometimes guys treat drinking as 'sit down have a beer and relax'. But for girls [it is] 'oh drinking we're going to town'.
- -Sometimes guys drink too much. They will coma out and they don't make it to town.
- -Yeah, heaps of [male] people.

R: So those guys, they are drinking for the sake of it?

-Yeah.

R: Whereas for females it [drinking] is just part of the whole night [experience]?

-Yeah, it is part of the whole night (female resident).

R: Any comment from you guys?

- -Pretty much hit the nail on the head. (male resident)
- -Yeah, it's more of a sit down and relax for me at least, and the girls all are pushing to end up in town. (male resident) (SV, focus group)

A second focus group also commented on gender differences.

-The boys focus on drinking whereas the girls focus on dancing or socializing. (CH, focus group)

4.6 Resident Drinking Outside the Halls of Residence

Sixty-two percent of drinking residents who travel into town (to continue socialising in city bars after initially drinking in the halls of residence) report (q.74) that they would typically consume no more than two drinks while in town (see Table 4.9).

Table 4.9 Number of drinks residents would typically consume in town

Number of drinks	% column	(<i>n</i>)	Cumulative %	
None	13.6	(55)	13.6	
1 or 2	48.0	(194)	61.6	
3 or 4	26.2	(106)	87.9	
5 or 6	7.2	(29)	95.0	
7 or 9	3.7	(15)	98.8	
10 or more	1.2	(5)	100.0	
Total	100	(404)		

A significant gender difference was found in the number of drinks male and female residents reported consuming in town (Mann-Whitney U, z = -4.51, p <

.001). Female residents (17.1%) were twice as likely as male residents (8.5%) to report they did not consume any alcohol while in town. Overall, 70.0% of female drinking residents consumed no more than two drinks while in town, in contrast to 49.4% of male drinking residents (See Table 4.10).

Table 4.10 Number of drinks residents would typically consume in town across gender

		Gender								
	-	Female			Male					
Number of	% within	Cumulative		% within		Cumulative				
Drinks	column	(n)	%	column	(n)	%				
0	17.1	(41)	17.1	8.5	(14)	8.5				
1 or 2	52.9	(127)	70.0	40.9	(67)	49.4				
3 or 4	21.7	(52)	91.7	32.9	(54)	82.3				
5 or 6	6.3	(15)	98.0	8.5	(14)	90.8				
7 to 9	2.1	(5)	100.0	6.1	(10)	96.9				
10 or more	0.0	(0)		3.0	(5)	100.0				
Total	100	(240)		100	(164)					

Factors Influencing Resident Drinking in City Bars

Many residents reported that they would ensure that they were in a state of intoxication before they left the halls of residence to move into the city. It was expensive to drink in town (unless a bar was running a drink price promotion), so residents would deliberately consume enough alcohol to ensure their level of intoxication maintained itself for a period of time. A resident discussed her drinking behaviour in town:

Yeah, I pretty much always go into town when I drink. But I never drink in town.... [I] just dance and drink water because I don't want to spend money on drinks. (BH, female)

Residents frequently commented that they could not allow themselves to get too intoxicated before leaving the halls of residence as they had to ensure that they were still able to gain entry into bars. A second resident discussed her drinking before leaving the halls of residence and then once in town:

R: Once you have finished the bottle or a bit over a bottle [of wine], what sort of condition would you be in at that point?

I would be laughing and I would be running around going to see people at different blocks. I am not an angry drunk, I am a happy drunk.

R:... And in terms of your body what sort of state would it be in?

I can still walk and then maybe I might slur my words a little bit, but other than that I would be alright. I would be able to get into the pubs at town.

R: Is that a good guide ...?

Yes. I wouldn't be stumbling. I would just be slurring my speech a little bit. I wouldn't be okay to drive or anything like that. But I would be alright to walk.

R: Then when you get into town, are you drinking? *No*.

R: So the buzz you have got from here in hall, once you get into town how long does that last for?

The whole night if I have had one and a half bottles of wine. I normally don't drink in town, unless it is \$3 or \$4 nights because I don't like to mix drinks. (SV, female)

When residents did purchase an alcoholic drink in town, many commented that they would often make the drink last as long as they could.

Personally for me, if I do in fact buy a drink in town, which under my financial circumstances doesn't often happen because they are so outrageously expensive, it would usually be in my hand the whole time. (BH, male).

A number of residents reported that they would often sober up by the time they left town to return to the halls of residence.

R: By the time you leave town what sort of condition would you be in?

I would be sobered up by then. Unfortunately. Fully sobered up by then.

(SV, male)

Residents commented that if they were very drunk when they arrived in town, they could on occasion have difficulty gaining access to a bar and therefore they would often go to great lengths to act sober while approaching the bar doorperson. Residents also commented that they became familiar with which bars in town were easier to gain access to than others. Residents participating in a focus group discussed their approaches to gaining access to bars while drunk:

-Sometimes you have like a friend who is sober driving and she will look after you like and take you into the pub and will act straight.

-Just before you are at the door, act straight and be sober, so we can get in.

R: Is that easy to do?

-Take a deep breath.

-Just take it easy and once you're in.

-Act straight.

R: So we could say that that is pretty common that people act straight once they get up to the door?

-Yeah.

R:... Are some bars harder to get in than others?

-Yeah.

-Yip.

R: Do you get to know which bars are easier to get in to?

-Yip.

-Yeah.

R: That becomes common knowledge.

-Yeah.

R: Are most of them easier or most of them harder?

-Most of them are easier.

-The popular ones are easy. (CH, focus group)

4.7 Standard Drinks

The questionnaire survey (q.14) asked drinking residents to respond to the statement 'I know what a standard drink is'. Seventy-three percent of residents agreed with the statement, 13.4% neither agreed nor disagreed, and 13.0% disagreed. No significant differences were found in residents' responses to the statement across gender or halls of residence groupings.

Although many residents commented that they counted the number of drinks they consumed using the standard drinks labelling system, their reported reasons for doing so often varied. The questionnaire survey (q.15) asked drinking residents to respond to the statement 'To stay in control of my drinking I count the number of

drinks I have'. Thirty-two percent of residents agreed with the statement, 25.7% neither agreed nor disagreed, and 42.6% disagreed. No significant differences were found in residents' responses to the statement across gender or halls of residence groupings. A resident commented on the number of drinks she consumed to control her drinking:

I count my drinks to know how much I have drunk. Just because I know how much I can handle, before I am too much out of control. I am like, I go I have had five, I won't drink anymore tonight. (SV, female)

Some residents however reported that they counted the number of drinks they consumed to ensure they got drunk. Other residents reported that they utilised the standard drinks measuring system to ensure a fair competition while undertaking drinking games with others. A number of residents also reported that they read the standard drink labelling system on alcoholic products to ensure that they were getting the best alcohol content value for their money. Residents participating in a focus group discuss their use of the standard drinking information:

R: So that [standard drinking labelling] has actually given you some information about the alcohol content of the drink?

-Yeah [general agreement].

-.... I suppose so you can say, if you go up against a mate [in a drinking competition], how many [drinks] have you had. You can say you are drinking 4% or 1% drinks.

-I think it is a financial thing as well. You look at the alcohol and you think that is \$12 for a packet of 2.5 standard drinks and you look at the other that is 1.5 [standard drinks]. The other will get you off [drunk] faster.

-And last longer. (BH, focus group)

4.8 Resident Drinking Related Harms

4.8.1 Frequency Residents Experience Drinking Related Harms

Discussion with residents during focus group interviews and one-to-one interviews revealed that many residents experienced a range of alcohol-related effects. Some residents reported these alcohol-related effects as infrequent events, while other residents reported them as weekly occurrences. Focus group participants listed some of the alcohol-related effects they had observed residents experiencing:

- -Fighting.
- -Spending their money.
- -Someone brought home a guy from town and he was so drunk that he actually went to the toilet on her floor. Terrible.
- -Hurting themselves.
- -Saying [verbally] hurting other people.
- -Bruises from falling over or someone bumping into them. People just always end up with random bruises that they don't know how they got.
- -The mess they make and the noise they make.
- -Just like people's lack of total consideration for anyone else.
- -Just caring about themselves, they are such nice people when they are sober but when they drink they are little shits.
- -Someone brought home someone else's boyfriend one time and they didn't know. They were terrible the next day. Yeah.
- R: So that is like doing something they later regret?
- -Yeah, I think that is quite big. As well as people hooking up when they come home after town. They are drunk and it just happens and the next day seeing each other and it is really weird.

-Yeah where you get to the point where you wish you could either kill them or cry.

R: 'Hook-ups' have been brought up many times in other groups... Do you think the regret about it is a rare thing, or sometimes, or often?

-I would say it is probably more regret most of the time rather than not regret.

-Or one person likes them but the other person is the opposite. One person wants to, that is why they were there, but the other person didn't want to.

-I agree with that. More regrets than happy about it. (CH, focus group)

The questionnaire survey (q.53-65) asked residents to report how frequently in the previous six month period they had experienced a range of drinking related harms. Overall, the most common alcohol-related harms reported by a majority of residents were vomiting (67.7%), missing a class due to drinking (58.4%), and physically hurting themselves due to drinking (57.0%). A summary of resident responses is shown in Table 4.11.

Table 4.11 Frequency residents report experiencing alcohol-related harms

·				Freque	ncy of harm experience	ed in th	ne past six months			
	Weekly		Mont	nly	3-5 tim	es	1-2 times	i	At least	once
Alcohol-related harms	% row	(n)	% row	(n)	% row	(<i>n</i>)	% row	(n)	Total % row	(total n)
Academic			<u>-</u>	•	•	-	•	-	-	
Missed a class because of drinking	6.9	(29)	10.0	(42)	18.5	(78)	23.0	(97)	58.4	(246)
Failed to complete an assignment on time or do as well could have	1.4	(6)	3.6	(15)	5.2	(22)	18.1	(76)	28.3	(119)
Impaired performance during a test or exam	0.2	(1)	1.2	(5)	2.9	(12)	12.4	(52)	16.6	(70)
Physical										
Vomited	1.4	(6)	6.4	(27)	19.7	(83)	40.1	(169)	67.7	(285)
Physically hurt self	2.4	(10)	8.1	(34)	14.1	(59)	32.5	(136)	57.0	(239)
Passed out	0.0	(0)	1.2	(5)	5.7	(24)	24.9	(105)	31.8	(134)
Been involved in a physical fight or been aggressive	0.7	(3)	1.2	(5)	4.8	(20)	17.8	(75)	24.5	(103)

Table 4.11 continued. Frequency residents report experiencing alcohol-related harms

	Frequency of harm experienced in the past six months										
_	W	eekly	Mont	thly	3-5 tim	ies	1-2 time	es .	At leas	st once	
Alcohol-related harms	% row	(n)	% row	(n)	% row	(n)	% row	(n)	Total % row	(total n)	
Sexual activity			-	-	-	-		-	-		
Engaged in unplanned sexual activity	1.7	(7)	5.0	(21)	5.2	(22)	21.4	(90)	33.3	(140)	
Ended up in a sexual situation weren't happy about	0.5	(2)	0.5	(2)	3.3	(14)	19.5	(82)	23.8	(100)	
Not used contraceptive protection	0.5	(2)	0.7	(3)	3.6	(15)	13.6	(57)	18.4	(77)	
Vehicle related											
Gotten in to a vehicle with a driver who had too much to drink	1.0	(4)	2.6	(11)	6.7	(28)	24.9	(105)	35.2	(148)	
Driven a vehicle while intoxicated from alcohol	0.2	(1)	1.4	(6)	4.0	(17)	15.2	(64)	20.9	(88)	
Financial											
Unable to pay bills	0.5	(2)	1.4	(6)	1.9	(8)	9.5	(40)	13.3	(56)	

Resident Drinking related Harms and Resident Drinking Patterns.

A significant (p < .001) association was found between twelve of the thirteen drinking related harms (excluding difficulties in paying bills) and the number of drinks a resident reported consuming on a typical drinking occasion, the number of drinks a resident reported consuming on their last drinking occasion, and the largest number of drinks a resident reported consuming during the previous four weeks period (all analysis undertaken using Spearman's correlation coefficient). A significant (p < .001) association was also found between all drinking related harms and the frequency a resident reported drinking alcohol (Spearman's correlation coefficient). These results indicate that residents who consume the largest amounts of alcohol, and who drink most frequently, are also most likely to report experiencing higher rates of alcohol-related harms. A summary of the Spearman's correlation coefficient results is shown in Table 4.12. Interestingly, the strongest correlations were found between the number of drinks a resident consumed on a typical drinking occasion and the frequency at which a resident reported 'passing out' due to drinking ($r_s = .542$, p < .001), the number of drinks a resident consumed on a typical drinking occasion and the frequency at which a resident 'missed a class' due to drinking ($r_s = .454$, p < .001). There was also a strong correlation between the frequency of alcohol consumption and the frequency at which a resident 'missed a class' due to drinking ($r_s = .491$, p < .001).

Table 4.12 Spearman's correlation coefficient analysis results of the relationship between the frequency residents experienced an alcohol-related harm and four resident drinking behaviours

		Drinking	behaviour	
	No. of drinks on a typical	No. of drinks on the last	Largest no. of drinks in the	Frequency of
Alcohol-related harms	drinking occasion	drinking occasion	past four weeks	resident drinking
Academic				
Missed a class because of drinking	$(r_s = .454, p < .001)$	$(r_s = .370, p < .001)$	$(r_s = .487, p < .001)$	$(r_s = .491, p < .001)$
Failed to complete an assignment on time or do as well could have	$(r_s = .198, p < .001)$	$(r_s = .224, p < .001)$	$(r_s = .298, p < .001)$	$(r_s = .278, p < .001)$
Impaired performance during a test or exam	($r_s = .204$, p < .001)	$(r_s = .181, p < .001)$	$(r_s = .243, p < .001)$	$(r_s = .258, p < .001)$
Physical				
Vomited	$(r_s = .369, p < .001)$	$(r_s = .314, p < .001)$	$(r_s = .362, p < .001)$	$(r_s = .350, p < .001)$
Physically hurt self	$(r_s = .348, p < .001)$	$(r_s = .300, p < .001)$	$(r_s = .357, p < .001)$	$(r_s = .314, p < .001)$
Passed out	$(r_s = .542, p < .001)$	$(r_s = .215, p < .001)$	$(r_s = .247, p < .001)$	$(r_s = .267, p < .001)$
Been involved in a physical fight or been aggressive	(r_s = .206, p < .001)	$(r_s = .264, p < .001)$	$(r_s = .326, p < .001)$	$(r_s = .244, p < .001)$

Table 4.12 continued. Spearman's correlation coefficient analysis results of the relationship between the frequency residents experienced an alcohol-related harm and four resident drinking behaviours

		Drinking	behaviour			
_	No. of drinks on a typical	No. of drinks on the last	Largest no. of drinks in the	Frequency of		
Alcohol-related harms	drinking occasion	drinking occasion	past four weeks	resident drinking		
Sexual activity						
Engaged in unplanned sexual activity	$(r_s = .316, p < .001)$	$(r_s = .275, p < .001)$	$(r_s = .386, p < .001)$	$(r_s = .349, p < .001)$		
Ended up in a sexual situation weren't happy about	$(r_s = .231, p < .001)$	$(r_s = .230, p < .001)$	$(r_s = .277, p < .001)$	$(r_s = .212, p < .001)$		
Not used contraceptive protection	$(r_s = .241, p < .001)$	$(r_s = .242, p < .001)$	(r _s = .263, p < .001)	$(r_s = .229, p < .001)$		
Vehicle related						
Gotten in a vehicle with a driver who had too much to drink	$(r_s = .281, p < .001)$	$(r_s = .232, p < .001)$	$(r_s = .330, p < .001)$	$(r_s = .335, p < .001)$		
Driven a vehicle while intoxicated from alcohol	$(r_s = .224, p < .001)$	$(r_s = .168, p < .001)$	$(r_s = .272, p < .001)$	$(r_s = .284, p < .001)$		
Financial						
Unable to pay bills	$(r_s = .126, p = .01)$	$(r_s = .130, p < .01)$	$(r_s = .184, p < .001)$	$(r_s = .160, p = .001)$		

Drinking Related Harms across Gender

Male drinking residents were significantly more likely than female drinking residents to report experiencing eleven of the thirteen drinking related harms. Male residents were more likely (p < .001) to be associated with driving a vehicle while intoxicated, to have been involved in a physical fight or behaved aggressively, and to have vomited due to drinking. Male residents were also much more likely (p < .005) to have passed out, missed a class, and ended up in a sexual situation they were not happy about due to drinking. They were also more likely (p < .05) to have travelled in a vehicle with a drunken driver, had an impaired performance during a test or exam, failed to complete an assignment on time or done as well as they could have, engaged in unplanned sexual activity, and not used contraceptive protection due to drinking. The two alcohol-related harms that showed no significant gender difference were residents reporting an inability to pay bills due to drinking and residents physically hurting themselves while drinking. A summary of resident responses and the Mann-Whitney U test results is shown in Table 4.13.

Table 4.13 Resident drinking related harms over the previous six months across gender

	Frequency of harm experienced in the past six months										
	We	Veekly Month		onthly	thly 3-5 times			1-2 times		ast once	Gender
									Total	Total	significance*
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	z =
Alcohol-related harms	row %	row %	row %	row %	row %	row %	row %	row %	row %	row %	
Academic Missed a class because of drinking	4.8	10.0	8.4	12.4	15.1	23.5	26.7	17.6	55.0	63.5	-2.98, p < .005
Failed to complete an assignment on time or do well	0.4	2.9	3.2	4.1	5.2	5.3	15.9	21.2	24.7	33.5	-2.02, p < .05
Impaired performance during a test or exam	0.0	0.6	0.8	1.8	1.6	4.7	11.2	14.1	13.6	21.2	-2.17, p < .05
Physical Vomited	2.0	0.6	4.8	8.8	15.5	25.9	39.0	41.8	61.3	77.1	-3.63, p < .001
Physically hurt self	1.2	4.1	7.6	8.8	15.3	12.4	33.7	30.6	57.8	55.9	-0.05, p = .95
Passed out	0.0	0.0	1.2	1.2	4.8	7.1	19.1	33.5	25.1	41.8	-3.45, p <.005
Been involved in a physical fight or been aggressive	0.0	1.8	1.2	1.2	2.4	8.2	14.3	22.9	17.9	34.1	-3.93, p < .001

^{*}Mann-Whitney U test

Table 4.13 continued. Resident drinking related harms over the previous six months across gender

Frequency of harm experienced in the past six months											
	Weekly		Mo	Monthly 3-5 times 1-2 times		times	mes At least or		nce Gender		
									Total	Total	significance*
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	z=
Alcohol-related harms	row %	row %	row %	row %	row %	row %	row %	row %	row %	row %	
Sexual activity Engaged in unplanned sexual activity	0.8	2.9	3.6	7.1	5.2	5.3	20.3	22.9	29.9	38.2	-2.01, p < .05
Ended up in a sexual situation weren't happy about	0.4	0.6	0.4	0.6	3.2	3.5	14.7	26.5	18.7	31.2	-2.84, p < .005
Not used contraceptive protection	0.4	0.6	0.4	1.2	3.2	4.1	11.3	17.1	15.3	23.0	-1.96, p = .05
Vehicle related Gotten in a vehicle with a driver who had too much to drink	0.4	1.8	2.0	3.5	5.6	8.2	22.3	28.8	30.3	42.3	-2.66, p < .01
Driven a vehicle while intoxicated from alcohol	0.0	0.6	0.4	2.9	2.4	6.5	11.2	21.2	14.0	31.2	-4.38, p < .001
Financial Unable to pay bills	0.0	1.2	0.8	2.4	1.6	2.4	8.4	11.2	10.8	17.2	-1.94, p = .052

^{*}Mann-Whitney U test

Resident Memory Blackouts

A number of residents during focus group and one-to-one interviews commented that they had experienced memory blackouts from drinking excessive amounts of alcohol. Some residents described these instances of memory blackouts as a one-off event or as forgetting a small part of the evening.

Well there are some parts I can't remember but usually it's alright. It is only a few things I can't remember from the nights. (BH, male)

Other residents described their memory blackouts as a regular drinking effect.

I kind of just went straight onto the deep end, I was drinking so much. I don't really remember spewing much in the first year. There were quite a few blackouts.

R: Blackouts where you wouldn't remember what had happened the night before?

Hours at end not knowing what happened. Like I would always remember how I got home but there would always be some things in the night clubs that I wouldn't remember. (CH, female)

Overall, 5.5% of drinking residents reported experiencing an alcohol-related memory blackout on a weekly basis, 20.4% reported monthly, 33.4% reported less than monthly, and 40.8% reported that they had never experienced an alcohol-related memory blackout. No significant differences were found in the frequency residents experienced an alcohol-related memory blackout across gender or the three halls of residence.

4.8.2 Resident Attitudes towards Alcohol-Related Harms

Discussion with residents during focus groups and one-to-one interviews revealed that many residents showed little concern about the alcohol-related harms they

experienced as a consequence of their drinking. This attitude of indifference is illustrated by a resident discussing the alcohol induced blackouts she had experienced during her first year at university:

I experienced hours at end [of] not knowing what happened. Like I would always remember how I got home but there would always be some things in the night clubs that I wouldn't remember.

R: Did you use to coma-out as well during parts of the evenings?

No, I don't ever remember being coma'd-out. Actually [there was] one time.

R: So when you look back, what are your thoughts about that period?

I laugh at it.

R: Because?

It was a joke. It was a like a joke because I did some stupid things. (CH, female)

For many residents the alcohol-related harms associated with excessive alcohol use were often viewed as an acceptable and expected component of student drinking behaviour.

R: Knowing what we know about all those consequences that happen to some heavy drinkers, why aren't students more moderate in their drinking?

As I said, it is because it is socially acceptable ... so they go out and binge drink (BH, male)

Residents commented that within the halls of residence setting it was common for residents to discuss the previous evening's drinking experiences over breakfast the

next day. These drinking narratives would often include descriptions of alcoholrelated harms and were shared as a source of entertainment, prestige, and gossip.

-Yeah everyone will be having a laugh about it really ... like what happened to so and so, did you hear about it.

-.... If you are throwing up they will laugh at you for that. (CH, focus group).

4.8.3 What Residents Do to Keep Safe while Drinking

When discussing the issue of alcohol-related harm with residents, many commented that they often undertook a number of actions while drinking, to limit the impact of alcohol-related harm both upon themselves and upon their friends.

A resident commented upon the importance of eating while drinking:

I know that if I don't eat I am going to get drunk rather easily and make a fool of myself, as opposed to getting a good meal in. I am [still] drunk but I can still remember the night and have a good time. (BH, female)

A resident discussed the safety of staying with friends while drinking:

When you are drinking and when you are out, you are with your friends
[and] that is one of the main reasons I would stay with my friends.

Because everyone goes on about don't leave or you'll get raped. So that's why most the people I know stay together, well girls anyway. Just because if you leave you may get into trouble and then people stress about you even if you just walk off to the toilet. (BH, female)

A resident commented on the dangers of walking alone at night:

Always making sure you have money for a taxi, I always do. There was one time when I didn't have money because I walked away from everyone

and so I was like well I will just walk home. But I didn't end up walking home because someone else picked me up, but you know that sort of happens if you don't have money. You just have to walk and it's not exactly the safest alternative. (CH, male)

The questionnaire survey (q.3-9) asked drinking residents to report how frequently in the past six months they had undertaken any of seven 'safe drinking' strategies. The most popular safe drinking behaviours undertaken by residents on an 'often' basis were taking a taxi home from town (82.5%), staying with friends at all times (80.1%), and eating food before drinking (74.6%). A summary of resident responses for the seven behaviours is shown in Table 4.14.

Female residents were found to be significantly more likely than male residents to undertake six of the seven safe drinking behaviours. No significant gender difference was found in the frequency that male and female residents consumed food before drinking. A summary of resident responses and the Mann-Whitney U test analysis is shown in Table 4.15.

Table 4.14 Frequency residents report undertaking safe drinking behaviours

					Frequen	су				
	Often		Somet	Sometimes Rarely			Never		Not applicable	
	% across		% across		% across		% across		% across	
Safe drinking behaviours	row	(n)	row	(n)	row	(n)	row	(n)	row	(n)
Taxi or bus home from town	82.5	(348)	10.2	(43)	3.3	(14)	0.7	(3)	3.3	(14)
Stayed with friends at all times	80.1	(338)	15.6	(66)	2.6	(11)	0.2	(1)	1.4	(6)
Eating food before drinking	74.6	(315)	20.1	(85)	4.0	(17)	0.2	(1)	0.9	(4)
Not leaving drinks unattended	62.6	(264)	22.7	(96)	9.7	(41)	2.8	(12)	2.1	(9)
Stopping drinking when had enough	39.1	(165)	41.0	(173)	15.4	(65)	3.6	(15)	0.9	(4)
Listening to friends to stop drinking	30.1	(127)	36.5	(154)	17.1	(72)	3.3	(14)	13.0	(55)
Non-alcoholic drinks between alcohol drinks	21.3	(90)	31.3	(132)	29.9	(126)	16.6	(70)	0.9	(4)

Table 4.15 Frequency residents report undertaking safe drinking behaviours across gender

					Freque	ncy					
	Ofte	n	Som	netimes	Rai	ely	Ne	ver	Not appli	cable	Gender
	% acros	s row	% ac	ross row	% acro	ss row	% acro	oss row	% across	s row	Significance ³
Safe drinking behaviours	female	male	female	male	female	male	female	male	female	male	z =
Taxi or bus home from town	90.0	71.3	5.2	17.5	0.8	7.0	0.8	.6	3.2	3.5	-5.33, p < .001
Stayed with friends at all times	84.9	73.1	12.4	20.5	1.6	4.1	0.0	.6	1.2	1.8	-3.00, p < .005
Eating food before drinking	77.3	70.8	18.7	22.2	2.8	5.8	0.4	.0	0.8	1.2	-1.54, p = .12
Not leaving drinks unattended	72.5	48.0	20.3	26.3	4.4	17.5	0.8	5.8	2.0	2.3	-5.78, p < .001
Stopping drinking when had enough	46.2	28.7	40.2	42.1	10.8	22.2	2.4	5.3	0.4	1.8	-4.27, p < .001
Listening to friends to stop drinking	32.7	26.3	36.3	36.8	14.7	20.5	2.4	4.7	13.9	11.7	-2.11, p < .05
Non-alcoholic drinks between alcohol	25.5	15.2	31.1	31.6	27.1	33.9	15.5	18.1	0.8	1.2	-2.29, p < .05
drinks											

^{*} Mann-Whitney U test

Second-Hand Drinking Effects 4.9

During focus group and one-to-one interviews many residents commented that they were periodically disturbed by other residents' alcohol-affected behaviour.

-Sometimes you wake up in the middle of the night because everyone is coming home from town or something. Or while you are doing your work you hear them coming back or going out.

-That is what you expect. I am not really enjoying them coming back.

R: Have other people noticed that?

-Yeah [general agreement].

-Sometimes they have a party in their room that can get noisy. (SV, focus group)

Twenty-nine percent of residents reported (q.35)¹⁰⁴ that they were woken up on a weekly basis by other residents returning home from town during the early hours of the morning (see Table 4.16). Female residents (33.6% on a weekly basis) were significantly more likely than male residents (21.9%) to report being woken up (Mann-Whitney U, z = -2.97, p < .005). No significant differences were found in the frequency residents reported being woken up across the three halls of residence or across the grouping of drinkers/non-drinkers.

Three percent of residents reported (q.36)¹⁰⁵ that they looked after a drunken student on a weekly basis (see Table 4.16). Residents who consumed alcohol (79.8%) were twice as likely as non-drinking residents (36.7%) to have reported looking after a drunken student (Mann-Whitney U, z = -6.62 p < .001). No significant differences were found across gender or halls of residence groupings.

¹⁰⁴ Non-drinkers' questionnaire q.17.105 Non-drinkers' questionnaire q.18.

Table 4.16 Frequency residents report experiencing alcohol-related hall incidents

	-			ſ	requency durir	ng past six r	months			
					3-5	5	1	-2	At lea	ast
	Weekly		Monthly		times		times		once	
Hall related incidents	row %	(n)	row %	(n)	row %	(n)	row %	(n)	row %	(<i>n</i>)
How often have you been woken up by others returning home	29.0	(145)	19.4	(97)	17.2	(86)	21.6	(108)	87.2	(436)
from town in the early hours of the morning?										
How often have you had to 'baby-sit' a drunken	3.0	(15)	14.6	(73)	14.8	(74)	40.6	(203)	73.0	(365)
student?										
How often have you felt unsafe in the Hall because someone	2.2	(11)	1.6	(8)	4.0	(20)	23.4	(117)	31.2	(156)
else was under the influence of alcohol?										

	Yes	Somewhat	No	Not applicable	
	row % (<i>n</i>)				
If you have experienced any of the above effects, have you	26.2 (130)	35.9 (178)	34.9 (173)	3.0 (15)	
been bothered by them e.g. upset or annoyed?					

Table 4.16 also shows that thirty-one percent of residents reported $(q.37)^{106}$ feeling unsafe at least once in the halls of residence. Female residents (34.9%) were significantly more likely than male residents (25.5%) to report feeling unsafe in the halls of residence (Mann-Whitney U, z = -2.30, p < .05). Similarly non-drinking residents (43.0%) were more likely than drinking residents (29.0%) to report feeling unsafe (Mann-Whitney U, z = -2.80, p < .005). No significant differences were found across gender or halls of residence groupings.

Discussion with residents revealed that although many residents reported being affected by other residents' drinking behaviour, not all residents reported that they were bothered by these effects. Some residents commented that they viewed the consequences of other residents' drinking behaviour as an acceptable and expected component of student culture and halls of residence culture. A number of other residents reported that although at the beginning of the year they were not bothered by other residents' drinking behaviour; they had found that as the year progressed their tolerance for this behaviour had diminished.

Twenty-six percent of residents reported $(q.38)^{107}$ that they had been bothered by hall alcohol-related incidents, 35.9% reported that they had been somewhat bothered, and 34.9% reported they had not been bothered by the hall alcohol-related incidents. Female residents (30.7%) were significantly more likely than male residents (19.2%) to report they were bothered by the second-hand alcohol-related effects (Mann-Whitney U, z = -4.24, p < .001). Non-drinking residents (32.9%) were also significantly more likely than drinking residents (24.9%) to

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¹⁰⁶ Non-drinkers' questionnaire q.19.

¹⁰⁷ Non-drinkers' questionnaire q.20.

report being bothered (Mann-Whitney U, z = -2.54, p < .05). No significant differences were found in the frequency residents reported that they were bothered by second-hand alcohol-related effects across ethnicity and halls of residence groupings.

4.9.1 Unacceptable Second-Hand Drinking Effects

Discussion with residents during focus groups and one-to-one interviews revealed that there were a number of second-hand drinking effect behaviours that residents were not as accepting of. These behaviours included inappropriate sexual behaviour, aggressive verbal or physical behaviour, and any repeated drunkenness that required care from others. Alcohol fuelled aggressive behaviour or inappropriate sexual behaviour was generally viewed by residents as a socially unacceptable behaviour. In contrast, a drinker getting so intoxicated as to require being looked after by others was more unacceptable due to the inconvenience it caused to the carers, rather than any social unacceptability associated with intoxication. Residents participating in a focus group describe examples of inappropriate alcohol affected behaviour:

- -Where their actions sort of crossed the line a bit. Like where they started trying it on with girls that kept pushing them away and that sort of stuff.
 -Fighting for no reason, stuff like that, is when it would get a bit too rich....
- -When they have used alcohol for the purpose of doing something they normally wouldn't do. Like if they had a grudge with someone and they didn't have the balls to do it, but usually a bit of alcohol under their belt to have a swing at them.

R: Others thoughts on that?

-I think vomiting actually sometimes makes you feel better. Basically getting close to comatose, basically having to crawl on your hands and knees to keep moving.

-Once and twice, I mean every so often you go over board and get fucked up. But otherwise if it is heaps and often it is getting too much.

R: How often would be too much?

-Every week in, week out.

-Yeah.

-Everyone is allowed a big night like that every month or two. Once in a while, but if it becomes a regular thing then you are constantly looking after the person, then that's too much.

-If you had to look after them it would ruin your night, you would get pissed off with them. (BH, focus group).

4.10 Conclusion

Male residents were found to drink more heavily and more frequently than female residents. Significant gender differences were found in residents' preferred choice of alcohol, with the majority of male residents preferring beer and the majority of female residents preferring RTD drinks. Although many residents reported some association with particular brands of alcohol, pricing appeared to be the most significant influence affecting residents' alcohol purchasing decisions. Two-thirds of residents reported that the halls of residence were the setting where they consumed alcohol most often and also consumed the largest amounts of alcohol. Significant gender differences were found in the frequency residents reported leaving the halls of residence to continue socialising elsewhere, with two-thirds of female residents and one-half of male residents leaving the hall at least seventy-

five percent of the time. Many residents drank in residence to a pre-mediated state of intoxication before they travelled on to city bars. These residents consumed alcohol to an intoxication threshold that still allowed them entry into bars. Three-quarters of female residents and one-half of male residents who travelled into the city (after drinking in the halls of residence) consumed no more than two drinks of alcohol while in bars.

The most common alcohol-related harms reported by residents were vomiting, followed by missing a class, and physically hurting themselves. Male residents were significantly more likely than female residents to report experiencing alcohol-related harms. Residents who consumed the largest amounts of alcohol and who drank most frequently were also more likely to report higher rates of alcohol-related harms. Residents generally had a high tolerance towards most alcohol-related harms. Female residents were found to be significantly more likely than male residents to undertake safe drinking strategies aimed at reducing alcohol-related harms. Although many residents reported experiencing a number of second-hand drinking effects, not all residents viewed these experiences as negative. Some residents commented that second-hand alcohol effects were an acceptable and expected component of student drinking and halls of residence culture.

5 RESULTS: RESIDENT BINGE DRINKING BEHAVIOUR

Resident Binge Drinking Behaviour Research Aims:

- To use existing official New Zealand guidelines in conjunction with the drinking patterns discerned in this research to determine the extent of binge drinking behaviour amongst the resident student population.
- ii. To determine any differences and/or similarities between the level of binge drinking behaviour in the resident student population and the rates of binge drinking behaviour reported in previous New Zealand and international tertiary student alcohol studies.

This chapter presents quantitative data and qualitative data addressing the two research aims related to *binge drinking behaviour*. This will include analysis of data related to resident heavy episodic drinking behaviour, resident drunken behaviour, resident self-assessment as a binge drinker, and the drinking effects residents monitor to limit their state of intoxication. As discussed in chapter two, the term heavy episodic drinking will be used to describe the consumption of seven or more drinks for male drinkers and five or more drinks for female drinkers.

5.1 Resident Heavy Episodic Drinking Behaviour

Eighty-four percent of female drinking residents (68.7% of all female residents) reported (q.66) consuming five or more drinks and 76.0% of male drinking residents (66.0% of all male residents) consumed seven or more drinks, on a typical drinking occasion. Overall, 80.5% of drinking residents (67.6% of all residents) reported heavy episodic drinking behaviour ($7 \ge$ drinks males and $5 \ge$ drinks females) on a typical drinking occasion.

Significant differences in heavy episodic drinking behaviour were found across the four ethnicity groupings for both female drinking residents (Kruskal-Wallis H = 8.88, df = 3, p < .05) and male drinking residents (Kruskal-Wallis H = 13.92, df = 3, p < .005). Female New Zealand Maori residents (88.0%) reported the highest rate of female heavy episodic drinking behaviour followed by New Zealand European residents (85.6%), Other Ethnicity residents (78.7%), and Asian residents (50.0%). Male New Zealand European residents (81.1%) reported the highest rate of male heavy episodic drinking behaviour followed by New Zealand Maori residents (77.9%), Other Ethnicity residents (72.0%), and Asian residents (50.0%). Overall, New Zealand residents reported the highest rates of heavy episodic drinking behaviour and Asian residents the lowest rate.

Eighty-five percent of male drinking residents (73.7% of all male residents) and 83.0% of female drinking residents (69.1% of all female residents) reported heavy episodic drinking behaviour at least once during the previous four week period.

5.2 Frequency of Resident Drunkenness

Forty-two percent of drinking residents (35.3% of all residents) reported (q.79) that they were drunk¹⁰⁸ on a weekly basis and a further 26.7% (22.4% of all residents) reported monthly. A significant gender difference was found in the frequency male and female residents reported experiencing drunkenness (Mann-Whitney U, z = -2.65, p < .01). Fifty-one percent of male drinking residents (44.2% of all male residents) and 36.0% of female drinking residents (29.6% of

¹⁰⁸ Discussion with residents during focus groups and one-to-one interviews revealed that resident's were confident in self-assessing if they had experienced drunkenness.

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all female residents) reported they were drunk on a weekly basis. A summary of resident responses is shown in Table 5.1.

Table 5.1 Frequency residents report self-assessed drunkenness

	-	Gender	-	-	-		
	Fer	nale	Ma	ale	Total		
Frequency of	%	%	%	%	%	%	
drunkenness	drinkers	all	drinkers	all	drinkers	all	
Weekly	36.0	29.6	51.2	44.2	42.1	35.3	
Monthly	30.0	24.7	21.8	18.8	26.7	22.4	
Less than monthly	26.0	21.4	20.6	17.8	23.8	20.0	
Never	8.0	6.6	6.5	5.6	7.4	6.2	
Total	100.0		100.0		100.0		

A significant association was found between the frequency a resident reported getting drunk and the number of drinks a resident reported consuming on a typical drinking occasion (Spearman's $r_s = .542$, p < .001). This result was significant for both male¹⁰⁹ residents (Spearman's $r_s = .531$, p < .001) and female¹¹⁰ residents (Spearman's $r_s = .495$, p < .001).

A significant difference was found in the frequency residents reported getting drunk across the four ethnicity groupings (Chi-square $\chi^2 = 19.68$, df = 3, p < = .05). Fifty-one percent of New Zealand Maori residents reported drunkenness on

¹¹⁰ Female residents drunk on a weekly basis consumed a median of 7-9 drinks, monthly drunkenness consumed a median of 7-9 drinks, and less than monthly drunkenness consumed a median of 5-6 drinks.

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¹⁰⁹ Male residents drunk on a weekly basis consumed a median of 13-15 drinks, monthly drunkenness consumed a median of 7-9 drinks, and less than monthly drunkenness consumed a median of 5-6 drinks.

a weekly basis, followed by 42.7% of New Zealand European residents, 35.6% of Other Ethnicity residents, and 28.0% of Asian residents (see Table 5.2).

Table 5.2 Frequency residents report drunkenness across ethnicity groupings

	-			Et	hnicity			
	NZ	7	NZ	NZ		er		
Frequency	Мас	ori	Europ	ean	Ethni	icity A		an
drunkenness	% col	(n)	% col	(n)	% col	(n)	% col	(n)
Weekly	50.7	(35)	42.7	(114)	35.6	(21)	28.0	(7)
Monthly	21.7	(15)	27.7	(74)	27.1	(16)	28.0	(7)
Less than monthly	17.4	(12)	23.6	(63)	33.9	(20)	20.0	(5)
Never	10.1	(7)	6.0	(16)	3.4	(2)	24.0	(6)
Total	100.0	(69)	100.0	(267)	100.0	(59)	100.0	(25)

5.3 Premeditated Drunkenness

Many drinking residents participating in focus group discussions and one-to-one interviews commented that they usually knew before they started drinking if they were going to get drunk.

R: Do you normally know before the night has started if you are going to have a big night drinking or does it kind of just happen during the night?

-I choose when I am going to have it.

R: So you choose, you know if you are going to have a big night or not? -Yeah.

-Yeah I will choose. I will go out and buy the dozen. But then there are the unexpected nights when you have people offer you free drinks and it's free and you are poor.

-.... Pretty much I know when I am going to go out but sometimes like you have friends who say they are going to go out. So you get dressed and go out with them.

-I would say probably the same. You choose your nights but then usually a party, like someone's birthday you get a bit more sloshed, free drinks on the table.

-Yeah I reckon it is both as well. Like I have planned most of my big nights but then there have been the odd time when it has sort of stepped up and you don't realise it.

-Yeah most of my big nights would be planned. I go out and buy a box, it starts from there. (BH, focus group)

The questionnaire survey (q.18) asked drinking residents to respond to the statement 'I usually know beforehand if I am going to get drunk'. Sixty percent of residents agreed with the statement, 26.1% neither agreed nor disagreed, and 14.3% disagreed. No significant differences were found in residents' responses to the statement across gender groupings, ethnicity groupings, or the frequency of drinking behaviour. A significant association was found between a resident's response to the statement and the number of drinks a resident reported consuming on a typical drinking occasion (Spearman's $r_s = .202$, p < .001). Residents who agreed that they usually knew before they started drinking if they were going to get drunk were also more likely to consume more drinks on a typical drinking occasion.

A number of drinking residents commented during focus group discussions and one-to-one interviews that they consumed alcohol with the intention of getting drunk.

R: Are there any in your drinking group who would just have a few drinks and will not get drunk?

Yeah, I know one person, but other than that everyone is getting drunk.

R: Everyone is drinking to get drunk?

Yeah.

R: Why do you think that pattern is there ... with that group?

I guess the stigma is that you have more fun when you are drunk, or you are more relaxed and have a way better time than if you are partially drunk. I think you either do it all the way or you don't do it at all.

(CH, female)

The questionnaire survey (q.20) asked drinking residents to respond to the statement 'I drink to get drunk'. Twenty-seven percent of residents agreed with the statement, 32.9% neither agreed nor disagreed, and 40.0% disagreed. No significant differences were found in residents' responses to this statement across gender, halls of residence, or ethnicity¹¹¹ groupings.

A significant association was found between a resident's response to the statement that they drank to get drunk and a residents response to the statement that they usually knew before they started drinking if they were going to get drunk (Spearman's $r_s = .261$, p < .001). Seventy-eight percent of residents who agreed

New Zealand European residents, and 7.7% of Asian residents.

¹¹¹ Although the ethnicity grouping analysis was not significant it was very close to significant (Chi-square $\chi^2 = 12.14$, df = 3, p = .059). Thirty-two percent of New Zealand Maori residents agreed that they drank to get drunk, followed by 28.8% of Other Ethnicity residents, 27.2% of

with the statement that they drank to get drunk also agreed with the statement that they usually knew before they started drinking if they were going to get drunk.

R: Would you consider yourself a binge drinker?

At times, yeah.

R: Because?

Sometimes I drink to get drunk. And I guess that is binge drinking.

R: Do you know before, on those evening that you are going to get drunk? *On most of them.*

R: What percentage of the time would you know beforehand [that you are going to get drunk]?

About eighty percent. (CH, female)

5.4 Resident Self-Assessment as a Binge Drinker or as a Non-Binge Drinker

Twenty-eight percent of drinking residents (23.2% of all residents) self-assessed themselves (q.82) as a binge drinker and the remaining 72.3% of drinking residents self-assessed themselves as a non-binge drinker. No significant association was found between a resident self-assessing themselves as a binge drinker and their gender, their ethnicity, or the halls of residence they resided in.

Self-Assessed Binge Drinkers

Self-assessed binge drinkers were significantly more likely to report drinking more frequently than self-assessed non-binge drinkers (Mann-Whitney U, z = -4.07, p < .001). Fifty-seven percent of self assessed binge drinkers consumed alcohol two or more times a week, in contrast to 37.7% of self-assessed non-binge drinking residents.

Self-assessed binge drinkers were significantly more likely to report consuming more alcohol on a typical drinking occasion than self-assessed non-binge drinkers (Mann-Whitney U, z = -5.59, p < .001). Ninety-six percent of female self-assessed binge drinkers and 94.8% of male self-assessed binge drinkers reported heavy episodic drinking behaviour on a typical drinking occasion. Further analysis revealed that female self-assessed binge drinkers consumed a medium of 7-9 drinks and male self-assessed binge drinkers consumed a medium of 10-12 drinks, on a typical drinking occasion.

Self-assessed binge drinkers were significantly more likely to report they were drunk more frequently than residents who self-assessed themselves as a non-binge drinker. (Mann-Whitney U, z = -6.61, p < .001). Sixty-seven percent of self-assessed binge drinkers reported they were drunk on a weekly basis, in contrast to 32.7% of self-assessed non-binge drinkers.

Self-assessed binge drinkers (48.7%) were significantly more likely to agree with the statement 'I drink to get drunk' than self-assessed non-binge drinkers (18.7%) (Mann-Whitney U, z = -6.25, p < .001).

Eighty-five percent of self-assessed binge drinkers agreed with the statement that 'binge drinking is measured by how much you drink' and 73.3% agreed with the statement that 'binge drinking is drinking to get drunk'.

The questionnaire survey (q.85) asked the one hundred and sixteen residents who self-assessed themselves as a binge drinker 'Would the availability of resources supporting the reduction of binge drinking behaviour be useful to you?' Seventy-

six percent responded that the resources would not be useful and the remaining 24.1% reported that the resources would be useful. No significant gender difference was found in residents' response to the question.

Self-Assessed Non-Binge Drinkers

Analysis of the 304 drinking residents who self-assessed themselves as a non-binge drinker revealed that 77.9% of the female residents and 70.5% of male residents reported heavy episodic drinking behaviour on a typical drinking occasion. Further analysis revealed that female self-assessed non-binge drinkers consumed a median of 5-6 drinks and male self-assessed non-binge drinkers consumed a median of 7-9 drinks, on a typical drinking occasion.

Analysis of the 304 drinking residents who self-assessed as non-binge drinkers revealed that 32.7% reported drunkenness on a weekly basis. A significant gender difference was found in the frequency self-assessed non-binge drinking male and female residents reported drunken behaviour (Mann-Whitney U, z = -2.69, p < .01). Forty-two percent of male and 25.6% of female self-assessed non-binge drinkers reported that they were drunk on a weekly basis.

5.5 Monitoring of Drinking Behaviour

Discussion with residents during the phase one focus groups and one-to-one interviews revealed that many residents drank to intoxication in a controlled and deliberate manner. These residents commented that they monitored their level of intoxication using a range of alcohol-related effects to signal either the need to slow down their drinking or to stop their drinking. Focus group participants discussed how they monitored their drinking:

- R: How do you know when you have had enough?
- -I can't drink any more.
- -You start drinking and it's like you just want to throw up after.
- -Sort of when you get to the stumble stage [loss of body control]. I am happy, I am struggling or I am getting there. Then you sort of stop for a little while and then should be alright to go to town.
- -... Pretty much when you realise you can't keep up straight, like stumbling.
- -Sometimes the people around you. They are sort of giving the look like what are you doing and sometimes you will think about it after.... And people are going you are drunk, they know you are drunk as they are looking at you.
- -I think I can tell by how I talk. Slurring your words, mixing up your words. (BH, focus group)

A second focus group also discussed their drink monitoring experiences:

- R. If you are not counting drinks how do you know when you have had enough? What is your guide for you?
- Whenever I get tipsy or happy, as soon as I get to that stage. As soon as I am happy, more confident, and louder.
- R. That is in your body, when you know you are at that point?
- -I know if I am going to drink anymore I am going to make a total arse of myself so I stop.
- -To some degree it is when I run out of drinks to drink and just when I am feeling really stupid, okay that is enough.
- -When I start saying things I wouldn't normally say, or perhaps shouldn't say. I know to stop.

-I don't know, I usually just keep going. I am usually still in control when I am smashed to a certain degree. I just keep topping it up. Once I hit smashed, then I will slow down a bit, come back down a bit and then keep topping up to that point.

R. So that is topping up to that point of smashed, stopping yourself from going to coma'd. So you know in yourself where that point is and when to slow down?

-Yeah, and I am still able to have a good time and dance, without making a total idiot of myself.

-Mine is kind of weird. If I kind of shake my head from side to side and the room moves slower than my head then I know I have had a bit. So then I probably slow down when my vision can't keep up with my movement.

-I am not too sure. It depends upon what I drink. If I drink beer I can drink for ages because that is what I know.

R.... Sue¹¹² what is your main indicator to let you know when you have got there [to your limit]?

-It is usually when I go to the toilet and I sit there and if it spins. The room spins. If the room spins then I slow down and have a beer.

R.... That is your test?

-Yeah. (BH, focus group)

Discussion with residents and pilot testing of the questionnaire survey schedule identified fourteen drinking effects most commonly used by residents to monitor their drinking experience. These drinking effects included a resident vomiting, feeling like vomiting, awareness of feeling a little drunk, awareness of being

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¹¹² One focus group participant had not responded and she was questioned.

drunk, awareness of being very drunk/wasted, losing the ability to walk, and losing the ability to talk. Other indicators included feeling too emotional, feeling aggressive, feeling tired, feeling their head/room spinning, having a boring night, and friends commenting to stop drinking. The drinkers' survey (q.39-52) asked residents to indicate how each of these fourteen drinking effects impacted upon their drinking behaviour by responding whether the effect either stopped their drinking, slowed down their drinking, did not impact upon their drinking, or if the effect was not applicable to them. Table 5.3 shows that the most common drinking effect which stopped residents' from drinking further was feeling the need to vomit (71.3%) and vomiting (67.1%). The most common drinking effect for slowing down residents' drinking was starting to feel a little drunk and tipsy (52.6%).

The Drinking Effects Residents use to Monitor Drinking Behaviour across Gender Female residents were significantly more likely than male residents to be associated with twelve of the fourteen drinking effects. The four drinking effects most strongly associated (p < .001) with female residents included the experience of starting to feel too emotional while drinking, vomiting, losing the ability to walk properly, and feeling the need to vomit. The two drinking effects that showed no gender association included when a resident reported experiencing 'a boring night' and when a resident's 'friends told them to stop drinking'. A summary of resident gender responses and the corresponding Chi-square analysis is shown in Table 5.4. A specific summary of male and female residents' responses to the three levels of intoxication (a little drunk and tipsy, drunk, and very drunk/wasted) is shown in Table 5.5.

Table 5.3 The impact of drinking effects upon resident drinking behaviour

	l will usua	ılly	l will usu	ally	It does not i	nfluence	Not	
	stop drinki	ing	slow my d	rinking	my drin	king	applica	ble
Drinking effect	row % (<i>i</i>	n)	row %	(n)	row %	(n)	row %	(n)
When I start to feel like vomiting	71.3 (3	301)	16.8	(71)	2.8	(12)	9.0	(38)
Vhen I vomit	67.1 (2	283)	11.8	(50)	4.7	(20)	16.4	(69)
When I feel extremely tired and want to sleep	64.5 (2	272)	19.7	(83)	12.1	(51)	3.8	(16)
When I know I am very drunk/wasted	61.6 (2	260)	18.2	(77)	10.7	(45)	9.5	(40)
When my head or the room starts spinning	57.8 (2	244)	25.1	(106)	6.9	(29)	10.2	(43)
When I start to lose the ability to walk properly	53.1 (2	224)	22.3	(94)	12.8	(54)	11.8	(50)
When the night is boring and/or no fun	45.1 (′	190)	21.9	(92)	27.6	(116)	5.5	(23)
When I start to lose the ability to talk properly	42.0 (′	177)	25.9	(109)	15.7	(66)	16.4	(69)
When I know I am drunk	39.8 (′	168)	37.4	(158)	18.0	(76)	4.7	(20)
When my friends tell me to stop drinking	39.2 (′	165)	35.9	(151)	9.5	(40)	15.4	(65)

Table 5.3 continued. The impact of drinking effects upon resident drinking behaviour

	l will usua	I will usually		I will usually		nfluence	Not	
	stop drinking		slow my drinking		my drinking		applicable	
Drinking effect	row % (<i>t</i>	7)	row %	(n)	row %	(n)	row %	(n)
When I start to get too emotional	32.7 (1	138)	21.8	(92)	16.1	(68)	29.4	(124)
When I start to feel aggressive or angry	32.3 (1	136)	15.7	(66)	15.0	(63)	37.1	(156)
When I reach my limit of counted drinks	23.0 (9	97)	19.2	(81)	24.0	(101)	33.7	(142)
When I start to feel a little drunk and tipsy	10.4 (4	14)	52.6	(222)	35.3	(149)	1.7	(7)

Table 5.4 The impact of drinking effects upon resident drinking behaviour across gender

	I will us	ually	l will us	sually	It does not	influence	No	t	
	stop drir	nking	slow my	drinking	my drin	king	applic	able	Gender
	Female	Male	Female	Male	Female	Male	Female	Male	significance
Drinking effect	row %	row %	row %	row %	row %	row %	row %	row %	χ² (3)
When I start to feel like vomiting	76.1	64.3	10.4	26.3	1.2	5.3	12.4	4.1	= 30.9, p < .001
When I vomit	71.3	60.8	8.4	17.0	0.8	10.5	19.5	11.7	= 32.1, p < .001
When I feel extremely tired and want to sleep	69.3	57.3	19.1	20.5	8.4	17.5	3.2	4.7	= 10.0, p < .05
When I know I am very drunk/wasted	70.5	48.5	12.7	26.3	6.4	17.0	10.4	8.2	= 29.4, p < .001
When my head or the room starts spinning	61.4	52.6	24.3	26.3	4.0	11.1	10.4	9.9	= 9.03, p < .05
When I start to lose the ability to walk properly	61.4	40.9	17.5	29.2	7.2	21.1	13.9	8.8	= 31.8, p < .001
When the night is boring and/or no fun	48.0	40.9	20.0	24.6	27.2	28.1	4.8	6.4	no sig
When I start to lose the ability to talk properly	50.6	29.4	21.5	32.4	10.8	22.9	17.1	15.3	= 25.2, p < .001
When I know I am drunk	47.8	28.1	35.5	40.4	12.0	26.9	4.8	4.7	= 23.2, p < .001
When my friends tell me to stop drinking	39.0	39.4	39.4	30.6	8.4	11.2	13.1	18.8	no sig

Table 5.4 continued. The impact of drinking effects upon resident drinking behaviour across gender

	l will us	ually	l will us	sually	It does not	influence	No	t	
	stop drin	ıking	slow my	drinking	my drin	king	applic	able	Gender
	Female	Male	Female	Male	Female	Male	Female	Male	significance
Drinking effect	row %	row %	row %	row %	row %	row %	row %	row %	χ² (3)
When I start to get too emotional	44.2	15.8	24.7	17.5	11.2	23.4	19.9	43.3	= 55.8, p < .001
When I start to feel aggressive or angry	39.0	22.4	15.1	16.5	8.4	24.7	37.5	36.5	= 26.9, p < .001
When I reach my limit of counted drinks	28.3	15.3	18.7	20.0	23.1	25.3	29.9	39.4	= 10.4, p < .05
When I start to feel a little drunk and tipsy	12.4	7.6	58.6	43.9	27.9	46.2	1.2	2.3	= 16.8, p = .001

Table 5.5 Resident responses to levels of intoxication across gender

	Residents response										
	l will u	ısually	l will u	I will usually		es not	Not app	licable			
	st	ор	slo	slow		ence	to)			
	my dr	inking	my dr	my drinking		inking	my drinking				
Level of	Female	Male	Female	Male	Female	Male	Female	Male			
Intoxication	% row	% row	% row	% row	% row	% row	% row	% row			
Very drunk	70.5	48.5	12.7	26.3	6.4	17.0	10.4	8.2			
Drunk	47.8	28.1	35.5	40.4	12.0	26.9	4.8	4.7			
A little drunk	12.4	7.6	58.6	43.9	27.9	46.2	1.2	2.3			

5.6 Conclusion

Heavy episodic drinking behaviour on a typical drinking occasion was reported by eighty-four percent of female drinking residents and seventy-six percent of male drinking residents. Significant ethnicity differences were found with New Zealand residents reporting the highest rate of heavy episodic drinking behaviour and Asian residents the lowest. One-half of male drinking residents and one-third of female drinking residents indicated they were drunk on a weekly basis. Asian residents were least likely to report regular drunkenness. The majority of drinking residents usually knew before they started drinking if they were going to get drunk and one-quarter reported that they consumed alcohol with the intention to get drunk. One-quarter of drinking residents self-assessed themselves as a binge drinker. Residents who self-assessed themselves as a binge drinker were more likely (than self-assessed non-binge drinking residents) to consume larger amounts of alcohol on a typical drinking occasion, drink more frequently, and get drunk more frequently. The majority of self-assessed binge drinkers indicated

resources supporting the reduction of binge drinking behaviour would not be useful to them.

The majority of residents monitored their drinking behaviour by observing a range of drinking effects as signals to either stop their drinking or to slow down their drinking. One-half of female residents and one-quarter of male residents would stop drinking when they felt drunk and a further one-third of female residents and forty percent of male residents would typically slow down their drinking.

Approximately five percent of female drinkers and fifteen percent of male drinkers did not appear to monitor or limit their level of alcohol intoxication.

6 RESULTS: STUDENT CULTURE

Student Culture Research Aims

- i. To identify resident students' understanding of student culture.
- To identify how resident students gain their understandings of student culture.
- To identify the role of student alcohol use as a component of student culture.
- iv. To determine whether resident students perceive any differences between halls of residence student culture and student culture more generally.

This chapter presents a combination of both quantitative and qualitative data addressing the four research aims related to *student culture*. This chapter will include data related to resident perceptions of student culture, how residents develop those perceptions, and the role of alcohol within student culture. Data covering the experiences of non-drinking students within student culture will also be given.

6.1 Resident Understandings of Student Culture

Discussion with residents during focus group discussions and one-to-one interviews revealed that most residents viewed student culture as a balance of both academic study and socialising experiences. Residents participating in a focus group interview discussed their views of a university student:

- -Someone who goes to classes.
- -Going to university, learning and having fun.
- -At uni you have to work to get your degree.
- -Play hard and work hard.

-Someone who wants to go to the next level. (SV, focus group)

Many residents commented that they worked hard at their academic studies, as the decision to become a student was costing them a lot of money and they did not want to fail. At the same time residents also reported that socialising with other students was an important component of the student culture experience, as these

- I guess the school leavers are all wanting to go out, have fun, and get drunk.... Whereas we [a second year student] have been there done that, we just want to get our degree. We want to go and have a few good nights out, but not get wasted.

-Yeah, it seems really idiotic; we are here to study to get a degree.

-.... I think it is okay [to socialise], as long as you keep it under control and study. I can study and then on the weekend I can have fun.

-.... You came here to study but you didn't come here just to study. You are supposed to get to know people and have fun. (SV, focus group)

When asked to identify what they most enjoyed about being a student, a number of residents commented on the new freedoms available to them, the new friendships they had made, and the fun they were having.

R: What have you enjoyed about the student lifestyle?

Being at university, you get a lot of free time.... It is fun, you get to meet a lot of people and it is kind of laid back. You have one main responsibility to do your assignments and to do your work.

R: Do you enjoy it?

focus group discussants indicate:

Yeah. (SV, female)

A resident described what she enjoyed about being a student:

Getting to know lots of different people. Like making a whole lot of new mates and that. There are some good people around here and the drinking is good. Good fun and having some good nights. (CH, female)

Focus group participants provide a broader picture still:

R: How would you describe a student, now that you have been here?

- -Poor.
- -Social.
- -Fairly intelligent.
- -Wanting to achieve. Wanting to do something.
- -Ambitious.
- -Wanting to have a good time in general though.
- -Meeting heaps of people, having a good time.
- -Wanting to get away from home.
- -Independence is a big thing. (SV, focus group)

The issue of increased independence was of particular relevance to the residents who had recently left home and were adjusting to their first experience of living away from family. For these residents the student lifestyle provided them with new found freedoms. The area of student culture that residents reported they did not enjoy was the lack of money available to them. Residents reported that they lived within a tight budget which they often found stressful.

R: Are there any parts of being a student that you don't enjoy?

I suppose one is money. You can't go out and work all day. But that is about all, probably the financial side. (CH, female)

6.2 How Residents Gain Their Understandings of Student Culture

6.2.1 Pre-University Awareness of Student Culture

The questionnaire survey (q.27)¹¹³ asked residents to respond to the statement 'Before I came to university, I had a good idea of what university life would be like'. Fifty-nine percent of residents agreed with the statement, 21.6% neither agreed nor disagreed, and 19.2% disagreed. No significant differences were found in residents' responses to the statement across gender, drinker/non-drinker, ethnicity, or halls of residence groupings.

The questionnaire survey $(q.28)^{114}$ asked residents to respond to the statement 'Before I came to university I thought university students partied a lot and drank a lot of alcohol'. Seventy-three percent of residents agreed with the statement, 18.9% neither agreed nor disagreed, and 7.8% disagreed. No significant differences were found in residents' responses to the statement across gender or the halls of residence groupings. Significant differences were found with drinking residents (78.3%) significantly more likely than non-drinking residents (46.2%) to agree with the statement (Mann-Whitney U, z = -6.18, p = .001). Significant differences were also found across the four ethnicity groupings (Kruskal-Wallis H = 77.23, df = 3, p < .001). Eighty-two percent of New Zealand Maori residents agreed with the statement followed by 81.1% New Zealand European residents, 70.1% of Other Ethnicity residents, and 29.0% of Asian residents.

Discussion with residents during focus group discussion and one-to one interviews supported the questionnaire survey (q.28) finding that prior to

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¹¹³ Non-drinkers' questionnaire q.10.

Non-drinkers' questionnaire q.11.

attending university New Zealand residents generally expected that there would be a high level of drinking within student culture. This view was also generally held by international students originating from North America and Europe. In contrast, many residents originating from Asian and some residents originating from the Pacific Island nations reported that they had been surprised and at times shocked by the level of student alcohol use they had observed in New Zealand. A group of Asian residents participating in an international student focus group discussed their experiences of New Zealand student drinking behaviour.

R. When you arrived in NZ were you surprised by the drinking or not surprised?

-I was.

R. Were you a little bit surprised or a lot surprised?

-A little bit because I have never seen so many people, like drinking every weekend, they are out and drink. And after dinner they just start from seven o'clock, and like walking and drinking through the hallways. And they behave drunk.

R. How about others?

-It is very common back in Korea and I wasn't surprised.

-I don't know, they [NZ students] like to start off drinking in the halls and then they go to town afterwards. That is the way they drink. And sometimes they drink during the week days as well. Not just the weekends.

R. Sue when you arrived in your first year at the halls, were you surprised?

-Actually I was in the quiet block last year. Our block was okay but other blocks were noisy. Almost every day they were drinking, singing and stuff. I was quite surprised. But after a while I got used to that.

R. Others?

-I learnt a lot of things about how people act like when they are drunk when I came here. But I heard, I have a lot of friends that study in India.
-....I think they, New Zealanders, they [are] people that drink, they just drink to get drunk. They drink to get drunk I think. Korean people more enjoy the drinking and talking. But these people they want to get drunk first, as fast as they can.

R....Liu were you surprised?

-.... It is quite different from China. Usually they [Chinese] drink one time for someone's birthday or a festival but not every weekend. (SV, focus group)

A Pacific Island student participating in a focus group discussed his perceptions of New Zealand student drinking behaviour:

R. When you first arrived ... were you surprised by the drinking you found here in NZ, the way people drank, or not surprised?

-I was very surprised. It was a big difference from back in the Islands.

Especially towards the end of the week, it was like focused on drinking, as an only focus, of hanging out and enjoying yourself. Whereas back home there are probably other things to do, like sports. There was more variety back home and it wasn't focused on drinking. (CH, male)

6.2.2 Where Residents Gain Their Perceptions of Student Culture

The majority of New Zealand residents reported that their perceptions of student culture, before arriving at university, were generally gained from a combination of media images and from the comments of family members and friends.

- R. Before you came here, what did you think being a student might be like and who told you about it?
- -I don't have any older brothers or sisters, but my friend's oldest sister told us and I had a friend who was older than me and she had come back and she told us.
- R. And what did she describe to you?
- -A party
- R. A party?
- -Yeah.
- R. And what else was there?
- -.... She was like, we get drunk all the time, we had an exam and I was drinking the night before. That is what I remember.
- -I don't have any older brothers and sisters either but a family friend told me about Waikato, or actually it was her mum telling my mum, who told me. But then I just started asking around a few people I know, older people. Like in their thirties and forties who did their same degree here and they only had good things to say about it.
- -.... I don't know what to say. I can't say I was told much about uni. Like I heard stories about parties and stuff, and that was where I got my impression from before I came here.
- -Probably just from mates and stuff. I always thought it would be a lot like the Americans and they have two people in a room¹¹⁵. And the food was definitely mentioned, how bad it was. I have an older sister. She is four years older and she has been to uni too. She did a lot of drinking.

¹¹⁵ The University of Waikato halls of residence accommodation are all single rooms.

-I got told by various family members who had never been to uni themselves. They told me what they thought, that it would be a good time. They didn't mention drinking, cause drinking was a given.

R. Drinking was a given?

-Yeah. You pretty much expect that when you go to uni, you don't need to be told. (SV, focus group)

Residents participating in a focus group commented on what they thought student culture would be like based upon the images they had gained from the media:

- -I thought it would be like America.
- -Yeah, same. I thought it would be more drinking. Maybe not more drinking but wilder [drinking].
- -More drinking in the corridors everywhere.
- -The TV shows you see, they have got massive hall parties. People hanging out the windows.
- R. Wilder, and more drinking, crazier?
- -Yeah it is much calmer [here] than it is portrayed on TV.

In contrast, many international students from Asian and the Pacific Island nations (and one could also assume their parents) commented that they had expected that student drinking in New Zealand would be similar to the student drinking behaviour in their home countries. Although these international students were surprised by the level and frequency of student drinking in New Zealand, they were often particularly shocked by the level of drunkenness shown by female New Zealand drinkers. International residents who spoke English as a second language also appeared to be less familiar with the portrayal of (Western) student culture as it is often depicted in English speaking film and television media.

6.3 The Role of Alcohol within Student Culture

6.3.1 Alcohol Use as a Symbol of Student Culture

Along with viewing alcohol use as a symbol of individual independence, a number of residents also viewed alcohol use as a symbol (and for some a defining characteristic) of student culture. For these residents, being a university student was synonymous with drinking alcohol. Residents commented that student culture had had a long association with alcohol use and that the current drinking behaviour of students was no different from the behaviour of earlier student generations.

R: Why do you think alcohol is a part of the student lifestyle?

-.... Hasn't it always been like this as well? Students drink. Like you know, like you talk to people who are old students and that is what they did when they were a student, so why wouldn't you?

-You just grow up thinking that is what university is, so you just go and do it really. (CH, focus group)

A resident also commented:

Binge drinking in the university here, I have no problem with that because that is the culture of the university. It is your first year, to binge drink is fine. (BH, male)

The questionnaire survey (q.29) and non-drinkers' questionnaire survey (q.12) asked residents to respond to the statement 'I think drinking alcohol is an important part of student culture'. Fifty-five percent of residents agreed with the statement, 28.9% neither agreed nor disagreed, and 16.0% of residents disagreed. Significant gender differences were found with male residents (62.1%) significantly more likely than female residents (50.7%) to agree with the

statement (Mann-Whitney U, z = -2.90, p < .005). Drinking residents (60.0%) were also significantly more likely than non-drinking residents (29.1%) to agree with the statement (Mann-Whitney U, z = -6.13, p < .001). Significant differences were found across the four ethnicity groupings (Kruskal-Wallis H = 15.94, df = 3, p < .001). Sixty percent of New Zealand European residents agreed with the statement followed by 58.1% of New Zealand Maori residents, 50.0% of Other Ethnicity residents, and 36.5% of Asian residents. A significant association was found between a resident's response to the statement and the number of drinks a resident consumed on a typical drinking occasion (Spearman's $r_s = .290$, p < .001), with residents who consumed larger amounts of alcohol more likely to agree with the statement. Overall, female residents, non-drinking residents, Asian residents, and light drinking residents were least likely to agree that alcohol was an important component of student culture.

A number of residents viewed their current student drinking behaviour as a transitional stage in their drinking life. These residents held the opinion that they were allowed to drink excessively while they were a student, but once they completed their degree and began working they would then reduce their drinking.

I mean it is University. You are only young once pretty much. It only starts getting bad when you get trashed for about three years. That is the average degree, so after that you should start getting a bit more mature. If you can't cut it out after that you have a bit of a problem. But yeah, teenagers are supposed to do it. (BH, male)

A number of residents also commented that being a university student not only gave them an excuse and social acceptance to drink excessively, but also minimised the consequences of their drunken behaviour.

I think because I am a student it gives me an excuse when I go out. People look at me and think she is a student, don't worry about it. I am in that age that I can get away with it. (CH, female)

For these students there was a strong expectation that as a student they would drink, that their drinking would on occasion be heavy, and that the consequences of their intoxicated behaviour would be excused (and forgiven) because they were university students.

6.3.2 Alcohol Use as a Component of Student Socialising Behaviour

Socialising with other students was an important component of student culture and many residents reported a strong relationship between student socialising and alcohol usage. Within the halls of residence setting, drinking alcohol with others was an easy activity to organise and an activity that most residents could participate in. Shared drinking occasions provided an opportunity to meet others and to develop friendships. A previously non-drinking resident described why she started drinking once she arrived in the halls of residence:

R: So after that month you started drinking. What do you think was the biggest influence that made that drinking happen?

It was definitely, I was at the halls, it was just everyone drank, that was just the norm. Like I would go down and I would be sober, and you saw everyone drinking and stuff, and that looked like fun. Cause they were all having fun and happy. And then I would think why not drink. Then on my eighteenth birthday they had a little party for me and they brought me some alcohol, and I drank it. And then they just kept buying me alcohol and so I kept drinking it, cause I didn't want to be rude. And so then because I had drunk it, the next day I woke up and they were like 'did you

have fun'. And I was like, that was cool as. And that time I saw that I did.

Then like, we will have fun tonight and to have fun I had to drink. Just to
have the same fun. (CH, female)

The desire to be part of things was not confined to female residents, however:

From a guy's perspective, just being part of the clubs, like if all your friends are going in to hang out you just go in. You don't want to be stuck in the hall by yourself, and it's just sort of like the general migration, I mean, often I reckon a lot of people go into town, just cause other people are. (SV, male)

The questionnaire survey (q.12) asked drinking residents to respond to the statement 'When I drink it is easier to meet and get to know people'. Sixty-seven percent of residents agreed with the statement, 23.8% neither agreed nor disagreed, and 8.8% disagreed. Significant gender differences were found with male residents (74.3%) more likely than female residents (62.8%) to agree with the statement (Mann-Whitney U, z = 2.75, p < .05). No significant differences were found in residents' responses to the statement across ethnicity and halls of residence groupings.

The questionnaire survey (q.19) asked drinking residents to respond to the statement 'I don't drink alcohol for the intoxication effect: I drink to join in with social and/or sporting activities'. Forty-seven percent of residents agreed with the statement, 39.6% neither agreed nor disagreed, and 13.5% disagreed. No significant differences were found in drinking residents' responses to the statement across gender, ethnicity, or halls of residence groupings.

Hooking-up

Discussion with residents during focus group discussions and one-to-one interviews revealed that many residents consumed alcohol and socialised with the intent of finding a potential partner. The term most commonly used by residents to describe this process of meeting a new partner was 'hooking-up'. Hooking-up could involve looking for a long term life partner or a short term sexual relationship.

R: So why are people going into town if it is not to drink?

-To socialise, I know most of us girls, well our group, like to dance and stuff, but some people go to hook-up (female)¹¹⁶.

R: What can you tell me about the 'hook up', importance?

-I can't tell you a lot about that (female).

-I don't think it's important, I don't know. That's from a girl's point of view (female).

-Most guys I have talked to, they say the only reason they go to town is to hook up with girls, and it is so true (male).

-To get a perve on the girls and to find hot girls, and that's where you find them. So [there is] nothing wrong with that (male). (SV, focus group)

Participants in a second focus group discussion also commented on why they

drank in city bars:

-You go for the atmosphere.

-Ultimately you go to find a partner.

-If you are single.

-That is true. So true.

-That is the main reason we go out. (BH, focus group)

The gender of the interviewee will be identified when it is relevant to the quotation statement.

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For a number of drinking residents, looking for a partner or hooking-up, was clearly an integral and often highly prioritised component of the total drinking experience. For some of these residents drinking alcohol also had the added benefit of increasing their ability and/or confidence to interact with potential partners.

6.3.3 Perceived Community Attitudes towards Student Drinking

Discussion with residents during focus group and one-to-one interviews revealed that many thought that the general public held the view that university students were excessive drinkers. Some residents commented that this community attitude was deserved, while other residents thought it was not.

I think it is a bit unfair really. I think it is a bit stereotypical because they are always focusing on this one group of university students, whereas there is a lot more to it than that. There are a whole bunch of other people who get drunk. We are at university, we have proven, we are not of higher intelligence, but we have proven that we can apply ourselves. For them to target us like that, I think it's a bit stupid. (BH, male)

A second resident also commented on the stereotyping of student drinkers:

I don't think that you can categorise it. It is an individual's choice but together students are probably going to rebel and have some fun.

Congregate together and drink. But I would think there are a lot of other people in the community that drink heavily as individuals but you can't categorise them as much as you can students. That's my idea on the whole thing. (CH, female)

The questionnaire survey $(q.34)^{117}$ asked residents to respond to the statement 'I think people out in the community believe all university students drink a lot of alcohol'. Eighty percent of residents agreed with the statement, 13.0% neither agreed nor disagreed, and 6.8% disagreed. No significant differences were found in residents' responses to the statement across gender and halls of residence groupings. Drinking residents (84.6%) were significantly more likely than non-drinking residents (57.0%) to agree with the statement (Mann-Whitney U, z = -5.63, p < .001). Significant differences were also found across the four ethnicity groupings (Kruskal-Wallis H = 60.09, df = 3, p < .001). Ninety-two percent of New Zealand Maori residents agreed with the statement followed by 86.3% of New Zealand European residents, 72.9% of Other Ethnicity residents, and 46.0% of Asian residents. Overall, non-drinking residents and residents from Asia were least likely to agree that the community perceives university students as heavy drinkers.

6.4 The Halls of Residence Environment within Student Culture

6.4.1 Halls of Residence as a Transition from Home

Many New Zealand residents reported that living in the halls of residence was their first experience of living away from the family home. These residents often viewed the halls of residence as providing a safe transition into independent living. Residents commented that the halls of residence setting allowed them the freedom to generally do what they wanted to, but they still had the security of the halls of residence staff and rules if required. As most New Zealand residents, and all International residents, had travelled to come to the university, the halls of

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¹¹⁷ Non-drinkers' questionnaire q.16.

residence were also viewed as providing an environment for them to make new friends.

R: If you were to describe what it is like being in the halls ... what might you say?

-.... I would say they [students] have to come to a hall because that is where you meet your friends.

-Yeah.

-I got told that as well before I came down. You can't not stay in the halls.

-I found it to be independent. Just do your own thing because you are not depending upon anyone else at all. It is really awesome the way everyone is just so open to making friends.... It has that atmosphere that everyone is quite happy to be friends with everybody.

-.... You make friends for life. You grow as a person. Instead of jumping straight into the world and going flatting and stuff.

-You learn to live with people beside your family.

-It is like being half independent, being away from home, so you are half way there before you go flatting. (CH, focus group)

A slightly older resident, at twenty-two years of age, who was in his first year of university study and living in the halls of residence, discussed his thoughts on the benefits of living in the halls of residence:

R: Do you think there is any difference between a first year student in the halls of residence and a first year [student] who goes out flatting?

Yes, I think it is actually quite a good step to go into the halls first to be honest, because as much as people love to say they do, you don't know anything when you are 17-18 years, you don't really know anything of the

world. Whereas you come here and it is an easier transition. You don't have to cook; you aren't worrying about power bills and all that. It is all done. You just worry about your studying, your clothes and getting to dinner. (SV, male)

A resident summarised the accommodation stages she viewed university students passing through:

I think in New Zealand a typical uni student, an ideal typical student spends their first year in the halls, makes lots of friends, and has a lot of fun. Second year [they] go out flatting and then in third year [they] are trying to finish their degree. (SV, female)

6.4.2 Drinking Within the Halls of Residence

Many residents viewed the halls of residence as a strong medium for student culture and therefore for student drinking. Some hall residents reported that before arriving at the halls of residence they expected that there would be a lot of drinking within the halls setting.

-I definitely think a lot of people came [to the halls] for the whole socialising and drinking experience. To actually be in this close knit environment. To see people drink and to have the experience of drinking.
-.... Most people do go to halls, even like in Otago, pretty much every hall they go because of the social life. That is one of the reasons I am at a hall of residence.

R: Before you arrived at the hall what were you thinking it would be like?

-All the misconceptions that you get on TV and like that.

-Like America and its colleges.

-Drinking.

-.... My friends, when I was going to uni said, 'oh my god that is so cool, you are going to be drinking every night, you are going to be doing so much drinking'. I said I am going to get a degree. I just didn't understand it. I know there was this big reputation. I am going to get a degree. I am not going to get drunk, to waste a lot of money. (SV, focus group)

In spite of most residents reporting that alcohol use played a significant role in student culture, many residents also commented that they did not believe that a resident needed to drink alcohol to fit in with others in the halls. Focus group participants discussed the challenges facing two non-drinking residents within their halls of residence:

-Guys like Hamish¹¹⁸ and Jamie [non-drinkers] they still fit in. They are like anyone else.

-But they could still fit in more if they drank.

-No I don't think so.

-I think some people [non-drinkers] you just get used to them not drinking and like you learn to know the people that don't drink. But they still come and hang out. Like we got Hamish and Jamie, Hamish hardly ever comes over but Jamie does all the time.

-For sure yeah.

R: So you can identify who the non-drinkers are?

-Yeah and you respect them for not drinking. Like you stop offering them drinks after you know a while and then, yeah, you still have fun with them.

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¹¹⁸ All names have been changed throughout the text to ensure participant anonymity.

-They still act, well they don't act drunk. You have to be quite a fun person to fit in with the drinkers.

-You have to have a lot of personality.

-If you were like a reserved person and you were surrounded by you know five intoxicated people, you are just going to get smothered. (BH, focus group)

The questionnaire survey (q.32)¹¹⁹ asked residents to respond to the statement 'I don't think you have to drink alcohol to fit in with others in a hall'. Seventy-three percent of residents agreed with the statement, 17.4% neither agreed nor disagreed, and 9.7% disagreed. No significant differences were found in residents' responses to the statement across gender, drinker/non-drinker, ethnicity, or halls of residence groupings, nor was there any significant association between a resident's response to the statement and the number of drinks they consumed on a typical drinking occasion.

Overall, many residents held the view that a lot of drinking occurred within the halls of residence and that hall students probably consumed more alcohol than their non-hall student peers living in the community. A resident summarised this view:

Yeah, I know a girl who lives in a flat and she doesn't drink as much as we would in the hall. Although they do have parties and stuff, they don't drink as much. I have met another girl that lives in a flat and another boy and they don't drink as much as what we do here. (CH, female)

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¹¹⁹ Non-drinkers' questionnaire survey q.14.

6.4.3 Halls of Residence Rules

Discussion with residents during focus group and one-to-one interviews revealed a range of attitudes towards the halls of residence rules. Many residents reported that the hall rules were an important and necessary component of the halls of residence culture. These residents commented that the rules helped to ensure that the halls of residence remained a safe and enjoyable experience for all residents. In contrast, a minority of residents reported that the hall rules were too restrictive on their behaviour. For these residents the desire for more freedom often focused around the freedom to drink alcohol and to socialise with others. Residents participating in a focus group explained why they thought the hall rules were reasonable:

R: You tend to think the rules are okay generally, why is that?

-Yeah.

-There are limits to everything.

-There are times when I need to study and others are being noisy.

-There are times when you want to go out.

-The main reason you are here, theoretically is to pass your course.

-Yeah. So you have to, and everyone is here to do that as well. (CH, focus group)

A second focus group of residents also explained why they thought the hall rules needed to be in place:

R: What do you think about the [hall] rules?

-They need to be there.

-They are there for control.

-If RA's¹²⁰ didn't come and take our drinks off us, we would probably get out of control.

-There are some nights as well when it does get out of control, you know like especially not hall residents, when other people come in. Mates that come in and they don't really care about the rules or anything. That can be quite hard at times.

-The rules are good for other residents who aren't drinking. Like if you want to study that night. (SV, focus group)

In contrast, participants in another focus group from the same hall commented on the restrictiveness of the hall rules:

R: Noise ban and alcohol ban, what do you think about them?

-It doesn't really work.

-Like people just get fines and they do it again and get another and they're like oh it's just coming out of my deposit I don't care.

-What do they expect? It is at the end of exams and the first thing they are going to do is party. You know.

-It was more effective last semester, just because of the fact that everyone would be coming back in two weeks, but now it's like the end of the year,

-.... What can they do kick me out? I am leaving anyway. (SV, focus group)

The questionnaire survey (q.31) asked drinking residents to respond to the statement 'I think the halls of residence rules restrict my drinking'. Thirty-eight percent of residents agreed with the statement, 35.4% neither agreed nor disagreed, and 26.5% disagreed. Significant gender differences were found with

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¹²⁰ The term RA is short for Residential Assistant (hall staff).

male residents (46.5%) significantly more likely than female residents (32.3%) to agree with the statement (Mann-Whitney U, z = -3.28, p = .001). No significant differences were found in drinking residents' responses to the statement across ethnicity or halls of residence groupings. A significant association was found between a resident's response to the statement and the number of drinks they consumed on a typical drinking occasion (Spearman's $r_s = .194$, p < .001) and the largest number of drinks they consumed in the previous four week period (Spearman's $r_s = .227$, p < .001). Overall, heavy-drinking male residents were more likely to agree that the halls of residence rules restricted their drinking behaviour.

6.5 Non-Drinking Residents

As non-drinking residents are included within halls of residence student population, this section of the student culture results will provide a brief overview of the data relating to the experiences of these non-drinking residents. Sixteen percent of hall residents reported that they had not consumed alcohol in the previous twelve month period. No significant association was found between a resident identifying as a non-drinker and their gender. Differences were found across ethnicity groupings with international student groupings reporting a higher proportion of non-drinking residents than New Zealand-based groupings. Chinese residents reported the highest proportion non-drinking residents (70.7%) and New Zealand Maori residents the lowest proportion (5.1%). A summary of resident responses across nine ethnicity groupings is shown in Table 4.1.

The non-drinkers' questionnaire survey (q.31) asked non-drinking residents 'What are your reasons for not drinking alcohol'. Health issues (50.6%) were reported

as the most common reason for not drinking (see Table 6.1). Of the six residents (7.5%) who listed 'other reasons' for not consuming alcohol; three commented that they did not drink alcohol because of academic reasons, one resident reported a lack of time to drink, and one resident commented that her boyfriend's religion forbade them from drinking. The sixth resident reported that he did not consume alcohol because he did not consider himself to be 'scum'.

Table 6.1 Non-drinking residents' reasons for not consuming alcohol.

Reasons for not drinking	%	(n)*	
Health reasons	50.6%	(40)	
Religion prohibits alcohol use	15.1%	(12)	
Family disapproval	15.1%	(12)	
Social disapproval	13.9%	(11)	
Don't like the taste of alcohol	8.8%	(7)	
Don't like the impact of alcohol on self	8.8%	(7)	
Culture prohibits alcohol use	8.8%	(7)	
Personal choice and principles	8.8%	(7)	
Don't need alcohol to have a good time	7.5%	(6)	
Other reasons	7.5%	(6)	
Don't like the impact alcohol has on others	5.0%	(4)	
Financial reasons	2.5%	(2)	

^{*}Non-drinking residents could identify multiple reasons for not consuming alcohol.

The non-drinkers' questionnaire survey (q.27) asked non-drinking residents 'While living in the halls of residence environment have you ever felt pressure from other students to drink alcohol'. Fifty-four percent of non-drinking residents reported they had not felt pressured to drink and 46.2% reported they had felt pressure to drink. No significant association was found between a non-drinking

resident reporting they had felt pressured to drink alcohol and their gender, or the halls of residence they resided in.

Although many non-drinking residents commented that they had friends within the halls of residence who consumed alcohol¹²¹, the majority typically reported closer friendships with other like minded non-drinking residents. For these non-drinking residents, the opportunity to indentify other non-drinking students within the halls of residence was an important component of their social integration. At the beginning of the academic year, a bowling and movie evening¹²² was organised by the halls of residence. Many non-drinking residents commented on the importance of this bowling/movie activity as an early opportunity for them to identify other non-drinkers and to build friendships. A non-drinking resident commented on how she met her non-drinking friends within the halls of residence:

The first week I was here, I made friends with a guy [non-drinker] who wasn't on my floor and then I became friends with all the people in his block who didn't drink. And then we found other people who didn't drink because of the bowling. So I am thinking it was quite a big thing for us to find friends elsewhere, since there were not that many non-drinkers in our block. (SV, female)

Non-drinking residents commented upon the importance of having non-drinking activities periodically throughout the academic year. These events were popular with both non-drinking residents and a number of light drinking residents who often did not wish to socialise at heavy-drinking student orientated events.

¹²² This evening event is organised as a non-drinking alternative to an inter-hall party organised the same evening for drinking residents.

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¹²¹ 77% of non-drinking residents reported that they had friends in the halls of residence who consumed alcohol and 58% of non-drinking residents reported that they at least 'sometimes' socialised with their drinking resident friends when they were consuming alcohol.

6.6 Conclusion

Student culture was described by residents as a combination of academic study and socialising activities. Before arriving at University, many New Zealand residents were informed by family and friends that the social component of student culture would involve heavy alcohol usage and frequent partying. In contrast, many Asian residents and some Pacific Island residents had been surprised by the extent of student drinking behaviour within student culture. A number of residents believed that being a university student not only gave them an excuse and social acceptance to drink excessively, but also minimised the consequences of their intoxicated behaviour. Finding a potential partner, or hooking up as it was most commonly termed, was identified by many residents as an important aspect of student socialising/drinking behaviour. Hooking up could involve a one-night sexual liaison or a long term committed relationship. Two-thirds of drinking residents reported that drinking alcohol made it easier for them to socialise with others. Overall the majority of residents reported that they enjoyed student culture.

New Zealand residents viewed the halls of residence as a safe transition from living at home with family into a semi-independent living situation. Both New Zealand and international residents commented that the halls of residence were a good environment to make new university-based friends and to settle into student culture. Although most residents viewed alcohol usage and socialising activities as strong components of the halls of residence culture, three-quarters of residents reported that they did not think a resident needed to consume alcohol to successfully integrate into the hall culture. Heavy-drinking male residents were most likely to report that the halls of residence rules restricted their drinking

behaviour. Non-drinking residents stressed the importance of having social opportunities within the halls of residence setting to meet other non-drinking residents.

7 RESULTS: BINGE DRINKING ENVIRONMENT

Binge Drinking Environment Research Aims:

- i. To identify what resident students define as 'binge drinking' behaviour.
- To determine resident students' attitudes towards binge drinking behaviour.
- iii. To identify connections between student culture and binge drinking.
- iv. To identify the influencing factors from both within the halls of residence setting and external to the halls of residence setting, that may support the establishment and maintenance of a resident student binge drinking.

This chapter will present a combination of both quantitative data and qualitative data addressing the four research aims related to binge drinking environment.

This will include data outlining residents' acceptance of binge drinking, the relationship between binge drinking and student culture, and the environmental variables (both on-campus and off-campus) that influence resident binge drinking behaviour. The chapter will begin by identifying how residents define binge drinking behaviour and the terms they commonly use to describe progressive stages of alcohol intoxication.

7.1 Residents' Definitions of Binge Drinking Behaviour

7.1.1 Terminology Used to Describe Binge Drinking Behaviour

During focus group discussion and one-to-one interviews residents were asked if the phrases 'binge drinking' and 'binge drinker' were terms that they used when talking with their peers about alcohol-related matters. Almost all residents reported that although they were familiar with these two terms, they were not phrases they would commonly use. Residents often identified the use of the terms binge drinker and binge drinking with the television and newspaper media.

R: Is binge drinking a term you and your friends would use?

No. No not really. You would get drunk, that's about it. You wouldn't say binge drinking. (CH, female)

A resident also commented:

No. Like, I don't find my friends saying it ever, or first years. I only hear it said by like on TV or something like that. (BH, female)

Residents commented that a continuum of terms was used to describe progressive stages of alcohol intoxication. A mild level of intoxication was often defined by the terms 'social' and/or 'tipsy'. During this social/tipsy stage a resident may experience a slight intoxication but they would still maintain full control of themselves and would be highly unlikely to experience any negative consequences as a result of their drinking. A moderate level of intoxication was usually defined by the terms 'half-cut' or 'had a few'. During this stage a resident would be a little more intoxicated than the tipsy/social stage and their bodily functions may be slightly impaired, but they would still be maintaining a reasonable control over themselves and their behaviour.

A full level of intoxication would most commonly be described by the terms 'drunk' and 'wasted' During this stage a resident would usually have impaired cognitive abilities and reduced physical control over their body. There

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¹²³ The term 'drunk' was selected by the researcher to identify intoxicated behaviour in the questionnaire survey schedule.

¹²⁴The alternative terms of 'cut', 'totalled', 'smashed', 'trashed', 'sloshed', 'tanked' and 'off your face' were also used on occasion by residents.

would be a greater likelihood of alcohol-related harms associated with this level of drunkenness.

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R: If someone is trashed, smashed, or drunk what lets you know someone
       has done that?
       -Having trouble standing up.
       -Falling over, can't talk properly.
       -Slurring.
       -Possibly get a bit aggressive.
       -Spewing.
       -If spewing then they are well on the way. (SV, focus group)
These impressions were reinforced by a second focus group:
       R: Now these others [terms] drunk, smashed, totalled, and wasted?
       -Stumbling around I guess.
       -Yeah.
       -Slurring all your words.
       -Loud.
       -Louder.
       -Really loud.
       -Saying stupid things.
       -Bit more aggressive.
       -Yeah.
       -Like abusive as well.
       -Like emotional as well.
       -Sometimes you get really emotional. (BH, focus group)
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An excessive level of intoxication where a resident was thought to be very drunk would often be described by the term 'coma'd', although the terms 'off your face' and 'trashed' could also be used to describe this state. At this level of intoxication a resident would have lost a great deal of control over their physical body and may also be experiencing difficulty maintaining consciousness.

R: If someone was coma'd what would that mean?

- -Passed out.
- -Spewed and gone to sleep.
- -Hard to wake.
- -Pretty much have to carry them home.
- -No control. (BH, focus group)

7.1.2 Definitions of Binge Drinking

Discussion with residents during the first stage focus groups and one-to-one interviews and piloting of the questionnaire survey schedule revealed that residents generally identified four definitions of binge drinking behaviour. These four definitions included the amount of alcohol an individual consumed while drinking, how often an individual was drinking, the reasons that an individual was drinking, and an individual drinking alcohol with the intention to get drunk. To investigate these definitions further, residents were asked in the questionnaire survey (q.23-26)¹²⁵ to indicate if they agreed, disagreed, or neither agreed nor disagreed with these four definitions. Seventy-two percent of residents agreed with the statement that binge drinking behaviour was defined by the amount of alcohol an individual consumed and 61.4% of residents agreed with the statement that binge drinking was defined by drinking alcohol with the intention to get

¹²⁵ Non-drinkers' questionnaire q.6-9.

drunk. A summary of resident responses is given in Table 7.1. No significant differences were found in residents' responses to the four binge drinking definition statements across gender, drinking/non-drinking, and ethnicity groupings. Amongst drinking residents, no significant association was found between a resident's response to the four binge drinking definition statements and the frequency of their drinking behaviour, or the quantity of alcohol they consumed on a typical drinking occasion.

Table 7.1 Resident responses to statements defining binge drinking behaviour

	Neither agree						
	Agree		or disagree		Disagree		
Statement	% row	(n)	% row	(n)	% row	(n)	
Binge drinking is measured by	72.0	(360)	19.4	(97)	8.6	(43)	
how much you drink.							
Binge drinking is drinking to get	61.4	(307)	25.0	(125)	13.6	(68)	
drunk.							
Binge drinking is measured by	31.1	(156)	29.1	(146)	39.7	(199)	
how often you drink.							
Binge drinking is measured by	24.2	(121)	39.7	(198)	36.1	(180)	
the reasons you drink.							

7.2 Residents' Attitudes towards Binge Drinking Behaviour

7.2.1 Resident Acceptance of Drunken Behaviour

Discussion with residents during focus groups and one-to-one interviews revealed that many residents were accepting of drunken behaviour. A resident participating in a one-to-one interview commented upon this attitude:

I think it is acceptable to go out and drink heaps and get drunk. It is actually socially accepted in New Zealand. (SV, male)

A second resident also comments:

R. Why don't you follow it [the safe drinking guidelines]? *Because I am a Kiwi.*

R. Which means?

Binge drinking culture. And I am a student. (CH, focus group)

Although drunkenness was accepted by many residents there were a number of limits placed upon this behaviour. Drunken behaviour was generally acceptable as long as the drinker did not get drunk on a daily basis, did not drink by themselves, did not get drunk to the point of unconsciousness (coma'd) too frequently, and was not a regular liability 126 to their friends or others around them.

R: What is the boundary is for people to say that [drinking] is not okay?

-Sort of like, you could go out say four times a week and get trashed as. If
you are acting alright and no one is really noticing you [that is okay]. It
is when you start embarrassing yourself. And being a dick and waking
people up.

- -Being really loud and waking people up.
- -It depends upon the attitude that people bring.
- -.... But if you are alone in your room it is a bit of a worry.
- -.... If you were getting smashed by yourself in your room, there would be something a bit wrong. (CH, focus group)

Residents participating in a second focus group discussed their thoughts on the boundaries of drunken behaviour:

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¹²⁶ Being a liability included any aggressive behaviour or any socially inappropriate behaviour (including inappropriate sexual behaviour).

R: What would a mate have to do with his drinking, where you would start to think this is not okay?

- -Drinking every night. In their room by themselves.
- -Yeah. Like an alcoholic there.
- -Where their actions sort of crossed the line a bit. Like where they started trying it on with girls that keep pushing them away and that sort of stuff.

 And fighting for no reason. Stuff like that, is when it would get a bit too rich.

R: How often would be too much [getting drunk to the point of having to be looked after by others]?

- -Every week in [and] week out.
- -Yeah.
- -Everyone is allowed a big night like that every month or two. Once in a while, but if it becomes a regular thing, then you are constantly looking after the person, that is doing it. Then that is too much.
- -.... If you had to look after them it would ruin your night. You would get pissed off with them. (BH, focus group)

The questionnaire survey $(q.17)^{127}$ asked residents to respond to the statement 'It is okay to get drunk as long as it is not every day'. Sixty-three percent of residents agreed with the statement, 20.2% neither agreed nor disagreed, and 17.0% disagreed. No significant gender differences were found in residents' responses to the statement. A significant difference was found with drinking residents (66.1%) more likely than non-drinking residents (45.6%) to agree with the statement (Mann-Whitney U, z = -4.32, p < .001). A significant difference

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¹²⁷ Non-drinkers' questionnaire q.3.

was also found across the four ethnicity groupings (Kruskal-Wallis H = 8.27, df = 3, p < .05). New Zealand European residents were more likely to agree with the statement (67.1%), followed by New Zealand Maori residents (62.2%), Other Ethnicity residents (57.1%), and Asian residents (51.6%). Amongst drinking residents a significant association was found between a resident's response to the statement and the frequency a resident consumed alcohol (Spearman's $r_s = .189$, p < .001), and the number of drinks a resident consumed on a typical drinking occasion (Spearman's $r_s = .253$, p < .001). The more frequently a resident consumed alcohol and the more drinks they consumed on a typical drinking occasion, the more likely they were to agree that it was okay to get drunk as long as it was not every day.

7.2.2 Attitudes towards Male and Female Drunken Behaviour

When discussing the issues of drunkenness with residents during focus groups and one-to-one interviews, many residents reported a greater tolerance towards a male getting very drunk and intoxicated than towards a female. The issue of physical safety (including sexual safety) was often mentioned by residents as a reason for their differing gender views towards excessive intoxication. A mixed gender focus group discussed their views on male and female drunkenness:

R: Do you think there is any difference for guys and girls ... about getting smashed or trashed?

- -I would say the guys do it more often. (female)
- -And more acceptable. (male)
- Yeah, a lot more. (female)
- -Yeah, a lot more. (female)
- -A lot more acceptable. (male)

R: Why is that?

-You see it in movies and shit, you see it all the time. The male is always getting hammered. And the women is always looking after him. I don't know. (male)

R:... If the girl is getting wasted and totalled regularly, would you start to think worse of her?

- -Yeah [general agreement amongst most of the group].
- -Probably. (male).
- -I think as a female I would be more concerned for other females. As a female if a guy was getting wasted every night, every weekend whatever, it's just, he is just a pisshead. (female)

R: So a guy can get wasted more often and be accepted?

- -Yeah [general agreement amongst the group].
- -.... I think if a girl goes that far she has to be looked after a lot more.

 (male)
- -Yeah there are some doggy guys out there that would notice her getting to the phase and would take advantage of her. (male)

R: There is an inherent difference? If she gets to the point of being smashed someone is going to watch over her for her safety?

- -Yeah [general agreement].
- -Whereas if it was a guy it is not as big an issue. (male)
- -He can be left to roam a bit. (male)
- -Yeah cause they can look after themselves. (female) (BH, focus group)

A College Hall focus group concurred:

R: Is there any difference between guys and girls getting smashed or wasted?

-It looks worst on girls. (female)

-It does, I heard that from a lot of people and I think it is probably true. (female)

R: Why is that different from a guy?

-I think it is based on the olden days like when girls weren't allowed to do things, it's not lady like. (female)

-Also some girls just are like are silly to begin with (female).

R:... Do you boys see it similarly?

Yeah, Yeah [males agree]. (CH, focus group)

In responding to the questionnaire survey $(q.21)^{128}$ statement 'It is okay for a male to get very drunk and wasted', 43.7% of residents disagreed with the statement, 34.5% neither agreed nor disagreed, and 21.8% agreed. A significant gender difference was found with male residents (36.0%) three times as likely as female residents (12.5%) to agree with the statement (Mann-Whitney U, z=-5.77, p < .001). The questionnaire survey $(q.22)^{129}$ asked residents to respond to the statement 'It is okay for a female to get very drunk and wasted. Fifty percent of residents disagreed with the statement, 33.5% neither agreed nor disagreed, and 16.0% agreed. A significant gender difference was found with male residents (24.4%) twice as likely as female residents (10.5%) to agree with the statement (Mann-Whitney U, z=-3.24, p = .001). Further analysis revealed that residents were significantly more likely to agree with the statement 'It is okay for a male to get very drunk and wasted' than agree with the statement 'It is okay for a female to get very drunk and wasted' (Wilcoxon Signed-Rank W, z=-5.69, p < .001). Analysis revealed that this difference was significant for both male residents

¹²⁸ Non-drinkers' questionnaire q.4.

Non-drinkers' questionnaire q.5.

(Wilcoxon Signed-Rank W, z = -4.88, p < .001) and for female residents (Wilcoxon Signed-Rank W, z = -2.90, p < .005).

7.2.3 Resident Unacceptability of Drunkenness

Although many residents reported an acceptance of drunken behaviour, a minority grouping of residents commented that they did not think drunkenness was acceptable. This minority group often stated that they were not against the consumption of alcohol in general, but they did not agree with an individual drinking to get drunk. Many of these residents were quick to comment that it was possible to have an enjoyable time drinking with others without resorting to drunkenness. A drinking resident explained why she was a moderate drinker:

R: So how come you are a slow drinker?

I never used to be. I don't know, it's just a habit. I have slowed down a lot. Before I came to Uni I did drink a lot, like shots and stuff, but I have kind of just grown out of it. Drinking [now] more socially, rather than to get drunk.

R: So I am really interested to know about that. Help me to understand why that has happened?

I don't know, I think I have grown up a bit and realised you don't have to get drunk to have a good time. I was getting sick of it; you know when you get drunk and lose control of yourself. I got sick of that, I don't like it. I like to have control of my body and what I am doing. I just drink socially now. I am not a big drinker any more. (CH, female)

A second moderate drinker discussed his drinking behaviour:

R: You said earlier, some people go out to get drunk, but that is not your agenda. What is your intention when you go out to drink?

I just want to be with my friends, if they want to go out and drink then I will go out with them and it is a better atmosphere when you are out with people.... I just don't like it the next day when you wake up and you feel real sick. That is one of the main reasons. Plus you don't want anything bad to happen. (SV, male)

The questionnaire survey $(q.13)^{130}$ asked residents to respond to the statement 'It is never okay to get drunk'. Thirteen percent of residents agreed with the statement, 34.0% of residents neither agreed nor disagreed, and 53.0% of residents disagreed. A significant gender difference was found with female residents (14.5%) more likely than male residents (10.7%) to agree with the statement (Mann-Whitney U, z = -2.22, p < .05). Non-drinking residents (35.4%) were also significantly more likely than drinking residents (8.8%) to agree with the statement (Mann-Whitney U, z = -5.83, p < .001). A significant difference was also found across the four ethnicity groupings (Kruskal-Wallis H = 42.42, df = 3, p < .001). Asian residents were more likely to agree with the statement (28.1%), followed by Other Ethnicity residents (24.3%), New Zealand Maori residents (10.8%), and New Zealand European residents (7.2%). Overall female, non-New Zealand, non-drinking residents were most likely to agree with the statement.

Discussion with residents during focus group and one-to-one interviews supported the survey findings that international students, particularly from Asia and the South Pacific nations, were less likely to find drunken behaviour acceptable.

These residents were often surprised and at times intimidated by the level of

130 Non-drinkers' questionnaire q.1.

drunkenness they found in New Zealand. They commented that in their home countries it was not acceptable for young people, and particularly for young women, to drink to intoxication. Asian residents participating in a focus group interview discussed their experiences of socialising in New Zealand:

-Yeah. It is quite bad. People get quite drunk and stand on the road, [it is] dangerous.

-I was told before I came here like that don't go out by yourself at night.

You have to go in a group. I can see like people get drunk and like abuse you.

- -Some people get drunk ... [it is] pretty unsafe sometimes.
- -Usually if you are with a group [you are safer].
- -I think New Zealanders get more violent as they drink more. (SV, focus group)

7.3 Connections between Student Culture and Binge Drinking

7.3.1 Binge Drinking as a Component of Student Culture

A number of residents viewed student drinking as a fundamental component of student culture.

I would say it [drinking] is a big part of it, being a student. Socialising and drinking. You go to university as much to get a degree as to have a good time. (SV, female)

A resident commented on the reasons he thought students could regularly binge drink:

R: Do you think being a student particularly supports drinking, binge drinking, or not?

Yes, because when you are a student you are around more people, you don't have a job, you have holidays, you have more time off. Most students in first year have time between lectures, and they get bored. That is about being a student. (SV, male)

Many residents reported noticing frequent drunken behaviour within the halls of residence setting. A resident discussed the differing levels of binge drinking behaviour he has observed in the hall community:

R:... What proportion of people would roughly do that [binge drink]?

It would be a lot. I don't know, maybe half the people, maybe. There are some people here who are obviously experienced with alcohol, and they are binge drinking and that is fine. Then there are other people ... they are obviously not experienced, they are binge drinking because they are at university. (BH, male)

The questionnaire survey $(q.30)^{131}$ asked residents to respond to the statement 'I think drunkenness is accepted by most students'. Seventy-six percent of residents agreed with the statement, 17.0% neither agreed nor disagreed, and 6.8% disagreed. No significant gender difference was found in residents' responses to the statement, but drinking residents (78.9%) were significantly more likely than non-drinking residents (62.0%) to agree with the statement (Mann-Whitney U, z = -3.36, p < .001). A significant difference was also found across the four ethnicity groupings (Kruskal-Wallis H = 24.47, df = 3, p < .001). Eighty-five percent of Other Ethnicity residents agreed with the statement, followed by New Zealand European residents (78.8%), New Zealand Maori residents (78.4%), and Asian residents (50.8%).

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¹³¹ Non-drinkers' questionnaire q.13.

7.3.2 The Role of Family and Friends in Linking Student Culture and Binge Drinking

Many residents reported that before arriving at university they had been informed by family and friends that binge drinking behaviour would be an integral component of their student experience.

-I had mates who had gone to other ones [universities] that told me, said it was a fun atmosphere, lots of friends, lots of drinking. So I heard, few rules and that.

-.... All my mates back home were talking about the drinking. Pretty intense up there they said. (CH, focus group)

Focus group participants also commented:

-Actually my friends think that university students drink a lot more. I come from a small town and so drinking is the big thing. It is the usual, it is expected. So people, friends I know, when they think of university it is constant parties and drinking.

- -It is kind of like that. Kind of expected.
- -Yeah definitely the norm.
- -Yeah, definitely what university was made out to be before we arrived.

 To be fun and partying.
- -That's what I thought it was. I thought it was this one big party. You roll up. Sex everywhere and what not. With the whole drinking atmosphere.

 But it is not like that at all. We get on the piss and what not, but it is not like that.

R: So the real life part of it [student culture] is not quite what others think it is?

-Yeah. [general agreement]. (BH, focus group)

7.3.3 The Role of the Media in Linking Student Culture and Binge Drinking

Many residents commented that they thought the news and entertainment media portrayed a strong association between student culture and binge drinking.

The media portrays it as students always drinking. They connect those two for some reason. (CH, male)

One of the hall Residential Managers also commented on the depiction of student drinking in the media:

I also feel that the environment over that last four to five years,

particularly exposure through the media and internet, there is more of a

strengthening, particularly through ads, of this culture of [student]

drinking.... We already had a society that drank, but we now also have all

this glamorising and socialising of all of those things. (Residential

Manager)

7.3.4 Comparison of Student Drinking Patterns with Non-Student Friends Drinking Patterns

Although many residents reported arriving at university expecting binge drinking to be a significant component of the student culture experience, a number of residents commented that the student binge drinking behaviour they had witnessed was not as frequent and as extreme as they had anticipated it would be. Residents commented that binge drinking behaviour was practised throughout New Zealand and a number of residents were quick to state that their non-student friends back home often drank the same, or more alcohol, as university students on campus. Resident responses to the questionnaire survey (q.82) support this impression.

Forty-six percent of residents reported that their non-student friends drank about the same as university students, 29.4% of residents reported that their non-student friends drank less, and 24.2% of residents reported that their non-student friends drank more than university students. No significant association was found between residents' assessment of non-student friends' drinking patterns and gender, ethnicity, or halls of residence groupings. There was also no significant association with the number of drinks consumed on a typical drinking occasion.

7.4 Binge Drinking Influencing Factors

7.4.1 Binge Drinking and the Individual

Throughout focus group discussions and one-to-one interviews almost all drinking residents reported that they enjoyed their drinking. Residents often had a lot of fun, met a lot of people, and enjoyed the relaxation and time out that drinking alcohol provided them.

I suppose to start with it is to get a bit of enjoyment out of it. It puts you on a bit of a high, I suppose. Yeah it just makes you enjoy things a bit more.

R: So you enjoy your drinking?

Yeah. (BH, male)

Focus group participants also commented:

R: Would it be fair to say there is fun associated with these [drinking] activities?

-I think it is all fun.

-I have friends that get really sad after they drink. Not many, but that like really kills it.

-Most people are happy.

-Or are quiet and don't want to talk.

-.... If it's not fun, what is the point?

-Yes, why would you drink? (CH, focus group)

A resident spoke about the relaxation she felt her drinking gave her:

I guess that the aim is to just get drunk. To just relax. I like alcohol, I don't know why. The next day it doesn't feel great and you regret it, of course. But just while you are drinking with friends you are so relaxed. It feels like a good atmosphere. (CH, female)

The same female resident had been in the halls of residence for three years and during her first year a number of unpleasant alcohol-related incidents had occurred to her and her friends. She was asked if there was anything she would have changed about her past drinking behaviour:

R: When you look back now, would you have wished that the environment was any different for you or would you have kept it as it is?

I think I would have kept it as it is, I think. We just had so many good times but there were also the bad times, which mainly happened in town not back at the hall. So on the way to being drunk we would be having fun, but then being drunk in town, that is when things went wrong.

R: So by and large you would keep it as it is, mostly?

Yeah.

R: Because of the fun that came with it?

Yeah and the friends I made. (CH, female)

The questionnaire survey (q.83) asked drinking residents to respond to the question 'Do you enjoy your drinking'. Ninety-six percent of residents agreed

that they enjoyed their drinking and the remaining 4.0% responded that they did not enjoy their drinking. No significant association was found between a resident's response to enjoying their drinking and their gender, their ethnicity, or if they considered themselves to be a binge drinker.

The questionnaire survey (q.11) asked drinking residents to respond to the statement 'I enjoy the buzz I get when I drink alcohol'. Seventy-nine percent of residents agreed with the statement, 16.6% neither agreed nor disagreed, and 4.3% of residents disagreed. No significant differences were found in residents' responses to the statement across gender and ethnicity groupings.

When asked (q.10) to respond to the statement 'Alcohol helps me to wind down and relax', 54.5% of residents agreed with the statement, 35.1% neither agreed nor disagreed, and 10.4% disagreed. A significant gender difference was found with male residents (67.3%) significantly more likely than female residents (45.8%) to agree with the statement (Mann-Whitney U, z = -4.44, p < .001). No significant difference was found in residents' response to the statement across ethnicity groupings.

7.4.2 Binge Drinking and the Halls of Residence

The Physical Structure of the Halls of Residence

Both residents and residential staff reported that the physical structure of the halls of residence setting was very conducive to resident socialising behaviour. On the positive side, this ease of socialising was viewed as a valued aspect of the halls of residence experience, as it supported residents meeting people and making new friends. On the negative side, the implication of having such a large number of

individuals living closely together meant that once one resident commenced drinking it was then easy for others living within the vicinity to join them. A gathering of drinkers could then quickly and spontaneously form within the halls of residence.

R: What are the influences within hall that might promote drinking?

-Having your mates really close to you, living down the hall.

-If they come over and they are drinking. Some nights I will try and study and next door there will be a huge group. I will be like, I can't do this.

-Like it is too tempting. You start getting depressed basically, just sitting there by yourself trying to work. You see them, so you go over and say hi.

You sit there for a while, it goes from there. If someone has as a drinking game going, something fun like that, then you tend to drink more.

-Two-hundred birthdays. Two-hundred people [in hall] equal two-hundred parties. It is not quite that bad as not everyone goes to everyone's birthday. But there are quite a lot of people that celebrate their birthdays, so there are quite a few moments like that. (BH, focus group)

Drinking Games and Competitiveness

Drinking games were reported by both residents and residential staff as a common and popular activity within the halls of residence. These drinking games were often associated with drunken behaviour and male residents appeared to participate in them more frequently than female residents. Residents participating in an all male focus group discussed a drinking game called 'paddle-in':

- -I think if anyone calls paddle-in, then you are pretty much in.
- -Yeah [general group laughter].
- -A drinking game.

-A drinking game while watching a movie, something happens, someone calls drink, you drink. That is fun, things like that, random, something fun, entices you a little bit more.

R: Drinking games are they common practice in the hall or not? -Paddle-in.

-Paddle-in is very common because it is a great game. Watching a movie, which you love to do anyway. It just adds a whole new dimension, like if you are watching a movie with mates and enjoying it. It's quite fun. (BH, focus group)

Residential staff participating in a focus group interview commented on the dynamic of competitiveness, particularly amongst male residents, when drinking games were played in the hall setting:

-There is also the aspect of competition, especially between the guys.

-There is the competition to see who can drink the most, who is the most wasted.

-Who is the coolest one. Then you get the coolest one out the front.

R: The cool [residents] are cool because they drink a lot?

-Yeah.

-That is where you get the culture of the drinking games. They are bringing out new games, just finding a new way to get wasted pretty much.

-.... It is sort of the same with the twenty-first [birthday] and that. How long did it take you to do your yardy¹³². The faster you did it the better the drinker you are.

-The more you are measured as a man or a woman.

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¹³² In New Zealand a yard glass (or yardy) is a large glass vessel that holds two and a half litres of beer. It is traditional in some New Zealand families for an individual on their twenty-first birthday to consume a yard glass of beer.

-Definitely it's the more you drink, the better the drinker you are, the more popular you are. (RA, focus group)

Popularity

Residential staff commented that a number of heavy-drinking residents within the halls of residence utilised their drinking behaviour as a means of gaining popularity and prestige amongst their hall peers. These residents developed a reputation as a 'drinker' and would often be admired by other residents because of the volume of alcohol they could drink or the speed with which they could consume alcohol. Residential staff commented:

-I think some people doing it [drinking] in the hall are kind of seeking attention.... They start drinking to get attention from other students.
-Probably the ones that weren't most popular and then they come to university and everyone is looking at them. "Wow, he is the biggest drinker" or whatever. He is like "I have got attention now". Attention seekers, cause if you look at them they are not that popular in words, or looks, or whatever. So, that is what I think.

-In relation to that, even last year sitting at the table [in the dining room] people would take notice when someone came in and said they got wasted, "I have been wasted for the last two nights" and they are drinking tonight. That is common talk at like the dinner table.

-The stories are popular. "What did you get up to last night? What happened that was interesting?" Everyone wants to know about it.
-.... I think a lot of people do enjoy hearing stories about themselves, what they got up to and what they don't know. They enjoy it and have a laugh.

(RA, focus group)

Peer Pressure

Residents reported mixed views on the role of peer pressure within the halls of residence setting. Some residents stated that they had experienced peer pressure themselves or they had observed others being pressured to drink. In contrast, other residents commented that the pressure to drink was an internal pressure that individuals placed upon themselves, rather than the result of being pressured externally by others

R: What in the hall would encourage people to drink a lot?

-Other people.

-People.

-Peer pressure.

-Not really peer pressure. It is just everyone else is doing it, having a big one.

-It's not about people saying "have a drink, go on, have another one". It is more everyone is drinking, so maybe you should too.

-.... It is kind of a thing you put on yourself rather than on other people.

(SV, focus group)

A male resident discussed some of the peer pressure he had experienced:

R: Do you ever feel any pressure to drink at all from others around you?

They usually try to put the pressure on me but I don't really care. It

doesn't worry me.

R: How come it doesn't worry you?

Because it just costs me money really. I am only going to do it if I really want to do it. I don't really care if other people want to do it or not.

R: Do you think other people are able to do that as well or do you think some of them buckle under the pressure?

I would say quite a few of them buckle under the pressure. I have a couple of mates who just drink every time someone else does.

R: Why do they do that [give in to peer pressure] do you think?

They don't have enough to do I guess. I don't know. Maybe it is because they just don't want to get left out of anything. (BH, male)

7.4.3 Binge Drinking and Influencing Factors From Outside the Halls of Residence

Orientation Week

Orientation Week was viewed by many residents and residential staff as having a significant influence upon resident drinking behaviour at the beginning of the academic year. The Orientation Week events included both the formal two week orientation programme organised by the Waikato Student Union¹³³ and the informal two to four week orientation themed activities initiated by the local city bars. A number of residents reported a high frequency of drinking and drunken behaviour during this Orientation Week period. Some residents reported drinking heavily for one week and other residents reported drinking heavily for up to one month. Orientation Week activities were generally viewed by residents as enjoyable events and an opportunity to make new university-based friendships.

undertaken by the Waikato Student Union.

¹³³ The Waikato Student Union is a compulsory student group that all University of Waikato students must belong to. The Student Union is responsible for organising a number of social, cultural and sporting activities for students throughout the year. The two week Orientation Week programme at the beginning of the academic year is the largest and most expensive social activity

- -O week, O month, ... that is what I expected O week to be like. It has now kind of settled down a bit. It was kind of intense at the start. It has calmed down a lot. Mondays are not a massive night anymore.
- -You just kept going.
- -Every night.
- -Because you want to be part of it. Everyone else is going out. So you really want to join in. You just keep going.
- -It's the time to make friends.
- -You don't get that much sleep if you stay home anyway.
- -Everyone is so loud.
- -It is the week where you establish yourself and who your friends are.

 (CH, focus group)

A resident discussed the friends he made during Orientation Week and the frequency of his drinking during that time:

-It was pretty cool. It was every night going out. It was pretty fun. Yeah that is what I liked most about it. It was pretty savage going out with everyone.

R: Do you think that helped you to mix and mingle and meet people or not?

Yeah I think it did. At that point I didn't really know anyone so I was going out with friends I already had.

R: Was your drinking more regular during O-week?

Yeah, it was every night of the week.... By the end of O-week I was real tired, I wanted to sleep. (CH, male)

Residential staff commented that although the Orientation Week activities provided a valuable opportunity for residents to experience student culture and to make new friends, the frequency and excessiveness of resident drinking during that time created significant problems for them as staff. A residential staff member discussed what it was like to be on duty during the orientation period:

It is really painful if you are on duty Wednesday, Thursday, Friday, or Saturday night. It is like herding cows accept it is worse as they back-chat to you. It is that painful, it honestly is. (RA, focus group)

Residential staff discussed their frustration in having the Orientation Week programme occur at the beginning of the academic year, at the very time when they were attempting to settle new residents into the halls of residence. Staff reported that it required a lot of effort, by both themselves and the hall residential manager, to convince some of the heavier drinking residents that the excessive drinking behaviour associated with Orientation week was not normal student drinking behaviour, and that it would not be tolerated in the halls of residence.

Cheap Drinks and Theme Night Promotions

Although residents consumed most of their alcohol in the halls of residence setting, residents also reported that they enjoyed leaving the hall and socialising elsewhere. Many residents reported that the cheap drink promotions, and to a lesser extent the theme night promotions, offered by local bars were a significant influence upon their drinking behaviour. Residents stated that they would often plan which nights of the week they would go out drinking, and where they would go out drinking, based upon the various promotions being offered at the time by local bars.

R: Out there in the community, what is there out there that might encourage people to drink?

-Specials.

-Drink nights.

-Specials.

R: Drink nights, specials, how does that work?

-Definitely, you are getting \$3 drinks and you feel like you should drink up and make the most of it.

-.... Money is a big factor.

R: In terms of spending too much?

-Yeah [general agreement].

R: What else might encourage you to drink?

-I guess the stuff like they have on at the Hamilton¹³⁴ bar. The themes.

The theme nights they have on. People go in early for that and I think they have cheap drinks.

R: Does that attract you guys sometimes?

-Yeah.

-It did at O-week. (SV, focus group)

A resident discussed her views on the promotion of drink specials being offered by a local bar:

The Hamilton bar when they have their drink specials, they are just enticing students to go and get drunk. (SV, female)

A resident also commented on his bar selection choices:

R: So which pub would you go to?

The Hamilton bar.

¹³⁴ The names of the bars have been changed.

R: Would you drink much at the Hamilton bar?

Yeah, yeah, because they have the cheap deals on.

R:... Do you think the specials make a difference to attract people?

Yeah definitely, \$3 doubles is what pulls me, that is the reason I go. (SV, male)

Residents stated that they monitored the drink promotion specials being offered by local bars through the local student magazine Nexus.

R: Are there any particular promotions that stand out since you have been here as a student?

In the Nexus [magazine] they always have, for the Hamilton bar, they have promotions and stuff. That is what I take notice of.

R: Do you think that advertising gets people to their pubs?

Yeah, I think it does cause everyone talks about it. Some people will mention it and word spreads around.

R: What do you think it is about those ads that captures people?

Probably the little cartoon they have, it makes people look at them, and brightly coloured. And cheap. The cheap drinks encourage people.

R: What particular promotions and activities would bring people along?

The cheap drinks always get the students. (CH, female)

The Proximity and Management of Local Bars

The questionnaire survey (q.33)¹³⁵ asked residents to respond to the statement 'I think drunkenness is very common in pubs on or around campus'. Seventy-two percent of residents agreed with the statement, 28.9% neither agreed nor

¹³⁵ Non-drinkers' questionnaire q.15.

disagreed, and 5.8% disagreed. No significant differences were found in residents' responses to the statement across gender and ethnicity groupings.

Hall residential staff, including the hall Residential Managers, identified the management of local bars and the proximity of local bars to the halls of residence, as two key factors within the community that influence resident drinking behaviour. Staff commented that a poorly managed student bar in the community (a bar that allowed patrons to drink to intoxication) had the potential to create significant problems for a hall of residence. One of the Residential Managers discussed the difficulties he experienced when a local bar situated in close proximity to his hall of residence was poorly managed:

I would have to say my worst year in the hall was when the on-campus bar was operating five hundred yards away from my hall. When it was being run by patrons who really were students themselves and wanted to create an environment that was a student, or what they considered to be the student drinking culture. I had a lot of trouble in my hall. We had binge drinking to excess. We had a number of cases of alcohol poisoning and this was because the bar was offering cheap drinks. People couldn't go down there and buy one or two drinks. In order for this pub to make money they had to sell ten drinks and so people were starting to drink in the hall and then going down to the bar, getting wasted and then coming back. We had a terrible year of incidents. (Residential Manager, focus group)

Residential staff working in the same hall of residence also discussed the implication of having a local bar situated in close proximity to the hall:

R: There are inconveniences having the bar so close?

Yeah I have always thought, if they could pick it [the bar] up and put it on the other side of the tennis court.... Like that would make quite a lot of difference just being that little bit further away.

R: It is almost a little too close?

-Yeah.

R: Do others see that?

-Yeah, if it was a little further away there would be less trips up to the hall [residents travelling between the bar and the hall].

R: Do you get any other impacts from the bar?

-Yeah

-Noise, especially on the peak nights or weeks like the Orientation Week and [drink] special nights. Like we can't do much to control that because then the noise in the Hall goes off and how can you tell them [residents] to shut up if the bar is pumping louder anyway? So it is pointless really.

-I know the car park fills up, like on some Wednesday nights at 3:30 am.

That is why I was saying the car park down there fills up with rowdy people and E block especially [is affected], especially if you live on that side of E block [facing the bar]. It is really bad.

R: That creates quite a noisy environment?

Yeah that is at two o'clock in the morning, people hanging around in the car park after the bar closes for some unknown reason.

R: What impact do you think it has on your residents?

-Ones that want to party like it and the ones that want to study hate it.

-There is nothing much we can do. (RA, focus group)

A second Residential Manager discussed the difficulties his hall of residence experienced from both students and non-students walking through the hall grounds on their way to and from a local bar:

This all happens from 10.00 pm to 1.00 am. Large groups of 'randoms' [non-residents] wandering right through the middle of the hall complex.

They come right through the middle of it. They won't walk around it.

They have to go right through it. And they are always drunk, they are always noisy.... We have also got people from outside the university, from the western side of the university, coming through going over to the pub.

And then they are walking back afterwards. (Residential Manager, focus group)

Overall, residential staff were not supportive of having a bar located close to a hall of residence. Staff reported that the potential problems of noise, damage, and drunkenness associated with a bar, did not make it a compatible neighbour to a hall of residence. Staff stated that the primary role of the halls of residence accommodation was to provide a good study and safe living environment for students.

I think because of the academic focus... It always comes back to the main thing that people are spending a lot of money to come and study here, and they should be given the best opportunity to study. (RA, focus group)

Sports and Sports Clubs

During focus group discussions and one-to-one interviews a number of residents commented on the relationship between alcohol use and sports. This relationship was identified as often more relevant to male drinkers than to female drinkers.

Male residents commented that they enjoyed drinking alcohol either after playing sports or while watching sports events.

R: Why are the boys drinking larger amounts than the girls?

- -Probably because the boys can handle more.
- -Nah it is probably [because] they're stressed, they can't handle being at Uni, and are stressed so they have to drink their sorrows away.
- -The boys might have lost a rugby game.
- -Depressed, so they take a drink, drink away the sorrows. Or the boys might have won a rugby game and got to celebrate.
- -They just want to get drunk.
- -I think it is an excuse when rugby's on.
- -.... Because that is what New Zealand men do. Men drink
- -It is [a New Zealand] tradition.
- -When the rugby's on the boys are going to drink. When the league is on TV they are going to drink. Whatever sports is on [they will drink]. (CH, focus group)

During focus group discussion and one-to-one interviews, a local rugby club, a soccer club, and a surf-lifesaving club were identified as promoting and/or tolerating excessive alcohol consumption. Residents involved in these clubs often reported intoxicated behaviour, drinking games, and/or 'court sessions', as a feature of the club drinking behaviour. These drinking activities were often used as a method of facilitating team/club bonding. A male resident discussed his experiences of a local rugby club:

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¹³⁶ A court session is a meeting held by a sports team to review the playing behaviour and/or general behaviour of team members. The meeting is usually chaired by senior team members (sometimes including coaching and/or support staff) and any team member indiscretions are usually penalised by the drinking of alcohol as a method of punishment.

R: Tell me about the culture in the rugby club and the drinking?

It's a part of it after the game. You sit down and have a few beers with the boys. Like we have a few boys that don't drink and that is accepted as well. They don't force it down their throats, which is good that they respect the guy that does that. But yeah, they enjoy having a beer after the game. I think it is good for team bonding. The boys get on, talk a bit of shit about what they did in the game and stuff like that.

R:.... Some have spoken with me about the court sessions, have you guys had many court session?

I have only been to one.

R: So what seems to happen at the court sessions?

From what I have seen there were people, they get fined for certain things like if they stuffed up during the game they have got to do, scull so much, like a mix or something, something horrible like that. Just a big binge I think, a big drinking session. That is when a lot of people go to excess or over their limit.

R:.... So why do you think people on that particular occasion [rugby court session] get so hammered?

I think it just comes down to the rules of the game. That is the expectation when you go into it that you are going to get pretty messed up. That is the name of the game I think. (CH, male)

Residential staff participating in a focus group discussion commented upon the influence of male rugby players:

R: Who do you think were the primary influences in developing the drinking culture of the Hall this year?

-The rugby boys. (RA, focus group)

7.5 Conclusion

The terms 'binge drinking' and 'binge drinker' were phrases that were not commonly used by residents or their peers. Although residents reported a wide range of expressions used within the student community to describe intoxicated behaviour, the two most commonly utilised terms were 'drunk' and 'wasted'. Three-quarters of residents agreed that binge drinking behaviour was measured by the amount of alcohol an individual consumed and sixty percent agreed that binge drinking behaviour was defined by an individual drinking with the intention to get drunk. The majority of residents were accepting of student binge drinking and viewed it as a component of student culture. Residents who consumed larger amounts of alcohol on a typical drinking occasion and who drank more frequently were also more likely to be accepting of binge drinking behaviour. Asian residents and non-drinking residents were least likely to be accepting of student binge drinking behaviour. Many New Zealand residents reported that prior to arriving at university members of their family and friends had informed them that binge drinking behaviour would be an integral part of their student culture experience. The media was also viewed as highlighting the connection between student culture and binge drinking.

Ninety-six percent of drinking residents commented that they enjoyed their drinking. Residents who enjoyed their drinking were found to also drink more frequently, drink larger amounts of alcohol, and to get drunk more frequently, than residents who reported they did not enjoy their drinking. Residents and residential staff reported that the physical and social structure of the halls of residence setting was very conducive to residents socialising with each other and provided residents with a very convenient drinking environment. Residents

expressed mixed views on the role of peer pressure within the halls of residence setting. A number of influences external to the halls of residence setting were identified by residents and residential staff as supporting resident binge drinking behaviour including Orientation Week activities, the promotion of cheap drink specials and theme night activities by local bars, the proximity and management of local bars, and the drinking behaviour promoted in some local sporting clubs.

This ends the research project results. The following chapter will now discuss resident drinking behaviour and compare the current study findings with previous research outcomes.

8 DISCUSSION: STUDENT DRINKING BEHAVIOUR

Following the Social Ecological Model¹³⁷, the discussion of the research results has been divided into three chapters. The first chapter will compare the current study results with previous research findings to identify similarities and differences between *resident student drinking* and other comparable drinking populations. The following chapter will explore the relationship between resident drinking behaviour and the *institution/halls of residence environment* and the *local community drinking environment*. Finally, the third chapter will discuss *student culture* and *binge drinking*. Recommendations arising from the three discussion chapters will be footnoted and then summarised in Chapter 11. As discussed in Chapter 2, this research project will utilise the term 'heavy episodic drinking' when comparing specific drinking behaviour results across studies and the term 'binge drinking' when discussing the broad concept of 'acute excessive alcohol usage'.

This chapter will begin by discussing *resident drinking behaviour* including the proportion of resident drinkers, where residents drink, the frequency of resident drinking, resident drunkenness, and resident heavy episodic drinking behaviour. Attention will be given to discussing the *alcohol-related harms* residents experience as a consequence of their drinking and the actions residents undertake to manage these harms. *Intervention strategies* arising from the research findings will be discussed including the provision of regular non-alcohol social activities, the University of Waikato's continued participation in the National Tertiary

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¹³⁷ The Social Ecological Model is a systems-based theory used to identify the multiple levels of influence that impact upon an individual's drinking behaviour (NIAAA, 2002a) and is detailed in Chapter 2.

Health Survey, and the use of 'drinking-effects' as a component of social marketing initiatives targeting student drinkers.

8.1 Resident Drinking Patterns

Proportion of Drinkers

The finding that eighty-seven percent of male residents and eighty-three percent of female residents had consumed alcohol in the previous twelve month period is similar to the 2004 national survey findings for 18 to 24 year old New Zealanders¹³⁸ (Ministry of Health, 2007a) and the 2007 National Tertiary Health Survey findings for University of Waikato students¹³⁹ (IPRU, 2007). Consistent with previous New Zealand tertiary studies, international students and particularly Asian students, were significantly less likely than New Zealand students to consume alcohol (Kypri et al., 2002; Maclennan, 2005).

Over the past twenty years there has been a significant increase in the number of international students ¹⁴⁰ studying at New Zealand tertiary institutions and the majority of these new students have originated from Asian ¹⁴¹ countries (Education Counts, 2008b). Research evaluating the experiences of international students in New Zealand has shown that Asian international students are more likely than other ethnicity groups to report difficulties initiating and maintaining friendships with New Zealand students (Ministry of Education, 2008). The current study finding that social opportunities to meet other students were often focused around alcohol-related activities has implications for those residents who do not consume

^{138 88%} of male and 86% of female 18-24 year old New Zealanders reported alcohol usage.

¹³⁹ 91% of male and 88% of female University of Waikato students reported alcohol usage. ¹⁴⁰ In 2006, 42,652 international students were enrolled in New Zealand tertiary institutions.

¹⁴¹ In 2006, 69.9% of international students enrolled in New Zealand tertiary institutions were from Asia.

alcohol. Arguably this situation was most noticeable for the sixty percent of non-drinking Asian residents who were often wishing to interact with New Zealand residents (ninety percent of whom were drinkers). Although the majority of residents in the current study reported that a resident did not have to consume alcohol to be able to mix with other residents within the halls setting (and non-drinking residents were just as likely as drinking residents to agree with this position), non-drinking New Zealand residents participating in interviews did report the importance of having non-alcohol social opportunities to meet other like-minded residents. These organised non-alcohol activities included bowling-nights, movie-nights, game-evenings, and visits to cafés, etc.

Currently, non-alcohol social activities organised by the halls of residence occur during the first-half of semester A as a component of the halls of residence orientation programme. The availability of non-alcohol activities throughout the academic year would provide regular opportunities for non-drinking New Zealand residents and International residents to socialise¹⁴². The provision of regular non-alcohol activities would also provide an alternative activity for drinking residents (Vicary & Karshin, 2002). Hall residential staff are allocated a 'portfolio' of responsibility within the halls of residence setting as a component of their duties¹⁴³. The organisation of non-alcohol activities could be incorporated into the halls of residence planned activities for the academic year through the creation of a new 'non-alcohol events' portfolio. The residential staff member responsible for this portfolio could encourage international students to participate in these activities as an opportunity to socialise with New Zealand students. This research

¹⁴² Particularly including new residents who arrive at the beginning of semester B (many of whom are international students).

¹⁴³ Examples of portfolio responsibilities include 'recycling coordination', 'hall magazine production', and 'inter-hall sport organisation', etc.

project will make a recommendation¹⁴⁴ that the halls of residence organise regular non-alcohol activities for residents throughout the academic year, and that a residential staff member is appointed to organise these events and to encourage international student participation.

Residents Preferred Choice of Alcohol

Consistent with the 2004 national study, beer was the most popular alcohol of choice amongst male drinkers (Ministry of Health, 2007a). The finding that RTDs were the preferred alcohol of choice amongst female residents is consistent with the national trend that indicates that RTDs continue to grow in popularity (Statistics New Zealand, 2008). Concerns, both nationally and internationally, have been raised about the growing popularity of RTDs amongst female drinkers (Huckle, Sweetsur, Moyes, & Casswell, 2008) and youth drinkers (Ministry of Youth Development, 2004). Proponents of RTDs argue that these drinks provide consumers with a pleasant tasting drink that contains a standard volume of spiritbased alcohol within each serving. Opponents of RTDs comment that the sweet taste of these drinks is designed to appeal to young drinkers, that the drinks can give the impression of not consuming alcohol (due to their sweet taste), and that in recent years there has been an increase in the alcohol content contained within some brands of RTDs (Weil, 2007). In response to these concerns (and particularly the concern of a link between young adult binge drinking behaviour and RTDs) a number of countries including France, Switzerland, Germany, and Sweden (SHORE, 2006a), and more recently Australia (National Business Review, 2008), have placed special taxes upon these drinks in an attempt to reduce consumption. Metzner and Kraus (2007) in their evaluation of the

¹⁴⁴ See *Recommendation 5*, section 11.1.2.

research literature investigating the relationship between RTD drink use and adolescent drinking behaviour concluded that there was little specific evidence of an association.

The current study found that drinkers of RTDs consumed these drinks in a manner that was consistent with their drinking intent 145. Those drinkers who consumed alcohol in a moderate manner would also consume RTDs in a moderate manner and those drinkers who consumed alcohol with the intention of getting drunk would often prefer the higher alcohol content RTDs as a means of achieving their goal of intoxication. Recently Lion Nathan Australia (2008) issued a media release stating the company recognized there was a growing concern in the community about the alcohol content of RTDs and that the company would voluntarily commit to a limit of no more than two standard drinks contained within a single RTD drink container. The Alcohol Advisory Council (2008a) has stated that it would support "a limit on the maximum level of alcohol strength for RTDs, and the container size, so that the risk of [the] alcohol content being masked by sweeteners is minimised" (p.5). New Zealand's current alcohol excise tax system taxes RTD drinks with low (5%) alcohol content and high (12%) alcohol content at the same tax rate and the Alcohol Advisory Council has commented that it would like to see the excise tax regime restructured "so that higher [RTD] alcohol content drinks are discouraged by means of a higher tax, and lower alcohol content drinks are encouraged by means of a lower tax" (2008a,

¹⁴⁵ A number of female residents also reported preferring to drink RTDs for safety reasons. An RTD bottle was less vulnerable to a drink spiking incident than an open glass vessel. An RTD bottle also contained a standardised volume of alcohol, in contrast to a freely poured spirit-based drink which could include a variable amount of alcohol content.

p.5). The current study found that resident drinkers were 'price sensitive', 146 and often purchased alcohol products based upon cost issues, rather than brand image (Casswell & Zhang, 1998), or even, on some occasions, taste. This finding supports the utilisation of taxing options as a means of modifying student drinking behaviour.

Frequency of Drinking

Due to differences in question response options, it is not possible to undertake a robust statistical comparison between the overall frequency of resident drinking in the current study¹⁴⁷ and the frequency of drinking undertaken by 18 to 24 year old New Zealanders¹⁴⁸ as reported in the 2004 national survey data¹⁴⁹ (Ministry of Health, 2007a). It is however possible to compare the two categories of very high frequency drinking (the consumption of alcohol four or more times a week) and low frequency drinking (the consumption of alcohol two to four times a month or less) between residents and 18 to 24 year old New Zealanders. The current study result showing that six percent of residents consumed alcohol four or more times a week, is much lower than the national study finding of thirty-four percent for 18 to 24 year old New Zealanders. While the low frequency drinking finding that fifty-seven percent of residents consumed alcohol two to four times a month or less is much higher than the national finding of twenty-six percent. U.S. students have also been found to drink less frequently than their same-age non-student peers (O'Malley & Johnston, 2002). The current study finding that male residents

¹⁴⁶ Research undertaken by the New Zealand Union of Students' Associations reported that many tertiary students were struggling with financial issues and were careful with their expenditure (NZUSA, 2008a).

⁽NZUSA, 2008a). ¹⁴⁷ The current study frequency of drinking options included less than monthly, 2-4 times a month, 2-3 times a week, and 4 or more times a week.

¹⁴⁸ Gender data is not available.

¹⁴⁹ The 2004 national survey frequency of drinking options included less than a week, 1-3 times a week, 4-6 times a week, and 7 or more times a week.

consumed alcohol more frequently than female residents was consistent with the findings of previous New Zealand University studies (Adam et al., 2000; Donavan et al., 2001; Kypri et al., 2002; Kypri et al., 2005a), national studies (Ministry of Health, 2007a), and US college student studies (O'Malley & Johnston, 2002). One possible explanation for this gender difference may be the differing role alcohol plays in the lives of male and female residents. Many female residents commented that they would only start drinking if they could make a social occasion of the event. This typically involved getting dressed up, leaving the halls of residence, and continuing socialising elsewhere. In contrast, a number of male residents reported that they could often drink for the sake of drinking. These drinking occasions for male residents did not necessarily need to lead onto other socialising events and therefore could easily be initiated and maintained within the halls of residence setting.

Where Residents Drink

The current study finding that two-thirds of drinking residents reported that the halls of residence was the setting where they consumed alcohol most often and where they consumed the largest amounts of alcohol was strikingly consistent with the 2001 University of Waikato halls of residence findings¹⁵⁰ (Donavan et al., 2001). After drinking in the halls of residence, residents would then often move onto city bars to continue socialising for the evening. Pre-party drinking behaviour has also been identified as a common practice amongst US college students (LaBrie & Pedersen, 2008; Pedersen & LaBrie, 2007). The finding that three-quarters of female drinking residents and one-half of male drinking residents

¹⁵⁰ The 2001 study found that 67% of drinking residents reported that the halls of residence were the setting where they drank most often and 65% reported that the halls were the setting where they consumed the largest amounts of alcohol.

University of Otago halls of residence study which found that one-half of all alcohol consumed by hall residents was consumed in a pub, bar or nightclub, and only one-third was consumed in the halls of residence (Kypri et al., 2007).

It cannot be said with any certainty why University of Waikato residents consume more alcohol in residence and less alcohol in on-licenced premises than University of Otago residents. In the current study, residents reported consuming the majority of their alcohol in residence because it was convenient and because it saved them money (as it was cheaper to purchase alcohol from an off-licence outlet). Maclennan (2005) reviewed the alcohol policies of the University of Otago halls of residence and reported that although some residences had alcohol policies that were more 'restrictive', 151 than others, all residences allowed on-site drinking. This suggests that University of Otago residents are also able to drink within their residence for reasons of convenience.

An explanation for the differences in drinking behaviour could involve differences in the bar entry 'intoxication thresholds' maintained by Hamilton on-licenced premises and Dunedin on-licenced premises. In the current study, many residents drank to intoxication while in residence and were then able to gain entry into Hamilton on-licenced premises. It may be that Dunedin on-licenced premises implement a stricter 'intoxication threshold' that does not allow intoxicated patrons to gain entry into their premises. If this was the case, then University of Otago residents would be required to restrict their in-residence drinking behaviour to ensure that they gained entry into Dunedin on-licenced premises. Another

¹⁵¹ Restrictiveness included where residents could drink in residence, the number of individuals a resident could drink with, and the amount of alcohol they could bring into residence.

explanation is that the city of Dunedin has a more active bar/club drinking environment that encourages student on-licence drinking. Recent New Zealand research has reported an association between a student's drinking behaviour and the density of on-licence and off-licence liquor outlets in the proximity of their accommodation, with high density liquor outlet areas associated with higher levels of student drinking behaviour and alcohol-related harms (Kypri, Bell, Hay, & Baxter, 2008a). In Dunedin many residences are within walking distance of 'student bars'. In contrast, the majority of Hamilton 'student bars' are located within the Hamilton CBD area which is approximately five kilometres from the halls of residence. Other possible explanations could involve differences in student financial resources (with University of Otago residents wealthier than University of Waikato students and therefore able to spend more money in onlicenced premises), differences in 'drink-prices' offered between Hamilton and Dunedin on-licenced premised (with Dunedin student-bars offering cheaper prices), and differences in the student cultures between the two campuses. Cousins, Wilson, Kypri, & Baxter (2008b) interviewed university staff and student leaders across six New Zealand university campuses (including the University of Otago and the University of Waikato), and found significant differences in the implementation and design of alcohol policies, and staff concerns about student drinking. Cousins et al., (2008b) were unable to identify individual universities within their results¹⁵² and therefore it is not possible to identify specific differences between the drinking environments of the University of Otago and the University of Waikato. Further 'across campus' research ¹⁵³

¹⁵² A condition of the data collection process was that individual universities would not be identified within the research findings.

¹⁵³ This research would need to include the assessment of the density and proximity of on-licence and off licence liquor outlets within the halls of residence areas, the availability of transport to and from liquor outlets, the halls of residence policies on in-residence alcohol use, the drink-prices (including 'drink specials' and theme promotions) offered by student bars, the financial resources

would be required to assess why University of Otago residents consume more alcohol in on-licence premises than University of Waikato residents.

8.2 Resident Heavy Episodic Drinking Behaviour

The finding that eighty percent of drinking residents reported heavy episodic drinking behaviour 154 on a typical drinking occasion was a ten percent increase on the heavy episodic drinking residents reported in the 2001 University of Waikato halls of residence study (Donavan et al., 2001). A breakdown of this increase across gender groupings revealed that male resident heavy episodic drinking increased by seventeen percent from fifty-nine percent in 2001 to seventy-six percent in 2006, and female resident heavy episodic drinking increased by six percent from seventy-eight percent in 2001 to eighty-four percent in 2006. These findings indicate that the difference in resident heavy episodic drinking behaviour between the two studies is primarily attributable to an increase in male resident drinking behaviour. A comparison of male and female resident rates of heavy episodic drinking behaviour with previous research findings is summarised below.

Male Heavy Episodic Drinking

The current study result that three-quarters of drinking male residents¹⁵⁵ reported heavy episodic drinking behaviour was an increase on the findings of the 2000 and 2001 University of Waikato studies (Adam et al., 2000; Donavan et al., 2001), and the 2000 and 2002 University of Otago studies (Kypri et al., 2002; Kypri et al., 2005a). The current study result was similar to the 2004 University of Otago

of residents, and the relationship between student drinking and student culture at the respective campuses.

 $^{7 \}ge \frac{154}{7} = \frac{7}{100} = \frac{154}{100} =$

Two-thirds of all male residents.

residents study (Maclennan, 2005) and the 2005 National Tertiary Health Survey 'Waikato student' findings (IPRU, 2005), but approximately ten percent lower than the findings of the most recent 2007 National Tertiary Health Survey 'Waikato student' findings (IPRU, 2007). A comparison of these results is presented in Table 8.1 and indicates that male student heavy episodic drinking behaviour at the University of Waikato has increased 156 from 2000 to 2007.

Table 8.1 Comparison of male student rates of heavy episodic drinking behaviour

Year	Institution	Student ^a	Heavy episodic drinking	% male	% male
		Sample	criterion	drinkers	students
2007	Waikato	All students	7 ≥ drinks preceding 4 weeks		77
2006 ^b	Waikato	Hall students	7 ≥ drinks typical drinking	76	66
2005	Waikato	All students	7 ≥ drinks preceding 4 weeks		70
2004	Otago	Hall students	0.08mg/100 ml preceding week	72	60
2002	Otago	All students	7 ≥ drinks preceding week	50	
2001	Waikato	Hall students	7 ≥ drinks typical drinking	59	
2000	Waikato	All students	7 ≥ drinks typical drinking	61	
2000	Otago	Hall students	7 ≥ drinks preceding 4 weeks	60	52

^a The 2004 national rate ($7 \ge drinks$) for male drinkers aged 18-24 years was 56.5% (MOH, 2007).

The finding that three-quarters of drinking male residents reported heavy episodic drinking behaviour, is almost one-quarter higher than the 2004 national rate for New Zealand males aged 18 to 24 years (Ministry of Health, 2007a) and supports previous research findings that heavy episodic drinking behaviour amongst tertiary students is more prevalent than their same age New Zealand peers (Kypri

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^b The current study.

¹⁵⁶ Due to variations in the heavy episodic drinking criterion used between studies, some tempering of comparative analysis is required.

et al., 2005a)¹⁵⁷. Timberlake et al., (2007) undertook a longitudinal national study of US students and found that when compared with their non-university peers, US university students were less likely to have been heavy episodic drinkers prior to attending university but once they entered university their drinking behaviour surpassed their non-student peers.

Female Heavy Episodic Drinking

The current study finding that eighty-four percent of drinking female residents ¹⁵⁸ reported heavy episodic drinking behaviour was a slight increase on the findings of the 2001 University of Waikato resident study (Donavan et el., 2001), but was a large increase on the findings of the 2000 University of Waikato study (Adam et al., 2000), and the 2000, 2002, and 2004 University of Otago studies (Kypri et al., 2002; Kypri et al., 2005a; Maclennan, 2005). This current study result was similar to the findings of the more recent 2005 and 2007 National Tertiary Health Survey 'Waikato student' findings (IPRU, 2005 & 2007). An overview of these results is presented in Table 8.2 and shows that female student heavy episodic drinking behaviour at the University of Waikato has increased slightly from 2000 through to 2007. The finding that eighty-four percent of female residents heavy episodic drink is one-third higher than the 2004 national rate for New Zealand females aged 18 to 24 years (Ministry of Health, 2007a) and again supports previous research indicating that tertiary students have a higher prevalence of heavy episodic drinking behaviour than their same age New Zealand peers (Kypri et al., 2005a).

¹⁵⁷ Kypri et al., (2005a) commented that comparisons between the New Zealand Ministry of Health 'national' surveys and New Zealand 'student-only' surveys "would tend to understate differences in drinking between students and non-students, although probably to a small extent" (p.713) as students (who are the heavier-drinkers) are also included in the national survey population. For example, in 2006, 23% of 18-19 year old New Zealanders and 19% of 20-24 year old New Zealanders were enrolled in University tertiary education (Ministry of Education, 2008a). ¹⁵⁸ Two-thirds of all female residents.

Table 8.2 Comparison of female student rates of heavy episodic drinking behaviour

Year	Institution	Sample ^a	Heavy episodic drinking	% female	% female
			criterion	drinkers	students
2007	Waikato	All students	5 ≥ drinks in preceding 4 weeks		69
2006 ^b	Waikato	Hall students	5 ≥ drinks typical drinking	84	69
2005	Waikato	All students	$5 \ge \text{drinks in preceding 4 weeks}$		63
2004	Otago	Hall students	0.08mg/100 ml preceding week	71	55
2002	Otago	All students	5 ≥ drinks in preceding week	49	
2001	Waikato	Hall students	5 ≥ drinks typical drinking	78	
2000	Waikato	All students	5 ≥ drinks typical drinking	62	
2000	Otago	Hall students	5 ≥ drinks preceding 4 weeks	58	46

^a The 2004 national rate ($5 \ge drinks$) for female drinkers aged 18-24 years was 51.5% (MOH, 2007).

Gender Summary

The current study finding that male and female residents report similar levels of heavy episodic drinking¹⁵⁹ is consistent with the 2005 National Tertiary Health Study findings (Kypri et al., 2009) and indicates a consistency in New Zealand male and female student drinking behaviour. It must be noted however that male residents in the current study drank more frequently than female residents, with one-half of male drinkers drunk on a weekly basis, in contrast to one-third of female drinkers. In the US, male students have been found to drink more frequently than female students (Wechsler et al., 2002a).

The finding that male and female student rates of heavy episodic drinking at the University of Waikato appear to be increasing highlights the need for ongoing

^b The current study.

¹⁵⁹ 66% of male residents and 69% of female residents reported heavy episodic drinking behaviour.

research to monitor this trend. The 2005 and 2007 National Tertiary Health Surveys (IPRU, 2005 & 2007) were the first national surveys to assess New Zealand student drinking and the University of Waikato's continued participation in this survey will allow ongoing evaluation of trends in University of Waikato student drinking behaviour. This study will make a recommendation the National Surporting the University of Waikato's continued participation in the National Tertiary Health Survey.

Interestingly, the current study 'resident student' rates of heavy episodic drinking behaviour were no greater than the University of Waikato 'general student' rates reported in the National Tertiary Health studies (IPRU, 2005 & 2007). This finding does not support previous research results indicating that resident student rates of heavy episodic drinking behaviour are greater than their non-resident student peers (Adam et al., 2000; Kypri et al., 2005b). This finding could be the result of the current study and the national studies asking slightly different questions to assess heavy episodic drinking behaviour ¹⁶¹ or the finding may be indicative of a new uniformity in drinking behaviour across resident and non-resident student populations at the University of Waikato. Further analysis of the 2005 and 2007 National Tertiary Health Study data will be able to clarify this issue across both the University of Waikato student population and the national student population¹⁶².

¹⁶⁰ See *Recommendation 10*, section 11.1.3.

¹⁶¹ The current study asked student's for the number of drinks they consume on a 'typical drinking occasion', where as, the national study asked student's if they have consumed more than '7 or 5 drinks' in the previous four week period.

¹⁶² The authors of the 2005 and 2007 national studies are progressively publishing their research findings.

Ethnicity Differences

The current study finding of significant differences in rates of heavy episodic drinking behaviour between New Zealand residents and Asian residents is consistent with previous New Zealand findings (Kypri et al., 2002; Kypri et al., 2005a; Maclennan, 2005). The current study finding of no significant difference in rates of heavy episodic drinking behaviour between New Zealand European residents and New Zealand Maori residents is in contrast to the findings of previous New Zealand studies. Kypri et al., (2009) reporting on the 2005 National Tertiary Health Survey found that students of New Zealand European ethnicity were significantly more likely to report heavy episodic drinking on a weekly basis than all other ethnicity groupings including New Zealand Maori. In contrast, Maclennan (2005) found that New Zealand Maori residents at the University of Otago reported rates of alcohol consumption higher than their New Zealand European resident peers. These variations in the reported rates of heavy episodic drinking behaviour between New Zealand European students and New Zealand Maori students may indicate differences across tertiary campuses 163, and between resident and non-resident students. Bramley, Broad, Harris, Reid, and Jackson (2003) reviewed the results of five New Zealand (non-student) alcohol surveys and found that New Zealand Maori often reported different alcohol consumption patterns from New Zealand non-Maori, with Maori alcohol consumption characterised by less frequent alcohol consumption than non-Maori, but more alcohol consumed per occasion than non-Maori.

¹⁶³ Excluding the Te Wananga o Aotearoa, the University of Waikato has the highest percentage of enrolled Maori tertiary students (18% of the total student body) (University of Waikato, 2006).

Recent New Zealand research assessing tertiary student drinking behaviour has identified that pre-university drinking behaviour is a significant predictor of university drinking behaviour (Maclennan, 2005; Kypri et al., 2009). This finding has also been reported in a number of international studies (Borsari, Murphy, & Barnett, 2007; Clapper, Martin, & Clifford, 1994; Sher and Rutledge, 2007; Wechsler et al., 1995). Although the current study found that two-thirds of residents reported that their drinking had increased since attending university, no assessment was made of resident drinking behaviour prior to attending university. With the benefit of hindsight, it is a limitation of the current research project that a more detailed assessment of resident pre-university drinking behaviour was not undertaken as a part of the questionnaire survey, and it is recommended that this variable be assessed in future student drinking surveys.

8.3 Resident Drunkenness

The current study finding that one-half of male drinking residents and one-third of female drinking residents were drunk on a weekly basis is much higher than the 2004 national study findings for 18 to 24 year old New Zealanders¹⁶⁴ (Ministry of Health, 2007a) and supports previous research findings that drunkenness is more prevalent amongst tertiary students than their non-student same age peers (Kypri et al., 2005a). A comparison of the current study finding of male and female resident drunkenness with previous New Zealand tertiary studies reveals that the male result was similar to the 2002 University of Otago finding for male students (47%) and a little less than the 2004 University of Otago finding for male halls of

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¹⁶⁴ 34% of male drinking New Zealanders and 16% of female drinking New Zealanders aged 18-24 years reported weekly drunkenness.

residence students (60%). The current study finding for drinking female residents is similar to the 2002 University of Otago finding for female students (39%) but less than the 2004 University of Otago finding for female hall residents (55%). These findings suggest that student drunkenness is a common behaviour on New Zealand tertiary campuses.

8.4 Resident Alcohol-Related Harms

Residents who consumed the largest amounts of alcohol and who drank most frequently were also most likely to report experiencing higher rates of alcoholrelated harm. Male residents were also significantly more likely than female residents to report experiencing alcohol-related harms. These findings are consistent with the findings of previous New Zealand tertiary studies (Adam et al., 2000; Kypri et al., 2002; Maclennan, 2005; McGee & Kypri, 2004) and international studies (O'Brian et al., 2006; Perkins, 2002; Wechsler et al., 1998, 2001b, & 2002b). A comparison of the current study drinking related harm results with the 2001 University of Waikato halls of residence study (Donavan et al., 2001) revealed a surprisingly high level of consistency between the two studies over eight of the thirteen alcohol-related harms. The five remaining alcohol-related harms that showed a significant reduction from 2001 to 2006 included the three academic harms (missing a class, failing to complete an assignment on time, and an impaired performance during a test or exam), a physical harm (being involved in a fight), and the financial harm (being unable to pay bills on time). A comparison of the 2001 and 2006 University of Waikato halls of residence results is shown in Table 8.3.

Table 8.3 Frequency residents report experiencing alcohol-related harms comparison with the 2001 University of Waikato halls of residence study

-	Frequency in the past six months									
	We	ekly		nthly	3-5 t		1-2 ti		Total at le	
Alcohol-related harms	% row 2006	% row 2001	% row 2006	% row 2001	% row 2006	% row 2001	% row 2006	% row 2001	% row 2006	% row 2001
Academic Academic	2000	2001	2006	2001	2000	2001	2000	2001	2000	2001
Missed a class because of drinking	7	13	10	10	18	17	23	28	58	69 ^a
Failed to complete an assignment on time or do as well could have	1	3	4	8	5	7	18	19	28	37 ^b
Impaired performance during a test or exam	0	0	1	3	3	7	12	15	17	23 °
Physical										
Vomited	1	3	6	10	20	21	40	36	58	60
Physically hurt self	2	4	8	6	14	16	32	32	57	58
Passed out	0	1	1	3	6	6	25	22	32	34
Been involved in a physical fight or been aggressive	1	1	1	3	5	8	18	21	24	33 ^d

Table 8.3 continued. Frequency residents report experiencing alcohol-related harms comparison with the 2001 University of Waikato halls study

	Frequency In the past six months									
		eekly	Mon		3-5 tim		1-2 time		Total at le	
Alcohol-related harms	% row 2006	% row 2001	% row 2006	% row 2001		% row 2001		% row 2001	% row 2006	% row 2001
Sexual activity										
Engaged in unplanned sexual activity	2	1	5	2	5	7	21	22	33	33
Ended up in a sexual situation weren't happy about	0	0	0	1	3	5	19	17	24	23
Not used contraceptive protection	0	2	1	2	4	5	14	14	18	22
Vehicle related										
Gotten in to a vehicle with a driver who had too much to drink	1	0	3	3	7	9	25	28	35	40
Driven a vehicle while intoxicated from alcohol	0	0	1	1	4	5	15	18	21	24
Financial										
Unable to pay bills	0	1	1	3	2	4	9	19	13	28 ^a

^a Man-Whitney U test of the 2006 and 2001 data: z = -4.82, p < 0.001

Academic Harms

It is interesting to note that all three academic harm indicators showed a significant reduction between the 2001 study and the 2006 study. Discussion with hall residential staff revealed that over the intervening five year period there had been a prioritising of resident academic achievement within the halls of residence setting. This new academic focus was initiated in 2003 by the Group Manager ¹⁶⁵ of Student Support Services and resulted in the appointment of an academiccoordinator position and the implementation of tutorial and study skill programmes within each of the three halls of residence. In their review of articles exploring the impact of environmental policies upon US college student drinking behaviour, Toomey, Lenk, & Wagenaar (2007) identified programmes that deemphasise the role of alcohol and create positive expectations on campus, as an area of research worthy of further investigation. It is possible that the focus on academic achievement within the halls of residence setting has had a secondary effect of encouraging residents to limit the impact of their drinking behaviour upon their academic achievement. A second possible explanation for the reduction in alcohol-related effects upon resident academic study could be due to financial awareness. Discussion with residents during focus group and one-to-one interviews revealed that the majority of residents were very mindful of the financial cost of attending tertiary education. The 2008 Westpac Tertiary Banking study revealed that forty-two percent of New Zealand tertiary students were concerned about their financial situation (Westpac Trust, 2008). It is possible therefore that many residents are increasingly careful to ensure that their drinking activities do not detrimentally impact upon their academic achievement. This suggestion is supported by the current study finding that Saturday 166 was the day

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¹⁶⁵ The Group Manager is responsible for overseeing the University of Waikato halls of residence.

that the majority of residents consumed their largest amount of alcohol.

Comparison of this finding with the 2001 University of Waikato study (Donavan et al., 2001) revealed that residents consuming their largest amount of alcohol on a Saturday had increased from forty-three percent of residents in 2001, to fifty-five percent of residents in 2006, an increase of twelve percent.

Sexual Health Harms

The finding that twenty-three percent of male drinking residents and fifteen percent of female drinking residents had participated in unprotected sexual intercourse at least once during the previous six month period, is of concern due to the potential consequences of unplanned pregnancies and sexually transmitted diseases. New Zealand rates of pregnancies and abortions are high by OECD standards (Statistics New Zealand, 2003). New Zealand also has high rates of sexually transmitted diseases and most particularly the transmission of Chlamydia (Coughlan & Bagshaw, 2005). A comparison of the current study rates of unprotected sexual intercourse with the 2001 University of Waikato halls of residence study (Adam et al., 2001) and the University of Waikato student results from the 2005 and 2007 National Tertiary Health Survey's (IPRU, 2005 & 2007) is shown in Table 8.4 and reveals a slight drop in unprotected sexual activity between the 2001 and 2006 studies, but shows that unprotected sexual activity continues to be an ongoing issue.

Table 8.4 Comparison of University of Waikato student rates of unprotected sexual activity

		Engaged in unprotected sexual		
		activity due to alcohol use		
Uni of Waikato		%	%	
Student Sample	Period of time	males	females	
2006 halls of residence	(6 month period)	23	15	
2001 halls of residence	(6 month period)	27	19	
2007 general student	(1 month period)	11	6	
2005 general student	(1 month period)	9	6	

The relationship between student alcohol use and risky sexual behaviour has been identified by a number of researchers (Cooper, 2002; Poulson, Eppler, Sattershite, Wuensch, & Bass, 1998; Wechsler et al., 1994). Klein, Geaghan, and MacDonald (2007) reported that many students view unplanned sexual activity in a favourable manner and that students who consumed larger amounts of alcohol were aware that they were at greater risk of engaging in unplanned sexual activity. Similar to the findings of Klein et al., (2007) a number of drinking residents (both male and female) commented that one of their aims while drinking/socialising was to find a potential sexual partner¹⁶⁷. Ironically, although alcohol usage provided some residents with the increased confidence to initiate contact with a potential partner¹⁶⁸, alcohol use could impair their judgement to ensure that they undertook safe-sex practices. Poulin and Graham (2001) investigated unplanned sexual intercourse behaviour amongst US students and reported a strong association

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¹⁶⁷ Further discussion on the influence of 'hooking-up' behaviour within student culture will be explored in the following chapter.

¹⁶⁸ 74% of male residents and 63% of female residents reported that it was easier for them to meet and get to know people when they have been drinking.

between alcohol usage and unprotected sexual activity. This research project will make a recommendation¹⁶⁹ that further research is undertaken at the University of Waikato to investigate the relationship between student alcohol use and student sexual behaviour, with the objective of identifying intervention initiatives aimed at reducing student rates of alcohol-related sexual-harms.

Drinking and Driving

During focus group and one-to-one interviews resident-initiated discussion about the topic of drinking and driving was noticeable by its absence. Only once during seventeen focus group discussions and eighteen one-to-one interviews did residents spontaneously raise the issue of drinking and driving, and on that one occasion it was to describe a resident who was well known for this behaviour. During researcher-initiated discussion about alcohol-related harms, not one resident admitted to drinking and driving. This contradicted the questionnaire survey results which revealed that one-third of drinking residents in the previous six month period had travelled in a vehicle with a driver who had consumed too much alcohol and twenty percent had driven a vehicle while intoxicated ¹⁷⁰. During the focus group and one-to-one interviews many residents joked and on occasion bragged about being intoxicated and experiencing a range of alcoholrelated harms, but not one resident joked about drinking and driving behaviour. Residents' demeanour and attitudes during these interviews suggested that this silence around the issue of drinking and driving was due to the social shame 171 now associated in New Zealand with this behaviour. The Ministry of Transport in their evaluation of New Zealanders' attitudes towards drinking and driving

¹⁶⁹ See *Recommendation 16*, section 11.2.

¹⁷⁰ These current study findings are similar to the 2001 halls of residence study findings (Donavan et al., 2001).

¹⁷¹ The concept of 'social shame' is discussed later in section 10.4.

behaviour found that only eight percent of New Zealanders did not acknowledge drinking and driving as a risky behaviour (Ministry of Transport, 2006). Habgood et al., (2001) in their evaluation of New Zealanders' drinking patterns found that concerns about drinking and driving were the most common reason reported by both male and female New Zealanders for reducing their alcohol consumption. In spite of New Zealanders un-accepting attitudes towards drinking and driving behaviour, many New Zealanders continue to drink and drive (Land Transport, 2007). The current study finding that males were significantly more likely than females to be involved in drink driving activities is consistent with previous New Zealanders reported that the risks of being caught drinking and driving were small (Ministry of Transport, 2007a). These findings suggest that although most residents (like most New Zealanders) do not condone drinking and driving behaviour, a proportion of them continue to practice it.

Blackouts

The experience of memory loss after a drinking occasion, commonly termed a blackout, is a symptom of binge drinking behaviour and is associated with an increased risk of alcohol-related harm (White, Jamieson-Drake, & Swartzwelder, 2002). The finding that one-half of residents had experienced a memory blackout in the previous six month period due to drinking is similar to previous New Zealand tertiary student findings (Adam et al., 2000; Donavan et al., 2001; McGee & Kypri, 2004) but is higher than a number of US studies (Presley et al., 1996; Wechsler et al., 2000a & 2002a). The current study finding that five percent of drinking residents experience a memory blackout on a weekly basis is a

significant concern and supports the recommendation that further initiatives are required to support the reduction of resident binge drinking behaviour.

8.4.1 Alcohol-Related Harms and Cultural Change Initiatives

Consistent with previous research findings, participants in the current study revealed a surprisingly high level of tolerance towards the majority of harms they and their friends experienced as a consequence of their drinking. Heavierdrinking residents, who experienced significantly more alcohol-related harms, did not appear to be any more concerned about alcohol-related harm than their lighter drinking resident peers (Adam et al., 2000; Posavac, 1991, Williams & Ricciardelli, 1996). Mohr, Brannan, Mohr, Armeli, and Tennen. (2008) in their assessment of US student drinking behaviour reported that the positive experiences students gained as a consequence of their drinking were not only pleasurable, but they also acted as a buffer against the negative effects that students experience as a consequence of their drinking. The current research project revealed that not only did the positive experiences of drinking act as a buffer, but also within the discourse of student culture many residents expected to experience a level of alcohol-related harm. For example, the three alcohol-related harms of vomiting, physically hurting oneself, and passing out were viewed by many residents as a normal consequence of student drinking behaviour and for some residents there was a sense of pride about having survived these experiences. Consistent with the findings of Adam et al., (2000) residents developed narratives focused around their drinking experiences that were a common topic of resident discussion, and alcohol-related harms were often constructed as entertaining and status holding within these drinking narratives. In general, residents were not embarrassed or shamed by their alcohol-related harm experiences, and on the contrary, they were often proud of them.

Perkins (2002) in his review of the literature assessing alcohol-related harms affecting US students commented that "there is only a modest overlap between self-identified problem drinking and the incidence of objectively defined negative consequences. Thus simply making students more aware of drinking hazards that they do not perceive or subjectively experience as indicative of a problem ... is not likely to be an effective prevention approach" (p.99). This finding has significant implications for alcohol intervention programmes targeting student drinking behaviour. For example, in New Zealand the Alcohol Advisory Council's 'changing the drinking culture' initiative 172 is currently focused upon the 'contemplative' stage of the 'Stages of Change Model' which promotes awareness between an individual's drinking behaviour and their experience of alcohol-related harms. As many residents in the current study reported a high tolerance towards most alcohol-related harms, it is likely that specifically targeted harms are necessary for 'contemplative' stage interventions focusing upon student drinkers. Interestingly, the current study did identify three second-hand alcoholrelated harms that residents generally did not find acceptable. These harms included any form of 'verbally or physically aggressive behaviour towards others', any 'inappropriate sexual behaviour towards others', and any 'repeated drunkenness that required ongoing care from others'. This research project will make a recommendation 173 that these three second-hand alcohol-related harms are incorporated in future intervention initiatives targeting student drinkers.

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¹⁷² The 'It's not the drinking but how we're drinking' programme.

¹⁷³See *Recommendation 12*, section 11.1.5.

8.5 Keeping Safe While Drinking

Consistent with previous research, female residents were significantly more likely than male residents to engage in a range of protective strategies to keep themselves safe while drinking (Benton, Schmidt, Newton, Shin, Benton, & Newton, 2004). A comparison of the current study findings with the 2001 University of Waikato halls of residence study (Donavan et al., 2001) is shown in Table 8.5 and reveals that the strategies of eating before drinking, ensuring transport to return home from city bars, and staying with friends while drinking have remained the three most common protective behaviours undertaken by residents. The fourth most common safe drinking strategy found in the current study, of not leaving drinks unattended, was not assessed in the 2001 study. Interestingly, the rate that residents reported they often 'stopped drinking when they had had enough' had reduced from almost two-thirds in 2001 to forty percent of residents in 2006. This finding is of concern as it indicates that fewer residents are often limiting their alcohol intake based upon their level of consumption and it is therefore perhaps not surprising that resident rates of heavy episodic drinking behaviour had increased between the two studies.

Table 8.5 Frequency residents report undertaking safe drinking behaviours across current 2006 study and 2001 study

	Frequency										
Safe drinking behaviours	Often % across row		Sometimes % across row		Rarely % across row		Never % across row		Not applicable % across row		Gender Significance*
	2006	2001	2006	2001	2006	2001	2006	2001	2006	2001	z =
Taxi or bus home from town	82.5	81.7	10.2	8.6	3.3	2.6	0.7	3.2	3.3	4.0	p = ns
Stayed with friends at all times	80.1	79.7	15.6	13.4	2.6	4.6	0.2	1.1	1.4	1.1	p = ns
Eating food before drinking	74.6	78.0	20.1	14.9	4.0	4.3	0.2	1.4	0.9	1.4	p = ns
Stopping drinking when had enough	39.1	63.3	41.0	21.5	15.4	8.6	3.6	4.0	0.9	2.6	-6.49, p < .001
Listening to friends to stop drinking	30.1	36.4	36.5	20.9	17.1	11.5	3.3	12.9	13.0	18.3	p = ns
Non-alcoholic drinks between alcohol drinks	21.3	24.6	31.3	25.1	29.9	28.0	16.6	20.6	0.9	1.7	p = ns

^{*} Mann-Whitney U test

Residential staff reported that the three safe drinking strategies of eating before drinking, ensuring transport to return home from city bars, and staying with friends while drinking were strongly emphasised as a component of the Residents' Orientation Programme at the beginning of the academic year. These strategies have also been promoted nationally (Alcohol Advisory Council, 2005b & 2008c) and internationally (Howard, Griffin, Boekeloo, Lake, & Bellows, 2007).

Currently the Hamilton office of the Accident Compensation Corporation 174 is developing a 'safe drinking' resource to be distributed to all students on campus at the University of Waikato. This study will make a recommendation 175 that the 'safe drinking' initiatives currently undertaken within the halls of residence setting continue to be promoted, and in future are coordinated with the Accident Compensation Corporation's 'safe-drinking' initiatives, to provide a coordinated campus-based approach to this issue.

The current chapter has compared resident drinking behaviour with previous research findings. The following chapter will explore the influence of the halls of residence, the institution environment, and the local community drinking environment, upon resident drinking behaviour.

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¹⁷⁵See *Recommendation 6*, section 11.1.2.

¹⁷⁴ The Accident Compensation Corporation is a New Zealand National Crown entity responsible for preventing injury to, and providing injury compensation for, New Zealanders.

9 DISCUSSION: THE RESIDENT DRINKING ENVIRONMENT

This chapter will discuss the relationship between *resident drinking behaviour* and the *halls of residence environment*, the *institution environment*, and the *local community drinking environment*. Intervention strategies arising from the current study findings and from the research literature will be discussed. These include the employment of University Security staff within the residence setting, modifications to the halls of residence *Alcohol Policy*, the implementation of a Screening and Brief Intervention initiative, implementation of a pre-university behavioural contract, a community/university liaison group, and a 'tightening' of bar entry criterion.

9.1 Halls of Residence Environment

During focus group and one-to-one interviews many residents reported that living in the halls of residence was their first long term¹⁷⁶ experience of living away from home and family. This new living situation provided residents with an opportunity to experience new freedoms but at the same time presented them with a range of new challenges. Stone (2005) evaluated the experiences of new students adjusting to campus life and found that the most common challenges students faced included having to deal with the increased self-responsibility for learning outcomes, initiating and maintaining new peer group relationships, adjusting to unfamiliar living and learning environments, and balancing the freedoms and responsibilities associated with the student lifestyle. Many residents in the current study commented that the halls of residence provided them with a supportive transition into both the academic and social components of student culture.

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¹⁷⁶ The academic year is nine months long.

Alcohol use was reported as a common socialising activity within the halls of residence setting and resident discussion about drinking behaviour and drinking related exploits was a common theme of resident conversations (Middlesex-London Health Unit, 2000). Numerous studies in New Zealand (Adam et al., 2000; Kypri et al., 2005b) and internationally (Baer, 1994; Presley et al., 2002; Wechsler et al., 2000b) have identified alcohol use as a central component of student residence culture.

9.1.1 Resident Drinking Behaviour across the Three Halls of Residence Quantity of Drinking

The finding that there was no significant difference in the number of drinks

residents consumed on a typical drinking occasion across the three halls of residence, is in contrast to the findings of the 2000 and 2004 University of Otago halls of residence studies (Kypri et al., 2002; Maclennan, 2005). Discussion with hall residential staff revealed there was consistent management of alcohol issues across the three halls of residence, as they all functioned under one set of university policies and disciplinary procedures. In contrast, Maclennan (2005) found significant differences in the residence rules, resident management, resident populations, and residence cultures across the twelve University of Otago halls of residence ¹⁷⁷. Maclennan commented that it was difficult to identify a clear association between the characteristics of a residence and resident drinking behaviour:

At this stage of the research, it may prove impossible to separate the effects of policy and enforcement from other environmental variables,

¹⁷⁷ The University of Otago halls of residence are a combination of University and privately owned residences.

such as peer influence, the physical layout of the hall, hall culture, and the managerial style of the hall administration. (p.107)

Maclennan (2005) did identify a significant association between a resident's preuniversity drinking behaviour and their university drinking behaviour and suggested that it was likely that resident's self-selected into a residence with a reputation congruent with their pre-university drinking behaviour.

Frequency of Drinking

The finding of significant differences in the frequency 178 of resident drinking behaviour across the three halls of residence is consistent with the 2000 and 2004 University of Otago halls of residence studies (Kypri et al., 2002; Maclennan, 2005). Discussion exploring why College Hall residents consumed alcohol more frequently than Student Village and Bryant Hall residents, identified the proximity of an on-campus bar adjacent 179 to College Hall as an influencing factor. Residents and residential staff at College Hall commented that the proximity of the bar made it very easy for College Hall residents to travel between the bar and College Hall throughout the course of an evening and that noise emanating from the bar would often attract residents. Within the research literature there is growing evidence to suggest an association between the geographic density of onlicence and off-licence alcohol outlets and alcohol-related harms (Gruenewald, Freisthler, Remer, LaScala, & Treno, 2006). In New Zealand, Kypri et al., (2008a) reported a positive association between the density of alcohol outlets across six university campuses and student drinking behaviour ¹⁸⁰. The authors suggested that any increase in alcohol outlet density in the area surrounding

¹⁷⁸ College Hall residents were found to drink most frequently, followed by Student Village residents, and Bryant Hall residents drank the least frequently.

¹⁷⁹ The bar is situated approximately 25 meters from College Hall.

¹⁸⁰ Using data from the 2005 National Tertiary Health study.

student residences is likely to lead to an increase student drinking behaviour.

College Hall residential staff commented that the proximity of the bar created a range of alcohol-related difficulties for the College Hall community including noise problems, vandalism, drunkenness, and non-resident individuals wandering in and around the College Hall buildings.

Interestingly, this year (2008) the bar adjacent to College Hall had been leased by a new manager/licensee who has operated the bar as a sports club for university sports teams and not as a student bar as it was previously being managed in 2006 (at the time of the data collection). In a recent communication the manager of College Hall (Arnold, J., personal communication, October 24th, 2008) commented that during 2008 the number of alcohol-related incidents occurring at College Hall had decreased by one-half and the cost of alcohol fuelled damage to College Hall property was one-third of previous levels. The manager attributed these reductions in alcohol-related harms directly to the changes in the bar management and operation¹⁸¹. This research project will make a recommendation¹⁸² that that the on-campus bar adjacent to College Hall be designated by the University of Waikato to remain a sports club bar for university sports clubs and not be allowed to reopen in the future as a general student bar.

9.1.2 Second-Hand Drinking Effects within the Halls of Residence

The effect of students' alcohol influenced behaviour upon others, often called second-hand drinking effects, has been identified in both New Zealand (Donavan et al., 2001; IPRU, 2005 & 2007, Langley et al., 2003; Maclennan, 2005) and

¹⁸¹ Previously the bar had been open six days a week and catered for all students and the public. During 2008 the bar was open three-four days a week, for a limited number of hours, and catered only for university sports teams, and a number of private functions.

¹⁸² See *Recommendation 7*, section 11.1.3.

internationally (Wechsler et al., 2001b; Weitzman, Nelson, Lee, & Wechsler, 2004).

Similar to the findings of the National Tertiary Health Surveys (IPRU, 2005 & 2007) the most common second-hand drinking effect reported by residents was the problem of noise and being woken up¹⁸³. Both residents and residential staff reported that they found these incidents of broken sleep irritating and disruptive. A comparison of the frequency that residents in the current study reported being woken up, with 2001 the University of Waikato halls of residence study 184 (Donavan et al., 2001) revealed a significant reduction in 2006 (Mann-Whitney U test, z = -1.989, p < 0.05). Discussion with residential staff revealed that during the intervening five year period between the two studies, there had been an increase in the presence of University Security staff patrolling the halls of residence grounds 185 and there was general agreement that this increase had a proactive influence in settling resident behaviour. In spite of the reduction in noise related problems, it is clear that noise issues continue to be an ongoing issue for both residents and residential staff. The finding that female residents were significantly more likely, than male residents, to be woken up is consistent with the findings of the 2002 University of Otago study (Langley et al., 2003). Devlin, Donovan, Nicolov, Nold, & Zandan (2008) in their comparative study of resident hall architecture designs reported that large halls of residence were more prone to noise related problems due to the volume of students they housed. This research project will make a recommendation ¹⁸⁶ supporting the continued use of University

¹⁸³ In the current study 29% of residents reported that they were woken up by others on a weekly basis, 19% reported monthly, 39% reported 1-5 times, and 13% reported never being woken up. ¹⁸⁴ 37% of residents reported that they were woken up by others on a weekly basis, 15% reported monthly, 39% reported 1-5 times, and 8% reported never being woken up.

¹⁸⁵ Security staff patrol from 10.00 pm through to 3.00 am, Wednesday to Saturday.

¹⁸⁶ See *Recommendation 4*, section 11.1.2.

Security staff as a strategy to continue reducing alcohol-related noise problems within the halls of residence setting.

Foubert, Tepper, and Morrison (1998) identified 'safety issues' as a significant predictor of student 'satisfaction' when living in halls of residence accommodation. The current study finding that one-third of female residents and one-quarter of male residents had felt unsafe in the halls of residence setting due to someone else's drinking behaviour was of concern to residential staff. Discussion with residents revealed that these occurrences of feeling unsafe were commonly associated with intoxicated male drinkers behaving in a verbally or physically aggressive manner within or around the residence buildings. This finding highlights the importance of good residential staff training to prepare staff to deal with 'difficult' situations (Keashly, Hunter, & Harvey, 1997). At the University of Waikato, residential staff participate in a two-week staff training programme (prior to the academic year beginning) and one component of the training programme is dedicated to 'staff and resident safety issues'. Interestingly, in spite of an increase in University Security staff patrolling the halls of residence grounds, no significant decrease was found in the frequency of reported 'unsafe incidents' between the 2001 University of Waikato study (Donavan et al., 2001) and the current study. It is likely that University Security staff and residential staff are not always informed by residents when these incidents occur. Further enquiry is needed to evaluate the reporting procedures utilised by residents when informing staff about unsafe incidents that occur within the halls of residence setting. This research project will make a recommendation¹⁸⁷ that the procedures for reporting safety concerns within the

¹⁸⁷ See *Recommendation 4*, section 11.1.2.

halls of residence setting be reviewed to ensure that these incidents are promptly reported and effectively dealt with by University Security staff and residential staff.

9.1.3 Management of Alcohol Issues

The finding that the majority of residents undertook most of their drinking within the halls of residence setting, and that forty percent of male residents and onequarter of female residents were drunk on a weekly basis, has significant implications for residential staff. The halls of residence mission statement is to "provide residents with an experience of communal living, which is conducive to social maturation and academic success" (University of Waikato, 2007, p.9). To support this mission statement, the halls of residence have a comprehensive Alcohol Policy addressing the issue of resident alcohol use (see Appendix G). Residential staff report that this policy have been progressively modified over recent years in an attempt to better manage resident drinking behaviour and is based upon the principle that the *Alcohol Policy* "does not attempt to prevent drinking but rather to foster a responsible approach by those who choose to use alcohol" (University of Waikato, 2007, p.viii). Currently the halls of residence Alcohol Policy restricts resident drinking to the bedroom areas, limits the number of residents drinking together to five individuals, and limits socialising to before 10.00 pm¹⁸⁸. Residents are restricted from having parties and making a disturbance that intrudes upon others. The Alcohol Policy lists a range of alcohol

¹⁸⁸ Interestingly, at the time of the data collection in 2006, the hall rules stated that any resident wanting to continue socialising after 10.00 pm were required to leave the halls of residence but there was no rule against drinking in residence after this time. As a consequence of residential staff discussion after participating in the current study focus group interviews, a statement was made by residential staff to the halls of residence management that a 'no drinking after 10.00 pm' rule would make their job easier when dealing with drinking residents. As a consequence, a new rule was implemented in 2007 stating that 'No drinking is allowed in residence between 10.00 pm and 10.00 am'.

influenced behaviours¹⁸⁹ that would lead to a resident receiving disciplinary action. The halls of residence have a separate *Alcohol Management Three Strikes Policy* to deal with alcohol-related disciplinary offences (see Appendix G). It is the role of the hall residential staff to patrol the halls of residence and ensure that residents adhere to the residence rules, and it is the role of the hall Residential Managers (and on occasion the Group Manager of Student Services) to implement disciplinary proceedings with residents who have infringed the *Alcohol Policy*. Discussion with residents revealed that many residents generally agreed with the need for the halls of residence *Alcohol Policy*, as they understood that these rules and their enforcement by residential staff, maintained order within the halls of residence setting. Similar to the findings of Donavan et al., (2001) it was heavy-drinking male residents who were most likely to report that the halls of residence rules restricted their drinking behaviour.

Currently in the halls of residence, a resident will only face alcohol-related disciplinary action if they commit an offence while under the influence of alcohol. A suggested change to the halls of residence *Alcohol Policy* would be to make it an offence to be intoxicated while in residence. This rule change would be similar to the current law that makes it an offence to be intoxicated in a licenced premise. Arguably, one of the benefits of this on-licence law is that drinkers generally moderate their drinking to ensure they can remain within a bar. It is possible that a similar rule within the halls of residence setting may moderate resident intoxication levels. A rule change of this nature would be a significant shift in the

¹⁸⁹ Including a resident being noisy and/or abusive; being obstructive to staff carrying out their duties; being obstructive to any other person; placing themselves or others at risk in some way through their actions; damaging, or is likely to damage, because of their actions or condition, the property of others, or of the Hall; is in such a condition that they will not or cannot respond to instruction that they are being given by a staff member; creates a mess that requires cleaning up by the resident or others (University of Waikato, 2007).

University of Waikato's halls of residence *Alcohol Policy* and would require consultation with residential staff regarding the practicalities of enforcing this rule. This research project will make a recommendation¹⁹⁰ that a change is made to the halls of residence *Alcohol Policy* making it an offence to be intoxicated within the halls of residence setting. This new rule could also be added to the University of Waikato's *Student Discipline Regulations*, allowing for disciplinary action against non-resident students who are found to be intoxicated within the halls of residence setting.

Early Intervention

Sher and Rutledge (2007) in their assessment of US student drinking behaviour reported that many students arrived at university with high expectations of alcohol fuelled behaviour and once on campus quickly increased their drinking behaviour to match these drinking expectations. The authors suggested that interventions aimed at reducing student binge drinking behaviour may benefit from implementation prior to student arrival on-campus. As many residents in the current study arrived on campus expecting alcohol use to be a significant component of student culture, the University of Waikato halls of residence may benefit from the implementation of a pre-university alcohol intervention.

The University of Waikato halls of residence have an *Alcohol Policy* outlining the residence rules on the use of alcohol within residence and the disciplinary consequences of breaking those rules (see Appendix G). This *Alcohol Policy* is contained within the *Halls of Residence Handbook*¹⁹¹ (University of Waikato, 2007). Residents are required to read the handbook before signing their

¹⁹⁰ See *Recommendation 3*, section 11.1.2.

¹⁹¹ This handbook also includes a full set of the hall rules, accommodation costs, and the student support services available on campus.

Residency Contract to confirm their acceptance for accommodation. Residential staff report that the majority of residents do not read the Halls of Residence Handbook before signing their Residency Contract and therefore arrive on campus with little awareness of the halls of residence rules and continue to maintain an alcohol dominated view of student culture. Residential staff are then required at the beginning of the academic year to educate new residents about the halls of residence rules including the hall Alcohol Policy.

Resident interaction with the halls of residence *Alcohol Policy* and a behavioural contract, prior to arrival on campus, could modify resident expectations of alcohol use within the halls of residence setting. For example, a separate copy of the halls of residence *Alcohol Policy* and a Behavioural Contract could be sent to prospective residents at the same time that they receive their *Residency Contract* and the *Halls of Residence Handbook*. Behavioural contracts have been used on campuses to modify a range of student behaviours including recycling (Wang & Katzev, 1990), learning (Beaty, Gibbs, & Morgan, 1997) and alcohol use (Riordan & Dana, 1998). To ensure residents read the *Alcohol Policy*, the *Behavioural Contract* would be constructed requiring residents to complete questions based on the policy. The current research project will make a recommendation ¹⁹² that a copy of the halls of residence *Alcohol Policy* and *Behavioural Contract* be sent to all prospective residents prior to their arrival on campus. It would be required that the *Behavioural Contract* is signed and returned prior to a resident receiving confirmation of their admission into the halls of residence.

¹⁹² See *Recommendation 2*, section 11.1.2.

9.2 Institution Environment

In 2007, the US National Institute on Alcohol Abuse and Alcoholism published What Colleges Need to Know Now: An Update on College Drinking Research¹⁹³ reporting that the most promising institution-based alcohol interventions included 'screening and brief intervention' strategies and 'campus and community partnership' strategies (NIAAA, 2007b). The 2007 paper expressed caution about the use of 'social norm campaign' strategies.

9.2.1 Screening and Brief Intervention Strategies

Individual student intervention strategies have traditionally involved mandated students attending brief motivational interviews and/or alcohol education sessions and have been found to be effective in reducing student drinking behaviour (Barnett et al., 2004). Recent initiatives to expand this strategy to include a greater number of drinking students has involved the delivery of 'Screening and Brief Intervention' strategies (SBI) in settings where drinking students are likely to be seen, such as medical and counselling services (NIAAA, 2007b). SBI strategies in these settings typically involve a health or counselling staff member undertaking an opportunistic screening test with a student accessing the service. Students who screen 'positive' for an alcohol issue are then provided with a five to ten minute alcohol advice/motivational interview (Heather, 2002). These SBI strategies have been found to be effective in reducing problematic alcohol consumption amongst students but difficulties in the consistent delivery of these interventions have been documented due to limited staffing resources within busy

¹⁹³ The 2007 paper is an update on the landmark 2002 paper *A Call To Action: Changing the Culture of Drinking at U.S. Colleges* (NIAAA, 2002a)

medical/counselling services (Moyer, Finney, Swearingen, & Vergun, 2002; Saunders, Kypri, Walters, Laforge, & Larimer, 2004).

Computer-based SBI strategies have been recommended as a cost effective and evidence-based strategy to reduce binge drinking behaviour amongst students (Kypri, Langley, Saunders, Cashell-Smith, & Herbison, 2008b). At the University of Otago, a new computer-based SBI initiative was trialled utilising a computer situated within the university health service (Kypri, Stephenson, Langley, Cashell-Smith, Saunders, & Russell, 2005c). Students waiting for their appointment at the health service were invited by staff to undertake an alcohol Screening test on the computer. Students who screened positively for an alcohol issue were then invited (by the Screening test programme) to continue with a follow-up Brief-Intervention programme that provided them with individual feedback about their drinking behaviour. This computer-based SBI procedure was found to require significantly less staffing resources than the traditional staff-based SBI strategies. This research project will make a recommendation 194 that a Screening and Brief Intervention initiative, utilising a computer-based SBI programme, is trialled at the University of Waikato medical centre.

Campus and Community Partnership Strategies

The 2007 NIAAA paper reported that:

As more credible studies continue to show positive outcomes associated with campus-community partnerships, this strategy should increasingly be considered an essential component of any college drinking prevention and intervention effort. (NIAAA, 2007b, p.6)

¹⁹⁴ See *Recommendation 1*, section 11.1.1.

The current research project found that a relationship existed between resident oncampus drinking and city bars. For example, many residents presented at bars in
an intoxicated state (due to their campus-based drinking) and posed difficulties for
bar door staff. Correspondingly, the alcohol promotions and serving practices of
bars affected resident drinking behaviour¹⁹⁵ and consequently hall communities
when intoxicated residents returned back to their hall of residence. This research
project identified that there was a need to coordinate the flow of information
between campus-based staff and Hamilton community-based staff regarding
student drinking behaviour.

During the first-half of 2008 the researcher presented a summary of the current study results to University of Waikato staff (including residential staff, student support staff, and health/counselling staff), members of the University of Waikato Student Union, and a number of Hamilton community-based staff (including health promotion staff, liquor licensing staff, Hamilton city council staff, and Hamilton Police staff). Interested parties from both the university and the community expressed an interest in forming a group to discuss shared issues involving student drinking behaviour. As a consequence, the Hamilton Student Alcohol Watch group was formed and meets bi-monthly¹⁹⁶. This research project will make a recommendation¹⁹⁷ that the Student Alcohol Watch Group continue to be supported by the University of Waikato as a vehicle to coordinate on-campus and off-campus initiatives targeting student drinking behaviour.

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¹⁹⁷ See *Recommendation 9*, section 11.1.3.

¹⁹⁵ This issue will be discussed in further detail later in this chapter.

¹⁹⁶ To date the group has discussed the operations of a number of city bars that have been impacting upon student drinking behaviour (these issues were followed up by the Hamilton Police and Health staff). The group has also facilitated a meeting of all groups involved in the planning of the 2009 Student Orientation Programme and recommendations have been made to improve the organisation/safety of a number of events.

The NIAAA paper (2007b) reported that the most common initiative undertaken on campuses to reduce student drinking behaviour has been the implementation of 'social-norm' drinking campaigns. These campaigns are based upon the research findings that students consistently overestimate the amount of alcohol their student peers consume (Ham & Hope, 2003; Perkins, 2002). Similar finding have also been documented in a New Zealand (Kypri & Langley, 2003) and Australia (Stainton, 2003; Walker, 2000). Social-norm campaigns publicise the 'actual' rate of student alcohol use on a campus, with the assumption that as students are informed about other students' actual drinking behaviour (which is lower than they previously thought), students will in turn reduce their own level of alcohol use. Toomey et al., (2007) reviewed the research literature evaluating the effectiveness of social-norm campaigns and commented that the results were mixed, with a number of studies finding no effect or an increase in student alcohol use. The NIAAA (2007b) recommended that social-norm campaigns should only be implemented with 'caution' and that further evaluative research was required to assess their effectiveness.

9.3 Local Community Drinking Environment

9.3.1 Intoxicated Residents and City Bars

The current study findings that residents consumed the majority of their alcohol intake within the halls of residence, that one-half of male drinking residents and one-third of female drinking residents were intoxicated at least once a week, and that the majority of these intoxicated residents travelled into the Hamilton CBD area to continue socialising in on-licenced premises, has significant implications

for the staff of these on-licenced premises. In New Zealand the Sale of Liquor Act Section 166 prohibits the sale and supply of alcohol to an intoxicated person, Section 167 prohibits a person being served alcohol to the point of intoxication, and Section 168 prohibits drunkenness or disorderly conduct on a licenced premise (Alcohol Advisory Council, 2006). Arguably it is a difficult job for bar staff, and particularly for bar door staff, to accurately assess a prospective patron's level of intoxication 198.

The current study finding that many residents consumed alcohol to a level of intoxication that would still allow them to gain access into Hamilton city bars highlights the importance of the entry 'intoxication threshold' maintained by bars. Residents reported that some bars were known to be more lenient than others in allowing intoxicated patron's access. If all city bars could be coordinated to maintain a consistent entry threshold, and if this threshold was reduced to ensure that intoxicated patrons did not gain access, then it is possible that hall residents would correspondingly reduce their levels of 'pre-bar' alcohol consumption to meet this new entry threshold. Interestingly, two-thirds of residents participating in the current study and two-thirds of University of Waikato students participating in the National Tertiary Health Surveys (IPRU, 2005 & 2007) reported that drunken behaviour was common in Hamilton bars.

Recently in Hamilton, an *Alcohol Accord Agreement* has been reached between the majority of interested parties involved in the sale of alcohol within the Hamilton CBD area. This group includes the managers and licencees of licenced premises in the area, the Hamilton Police, the Hamilton Liquor Licensing

¹⁹⁸ The Alcohol Advisory Council (2006) has produced a set of 'intoxication guidelines' for bar staff, detailing the characteristics of drunken behaviour under the four areas of impaired speech, impaired coordination, appearance, and behaviour.

Inspector (Hamilton City Council), and the Waikato District Health Officer¹⁹⁹. The aim of the Accord is "to adopt and maintain responsible and quality practices, particularly where the sale and consumption of liquor is involved, in order to create a vibrant and safe community for residents, customers, visitors and employees alike" (Henderson, 2008, p.6).

Previous research has shown mixed results regarding the efficiency of bar staff to monitor intoxication amongst bar patrons (Donnelly & Briscoe, 2003, Lang, Stockwell, Rydon, & Beel, 1998) and that training initiatives targeting bar staff can lead to a reduction in bar patron intoxication levels (Johnsson & Berglund, 2003). This research project will make a recommendation through the Hamilton Alcohol Accord group that an initiative be undertaken to lower the bar entry 'intoxication threshold' allowing patrons to gain access into city bars. This initiative would require a consistent threshold for both male and female drinkers and a consistency across city bars. The implication of this initiative is that residents would be required to arrive at city bars in a less intoxicated state ²⁰¹.

Previous international research has utilised an alcohol-breathalyser machine to assess the intoxication levels of patrons exiting licenced premises, as an evaluation of bar staff alcohol-serving practices (Lang et al., 1998; Stockwell, Rydon, Gianatti, Jenkins, Ovenden, & Syed, 2006). Following the current study finding that many residents arrived at city bars in varying states of intoxication, this research project will recommend²⁰² that further research is undertaken,

¹⁹⁹ The same Waikato District Health Officer and Police Liquor Licensing staff are also members of the Student Alcohol Watch Group.

²⁰⁰ See *Recommendation 11*, section 11.1.4.

Arguably if intoxicated residents are gaining access to city bars then it is likely that other intoxicated patrons may also be gaining access.

²⁰² See *Recommendation 17*, section 11.2.

utilising a breathalyser machine, to assess the intoxication levels of patrons (student and non-student) entering and exiting Hamilton city bars. This research would evaluate the 'intoxication thresholds' bars decline prospective patrons' entry and also assess the intoxication levels of patrons exiting bars. This research data would also be valuable in assessing which Hamilton bars are not supporting the aims of the Hamilton *Alcohol Accord Agreement*.

9.3.2 Price of Alcohol

On-Licence

Although almost three-quarters of female residents and one-half of male residents typically consumed no more than two alcoholic drinks while drinking in city bars, residents reported that the exceptions to this typical on-licence drinking behaviour occurred when bars provided drink-price specials. In the US, drink-pricing promotions by bars, including 'happy hour' specials, have been have been found to be associated with increased student alcohol use (Kuo, Wechsler, Greenberg, & Lee, 2003). Consistent with previous research, the current study found that drinkprice specials also encouraged residents to drink on the evenings that drink-price specials were offered (Toomey et al., 2007). In Hamilton, the issue of drink pricing is particularly influential during the Student Orientation Week at the beginning of each academic semester. During this time, bars enter into a very competitive promotions programme that includes drink-price specials and/or theme nights to capture the student-drinking market for the up-coming semester. These promotions are regularly advertised in the University of Waikato student newspaper Nexus ²⁰³. Kuo et al., (2003) reported that the regulation of marketing practices such as sale prices, promotions, and advertisements may be an important

 203 The issue of alcohol advertising will be discussed later in this chapter.

strategy to reduce student binge drinking behaviour. Jones and Lynch (2007) also comment:

A specific area of concern is the apparent targeting of university students in a number of venues and promotions. For example, we identified promotions including free entry for students, 'student happy hours' and free transport from university campuses to venues and between venues. Given that university students are already a high-risk group for excessive alcohol consumption, promotions which target this group specifically are an important area for examination and intervention. (p.483)

Off-Licence

Resident purchasing of off-licence alcohol revealed an ongoing tension between pricing and brand preference. Harwood, Erickson, Fabian, Jones-Webb, Slater, & Chaloupka (2003) have identified that low income consumers are very 'price sensitive' when purchasing alcohol products. For many residents in the current study this price sensitivity was demonstrated by them purchasing the cheapest brand of alcohol or purchasing the brand that provided the most alcohol content in relation to price (Toomey & Wagenaar, 2002). Weitzman et al., (2003) reported that students living in environments where alcohol was cheap and more accessible were significantly more likely to consume more alcohol.

Although residents' off-licence purchasing of alcohol was influenced by pricing, some residents reported brand identification influencing their alcohol purchasing selections (Austin, Chen, & Grube, 2006; Casswell, 2004). For example, male beer drinkers may associate themselves as an 'Export Gold' man or a 'Tui'

man²⁰⁴. These residents may often have a range of items presenting their preferred 'brand' on show in their bedroom area, e.g. empty bottles, caps, towels, and advertising posters. Hogg, Cox and Keeling (2000) have discussed the relationship in the modern consumer society between symbolic consumption, the image consumers are 'purchasing' when they purchase an alcoholic product, and consumer choice. Amongst residents, brand identification could also be demonstrated by which brands of alcohol a resident would not purchase.

Minimum Price Control

Barbor et al., (2003) have stated that "when other factors remain unchanged, an increase in price has generally led to a decrease in alcohol consumption, and that a decrease in price has usually led to an increase in alcohol consumption" (p.107). In New Zealand, the Alcohol Healthwatch Group in their report Alcohol Excise *Tax: Changes to the New Zealand System* have stated that:

The price of alcohol is a proven major influence on consumption, and controls on price through an alcohol excise taxation system provide an important public health strategy to reduce harm, particularly among price sensitive young people and moderate to heavy drinkers. (Alcohol Healthwatch, 2004, p.20)

The report goes on to suggest that a minimum pricing structure be introduced for New Zealand alcoholic beverages. This argument is based upon the assumption that alcohol is not an ordinary 'commodity' and that the pricing of alcohol products should not be left to the market place to decide. An example of offlicence alcohol pricing being left to the market place is the now common practice of supermarket chains offering low-price alcohol (sometimes at loss-leading

²⁰⁴ 'Export Gold' and 'Tui' are brands of alcohol.

prices) as a marketing tool to attract customers into supermarkets (Alcohol Advisory Council, 2007c). To control on-licence pricing the Alcohol Healthwatch report also recommends that "the scope of Section 154A of the Sale of Liquor Amendment Act 1999, which makes it an offence to encourage persons on licenced premises to consume alcohol to an excessive extent, [be extended] to cover cut price promotions" (2004,p. 4). A minimum pricing structure would restrict the ability of on-licence bars to target student drinkers using drink-price promotions. This is likely to impact upon students who are price-sensitive alcohol consumers.

Alcohol Advertising

In New Zealand, the *Code for Advertising Alcohol* (New Zealand Advertising Standards Authority, 2008) stipulates that alcohol advertising must promote 'responsibility and moderation in liquor consumption' but there are no restrictions on the advertising of alcohol product pricing (Alcohol Healthwatch, 2005).

Cousins and Kypri (2008a) assessed the volume of alcohol-related advertising in five New Zealand university student newspapers and found that the University of Waikato *Nexus* newspaper "had by far" the most alcohol-related advertisements.

The authors also reported that students were exposed to many forms of alcohol-related advertising media "both on- and off-campus, via print, television, radio, the internet, billboards, shop fronts and at point of sale" (p.568). Saffer (2002) reviewed the research literature assessing the impact of alcohol-related advertising upon US student drinking and reported that although increased alcohol advertising was associated with an increase in student alcohol consumption, limited alcohol-related advertising bans (for example campus-wide bans on alcohol-related advertising) were unlikely to be effective in reducing alcohol consumption as

alcohol advertisers typically transferred their advertising to alternative 'non-banned' media²⁰⁵. It is likely that any call to ban alcohol advertising in the *Nexus* newspaper²⁰⁶ would result in a transfer of alcohol-related advertising into alternative on-campus and off-campus advertising media²⁰⁷. Saffer (2002) stated that a 'comprehensive advertising ban' at a national level is required to reduce the impact of alcohol advertising upon students. In recent years there have been calls in New Zealand to place restrictions upon alcohol-related advertising including "a comprehensive ban on [all] alcohol marketing, as we have for tobacco products" (Alcohol Healthwatch, 2007, p.1)²⁰⁸. This research project supports a change to the New Zealand *Code for Advertising Alcohol* prohibiting the advertisement of 'alcohol pricing' as an initiative to limit the impact of drink-price promotions upon student drinking behaviour.

9.3.3 Sports Clubs

In the current study a number of residents identified sports clubs as commonly allowing and/or promoting binge drinking behaviour. This binge drinking could be the result of poor serving practices from the club bar (e.g. serving intoxicated patrons) or a consequence of team off-licence drinking occasions²⁰⁹. In New

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²⁰⁵ Saffer (2002) did comment that although 'limited' alcohol advertising bans were unlikely to be effective they can act 'as a signal of an administrative intolerance' towards student alcohol abuse. ²⁰⁶ In New Zealand, student newspapers, including the University of Waikato *Nexus* newspaper, are owned and operated by student associations which are independent of university administration.

²⁰⁷ For example, during the first two weeks of each semester a number of CBD bars employ students to stand at the entrance to the university with banners advertising upcoming promotions and give away alcohol/bar-related paraphernalia including wall planners, posters, hats, and vouchers. One of the bars has purchased a dwelling adjacent to the main university entrance gate and displays advertising banners throughout the academic year. CBD bars regularly display posters on campus notice boards advertising upcoming promotions/events.

²⁰⁸ In 2007, a Steering Group Committee appointed by the Ministry of Health to review the

In 2007, a Steering Group Committee appointed by the Ministry of Health to review the regulation of alcohol advertising in New Zealand, recommended a continuation of the current voluntary industry code administered by the New Zealand Advertising Standards Authority.

Team 'court sessions' were particularly indentified as a team drinking activity when excessive alcohol consumption was promoted and expected of team members. Team drinking occasions were often viewed as a 'team-bonding' activity.

Zealand, the Alcohol Advisory Council and the Accident Compensation

Corporation have jointly initiated a Sports Clubs Accreditation programme, with
the purpose of reducing both on-licence and off-licence alcohol abuse within the
New Zealand sports club environment (Alcohol Advisory Council, 2007b). This
research project supports the Sports Clubs Accreditation programme as an
initiative to reduce binge drinking behaviour amongst student sports club
members.

9.3.4 The Location of Local Bars and Sports Clubs

As discussed previously, the proximity of the bar adjacent to College Hall had a significant impact upon the College Hall community. Kypri et al., (2008) in their national study of New Zealand student drinking behaviour and liquor outlet density found that the number of liquor outlets within walking distance of a student's home was positively associated with a student's drinking level and experience of alcohol-related harms. The authors recommended that legislators and authorities who administer liquor licensing applications should consider the probable public health risk posed by permitting increasing numbers of alcohol outlets. A recent poll undertaken by the *Waikato Times* newspaper asked local residents their opinion about the number of on-licence and off-licence alcohol outlets in their community and three-quarters of respondents supported initiatives to reduce the number of outlets in the Hamilton suburban areas (Holloway, 2008). This research project supports a restriction of the number of off-licence alcohol outlets, and the proximity of on-licence bars, within the vicinity of student accommodation.

The current chapter has discussed the impact of the halls of residence environment, the institution environment and the local community drinking environment upon resident drinking. The following chapter will explore the relationship between student culture and student binge drinking behaviour.

10 DISCUSSION: STUDENT CULTURE AND BINGE DRINKING

This chapter will firstly explore academic study, socialising, hooking-up, and alcohol use as components of *student culture*. The chapter will then discuss resident understandings of *binge drinking behaviour* and the relationship between *student culture and binge drinking*. Next this chapter will examine *controlled intoxication* as a component of resident binge drinking behaviour. Finally this chapter will explore the implications of the current research findings upon future *national intervention initiatives* aiming to reduce student drinking behaviour.

10.1 Student Culture

Student culture was described by residents as a combination of academic study and socialising experiences. Ashmore et al., (2007) have commented that although students are influenced by many other subcultures "the academic and sociosexual subcultures are the dominant ones [within student culture]" (p.2926). These two aspects of student culture have alternatively been labelled the 'academic' and 'personal' narratives by Walker (2001).

The academic narrative of student culture involves the student as a scholar and includes attendance at classes, writing essays, completing tests and exams, and ultimately gaining a tertiary qualification (Walker, 2001). Ashmore et al., (2007) identified this aspect of student life as the 'official' narrative of student culture. For many residents in the current study, the academic component of student culture represented an investment in their future. Residents were aware that studying entailed a financial cost to them, usually through the student loan

scheme²¹⁰, and they wanted to ensure they succeeded at their studies. Student loans have become a common feature of student culture across many Western countries (Woodhall, 2002) and have been associated with an increased 'economic awareness' and financial 'self-reliance' amongst students (Winn & Stevenson, 1997). Many residents in the current study conveyed an 'economic awareness' concerning the cost of their tertiary study.

Along with the intention of succeeding at their studies, many residents also expected to experience a rich social life as a student. Prior to arriving at university, the majority of residents had anticipated that alcohol use and socialising would be a strong feature of student culture²¹¹. Sher and Rutledge (2007) in their evaluation of US student drinking behaviour commented that a number of students "viewed partying as an important motive of attending college, suggesting that the college environment itself is looked forward to" (p.831). For many residents in the current study the social component of student culture included having fun, experiencing new social activities, forming new relationships (including sexual relationships), and the consumption of alcohol. Ashmore et al., (2002) have described this social aspect of student culture as the sociosexual subculture of 'partying, playing, and partner pursuing'.

Interestingly, the importance of both the academic and social narratives of student culture have been recognised and utilised by New Zealand tertiary institutions in their advertising campaigns to attract prospective students to their campuses. These marketing strategies frequently discuss the strength of the institution's

²¹⁰ The New Zealand Union of Students' Associations (2008b) reported that the collective student debt in New Zealand has reached "\$10 billion" and that the average student debt is now

²¹¹ 73% of residents reported that prior to attending university they had expected that university students would consume a lot of alcohol and party a lot.

academic programmes alongside the richness of the student lifestyle. For example, the *University of Waikato Undergraduate Prospectus 2009* states "The University of Waikato showed its strength by being ranked number one in New Zealand in ten subjects" (2009, p.2) and "Hamilton has the best student nightlife in the country" (2009, p.8). Similarly, the *University of Otago Handbook 2008* comments that the "University of Otago is New Zealand's oldest and finest University" (2008, p.1) and that "coming to Otago isn't just about attending lectures and passing your exams. To gain a full university experience, you'll need to have a few good stories to tell when you graduate" (2008, p.34).

Alcohol Use

In the current study, alcohol use occupied a central role within the majority of drinking resident's description of student culture²¹² (Dantzer, Wardle, Fuller, Pampalone, & Steptoe, 2006). Many residents held the opinion that alcohol use had a long history within student culture (Bishop et al., 2004) and viewed their drinking/socialising behaviour as maintaining these traditions of student drinking (NIAAA, 2002a). Interestingly, Asian residents in the current study were significantly less likely than other nationality groups to report that alcohol was an important component of student culture²¹³ and to have expected alcohol use to be prevalent within New Zealand student culture²¹⁴ (Alcohol Advisory Council, 2004e). Ho, Li, Cooper, and Holmes (2007) evaluated the experiences of Chinese international students living in New Zealand and reported that that many Chinese students had a limited knowledge of New Zealand culture (and we can assume

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²¹² 60% of drinking residents agreed with the statement that alcohol was an important component of student culture.

²¹³ 36% of Asian residents agreed that alcohol was an important component of student culture, in contrast to 60% of New Zealand residents.

²¹⁴ 29% of Asian residents reported that prior to arriving at university they thought that students consumed a lot of alcohol and partied a lot, in contrast to 80% of New Zealand students.

New Zealand student culture) before their arrival in New Zealand. As many Asian residents in the current study reported surprise, and on some occasion's concern, about the drinking behaviour they witnessed in New Zealand, this research project will make a recommendation²¹⁵ that a component of the University of Waikato *International Student Orientation Programme*²¹⁶ provide new Asian students with an understanding of New Zealand student drinking behaviour. This information would help prepare new Asian students to deal with the drinking behaviour that they are likely to experience during their stay in New Zealand.

Many residents in the current study reported a strong association between alcohol use and 'hooking-up' behaviour. In recent times a number of researchers have discussed the changing patterns of tertiary student socialising behaviour arguing that the traditional heterosexual practice of 'dating' has been replaced by the practice of 'hook-ups' or 'hooking-up' (Lambert, Kahn, & Apple, 2003; Manning et al., 2006; Paul, McManus, & Hayes, 2000). Hooking-up behaviour typically involves an individual socialising/drinking with a group of friends, meeting a potential partner during the course of an evening, and then sharing a level of sexual intimacy with the new partner (Bogle, 2007)²¹⁸. Lambert et al., (2003) have commented that hooking-up behaviour has become a 'normative' socialising behaviour on many campuses. Bogle (2007) has suggested that student alcohol use is a common feature of hooking-up behaviour and "this need for alcohol may

²¹⁵ See *Recommendation 7*, section 11.1.3.

²¹⁶ All new international students to the University of Waikato participate in the *International Student Orientation Programme*.

²¹⁷ Traditional heterosexual dating behaviour involves one of the pair asking the other out to share time together and there is often an expectation that the degree of sexual intimacy shared between the pair will match the level of emotional intimacy shared (Bogle, 2007).

²¹⁸ During hooking-up behaviour there is often no direct relationship between sexual intimacy and emotional intimacy or relationship commitment. This behaviour is similar to what was previously termed 'causal sex' or a 'one-night-stand'.

account for the increasing role that 'partying' has played in the social lives of college students" (p.777). In the current study, the majority of drinking residents reported²¹⁹ that alcohol use made it easier for them to socialise and a number of residents reported that they drank/socialised with the intention or hope of hooking-up²²⁰. Previous research has identified alcohol intoxication as a strong predictor of full intercourse hooking-up behaviour amongst students (Paul et al., 2000). Although the current study did not assess the relationship between resident drinking behaviour and sexual activity, it did measure resident alcohol usage and resident experiences of alcohol-related sexual harms. Residents who drank more frequently and consumed larger amounts of alcohol, were also more likely to experience 'unplanned sexual activity', 'end up in a sexual situation they were not happy about', and 'not use contraceptive protection'. As discussed in Chapter 8, this research project will recommend²²¹ that further research is undertaken to investigate the relationship between student alcohol usage and student sexual behaviour at the University of Waikato.

10.2 Binge Drinking

Terminology and Definition

The phrases 'binge drinking' and 'binge drinker' were not terms that were commonly used by residents or their peers. Residents commented that they were familiar with these phrases but generally associated them with media usage. A study of Canadian students also reported that the phrases binge drinking and binge

²¹⁹ 74% of male residents and 63% of female residents reported that it was easier for them to meet and get to know others when they have been drinking.

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Hooking-up with a new sexual partner was viewed by some residents as an extension of a 'good night out' with friends.

²²¹ See *Recommendation 16*, section 11.2.

drinker were not used by students²²² (Middlesex-London Health Unit, 2001). In the current study residents typically used the terms 'getting pissed', 'drunk', 'totalled', 'smashed' and 'coma'd' to describe binge drinking behaviour. This finding suggests that alcohol intervention strategies targeting student populations may 'connect' better with students if they utilise drinking terms that students commonly use (Jack, Bouck, Beynon, Ciliska, & Lewis, 2005). For example, New Zealand alcohol intervention programmes targeting general-population drinkers have utilised the drinking terms "hammered" (Auckland District Health Board, 2008), "wasted" (Youthline, 2008), and "out of it" (Hamilton Liquor Liaison Group, 2008).

The majority of residents defined binge drinking behaviour as 'the amount of alcohol an individual consumed on a drinking occasion' and 'drinking alcohol with the intention of getting drunk'223. Interestingly, these two binge drinking definitions were supported by the current study finding that residents who self-assessed themselves as a binge drinker, were also more likely to consume larger amounts of alcohol and experience intoxication more frequently, than their self-assessed non-binge drinking peers. In the United Kingdom, a survey of English drinkers identified binge drinking behaviour as 'drinking with the intention to get drunk', 'drinking to the point of losing control', and 'drinking as much as possible in a short space of time' (MCM Research, 2004). These findings support Wechsler and Nelson's (2001a) argument that the meaning of the term 'binge

²²² Canadian students were more likely to report that they were "chugging" or "funnelling" to describe binge drinking behaviour.

²²³ 72% of residents agreed that binge drinking was measured by the amount of alcohol an individual consumed and 61% agreed that binge drinking was drinking with the intention to get drunk. Resident agreement with these two binge drinking definitions was consistent across gender groupings, drinking/non-drinking groupings, ethnicity groupings, and drinking behaviour groupings.

drinking' is now commonly understood and used by the public to describe acute excessive alcohol usage²²⁴.

Research Measurement of Binge Drinking

As outlined in Chapter 2, there has been a great deal of debate in the research literature concerning the use of the term binge drinking and the criterion of binge drinking behaviour (Carey, 2001). A number of researchers have questioned the validity of assessing binge drinking behaviour based solely upon the number of drinks consumed (DeJong, 2003; Kypri et al., 2005b; Read et al., 2008). Using the five/seven drinking criterion, two-thirds of residents in the current study would be defined as binge drinkers. Interestingly, only one-quarter of residents in the current study self-assessed themselves as a binge drinker.

Amongst residents in the current study who self-assessed themselves as non-binge drinkers, the median number of drinks consumed on a typical drinking occasion for female residents was five to six drinks and for male residents seven to nine drinks. This finding indicates that many of these self-assessed non-binge drinkers only 'just' broached the five/seven drink threshold. Kypri et al., (2005b) have stated that a drinking counting methodology fails to take into account a number of important factors and have suggested that a more accurate assessment of drinking behaviour can be calculated using a variation of the 'Widmark formula' developed for road safety research. This formula assesses a drinkers EBAC²²⁵ for a drinking episode using five variables including; gender (a separate body/water constant for males and females), number of drinks consumed, body weight, duration of

²²⁴ Rather than the historical definition of binge drinking denoting a prolonged period of intoxication usually lasting a number of days.

The resulting Excessive Blood Alcohol Concentration is expressed as 'g per 100 ml blood' and a threshold of 0.08 g per 100 ml blood is suggested as an assessment of intoxication.

drinking, and typical weekly volume of alcohol consumption (assessed as a metabolism rate). Kypri et al., (2005b) compared the proportion of student drinking episodes defined as 'binge drinking' using the EBAC formula and the five/seven drinking criterion, and found that the EBAC binge drinking rates (males 39% and females 37%) were significantly lower than the five/seven criterion binge drinking rates (males 50% and females 49%). This research project supports the use of the EBAC formula as a means of strengthening the measurement of binge drinking behaviour and reducing the risk of 'over-stating' the number of binge drinkers (IATFAOSAI, 2000).

Binge Drinking and Student Culture

In the current study two-thirds of residents agreed that it was okay to get drunk as long as it did not occur every day. This finding is two and a half times higher than the New Zealand national average²²⁶ (Alcohol Advisory Council, 2005b). Many residents reported observing frequent student drunkenness in residence²²⁷ and in local bars²²⁸, and therefore viewed binge drinking as a normative²²⁹ component of student culture²³⁰. These findings support previous research indicating that student culture is accepting of binge drinking behaviour (Dawson et al., 2004; Timberlake et al., 2007). Interestingly, female drinkers were just as likely as male drinkers to accept binge drinking behaviour within student culture and this finding supports previous research suggesting that there is a growing convergence of female and male student attitudes and behaviour (Astin, 1998).

²²⁶ 24% of New Zealanders (aged 18 plus years) agreed that it was okay to get drunk as long as it was not every day (ALAC, 2005b). Specific data for 18-24 year old New Zealanders was not available.

²²⁷ 51% of male drinking residents and 36% of female drinking residents reported that they were drunk on a weekly basis.

²²⁸ 72% of residents reported that drunkenness was very common in bars in and around campus.

²²⁹ 76% of residents agreed with the statement that drunkenness was accepted by most students.

²³⁰ 73% of residents prior to their arrival on campus thought that students partied a lot and consumed a lot of alcohol.

Curiously, a number of New Zealand residents commented that now that they had experienced student drinking behaviour for themselves, they did not think that it was as excessive as they had anticipated it was going to be.

Within residents' acceptance of binge drinking behaviour is an attitude that excessive alcohol use is an enjoyable social activity (rather than a social problem requiring intervention). Crundall (1995) evaluated Australian student drinking behaviour and commented that students valued the 'intrinsic properties' of alcohol (i.e. the taste and euphoric effect) and often drank to intoxication because they enjoyed it. The Middlesex-London Health Unit (2001) study reported that Canadian students drank excessively because it was 'fun and exciting' and the benefits of having fun were seen to outweigh any potential negative consequences. The authors commented that for many students "the bragging about outrageous drinking adventures were also an additional source of fun and entertainment" (Middlesex-London Health Unit, 2001, p. 16). The current study finding that three-quarters of residents enjoyed the 'buzz' they got when drinking²³¹ and one-half reported that alcohol use helped them to relax, supports the conclusion that the majority of residents enjoy their experiences of alcohol use²³². Lyons and Willott (2008) interviewed New Zealanders aged twenty to twenty-nine years of age and reported that "binge drinking was a normalised and social activity that participants viewed as unproblematic" (p.712). Given that binge drinking behaviour is a feature of student culture (NIAAA, 2002b), that eighteen to twenty-four year old New Zealanders represent the age grouping with the largest proportion of heavy episodic drinkers (Ministry of Health, 2007a), and

²³¹ This rate is two and a half times higher than the national response (Alcohol Advisory Council, 2005).

²³² 96% of residents reported that they enjoyed their drinking.

that many students enjoy drinking (Crundall, 1995), it is not surprising that a large number of residents in the current study regularly binge drink.

The current study identified an interesting dynamic regarding resident drinking behaviour. Contrary to the popular description of student drinking as an uncontrolled activity (McCornmick, 2008), the majority of drinking residents in the current study practiced a form of 'controlled intoxication' while drinking.

This issue of controlled intoxication will be explored next.

10.3 Controlled Intoxication: Constrained Binge Drinking

The majority of binge drinking behaviour in the current study was premeditated²³³. Residents typically planned their big drinking nights in consultation with friends, would purchase alcohol from an off-licence outlet to consume in the hall of residence, generally knew before they started drinking if they would be moving onto bars later in the evening, and would ensure that they arrived at bars in an intoxicated state. Nichols (1993) in his assessment of US student drinking behaviour commented that "the altered consciousness that results from heavy-drinking is a dominant theme in narratives of [student] partying....

Intoxication is not a condition towards which one moves in the course of partying, according to these narratives, but a necessary condition to begin" (p.14). The question facing many drinking residents in the current study was not 'will I get intoxicated' but 'how intoxicated will I get?'

²³³ 60% of residents reported that they usually knew before they started drinking if they were going to get drunk and 27% of residents reported that they consumed alcohol with the intention to get drunk.

In the current study the majority of residents who consumed alcohol with the intention of getting intoxicated, did so in a 'controlled' manner, and would monitor their level of intoxication by observing a range of drinking effects.

Residents commented that they used these drinking effects as signals to either stop their drinking or to slow their drinking. Measham and Brain (2005) observed controlled intoxication during research into the behaviour of English pub drinkers, describing this drinking behaviour as 'controlled loss of control', and explaining that this behaviour allowed drinkers to experience the pleasures of intoxication, while at the same time minimising the associated risks to personal safety and health. Moore, Shepherd, Perham, and Cusens, (2007) assessed the intoxication levels²³⁴ of European evening bar drinkers and reported that most intoxicated drinkers' "levels of intoxication did not vary by [the] hour of [the] survey...this suggests that drinkers reach a certain level of intoxication which they then seek to maintain through the evening" (p.633).

The current study finding that one-half of female residents and one-quarter of male residents stopped their drinking and a further one-third of female residents and forty percent of male residents slowed down their drinking, when they started feeling drunk, supports the practice of controlled intoxication. The New Zealand Alcohol Advisory Council's (2005a) 2005 survey of New Zealanders' drinking behaviour reported that of the twenty-two percent of adults who were assessed as binge drinkers, just over one-half of them (twelve percent) were categorised as 'constrained binge drinkers' in contrast to the remaining ten percent categorised as 'uninhibited binge drinkers'. Constrained binge drinkers consumed binge drinking amounts of alcohol but limited their total volume of their drinking due to

²³⁴ The researchers utilised a breathalyzer machine to test blood alcohol concentration levels.

concerns about health, work, and family. Interestingly, the category of 'constrained binge drinkers' included the largest grouping of eighteen to twenty-four year old New Zealanders and the highest grouping of New Zealanders who identified as students.

In the current study there was a minority grouping of drinking residents who did not practice controlled intoxication, whose drinking behaviour was typified by uncontrolled binge drinking behaviour, and who would be termed 'uninhibited binge drinkers' 235. This group consisted of approximately fifteen percent of male drinkers and five percent of female drinkers 237. The implication of this finding is that the remaining eighty-five percent of male drinking residents and ninety-five percent of drinking female residents practiced controlled intoxication when binge drinking.

Future Research

Further research²³⁸ is required to investigate the dynamics of controlled intoxication in greater detail. If future research confirms that one or more of the fourteen drinking effects are used by drinkers to monitor controlled intoxication, then intervention strategies could be developed utilising these effects. For example, a harm minimisation campaign would encourage drinkers to use a lower 'drinking effect' to monitor their drinking behaviour and correspondingly reduce their level of intoxication. Further research is also required to investigate the fifteen percent of male residents and five percent of female residents whose

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²³⁸See *Recommendation 18*, section 11.2.

²³⁵ Using the Alcohol Advisory Council definition (2005a).

²³⁶ These male uncontrolled binge drinkers would include the 10% of male drinkers who reported that the experience of vomiting would not influence their drinking behaviour and the 17% of who reported that knowing they were very drunk and wasted would not influence their drinking.

²³⁷ These female uncontrolled binge drinkers would include the 1% off female drinkers who reported that the experience of vomiting would not influence their drinking behaviour and the 6% of who reported that knowing they were very drunk and wasted would not influence their drinking.

drinking behaviour was typified by uncontrolled binge drinking behaviour. It is possible that these uninhibited binge drinkers will require a harm minimisation strategy different from controlled binge drinkers.

Of the fourteen drinking effects that residents reported using to monitor controlled intoxication, only one effect, 'friends instructing friends to stop drinking', was external to a resident's control. The current study found that forty percent of female residents and male residents reported that they would stop their drinking, and further forty percent of female residents and thirty percent of male residents reported that they would slow down their drinking, if requested to by a friend. Discussion with residential staff revealed that the 'safe-drinking' message that 'friends look after friends' when drinking, was a theme strongly promoted within the halls of residence setting. Clapp, Shillington, and Segar (2000) evaluated US student drinking behaviour and reported that "having friends present while drinking" was a protective variable that reduced students' experiences of alcoholrelated harms. Wyllie and Casswell (1991a) investigated the drinking behaviour of young²³⁹ male New Zealanders and reported that peer group acceptance played an important role in the shaping of male drinking patterns. In 2007, the New Zealand Ministry of Transport launched a social marketing campaign based upon 'male mateship' that encouraged friends not to allow an intoxicated friend to drink and drive (Ministry of Transport, 2007b). The underlying message of this campaign is that 'mates take care of mates'. Interestingly, research reviewing the content of New Zealand alcohol advertising has identified strong associations between alcohol use and 'traditional male identity' (Wyllie, Casswell, & Stewart, 1991b) and male 'macho imagery and sports' (Thomson, Casswell, & Stewart,

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²³⁹ 18-29 year old.

1994). This research project will make a recommendation²⁴⁰ that future alcohol intervention initiatives targeting student drinkers, promote the message that 'friends do not let friends get wasted' and to encourage 'friends to tell friends to stop or slow down their drinking'.

Although eighty-five percent of male drinkers and ninety-five percent of female drinkers practiced controlled intoxication many still maintained a 'threshold' of intoxication that resulted in them experiencing a range of alcohol-related harms including vomiting, blackouts, and loss of bodily control. This finding has implications for social marketing initiatives targeting student drinkers and is discussed next.

10.4 Student Binge Drinking and Intervention Initiatives

In New Zealand the *National Alcohol Strategy* (Alcohol Advisory Council & Ministry of Health, 2001) is founded upon three strategy areas²⁴¹, and the area of 'demand reduction' in relation to the current study research population, realistically entails encouraging the majority of residents to reduce their threshold of controlled intoxication. Currently the Alcohol Advisory Council's (2005b) 'changing the drinking culture' programme invites New Zealand drinkers to make a cognitive connection between their drinking behaviour and any alcohol-related harms they may experience as a consequence of their drinking. This 'cognitive connection' is arguably difficult for student drinkers who show a high level of tolerance towards alcohol-related harm. As discussed in Chapter 8, the negative experiences that students encounter as a result of their drinking are often

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²⁴⁰ See *Recommendation 13*, section 11.1.5.

²⁴¹The three strategy areas are 'supply control', 'demand reduction', and 'problem minimisation' (Ministry of Health, 2007b).

countered by positive drinking experiences (Mohr et al., 2008) and are also viewed as an acceptable (and expected) feature of student drinking.

Perkins (2002) has suggested that a significant change in student attitudes towards alcohol intoxication is required if campus-based alcohol intervention strategies are to be successful and this will require "staff and most importantly the majority of students, in reacting negatively and in a clear and direct fashion to students who do misuse alcohol... so that the negative consequences of drinking are not inadvertently enabled or rewarded in academic communities" (p.99).

Unfortunately the behavioural signs of excessive intoxication are currently accepted and celebrated within student culture (NIAAA, 2002a) and as long as they continue to be, it is likely that 'cultural change' initiatives will have limited impact upon student drinking behaviour²⁴².

Intoxication and Shame

Drinking and driving behaviour in New Zealand society has become shameful and socially unacceptable as a consequence of the Ministry of Transport's 'drinking and driving' social marketing campaign²⁴³. Similarly, the Ministry of Justice's current 'anti-violence' social marketing campaign promotes the message that 'violence is not okay' in New Zealand society. Brooks (2008) defined shame as a painful emotion that an individual experiences in response to a sense of failure to attain a valued ideal. Gilbert (2000) categorised 'external' shame as connected to how an individual believes that others (including individuals, groups, or society at

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²⁴² Research undertaken by the Alcohol Advisory Council (2005a) and Lyons & Willott (2008) indicates that there is also a proportion of New Zealand drinkers who are accepting of binge drinking behaviour and its associated alcohol-related harm. For example 29% of New Zealand drinkers were classified as 'Uninhibited Binge Drinkers' in the 2005 Alcohol Advisory Council survey (2005a).

²⁴³ The 'If you drink and drive you are a bloody idiot' campaign.

large) judge them²⁴⁴. Interestingly, the current study did identify a level of shame associated with resident 'drinking and driving' behaviour. Not one resident during seventeen focus group discussions and eighteen one-to-one interviews admitted to drinking and driving, and yet the (anonymous) questionnaire survey revealed that twenty percent of drinking residents had driven while drunk in the previous six month period.

The current Alcohol Advisory Council 'changing the drinking culture' campaign does include some shaming of intoxicated behaviour implicit within the presentation of alcohol-related harms (e.g. the impact of alcohol misuse upon family and friends). What is required is a complementary social marketing campaign that specifically shames 'intoxicated behaviour' 'including 'vomiting', 'passing out', 'blackouts', and 'loss of bodily control'. This campaign would promote the message that the behavioural symptoms of intoxicated behaviour are socially unacceptable in New Zealand society. Interestingly, in Southern European countries, public intoxicated behaviour has historically been identified as shameful behaviour and "drunken comportment... [was] expected to more or less match sober comportment" (Room & Makela, 2000, p.481). A New Zealand society that viewed intoxicated behaviour as a shameful behaviour, would be less likely to accept student binge drinking behaviour as a 'rite of passage' (Vicary & Karshin, 2002) and 'a bit of harmless fun'.

Intoxication and Legislation

The shaming of intoxicated behaviour within New Zealand drinking culture would be supported by new legislation making it an offence to be intoxicated in a public

²⁴⁴ Gilbert (2000) also identified 'internal' shame as associated with a negative self-evaluation (based upon attributes, personality characteristics and behaviours) that an individual may hold about themselves.

place. The Hospitality Association of New Zealand²⁴⁵ (HANZ) in a submission to the Ministry of Justice discussed the limitations of the current New Zealand legislation dealing with intoxicated behaviour stating that:

Currently the only offences around intoxication are where operators of licenced premises, including licensees, managers (and in some situations servers), sell or supply liquor to an intoxicated person... or allow drunkenness or disorderly conduct on licenced premises.... The Association believes that it should be made an offence to be intoxicated in a public place and on licenced premises. This would send a very clear and powerful message to all New Zealanders that intoxication wherever it occurs is unacceptable. (HANZ, 2007, p.2)

In recent years there has also been a strong push by the New Zealand Police, Local Authorities, and public health officials to reduce intoxication levels at public events with liquor-licences including concert venues and sports stadiums (Alcohol Advisory Council, 2008d). Similarly since the passing of the Local Government Prohibition of Alcohol in Public Places Amendment Act 2001, Local Authorities have been creating alcohol-free areas to restrict the use of alcohol in public areas. Legislation making it an offence to be intoxicated in a public place would support the current legislation and send a clear message to New Zealanders that public drunkenness was an unacceptable behaviour in New Zealand culture. This research project will make a recommendation²⁴⁶ that a legislative change is made making it an offence to be intoxicated in a public place.

The following chapter will now outline recommendations from the research project.

²⁴⁵ The HANZ has 2.300 members, all of whom hold a liquor licence and are engaged in the sale of alcohol to New Zealanders.

246 See *Recommendation 15*, section 11.1.5.

11 RECOMMENDATIONS FOR INTERVENTION STRATEGIES AND FUTURE RESEARCH

This chapter will detail recommendations arising from the current study findings and the research literature that seek to reduce resident binge drinking behaviour. These recommendations target individual drinkers, the halls of residence environment, the institutional environment, the local community drinking environment, and the national drinking environment, each of which reflect particular components of the Social Ecological Model²⁴⁷. This chapter will also recommend three areas of future research including research investigating the relationship between student drinking behaviour and student sexual behaviour, research evaluating the intoxication levels of bar patrons entering and exiting Hamilton city bars, and research exploring the area of 'controlled intoxication'.

11.1 Intervention Strategies

11.1.1 Individual Drinkers

Screening and Brief Intervention Strategy

The current study revealed that one-half of male drinking residents and one-third of female drinking residents were intoxicated on a weekly basis and that many residents experienced a range of alcohol-related harms. Previous New Zealand research has demonstrated that a computer-based Screening and Brief Intervention (SBI) strategy can reduce student binge drinking behaviour. At the University of Waikato, a computer-based SBI initiative could be positioned in the student medical centre. All drinking students accessing the medical service could be invited by medical centre staff to undertake the Screening programme, and

²⁴⁷ See Figure 3.1 for a visual overview of the variables influencing resident drinking behaviour at each of these levels/environments.

students who were assessed as drinking outside the 'safe drinking guidelines' would be invited by the Screening programme to undertake the Brief Intervention programme.

Recommendation 1: The recommendation is made that a computer-based Screening and Brief Intervention initiative be installed at the University of Waikato student medical centre.

11.1.2 Halls of Residence Environment

Pre-University Behavioural Contract

Many residents arrived at the halls of residence expecting binge drinking behaviour to be a component of the halls of residence experience and unaware that the halls of residence enforced a comprehensive *Alcohol Policy* designed to promote moderate alcohol use. Previous research has demonstrated that intervention strategies targeting students prior to their arrival on campus can affect student attitudes and behaviour.

Recommendation 2: The recommendation is made that a copy of the halls of residence Alcohol Policy and a Behavioural Contract be sent to all prospective residents prior to their arrival on campus. To ensure residents read the Alcohol Policy, the Behavioural Contract would be constructed requiring residents to complete questions based upon the policy. The behavioural contract would need to be signed and returned prior to a resident receiving confirmation of their admission into the halls of residence.

Prohibition of Intoxication

A number of residents regularly drank to intoxication within the halls of residence setting and their drinking behaviour often created difficulties for both residential staff and other residents. Currently the halls of residence *Alcohol Policy* includes a comprehensive set of rules to manage resident drinking behaviour but there is no rule prohibiting alcohol intoxication. The addition of a rule prohibiting alcohol intoxication would support the reduction of resident in-hall alcohol consumption. This new rule would also be added to the University of Waikato's *Student Discipline Regulations*, allowing for disciplinary action against non-resident students who are found to be intoxicated within the halls of residence setting.

Recommendation 3: A recommendation is made that the halls of residence Alcohol Policy, and the University of Waikato Student Disciplinary Regulations, are amended to make it an offence for a student to be intoxicated within the halls of residence setting.

University Security Staff

The current study identified that alcohol-related 'noise disturbances' and 'safety issues' continue to affect many residents and residential staff. University Security staff patrolling the halls of residence grounds during the late evening and early morning periods are an important component of the halls of residence response to address these incidents.

Recommendation 4: A recommendation is made that the halls of residence continue to employ University Security staff in the evenings to reduce alcohol-related noise problems and safety issues. It is also recommended that the procedures for reporting safety concerns within the halls of

residence setting be reviewed to ensure that these incidents are promptly reported and effectively dealt with by University Security staff.

Non-Alcohol Social Activities

The halls of residence provide a number of non-alcohol social activities at the beginning of Semester A. Non-drinking residents identified these non-alcohol activities as important opportunities to socialise with other like-minded residents. The provision of non-alcohol activities throughout the academic year would provide non-drinking residents with regular opportunities to socialise and also provide Asian international residents (many of whom are non-drinkers and report difficulty making friends with New Zealand students) opportunities to interact with New Zealand residents. A residential staff member would be responsible for organising these non-alcohol activities as a component of their staff duties.

Recommendation 5: The recommendation is made the halls of residence organise regular non-alcohol social activities for residents throughout the academic year, and that a residential staff member is appointed to organise these events and to encourage international student participation.

Campus Coordination of Intervention Strategies

The halls of residence promote a number of 'safe drinking' strategies as a component of the halls of residence orientation programme. The Hamilton office of the Accident Compensation Corporation has recently prioritised student drinking behaviour as an area of concern and are currently developing a range of resources to promote 'safe drinking' behaviours amongst students.

Recommendation 6: The recommendation is made that the 'safe drinking' initiatives currently undertaken within the halls of residence setting continue to be promoted and in future are coordinated with Accident Compensation Corporation initiatives, to provide a coordinated campusbased approach to this issue.

11.1.3 Institution Environment

Asian International Students

The majority of Asian international students arrived in New Zealand with little understanding of New Zealand student drinking behaviour and were often surprised (and on some occasions concerned) by the drinking they witnessed in New Zealand. All new international students arriving at the University of Waikato are required to attend an International Student Orientation Programme. This programme is designed to prepare international students to adjust to studying and living in New Zealand.

Recommendation 7: The recommendation is made that new Asian international students attending the University of Waikato International Student Orientation Programme are provided with an orientation session educating them about New Zealand student drinking behaviour.

On-Campus Bar

When the on-campus bar adjacent to College Hall was operating as a student bar open to the public, it impacted negatively upon the College Hall community and College Hall residents were found to drink more frequently than their other-hall resident peers. Now that the on-campus bar is currently operating as a sports club

bar (with restricted patronage and restricted opening hours), the impact of the bar upon the College Hall community has reduced significantly.

Recommendation 8: The recommendation is made that the on-campus bar adjacent to College Hall be designated by the University of Waikato to remain solely as a sports club bar (servicing university sports teams) and not be allowed to operate in the future as a general student bar.

Student Alcohol Watch Group

A Student Alcohol Watch Group was recently formed in Hamilton as a vehicle for university staff and community-based staff working in the area of alcohol-related harm reduction, to coordinate initiatives focused upon student drinking behaviour.

Recommendation 9: The recommendation is made that the University of Waikato continue to support the Student Alcohol Watch Group as a vehicle to coordinate on-campus and off-campus initiatives targeting student drinking behaviour.

National Tertiary Student Health Study

The University of Waikato has previously participated in the 2005 and 2007

National Tertiary Student Health studies. The data gathered from these two studies has been valuable in assessing the drinking patterns of University of Waikato students and further participation in the bi-yearly surveys will allow for a longitudinal evaluation of University of Waikato student drinking behaviour.

Recommendation 10: The recommendation is made that the University of Waikato continue to participate in the National Tertiary Student Health study.

11.1.4 Local Community Drinking Environment

Reduction of Bar Entry 'Intoxication Threshold'

Many residents consumed the majority of their alcohol consumption prior to arriving at city bars. This pre-bar drinking was often characterised by residents drinking to a level of intoxication that still allowed them to gain entry into bars. This finding highlights the importance of the bar entry 'intoxication threshold' maintained by city bars. If all city bars were coordinated to maintain a consistent entry threshold, and if this threshold was reduced to ensure that intoxicated patrons did not gain access, then it is likely that residents would correspondingly reduce their level of pre-bar alcohol consumption to match the new 'intoxication threshold'.

Recommendation 11: The recommendation is made that an initiative is undertaken through the Hamilton Alcohol Accord group to lower the 'intoxication threshold' prohibiting intoxicated patrons from gaining access into Hamilton city bars.

11.1.5 National Drinking Environment

Cultural Change Strategies

The Alcohol Advisory Council's 'changing the drinking culture' campaign currently encourages drinkers to make a cognitive connection between their drinking behaviour and their experiences of alcohol-related harms. Many residents in the current study showed a high level of tolerance towards the majority of alcohol-related harms. There were however three second-hand alcohol-related effects that residents showed a lower tolerance toward, including a drinker 'becoming aggressive while drinking', 'becoming verbally or physically

sexually inappropriate while drinking', and 'becoming a regular liability to friends while drinking'.

Recommendation 12: The recommendation is made that the behaviours of 'becoming aggressive while drinking', 'becoming verbally and physically sexually inappropriate while drinking', and 'becoming a regular liability to friends', be utilised in future 'changing the drinking culture' initiatives targeting student drinkers.

The majority of residents in the current study reported that they would either slow down their drinking or stop their drinking if asked to by a friend. This finding suggests that future 'changing the drinking culture' initiatives could utilise a drinker's friends as a resource to encourage reduced alcohol consumption.

Recommendation 13: The recommendation is made that future 'changing the drinking culture' initiatives targeting students use 'peer comment' as a strategy to reduce student binge drinking behaviour.

The majority of residents in the current study were accepting of intoxicated behaviour and often shared stories about the behavioural effects of their drinking as a source of entertainment. Overall residents demonstrated very little social shame associated with intoxicated behaviour.

Recommendation 14: The recommendation is made that a 'changing the drinking culture' initiative be developed to shame the behavioural signs of intoxicated behaviour including vomiting, blacking out, and loss of bodily control.

Legislative Change

Currently it is not an offence in New Zealand to be intoxicated in a public place. It is an offence for bar staff to serve an intoxicated person or have an intoxicated person on their licenced premise. A change to the law making it an offence to be intoxicated in a public place would present a clear message to New Zealanders that public drunken behaviour was not acceptable within New Zealand society and support the Alcohol Advisory Council's initiative to change the New Zealand drinking culture. The researcher will meet with the local Minister of Parliament and write to the New Zealand Minister of Justice about this recommended legislative change.

Recommendation 15: The recommendation is made that new legislation is undertaken making it an offence to be intoxicated in a public place.

11.2 Further Research

11.2.1 Sexual Health Issues

The current study revealed a relationship between resident drinking behaviour and resident experiences of alcohol-related sexual harms. Previous New Zealand and international research has identified a strong association between student alcohol use and sexual behaviour. As a significant number of students in the current study were affected by alcohol-related sexual harms, further research is required to investigate this issue and to identify possible intervention strategies.

Recommendation 16: The recommendation is made that further research is undertaken to investigate the relationship between student alcohol use and student sexual behaviour, with the objective of identifying intervention strategies aimed at reducing rates of alcohol-related sexual harms.

11.2.2 The Intoxication Levels of Bar Patrons

Many residents in the current study were able to gain entry into Hamilton bars while in a state of intoxication. Previous international research has assessed the serving practices of bar staff by evaluating the intoxication levels (using an alcohol-breathalyser machine) of patrons exiting licenced premises. Further research assessing the intoxication levels of patrons (both student and non-student) entering and exiting Hamilton bars would allow an assessment of each bar's entry 'intoxication threshold' and each bar's alcohol serving practices. This research data would be valuable in assessing which Hamilton bars are supporting the Hamilton Alcohol Accord aim to promote responsible alcohol use and which bars were not supporting this aim.

Recommendation 17: The recommendation is made that research is undertaken to assess the intoxication levels of patrons entering and exiting Hamilton CBD licenced premises, with the objective of assessing each bar's entry 'intoxication threshold' and each bar's alcohol serving practices.

11.2.3 Controlled Intoxication

The current study revealed that ninety-five percent of female drinkers and eighty-five percent of male drinkers practiced 'controlled intoxication' while drinking and many of these drinkers monitored their drinking behaviour using a number of drinking effects.

Recommendation 18: The recommendation is made that further research is undertaken to investigate the fourteen drinking effects identified in the

current study. This research would evaluate if one particular effect was more commonly utilised than others and if there were further drinking effects that were used by drinkers. The research would also evaluate the use of these drinking effects across both student and non-student drinking populations.

REFERENCES

- Adam, D., Welch, N., Pendlebury, C., & Merrit, K. (2000). A Culture of

 Consumption: An investigation into alcohol-related drinking problems

 amongst university students. Unpublished report, University of Waikato,

 Hamilton, NZ.
- Adamson, S., Sellman, D., Deering, D., Robertson, P., & de Zwart, D. (2006).

 Alcohol and drug treatment population profile: a comparison of 1998 and 2004 data in New Zealand. *New Zealand Medical Journal*, 119(1244), 51-59.
- Alcohol Advisory Council of New Zealand. (1997). *Youth and Alcohol Survey*Overview (occasional paper no.1). Wellington, NZ: Author.
- Alcohol Advisory Council of New Zealand. (2003a). Alcohol and New Zealand:

 The Alcohol Advisory Council, working to reduce alcohol-related harm in

 New Zealand. Wellington, NZ: Author.
- Alcohol Advisory Council of New Zealand. (2003b). *Youth and Alcohol: 2003 ALAC Youth Drinking Monitor*. Wellington, NZ: Author.
- Alcohol Advisory Council of New Zealand. (2004a). The Way We Drink: the current attitudes and behaviours of New Zealanders (aged 12 plus) towards drinking alcohol. Wellington, NZ: Author.
- Alcohol Advisory Council of New Zealand. (2004b). *Standard Drink Calibration*. Wellington, NZ: Author.
- Alcohol Advisory Council of New Zealand. (2004c). What is a standard drink. Alcohol.org.nz, 4(4), 8-9.

- Alcohol Advisory Council of New Zealand. (2004d). Alcohol Use and Tertiary

 Students in Aotearoa-New Zealand (occasional paper no. 21). Wellington,

 NZ: Author.
- Alcohol Advisory Council of New Zealand. (2004e). Alcohol and Drugs in New Zealand: An Asian Perspective (occasional paper no.22). Wellington, NZ: Author.
- Alcohol Advisory Council of New Zealand. (2005a). *The Way We Drink 2005- Executive Summary (occasional paper No.27)*. Wellington, NZ: Author.
- Alcohol Advisory Council of New Zealand. (2005b). It's not the drinking: it's how we're drinking. *Alcohol.org.nz*, *5*(4), 3-5.
- Alcohol Advisory Council of New Zealand. (2006). *Intoxication-What to watch* for. Wellington, NZ: Author.
- Alcohol Advisory Council of New Zealand. (2007a). ALAC Alcohol Monitor-Adults and Youth. 2006-2007 Drinking Behaviours Report. Wellington, NZ: Author.
- Alcohol Advisory Council of New Zealand. (2007b). Enforcement or willing compliance. Lessons learnt from the Sports Club Accreditation

 Programme pilot. Paper presented at the *ALAC Working Together*Conference, May 14th, 2007, Rotorua, NZ.
- Alcohol Advisory Council of New Zealand. (2007c). Reducing alcohol-related harm through the use of pricing mechanisms. *Alcohol.org.nz*, 7(4), 4-7.
- Alcohol Advisory Council of New Zealand. (2008a). Ready-to-drinks: so what's the issue? *Alcohol.org.nz*, 9(2), 3-5.
- Alcohol Advisory Council of New Zealand. (2008b). *Our Strategic Direction:* 2008-2013. Wellington, NZ: Author.

- Alcohol Advisory Council of New Zealand. (2008c). *How To Be Safer*. Retrieved May 24th, 2008, from http://www.alac.org.nz/HowToBeSafer Overview.aspx.
- Alcohol Advisory Council of New Zealand. (2008d). Guidelines for the

 Management of Alcohol at Large-Scale Public Events. Wellington, NZ:

 Author.
- Alcohol Advisory Council of New Zealand, & Ministry of Health. (2001).

 National Alcohol Strategy: 2000-2003. Wellington, New Zealand:

 Authors.
- Alcohol Concern. (2003). *Fact Sheet: Binge Drinking*. Retrieved 12th May, 2008, from http://www.alcoholconcern.org.uk/files/20031212_
 114408 Binge%20drinking%20update%20%202003.pdf.
- Alcohol Healthwatch. (2004). Alcohol Excise Tax. Changes to the New Zealand System. Auckland, NZ: Author.
- Alcohol Healthwatch. (2005). *Alcohol Marketing: an update*. Auckland, NZ: Author.
- Alcohol Healthwatch. (2007, May 4th). Media Release. Auckland, NZ: Author.
- Alva, S. A. (1998). Self-reported alcohol use of college fraternity and sorority members. *Journal of College Student Development*, 39(1), 3-11.
- Arboleda, A., Wang, Y., Schelley, M., & Whalen, D. (2003). Predictors of residence hall involvement. *Journal of College Student Development*, 44(4), 517-529.
- Ashmore, R. D., Del Boca, F. K., & Beebe, M. (2002). "Alkie," "Frat Brother," and "Jock": perceived types of college students and stereotypes about drinking. *Journal of Applied Social Psychology*, 32(5), 885-907.

- Ashmore, R. D., Griffo, R., Green, R., & Moreno, A. H. (2007). Dimensions and categories underlying thinking about college student types. *Journal of Applied Social Psychology*, *37*(12), 2922-2950.
- Assunta, M. (2006). *Impact of Alcohol Consumption on Asia*. Molnycke, Sweden:

 IOGT International. Retrieved August 25th, 2008, from

 http://www.iogt.org/admin/pdf/Alcohol_Consumption_Asia.pdf.
- Astin, A. (1998). The changing American college student: thirty-year trends, 1966-1996. *The Review of Higher Education*, 21(2), 115-135.
- Auckland District Health Board. (2008). Fact Sheet-Alcohol and Drugs.

 Auckland, NZ: Author.
- Austin, E. W., Chen, M.-J., & Grube, J. W. (2006). How does alcohol advertising influence underage drinking? The role of desirability, identification and scepticism. *Journal of Adolescent Health*, 38(4), 376-384.
- Australian National Health and Medical Research Council. (2001). *Australian Alcohol Guidelines: health risks and benefits*. Canberra, Australia: Author. Retrieved 3rd February, 2008, from http://www.nhmrc.gov.au/publications/synopses/_files/ds9.pdf.
- Australian National Health and Medical Research Council. (2007). Australian alcohol guidelines for low-risk drinking: draft for public consultation.

 Canberra, Australia: Author. Retrieved 3rd February, 2008, from http://www.nhmrc.gov.au/consult/_files/draft_australian_alcohol_guidelines.pdf.
- Babor, T. F., Caetano, R., Casswell, S., Edwards, G., Giesbrecht, N., Graham, K., et al. (2003). *Alcohol: No Ordinary Commodity. Research and Public Policy*. New York: Oxford University Press.

- Babor, T., Higgins-Biddle, J., Saunders, J., & Monteiro, M. (2001). *AUDIT: The Alcohol Use Disorders Identification Test. Guidelines for use in primary care* (2nd ed) (WHO/MSD/MSB/01.6a). Geneva: World Health Organization.
- Baer, J. S. (1994). Effects of college residence on perceived norms for alcohol consumption: an examination of the first year in college. *Psychology of Addictive Behaviors*, 8(1), 43-50.
- Baer, J. S. (2002). Student factors: understanding individual variation in college drinking. *Journal of Studies on Alcohol*, 63(2:supp), 40-53.
- Bainbridge, W. (1992). Social Research Methods and Statistics: A computer-assisted introduction. Belmont, CA: Wadsworth.
- Barnett, N., O'Leary, T., Fromme, T., Borsari, B., Carey, K., Corbin, W., et al. (2004). Brief alcohol interventions with mandated or adjudicated college students. *Alcoholism: Clinical and Experimental Research*, 28(6), 966-975.
- Beaty, L., Gibbs, G., & Morgan, A. (1997). Learning Orientations and Study

 Contracts. In *The Experience of Learning* (pp. 72-76). Edinburgh, UK:

 University of Edinburgh.
- Benton, S. L., Schmidt, J. L., Newton, F. B., Shin, K., Benton, S. A., & Newton,
 D. W. (2004). College student protective strategies and drinking
 consequences. *Journal of Studies on Alcohol*, 65(1), 115-122.
- Bishop, J., Lacour, M., Nutt, N., Yamada, V., & Lee, J. (2004). Reviewing a decade of change in student culture. *Journal of College Student*Psychotherapy, 18(3), 3-29.
- Bleakley, A. (2005). Stories as data, data as stories: making sense of narrative inquiry in clinical education. *Medical Education*, *39*(5), 534-540.

- Bogle, K. A. (2007). The shift from dating to hooking up in college: what scholars have missed. *Sociology Compass*, 1(2), 775-788.
- Bollinger, C. (1967). *Grog's Own Country*. Auckland, NZ: Minerva Limited.
- Borsari, B., Murphy, J., & Barnett, N. (2007). Predictors of alcohol use during the first year of college: Implications for prevention. *Addictive Behaviors*, 32, 2062-2086.
- Bramley, D., Broad, J., Harris, R., Reid, P., & Jackson, R. (2003). Differences in patterns of alcohol consumption between Maori and non-Maori in Aotearoa (New Zealand). *The New Zealand Medical Journal*, *116*(1184), 645-662.
- Brewer, J., & Hunter, A. (2006). Foundation of Multi-method Research:

 Synthesizing Styles. Thousand Oaks, California: Sage Publications.
- Bronfenbrenner, U. (1999). Environments in developmental perspective:

 theoretical and operational models. In S. Friedman & T. Wachs (Eds.),

 Measuring environment across the life span: Emerging methods and

 concepts (pp.3-28). Washington, D.C: American Psychological

 Association Press.
- Brooks, T. (2008). Shame on you, shame on me: Nussbaum on shame punishment. *Journal of Applied Philosophy*, 25(4), 322-334.
- Broughton, E., & Molasso, W. (2006). College drinking: Content analysis of 30 years of research. *Journal of College Student Development*, 47(6), 609-628.
- Bryman, A. (2004). *Social Research Methods*. New York: Oxford University Press.

- Canadian Public Health Association. (2006). Fact Sheet: Drinking and Alcohol.

 Ottawa, ON: Author. Retrieved April 15th, 2008, from

 http://www.drinkingfacts.ca/english/downloads/facts.pdf.
- Carey, K. B. (2001). Understanding binge drinking: introduction to the special issue. *Psychology of Addictive Behaviors*, *15*(4), 283-286.
- Casswell, S. (2004). Alcohol brands in young peoples' everyday lives: new developments in marketing. *Alcohol and Alcoholism* 39(6), 471-476.
- Casswell, S., & Bhatta, K. (2001). A Decade of Drinking: ten year trends in drinking patterns in Auckland, New Zealand, 1990-1999. Auckland, NZ: Alcohol and Public Health Research Unit, University of Auckland.
- Casswell, S., & Zhang, J. (1998). Impact of liking for advertising and brand allegiance on drinking and alcohol-related aggression: a longitudinal study. *Addiction*, *93*(8), 1209-1217.
- Charmaz, K. (2006). Constructing grounded theory: a practical guide through qualitative analysis. London: Sage.
- Clapp, J. D., Ketchie, J. M., Reed, M. B., Shillington, A. M., Lange, J. E., & Holmes, M. R. (2008). Three exploratory studies of college theme parties.

 *Drug and Alcohol Review, 27(5), 509 518.
- Clapp, J. D., Shillington, A. M., & Segars, L. (2000). Deconstructing contexts of binge drinking among college students. *American Journal of Drug & Alcohol Abuse*, 26, 139-154.
- Clapper, R. L., Martin, C. S., & Clifford, P. R. (1994). Personality, social environment, and past behavior as predictors of late adolescent alcohol use. *Journal of Substance Abuse*, 6(3), 305-313.
- Coakes, S., Steed, L., & Dzidic, P. (2006). SPSS Version 13.0 for Windows:

 Analysis without anguish. Milton, Australia: Wiley.

- Coffey, T. G., (1966). Beer Street: Gin Lane. Some views of 18th-century drinking. *Quarterly Journal of Studies on Alcohol*, 27, 669-692.
- Connor, J., Broad, J., Rehm, J., Vander Hoorn, S., & Jackson, R. (2005). The burden of death, disease and disability due to alcohol in New Zealand.

 New Zealand Medical Journal, 118(1213), 1412-1424.
- Cooper, M. L. (2002). Alcohol use and risky sexual behavior among college students and youth: evaluating the evidence. *Journal of Studies on Alcohol*, 63(2:supp), 101-117.
- Coughlan, E., & Bagshaw, S. (2005). Chlamydia-the problem that just won't go away. *The New Zealand Medical Journal*, 118(1220), 1605-1607.
- Cousins, K., & Kypri, K. (2008a). Alcohol advertising in the New Zealand university student press. *Drug and Alcohol Review*, 27(5), 566-569.
- Cousins, K., Wilson, J., Kypri, K., & Baxter, J. (2008b). Alcohol-Related Harms

 Among New Zealand University Students: Institutional Policies, Liquor

 Law Enforcement, and Healthcare. Dunedin, NZ: Injury Prevention

 Research Unit, University of Otago.
- Crundall, I. (1995). Perceptions of alcohol by student drinkers at university. *Drug* and Alcohol Review, 14, 363-368.
- Cumings, K. D., Haworth, J. G., & O'Neill, K. (2001). A "perfect standard" exploring perceptions of student life and culture at Wheaton College. *Religion and Education*, 28(2), 33-64.
- Dahlberg, L. L. & Krug, E. G. (2002). Violence a global public health problem.

 In E. Krug., L. Dahlberg., J. Mercy., A. Zwi., & R. Lozano. (Eds.), World

 Report on Violence and Health (pp. 1-56). Geneva, Switzerland: WHO.
- Dantzer, C., Wardle, J., Fuller, R., Pampalone, S., & Steptoe, A. (2006).

 International study of heavy drinking: attitudes and sociodemographic

- factors in university students. *Journal of American College Health*, 55(2), 83-89.
- Dawson, D. A., Grant, B. F., Stinson, F. S., & Chou, P. S. (2004). Another look at heavy episodic drinking and alcohol use disorders among college and non-college youth. *Journal of Studies on Alcohol*, 65(4), 477-489.
- Day, K., Gough, B., & McFadden, M. (2003). Women who drink and fight: a discourse analysis of working-class women's talk. *Feminism Psychology*, 13(2), 141-158.
- De La Mare, A. (1981). Drink or Drought: Liquor Licensing and the Prohibition

 Movement. Invercargill, NZ: Craig Printing Company.
- DeJong, W. (2003). Definitions of binge drinking. *Journal of the American Medical Association*, 289(13), 1635.
- DeJong, W., & Langford, L., M. (2002). A typology for campus-based alcohol prevention: Moving toward environmental management strategies. *Journal of Studies on Alcohol*, 63(2:supplemen), 140-148.
- Devlin, A. S., Donovan, S., Nicolov, A., Nold, O., & Zandan, G. (2008).Residence Hall architecture and sense of community: Everything old is new again. *Environment and Behavior*, 40(4), 487-521.
- Donavan, A., McEwan, B., & Nixon, A. (2001). 2001: A Year of Change. An evaluation of alcohol drinking patterns and associated behaviours amongst university halls of residence students. Unpublished report, University of Waikato, Hamilton, NZ.
- Donnelly, N., & Briscoe, S. (2003). Signs of intoxication and server intervention among 18 to 39 year olds drinking at licensed premises in New South Wales, Australia. *Addiction*, 98(9), 1287-1295.

- Easton, B. (2002). Taxing Harm: Modernising Alcohol Excise Duties. Wellington, NZ: Alcohol Advisory Council.
- Education Counts. (2008a). *Participation Rates in Tertiary Education*. Retrieved September 4th, 2008, from http://www.educationcounts.govt.nz/__ data/assets/pdf_file/0018/17406/tspar9-Tertiary_participation.pdf.
- Education Counts. (2008b). *International students enrolled in tertiary education*.

 Retrieved May 3rd, 2008, from http://www.educationcounts.govt.nz/
 indicators/student_participation/tertiary_education/international_students_
 enrolled_in_formal_tertiary_education.
- Edwards, K., & McKelfresh, D. (2002). The impact of a living learning center on students' academic success and persistence. *Journal of College Student Development*, 43(3), 395-404.
- Elworthy, S. (1990). Ritual Song of Defiance: A Social History of Students at the University of Otago. Dunedin, NZ: Otago University Students' Association.
- Engs, R. C. (1995). Do traditional Western European drinking practices have origins in antiquity. *Addiction Research*, 2(3), 227-239.
- Field, A., & Casswell, S. (1999). Drugs in New Zealand National Survey, 1998.
 Auckland, NZ: Alcohol and Public Health Research Unit, University of Auckland.
- Foubert, J., Tepper, R., & Morrison, D. (1998). Predictors of student satisfaction in university residence halls. *The Journal of College and University Student Housing*, 27(1), 41-45.
- Gfroerer, J. C., Greenblatt, J. C., & Wright, D. A. (1997). Substance use in the US college-age population: Differences according to educational status and living arrangement. *American Journal of Public Health*, 87(1), 62-65.

- Gilbert, P. (2000). The relationship of shame, social anxiety and depression: the role of the evaluation of social rank. *Clinical Psychology & Psychotherapy*, 7(3), 174-189.
- Gill, J. (2002). Reported levels of alcohol consumption and binge drinking within the UK undergraduate student population over the last 25 years. *Alcohol and Alcoholism.*, 37(2), 109-120.
- Gill, J., & Donaghy, M. (2004). Variation in the alcohol content of a 'drink' of wine and spirit poured by a sample of the Scottish population. *Health Education Research*, 19(5), 485-491.
- Glaser, B. G. (1978). Theoretical Sensitivity: Advances in the methodology of grounded theory. Mill Valley, CA: Sociology Press.
- Glaser, B. G., & Strauss, A. L. (1999). *The Discovery of Grounded Theory:* strategies for qualitative research. New York: Aldine de Gruyter.
- Gliksman, L., Adlaf, E., M., Demers, A., & Newton-Taylor, B. (2003). Heavy drinking on Canadian campuses. *Canadian Journal of Public Health*, 94(1), 17-21.
- Green, J. (2005). Analysing qualitative data. In J. Green & J. Browne (eds.),

 *Principles of Social Research. Maidenhead, UK: Open University Press.
- Gruenewald, P. J., Freisthler, B., Remer, L., LaScala, E. A., & Treno, A. (2006).

 Ecological models of alcohol outlets and violent assaults: crime potentials and geospatial analysis. *Addiction*, 101(5), 666-677.
- Grzywacz, J. & Marks, N. (2000). Reconceptualizing the work-family interface:

 An ecological perspective on the correlates of positive and negative spillover between work and family. *Journal of Occupational Health Psychology*, 5(1), 111-126.

- Gual, A., & Colom, J. (1997). Why has alcohol consumption declined in countries of southern Europe? *Addiction*, 92(1:supp), 21-31.
- Habgood, R., Casswell, S., Pledger, M., & Bhatta, K. (2001). *Drinking in New Zealand: National Surveys Comparison 1995 & 2000*. Auckland, NZ:Alcohol & Public Health Research Unit, University of Auckland.
- Ham, L. S., & Hope, D. A. (2003). College students and problematic drinking: A review of the literature. *Clinical Psychology Review*, 23(5), 719-759.
- Hamilton Liquor Liaison Group. (2008). *Hamilton Liquor Liaison Group-Review* 2007-2008. Hamilton, NZ: Author.
- Hardford, T., Wechsler, H., & Muthen, B. (2002a). The impact of current residence and high school drinking on alcohol problems among college students. *Journal of Studies on Alcohol*, 63(3), 271-230.
- Harford, T. C., Wechsler, H., & Seibring, M. (2002b). Attendance and alcohol use at parties and bars in college: a national survey of current drinkers. *Journal of Studies on Alcohol*, 63(6), 726-732.
- Hargreaves, R. (2000). The demon drink: alcohol and prohibition in New Zealand. Friends of the Hocken Collections, Bulletin No.33. Dunedin, NZ: Hocken Collection. Retrieved 24th September, 2008, from http://www.library.otago.ac.nz/pdf/hoc_fr_bulletins/2033_bulletin.pdf.
- Harwood, E., Erickson, D. J., Fabian, L., Jones-Webb, R., Slater, S., &
 Chaloupka, F. J. (2003). Effects of communities, neighbourhoods and stores on retail pricing and promotion of beer. *Journal of Studies on Alcohol*, 64(5), 720-727.
- Hayward, K., & Hobbs, D. (2007). Beyond the binge in 'booze Britain': market-led liminalization and the spectacle of binge drinking. *British Journal of Sociology*, 58(3), 437-456.

- Heather, N. (2002). Effectiveness of brief interventions proved beyond reasonable doubt. *Addiction*, 97(3), 293-294.
- Henderson, R. (2008, June 13th). Hamilton Alcohol Accord. In *Proceedings from the University of Waikato Tertiary Student Alcohol Symposium*, Hamilton, NZ: University of Waikato.
- Hercock, F. (1994). A Democratic Minority: A Centennial History of the Auckland

 University Students' Association. Auckland, NZ: Auckland University

 Press.
- Hingson, R. W., & Howland, J. (2002). Comprehensive community interventions to promote health: implications for college-age drinking problems. *Journal of Studies on Alcohol*, 63(2:supp), 226-240.
- Ho, E., Li, W., Cooper, J., & Holmes, P. (2007). *The Experiences of Chinese International Students in New Zealand*. Hamilton, NZ: Migration Research

 Group, University of Waikato.
- Hogg, M., Cox, A. J., & Keeling, K. (2000). The impact of self-monitoring on image congruence and product/brand evaluation. *European Journal of Marketing*, *34*(5/6), 641-666.
- Holloway, B. (2008, September 4th). Cut back the booze. Waikato Times, p. 1.
- Hospitality Association of New Zealand. (2007, June 11th). Submission to the Ministry of Justice on the Review of the Sale and Supply of Liquor to Minors. Wellington NZ: Author.
- Howard, D. E., Griffin, M., Boekeloo, B., Lake, K., & Bellows, D. (2007).

 Staying safe while consuming alcohol: a qualitative study of the protective strategies and informational needs of college freshmen. *Journal of American College Health*, 56(3), 247-254.

- Huckle, T., Sweetsur, P., Moyes, S., & Casswell, S. (2008). Ready to drinks are associated with heavier drinking patterns among young females. *Drug & Alcohol Review*, 27(4), 398-403.
- Injury Prevention Research Unit. (2005). Tertiary Student Health Survey 2005: confidential report of preliminary findings to participating institutions.

 Dunedin, NZ: Author, University of Otago.
- Injury Prevention Research Unit. (2007). Tertiary Student Health Survey 2007: confidential report of preliminary findings to participating institutions.

 Dunedin, NZ: Author, University of Otago.
- Inkelas, K., & Weisman, J. (2003). Different by design: An examination of student outcomes among participants in three types of Living-Learning programs. *Journal of College Student Development*, 44(3), 335-346.
- Inter-Association Task Force on Alcohol and Other Substance Abuse Issues.

 (2000, August 11). A position statement from the Inter-Association Task

 Force on Alcohol and Other Substance Abuse Issues. Retrieved April 27,

 2008, from http://www.iatf.org/proc1a.htm.
- Jack, S. M., Bouck, L. M., Beynon, C. E., Ciliska, D. K., & Mitchell, M. J.
 (2005). Marketing a hard-to-swallow message: recommendations for the design of media campaigns to increase awareness about the risks of binge drinking. *Canadian Journal of Public Health*, 96(3), 189-192.
- Jackson, K. (2008). Heavy episodic drinking: determining the predictive utility of five or more drinks. *Psychology of Addictive Behaviors*, 22(1), 68-77.
- Johnsson, K., & Berglund, M. (2003). Education of key personnel in student pubs leads to a decrease in alcohol consumption among the patrons: a randomized controlled trial. *Addiction*, 98(5), 627-633.

- Johnston, L., O'Malley, P., & Bachman, J. (2000). *National Survey Results on*Drug Use from the Monitoring the Future study, 1975-1999, Vol. 2.

 Bethesda, MD: NIH Publication, US Department of Health and Human Services.
- Jones, S., & Lynch, M. (2007). Non-advertising alcohol promotions in licensed premises: does the Code of Practice ensure responsible promotion of alcohol. *Drug and Alcohol Review*, 26, 477-485.
- Jureidini, R., & Poole, M. (2000). *Sociology: Australian Connections*. St Leonards, Australia: Allen & Unwin.
- Karam, E., Kypri, K., & Salamoun, M. (2007). Alcohol use among college students: an international perspective. *Current Opinion in Psychiatry*, 20(3), 213-221.
- Keashly, L., Hunter, S., & Harvey, S. (1997). Abusive interaction and role state stressors: relative impact on student residence assistant stress and work attitudes. *Work and Stress*, 11(2), 175-185.
- Klein, W., Geaghan, T., & MacDonald, T. (2007). Unplanned sexual activity as a consequence of alcohol use: a prospective study of risk perceptions and alcohol use among college freshmen. *Journal of American College Health*, 56(3), 317-323.
- Kuo, M., Adlaf, E., Lee, H., Gliksman, L., Demers, A., & Wechsler, H. (2002).More Canadian students drink but American students drink more:comparing college alcohol use in two countries. *Addiction*, 97(12), 1583-1592.
- Kuo, M., Wechsler, H., Greenberg, P., & Lee, H. (2003). The marketing of alcohol to college students: The role of low prices and special promotions. American Journal of Preventive Medicine, 25(3), 204-211.

- Kypri, K., Bell, M. L., Hay, G. C., & Baxter, J. (2008a). Alcohol outlet density and university student drinking: a national study. *Addiction*, 103(7), 1131-1189.
- Kypri, K., Cronin, M., & Wright, C. (2005a). Do university students drink more hazardously than their non-student peers. *Addiction*, *100*(5), 713-714.
- Kypri, K., & Langley, J. (2003). Perceived social norms and their relation to university student drinking. *Journal of Studies on Alcohol*, 64(6), 829-834.
- Kypri, K., Langley, J. D., McGee, R., Saunders, J. B., & Williams, S. (2002).
 High prevalence, persistent hazardous drinking among New Zealand
 tertiary students Alcohol and Alcoholism: International Journal of the
 Medical Council on Alcoholism, 37(5), 457-464.
- Kypri, K., Langley, J., Saunders, J., Cashell-Smith, M., & Herbison, P. (2008b).
 Randomized controlled trial of web-based alcohol screening and brief intervention in primary care. *Archives of Internal Medicine*, 168(5), 530-536.
- Kypri, K., Langley, J., & Stephenson, S. (2005b). Episode-centred analysis of drinking to intoxication in university students. *Alcohol and Alcoholism*, 40(5), 1-6.
- Kypri, K., Paschall, M., Langley, J., Baxter, J., Cashell-Smith, M., & Bourdeau,
 B. (2009). Drinking and alcohol-related harm among New Zealand
 university students: findings from a national web-based survey.
 Alcoholism: Clinical and Experimental Research, 33(2), 307-314.
- Kypri, K., Paschall, M. J., Maclennan, B., & Langley, J. D. (2007). Intoxication by drinking location: A web-based diary study in a New Zealand university community. *Addictive Behaviors*, *32*(11), 2586-2596.

- Kypri, K., Stephenson, S., & Langley, J. D. (2004). Assessment of Nonresponse bias in an internet survey of alcohol use. *Alcoholism Clinical and Experimental Research*, 28(4), 630-634.
- Kypri, K., Stephenson, S., Langley, J. D., Cashell-Smith, M., Saunders, J., & Russell, D. (2005c). Computerised screening for hazardous drinking in primary care. *New Zealand Medical Journal*, *118*(1224), 1-10.
- LaBrie, J. W., & Pedersen, E. R. (2008). Prepartying promotes heightened risk in the college environment: An event-level report. *Addictive Behaviors*, 33(7), 955-959.
- Lambert, T. A., Kahn, A. S., & Apple, K. J. (2003). Pluralistic ignorance and hooking up. *Journal of Sex Research*, 40(2), 129-133.
- Land Transport New Zealand. (2007). 2006 Road Toll Lowest In 46 Years (media release 01.01.07). Retrieved August 24th, 2008, from:

 http://www.landtransport.govt.nz/media/2007/070101.html.
- Lang, E., Stockwell, T., Rydon, P., & Beel, A. (1998). Can training bar staff in responsible serving practices reduce alcohol-related harm. *Drug & Alcohol Review*, 17, 39-50.
- Langley, J., Kypri, K., & Stephenson, S. (2003). Second-hand effects of alcohol use among university students: computerised survey. *British Medical Journal*, 327(7422), 1023-1024.
- Larimer, M., Irvine, D., Kilmer, J., & Marlatt, G. A. (1997). College drinking and the Greek system: Examining the role of perceived norms for high-risk behavior. *Journal of College Student Development*, 38(6), 587-599.
- Legard, R., Keegan, J., & Ward, K. (2003). In-depth Interviews. In J. Ritchie & J. Lewis (eds.), *Qualitative Research Practice: A guide for social science students and researchers*. London: Sage.

- Lion Nathan Australia. (2008). *Lion Nathan Australia to cease production of*energy additive RTDs and to commit to a limit of two standard drinks for

 single serve RTD containers (media release 20/3/08). Retrieved August

 14th, 2008, from http://www.lion-nathan.com/Files/Media
 Releases/Company-and-ASX-Releases/2008/Lion%20Nathan%20

 exits%20energyfinal.pdf.
- Love, P., Boschini, V., Jacobs, B., Hardy, C., & Kuh, G. (1993). Student Culture.

 In G. Kuh (ed.), *Cultural Perspectives in Student Affairs Work*. Boston:

 University Press of America.
- Lyons, A., Dalton, S., & Hoy, A. (2006). Hardcore drinking: portrayals of alcohol consumption in young women's and men's magazines. *Journal of Health Psychology*, 11(2), 223-232.
- Lyons, A., & Willott, S. (2008). Alcohol consumption, gender identities, and women's changing social positions. *Sex Roles*, *59*, 694-712.
- Maclennan, B. A. (2005). *Residential Hall Alcohol Policies and Alcohol-Related Harm.* Unpublished Master's thesis, University of Otago, Dunedin, NZ.
- Manning, W., Giordano, P., & Longmore, M. (2006). Hooking up: the relationship contexts of 'non-relationship' sex. *Journal of Adolescent Health*, 21(5), 459-483.
- Matheson, D., & Achterberg, C. (2001). Ecologic study of children's use of a computer nutrition education program. *Journal of Nutrition Education*, *33*(1), 2-9.
- McCornmick, R. (2008, April 8). The binge drinking culture. *New Zealand Herald*, p. A8.

- McGee, R., & Kypri, K. (2004). Alcohol-related problems experienced by university students in New Zealand. *Australian and New Zealand Journal of Public Health*, 28(4), 321-323.
- McLachlan, D. (2006). Students behaving badly: student discipline at the

 University of Otago. In *Culture of Change: Beginnings at the University of*Otago. Dunedin, NZ: Departments of English and History, University of

 Otago.
- MCM Research. (2004). WTAG Binge-Drinking Research. Oxford, UK: Author
- Measham, F. (2006). The new policy mix: alcohol, harm minimisation, and determined drunkenness in contemporary society. *International Journal of Drug Policy*, 17(4), 258-268.
- Measham, F., & Brain, K. (2005). 'Binge' drinking, British alcohol policy and the new culture of intoxication. *Crime Media Culture*, 1(3), 262-283.
- Medical News. (2004, December 22nd). Binge drinking a blight on Australia's young. *Medical News Today*. Retrieved June 14th, 2008, from http://www.medicalnewstoday.com/articles/18204.php.
- Metzner, C., & Kraus, L. (2008). Review: The impact of alcopops on adolescent drinking: a literature review. *Alcohol and Alcoholism*, 43(2), 230-239.
- Middlesex London Health Unit. (2001). Process Evaluation of the Central

 West/Southwest Binge Drinking Campaign: Implications for practice and
 lessons learned. London, Ontario: Author.
- Miller, W. R., Heather, N., & Hall, W. (1991). Calculating standard drink units: international comparisons. *Addiction*, 86(1), 43-47.
- Minichiello, V., Aroni, R., Timewell, E., & Alexander, L. (1990). *In-Depth Interviewing: Researching People*. Melbourne, Australia: Longman Cheshire.

- Ministerial Council on Drug Strategy. (2006). National Alcohol Strategy 2006-2009. Canberra, Australia: Australian Department of Health and Aging. Retrieved April 15th, 2008, from http://www.alcohol.gov.au/internet/alcohol/publishing.nsf/Content/nas-06-09.
- Ministry for Culture and Heritage. (2008). Eat, drink and be merry: dining out in 20th century New Zealand. *New Zealand History Online*. Retrieved September 24th, 2008, from http://www.nzhistory.net.nz/culture/no-pavlova-please/dining-out.
- Ministry of Education. (2008). The Experiences of International Students in New Zealand: report on the results of the National Survey 2007. Wellington, NZ: Author.
- Ministry of Health. (2001). *New Zealand Drug Statistics*. Retrieved August 10th, 2008, from http://www.nzhis.govt.nz/moh.nsf/pagesns/130/\$File/drugs.pdf
- Ministry of Health. (2004a). A Portrait of Health: Key results of the 2002/3 New Zealand Health Survey. Wellington, NZ: Author.
- Ministry of Health. (2007a). Alcohol Use in New Zealand: analysis of the 2004

 New Zealand Health Behaviours Survey-alcohol use. Wellington, NZ:

 Author.
- Ministry of Health. (2007b). *National Drug Policy 2007-2012*. Wellington, NZ: Author.
- Ministry of Health. (2008a). A Portrait of Health. Key results of the 2006/07 New Zealand Health Survey. Wellington, NZ: Author.
- Ministry of Health. (2008b). *National Alcohol Action Plan: Consultation Document*. Wellington, NZ: Author.
- Ministry of Justice. (2005). Young People and Alcohol. Wellington, NZ: Author.

- Ministry of Justice. (2007). The Sale and Supply of Alcohol to Under 18 Year

 Olds in New Zealand: A systematic overview of international and New

 Zealand literature. Wellington, NZ: Author.
- Ministry of Transport. (2006). Survey Of Public Attitudes To Road Safety 2006: Summary of results. Wellington, NZ: Author.
- Ministry of Transport. (2007a). *Alcohol/Drugs: crash statistics for the year ended*31 Dec 2006. Retrieved, May 24th, 2008, from http://www.transport.

 govt.nz/assets/NewPDFs/Alcohol-Drugs-Crash-Factsheet-July-07.pdf
- Ministry of Transport. (2007b). *Be the sober driver-take one for the team* (media release 20/12/07): Retrieved August 20th, 2008, from: http://www.ltsa.govt.nz/media/2007/071220.html.
- Ministry of Youth Development. (2004). *Inquiry: Should Alcopops be taxed*higher than other alcoholic beverages to reduce teenage drinking.

 Wellington, NZ: Author.
- Mohr, C. D., Brannan, D., Mohr, J., Armeli, S., & Tennen, H. (2008). Evidence for positive mood buffering among college student drinkers. *Personality and Social Psychology Bulletin*, 34(9), 1249-1259.
- Moore, S., Shepherd, J., Perham, N., & Cusens, B. (2007). The prevalence of alcohol intoxication in the night-time economy. *Alcohol*, 42(6), 629-634.
- Moyer, A., Finney, J., Swearingen, C., & Vergun, P. (2002). Brief interventions for alcohol problems: a meta-analytic review of controlled investigations in treatment-seeking and non-treatment-seeking populations. *Addiction*, 97(3), 279-292.
- Murrell, S. P., & Denzine, G. (1998). Community college residence halls: a hidden treasure. *Community College Journal of Research & Practice*, 22(7), 663-675.

- National Business Review. (2008, April 28th). Independent Liquor blasts Aussie alco-pop tax hike. *The National Business Review*. Retrieved June 6th, 2008, from http://www.nbr.co.nz/article/independent-liquor-blasts-aussie-alco-pop-tax-hike.
- National Institute on Alcohol Abuse and Alcoholism. (2002a). A Call to Action:

 Changing The Culture of Drinking at U.S. Colleges (NIH Pub. No. 02-5010). Rockville, MD: Author.
- National Institute on Alcohol Abuse and Alcoholism. (2002b). What College Presidents Need To Know About College Drinking (NIH Pub. No. 02-5014). Rockville, MD: Author.
- National Institute on Alcohol Abuse and Alcoholism. (2007a). What's a Standard Drink (NIH Pub No. 07-3769). Rockville, MD: Author.
- National Institute on Alcohol Abuse and Alcoholism. (2007b). What Colleges

 Need to Know Now; An Update on College Drinking Research (NIH Pub.

 No. 07-5010). Rockville, MD: Author.
- New Zealand Advertising Standards Authority. (2008). *Code for Advertising Liquor*. Wellington, NZ: Author. Retrieved November 12th, 2008, from http://www.asa.co.nz/code_liquor.php.
- New Zealand Union of Students' Associations. (2008a, January 24th). *New**Research Shows Massive Student Debt Increase Since 2004 (media release). Retrieved June 5th, 2008, from http://www.students.org.nz/files/Press_2008.
- New Zealand Union of Students' Associations. (2008b, April 9th). *Student Debt Reaches \$10b-A Millstone, Not a Milestone* (media release). Retrieved June 14th, 2008, from http://www.students.org.nz/files/Press_2008.

- Nichols, W. (1993). Partying and the mysteries of student culture. *Antioch Review*, 51(4), 537-550.
- O'Brien, M. C., McCoy, T. P., Champion, H., Mitra, A., Robbins, A., Teuschlser, H., et al. (2006). Single question about drunkenness to detect college students at risk for injury. *Academic Emergency Medicine*, *13*(6), 629-636.
- O'Hara, R. J. (2006, Nov 28th). Hogwarts U. *Inside Higher Education*. Retrieved May 3, 2008, from http://insidehighered.com/views/2006/11/28/ohara.
- O'Malley, P. M., & Johnston, L. D. (2002). Epidemiology of alcohol and other drug use among American college students. *Journal of Studies on Alcohol*, 63(2:supp), 23-39.
- Ozegovic, J., Bikos, L., & Szymanski, D. (2001). Trends and predictors of alcohol use among undergraduate female students. *Journal of College Student*Development, 42(5), 447-456.
- Paschall, M. J., Kypri, K., & Saltz, R. (2006). Friday class and heavy alcohol use in a sample of New Zealand college students. *Journal of Studies on Alcohol*, 67(5), 764-769.
- Patton, M. (1997). *Utilization-Focused Evaluation* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Paul, E. L., McManus, B., & Hayes, A. (2000). "Hookups": characteristics and correlates of college students' spontaneous and anonymous sexual experiences. *Journal of Sex Research*, *37*(1), 76-88.
- Pedersen, E. R., & LaBrie, J. W. (2007). Partying before the party: examining prepartying behaviour among college students. *Journal of American College Health*, 56(3), 237-245.

- Perkins, H. W. (2002). Surveying the damage; a review of research on consequences of alcohol misuse in college populations. *Journal of Studies on Alcohol*, 63(2:supp), 91-100.
- Pike, G. (1999). The effects of residential learning communities and traditional residential living arrangements on educational gains during the first year of college. *Journal of College Student Development*, 40(3), 269-285.
- Pike, G., Schroeder, C., & Berry, T. (1997). Enhancing the educational impact of residence halls: The relationship between residential learning communities and first-college experiences and persistence. *Journal of College Student Development*, 38(6), 609-622.
- Posavac, E. (1991). College students' views of excessive drinking and the university's role. *Journal of Drug Education*, 23(3), 237-245.
- Poulin, C., & Graham, L. (2001). The association between substance use, unplanned sexual intercourse and other sexual behaviours among adolescent students. *Addiction*, 96(4), 607-621.
- Poulson, R. L., Eppler, M. A., Sattershite, T. N., Wuensch, K., & Bass, L. A. (1998). Alcohol consumption, strength of religious beliefs, and risky sexual behavior in college students. *Journal of American College Health*, *46*(5), 227-232.
- Presley, C., Meilman, P., & Cashin, J. (1996). 1992-1994 Alcohol and Drugs on American College Campuses: Use, Consequence, and Perceptions of the Campus Environment (Vol 4). Carbondale, Ill: The Core Institute.
- Presley, C. A., Meilman, P. W., & Leichliter, J. S. (2002). College factors that influence drinking. *Journal of Studies on Alcohol*, 63(2:supp), 82-91.

- Prochaska, J., Velicer, W., Rossi, J., Goldstein, M., Marcus, H., & Rakowski, W. (1994). Stages of change and decisional balance for 12 problem behaviors. *Health Psychology*, 13(1), 39-46.
- Rabow, J., & Duncan-Schill, M. (1995). Drinking among college students. *Journal of Alcohol & Drug Education*, 40(3), 52-65.
- Read, B., Archer, L., & Leathwood, C. (2003). Challenging cultures? Student conceptions of 'belonging' and 'isolation' at a post-1992 university. *Studies in Higher Education*, 28(3), 261-277.
- Read, J. P., Beattie, M., Chamberlain, R., & Merrill, J. E. (2008). Beyond the "binge" threshold: Heavy drinking patterns and their association with alcohol involvement indices in college students. *Addictive Behaviors*, 33(2), 225.
- Research New Zealand. (2006). A Healthy Drinking Culture: A search and review of international and New Zealand literature: Wellington, NZ: Author.
- Riordan, B., & Dana, R. (1998). Greek letter organizations and alcohol: problems, policies, and programs. *New Directions for Student Services*, 1998(81), 49-59.
- Roche, A., M., & Watt, K. (1999). Drinking and university students: From celebration to inebriation. *Drug and Alcohol Review*, 18(4), 389-399.
- Roche, A. M., Snow, P. C., Duff, C., Crosbie, D., & Lunnay, B. (2005). *The Future of Drinking: A report on the conference Thinking Drinking:*Achieving Cultural Change by 2020. Melbourne: Australian Drug
 Foundation.
- Room, R. (1997). Alcohol, the individual and society: what history teaches us. *Addiction*, 92(1:Supp), 7-11.

- Room, R., & Makela, K. (2000). Typologies of the cultural position of drinking. *Journal of Studies on Alcohol*, 61(3), 475.
- Rosenberg, J. (2008, September 26th). Drink till you think. *Collegehumor.com*.

 Retrieved September 29th, 2008, from http://www.collegehumor.com/article:1762538.
- Saffer, H. (2002). Alcohol advertising and youth. *Journal of Studies on Alcohol*, 14(supp), 173-181.
- Saunders, B., Kypri, K., Walters, S., Laforge, R., & Larimer, M. (2004).

 Approaches to brief intervention for hazardous drinking in young people.

 Alcoholism: Clinical and Experimental Research, 28(2), 322-329.
- Schuman, H., & Presser, S. (1996). *Questions and Answers in Attitude Surveys*.

 New York: Sage Publishing.
- Sher, K. J., & Rutledge, P. C. (2007). Heavy drinking across the transition to college: Predicting first-semester heavy drinking from precollege variables. *Addictive Behaviors*, *32*(4), 819-835.
- SHORE (2006a). *Alcohol Taxation in the Western Pacific Region*. Auckland, NZ: Author, Massey University.
- SHORE (2006b). Legal Party Pill Use in New Zealand. Auckland, NZ: Author, Massey University.
- SHORE (2008). Recent Trends in Illegal Drug Use In New Zealand, 2005-2007.

 Auckland, NZ: Author, Massey University.
- Small, S. & Luster, T. (1994). Adolescent sexual activity: an ecological, risk-factor approach. (1994). *Journal of Marriage and the Family*, *56*, 181-192.
- Smith, S., & Rodger, R. (2005). Student learning community of practice: Making meaning of the Student Learning Imperative and principles of good

- practice in student affairs. *Journal of College Student Development*, 46(5), 472-487.
- Stainton, L. (2003). Alcohol and drug use and perceived use at University of Southern Queensland Toowoomba campus. *Journal of the Australian and New Zealand Student Services Association*, 22(October), 6-29.
- Statistics New Zealand. (2003). *Teenage Fertility in New Zealand*. Retrieved May 18th, 2008, from http://www.stats.govt.nz/products-and-services/Articles/teen-Sep03.htm.
- Statistics New Zealand. (2005). *Focusing on Women 2005*. Retrieved August 5th, 2008, from http://www.stats.govt.nz/NR/rdonlyres/FC1BDDF4-F40F-4B05-B00C-104AC9D38D78/0/FocusingOnWomen2005.pdf.
- Statistics New Zealand. (2008). *Alcohol and Tobacco Available for Consumption:*year ended December 2007. Retrieved April 29th, 2008, from

 http://www.stats.govt.nz/products-and-services/hot-off-the-press/alcohol-and-tobacco/alcohol-and-tobacco-available-for-consumption-year-ended-dec07-hotp.htm.
- Stewart, L. (1997). Approaches to preventing alcohol-related problems: The experience of New Zealand and Australia. *Drug & Alcohol Review*, 16(4), 391-399.
- Stockwell, T., Pakula, B., MacDonald, S., Buxton, J., Zhao, J., Tu, A., et al. (2007). Alcohol Consumption in British Columbia and Canada: A Case for Liquor Taxes that Reduce Harm (Bulletin No. 3). Victoria, Canada: University of Victoria.
- Stockwell, T., Rydon, P., Gianatti, S., Jenkins, E., Ovenden, C., & Syed, D. (2006). Levels of drunkenness of customers leaving licensed premises in

- Perth, Western Australia: a comparison of high and low 'risk' premises. *Addiction*, 87(6), 873-881.
- Stokols, D. (2000). The social ecology paradigm of wellness promotion. In M. S. Jamner & D. Stokols (eds.), *Promoting Human Wellness: New Frontiers for Research, Practice and Policy*. Ewing, NJ: University of California Press.
- Steering Group Committee. (2007). Report of the Steering Group for the Review of the Regulation of Alcohol Advertising (Report for the New Zealand Minister of Health). Wellington, NZ: Ministry of Health.
- Stone, C. (2005). Promoting an integrated campus-wide approach to first year student retention. *Journal of the Australian and New Zealand Student Services Association*, 26(October), 33-40.
- Substance Abuse and Mental Health Services Administration. (2007). Results

 From The 2006 National Survey On Drug Use And Health: National

 Findings. Rockville, M.D: United States Department of Health and Human Services.
- Thomson, A., Casswell, S., & Stewart, L. (1994). Communication experts' opinion on alcohol advertising through the electronic media in New Zealand. *Health Promotion International*, 9(3), 145-152.
- Timberlake, D., Hopfer, C., Rhee, S., Friedman, N., Haberstick, B., Lessem, J., et al,. (2007). College attendance and its effect on drinking behaviors in a longitudinal study of adolescents. *Alcoholism: Clinical and Experimental Research*, 31(6), 1020-1030.
- Tonkiss, F. (2004). Using focus groups. In C. Seale (ed.), *Researching Society* and Culture. London: Sage.

- Toomey, T. L., Lenk, K. M., & Wagenaar, A. C. (2007). Environmental policies to reduce college drinking: an update of research findings. *Journal of Studies on Alcohol and Drugs*, 68(2), 208-219.
- Toomey, T. L., & Wagenaar, A. C. (2002). Environmental policies to reduce college drinking: options and research findings. *Journal of Studies on Alcohol*, 63(2:supp), 193-206.
- Tucciarone, K. M. (2007). Cinematic college: national lampoon's animal house teaches theories of student development. *College Student Journal*, 41(4), 843-858.
- Turner, C. (1990). How much alcohol is in a 'standard drink'? An analysis of 125 studies. *British Journal of Addiction*, 85(9), 1171-1175.
- Uni-Friend. (2008). Engineering Faculty @ UoA. *Unifriend.co.nz*: Retrieved September 14th, 2008, from http://www.unifriend.co.nz/index.php?option =com_content&task=view&id=127&Itemid=223.
- University of Otago. (2008). Student Handbook 2008. Dunedin, NZ: Author.
- University of Waikato. (2007). *University of Waikato Halls of Residence Handbook*. Hamilton, NZ: Author.
- University of Waikato. (2009). *Undergraduate Prospectus 2009*. Hamilton, NZ: Author.
- Vasquez, S., & Rohrer, B. (2006). Students living in residence halls. In L. Gohn & G. Albin (eds.), *Understanding College Student Subpopulations: A guide for student affairs professionals*. Washington, D.C.: National Association of Student Personnel Administrators.
- Vicary, J., & Karshin, C. (2002). College alcohol abuse: a review of the problems, issues, and prevention approaches *The Journal of Primary Prevention*, 22(3), 299-331.

- Walker, K. (2000). Reported and perceived drug and alcohol use amongst

 Australian university students. *Journal of the Australian and New Zealand*Student Services Association, 16(October), 3-34.
- Walker, K. (2001). The concerns of commencing students at Adelaide University.

 *Journal of the Australian and New Zealand Student Services Association,

 18(October), 20-39.
- Wang, T., & Katzev, R. (1990). Group commitment and resource conservation: two field experiments on promoting recycling. *Journal of Applied Social Psychology*, 20(4), 265-275.
- Wechsler, H., Davenport, A., Dowdall, G., Moeykens, B., & Castillo, S. (1994).
 Student health and behavioural consequences of binge drinking in college:
 A national survey of students at 140 campuses. *Journal of American Medical Association*, 272, 1672-1677.
- Wechsler, H., Dowdall, G. W., Davenport, A., & Castillo, S. (1995). Correlates of college student binge drinking. *American Journal of Public Health*, 85(7), 921-927.
- Wechsler, H., Dowdall, G., Maenner, G., Gledhill-Hoyt, J., & Lee, H. (1998).

 Changes in binge drinking and related problems among American college students between 1993 and 1997. *Journal of American College Health*, 47(2), 57-68.
- Wechsler, H., Kelley, K., Weitzman, E., Giovanni, J., & Seibring, M. (2000b).

 What colleges are doing about student binge drinking: A survey of college administrators. *Journal of American College Health*, 48(5), 219-226.
- Wechsler, H., Lee, J. E., Hall, J., Wagenaar, A. C., & Lee, H. (2002b).

 Secondhand effects of student alcohol use reported by neighbours of

- colleges: the role of alcohol outlets. *Social Science & Medicine*, 55(3), 425-435.
- Wechsler, H., Lee, J., Kuo, M., & Lee, H. (2000a). College binge drinking in the 1990's: A continuing problem: Results of the Harvard School of public Health 1999 College Alcohol Study. *Journal of American College Health*, 48(5), 199-210.
- Wechsler, H., Lee, J., Kuo, M., Seibring, M., Nelson, T., & Lee, J. (2002a).

 Trends in college binge drinking during a period of increased prevention efforts: findings from four Harvard School of Public Health College

 Alcohol Study surveys 1993-2001. *Journal of American College Health*, 50(5), 203-217.
- Wechsler, H., Lee, J. E., Nelson, T. F., & Lee, H. (2001b). Drinking Levels,
 Alcohol Problems and Secondhand Effects in Substance-Free College
 Residences: Results of a National Study. *Journal of Studies on Alcohol*,
 62(1), 23-31.
- Wechsler, H., & Nelson, T. F. (2001a). Binge drinking and the American college student: whats five drinks? *Psychology of Addictive Behaviors*, 15(4), 287-291.
- Wechsler, H., & Nelson, T. F. (2008). What we have learned from the Harvard School of Public Health College Alcohol Study: focusing attention on college student alcohol consumption and the environmental conditions that promote it. *Journal of Studies on Alcohol and Drugs*, 69(4), 481-491.
- Weil, B. (2007, 31 October). Kid's drinks have higher alcohol level than wine.

 Times Online. Retrieved, 14th May, 2008, from http://www.times.co.nz

 /cms/opinion/viewpoint/2007/10/art100018328.ph.

- Weitzman, E. R., Nelson, T. F., Lee, H., & Wechsler, H. (2004). Reducing drinking and related harms in college: evaluation of the "A Matter of Degree" program. *American Journal of Preventive Medicine*, 27(3), 187-196.
- Weitzman, E. R., Nelson, T. F., & Wechsler, H. (2003). Taking up binge drinking in college: the influences of person, social group, and environment.

 **Journal of Adolescent Health, 23(1), 26-35.
- Westpac Trust. (2008, 15th February). Survey Highlights Students' Money

 Worries. Retrieved May 20th, 2008, from http://www.westpac.co.nz
 /olcontent/olcontent.nsf/Content/15+February+2008.
- White, A. M., Jamieson-Drake, D. W., & Swartzwelder, H. S. (2002). Prevalence and correlates of alcohol-induced blackouts among college students:
 Results of an e-mail survey. *Journal of American College Health*, 51(3), 117-129.
- White, A. M., Kraus, C., McCracken, L. A., & Swartzwelder, H. S. (2003). Do college students drink more than they think: use of a free-pour paradigm to assess how college students define standard drinks. *Alcoholism: Clinical and Experimental Research*, 24(11), 1751-1756.
- White, A. M., Kraus, C. L., Flom, J. D., Kestenbaum, L. A., Mitchell, J. R., Shah, K., et al. (2005). College students lack knowledge of standard drink volumes: implications for definitions of risky drinking based on survey data. *Alcoholism: Clinical and Experimental Research*, 29(4), 631-638.
- Wilkins, C., & Sweetsur, P. (2008). Trends in population drug use in New Zealand: findings from national household surveying of drug use in 1998, 2001, 2003, and 2006. *The New Zealand Medical Journal, 121*(1274), 61-71.

- Williams, R. J., & Ricciardelli, L. (1996). Expectancies relate to symptoms of alcohol dependence in young adults. *Addiction*, *91*, 1031-1039.
- Wilsnack, R., Vogeltanz, N., Wilsnack, S., & Harris, R. (2000). Gender differences in alcohol consumption and adverse drinking consequences: cross-cultural patterns. *Addiction*, 95(2), 251-265.
- Wilsnack, S., & Wilsnack, R. (2002). *International Gender and Alcohol research:**Recent Findings and Future Directions. Bethesda, MD: National Institute on Alcohol Abuse and Alcoholism.
- Winn, S., & Stevenson, R. (1997). Student loans: are the policy objectives being achieved. *Higher Education Quarterly*, *51*(2), 144-163.
- Woodhall, M. (2002). Paying for learning: the debate on student fees, grants and loans in international perspective. *Welsh Journal of Education*, 11(1), 1-9.
- World Health Organization. (2001b). *Global Status Report on Alcohol* (WHO/NCD/MSD/2001.2). Geneva: Author.
- World Health Organization. (2001a). *Global Status Report. Alcohol and Young People* (WHO/MSD/MSB/01.1). Geneva: Author.
- Wyllie, A., & Casswell, S. (1991a). A qualitative investigation of young men's drinking in New Zealand. *Health Education Research*, 6(1), 49-55.
- Wyllie, A., Casswell, S., & Stewart, J. (1991b). The response of young men to increased television advertising of alcohol in New Zealand. *Health Promotion International*, 6(3), 191-197.
- Wyllie, A., Millard, M., & Zhang, J. F. (1996). *Drinking in New Zealand: a*national survey 1995. Auckland, NZ: Alcohol and Public Health Research

 Unit, University of Auckland.
- Yates, S. (2004). Doing Social Science Research. London: Sage.

Youthline. (2008). *Binge Drinking - Information*. Retrieved September 24th, 2008, from http://youthline.co.nz/content/view/32/192/lang,english/.

Zhao, C., & Kuh, G. (2004). Adding value: Learning communities and student engagement. *Research in Higher Education*, 45(2), 115-138.

APPENDIXES

APPENDIX A: Phase One Focus Group Interviews Ethical Approval Application

University of Waikato Faculty of Arts and Social Sciences

Human Research Ethics Committee Application for Ethical Approval

Brett McEwan
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January 2006

Name of Researcher. Brett McEwan.

Department of Researcher. Societies and Cultures

<u>Title of Research Project</u>. Student Culture and Binge Drinking. An investigation of the relationship between student culture and binge drinking behaviour as it is manifested in the lived experiences of the University of Waikato halls of residence student population.

Status of the Research Project. The researcher currently has provisional enrolment as a PhD candidate. This application is required by the Postgraduate Studies Committee for full enrolment status.

<u>Supervisors.</u> Associate Professor David Swain, Dr Maxine Campbell, and Dr Judith MacDonald, Department of Societies and Cultures

<u>Funding.</u> The researcher is the recipient of a Bryant Postgraduate Research Scholarship. A condition of this scholarship is that the recipient undertakes a postgraduate research project investigating an area of life within the University of Waikato halls of residence. Other than this stipulation the scholarship providers have no influence on the development of the research project, nor do they claim any ownership of the research findings.

Justification and Description of the Research Project. The project will investigate the relationship between student culture and binge drinking culture, and the impact that these cultures have upon resident student drinking behaviours at The University of Waikato halls of residence. In New Zealand, four quantitative studies have been undertaken evaluating tertiary student drinking behaviour. The findings of all four studies revealed that living in a hall of residence was a significant predictor of excessive alcohol use. This project seeks to complement the existing studies by means of a qualitative investigation of halls of residence student alcohol use from the perspective of both hall students and staff. Attention will be given to exploring students' understanding of binge drinking culture and, conversely, safe drinking practices. It will also seek to identify

influencing factors from both within and outside the halls of residence environment that support, or challenge the establishment and maintenance of binge drinking culture. This research will add a human face to the existing quantitative data, allowing a more nuanced understanding of the issue than is possible through quantitative methods alone. A detailed list of the research aims is given in the Appendix. It is envisaged that the data obtained from investigating the research aims will contribute to the development of future alcohol harm minimisation strategies within the halls of residence setting.

<u>Data Collection.</u> A mix of both qualitative and quantitative methods will be used to gather the research data. The focus of this Ethical Application is to gain approval to convene five focus groups. Further ethical applications will be submitted for the in-depth interviews, the questionnaire, and the follow-up focus groups as they arise.

The research population will be drawn from the managers, staff, and students living on campus at the three fully-catered halls of residence at The University of Waikato: Bryant Hall, Student Village and College Hall. In all, this comprises of a total research population of 800 students and 30 staff.

During the first stage of data collection, five focus groups and twelve indepth interviews will be undertaken. One focus group will be comprised of the 3 managers, a second focus group will comprise of 6-9 residential staff, and the remaining three focus groups will comprise of 6-8 resident students (one group from each hall). The procedures for recruiting the focus group participants are outline below.

The second stage of data collection will involve a self-completion questionnaire distributed to all 800 resident students and 30 residential staff.

The third stage of data collection will involve five focus groups. A time line outlining the three data collection stages is given in the Appendix.

Procedures for Recruiting Focus Group Participants.

Residential Managers. The three residential managers will be selected by virtue of their positions. Once ethical approval has been given, the researcher will meet with the managers to discuss the implementation of the research project. A formal letter of invitation will be given to the managers inviting them to participate in a focus group discussion group (see Appendix), along with a focus group information sheet and consent form (see Appendix). Over the past year the researcher has maintained contact with the managers regarding the proposed research project and all three hall managers have indicated their support of the study.

Residential Staff. In March 2006 the researcher will attend a staff meeting at each of the halls of residence to outline the current research project and invite staff who may be interested in participating in a staff focus group to leave their contact details. A formal letter of invitation will then be sent to each of the interested residential staff inviting them to participate in the study (see Appendix), along with a focus group information sheet and consent form (see Appendix). Six to nine interested staff will be selected to participate in the focus group based upon a balance of gender, age, staff experience and hall (ideally it would be good to have three staff from each of the three halls involved).

Resident Students. At the beginning of the academic year, as a part of the resident orientation program, the manager of each hall has a welcome meeting with the hall resident students. During this welcome meeting, five minutes will be made available to the researcher to allow him to introduce himself and outline the research project being undertaken in the hall during 2006. In April the researcher will hold an information session in each of the three halls of residence during meal time (in the hall dining room). A brief outline of the research project will be discussed and an invitation offered to any students who may wish to be involved in the hall

focus group. Names will be taken from students who indicate an interest in participating. All interested students will be sent an invitation letter (see Appendix), along with a focus group information sheet and consent form (see Appendix). Four male residents and four female residents will be randomly selected to participate in each hall focus group.

Procedures in which the Participants will be involved.

The managers and residential staff focus groups will be undertaken in the meeting room at Student Village. The residential student focus groups will be held in the students' halls of residence, using the hall meeting room. Each focus group will take approximately one hour. Food and non-alcoholic drinks will be provided for focus group participants (this is a customary practice for meetings held within a halls of residence setting).

Focus Group Questions.

The goals of the focus group discussions will be to investigate how the resident students, residential staff, and residential managers view the four areas of Student Drinking, Binge Drinking, Student Culture, and the Binge Drinking Environment. A list of the focus group aims and discussion questions is given in the Appendix.

<u>Procedures and Time Frame for Storing Personal Information and Other</u> Data.

The information gained from the focus groups in the form of written notes and tape recordings will be held by the researcher in a secure filing cabinet in his office at the University of Waikato. Transcriptions of the tape recordings will be undertaken by the researcher and stored similarly.

Ethical and Legal Issues.

Access to participants. This issue will be organised through meetings with the hall managers.

Informed consent. Introductory talks, information sheets and informed consent forms will be given to all focus group participants before participating in the focus groups.

Potential risk to participants. As the focus groups are being undertaken with students who live together, confidentiality may be an issue. To maintain confidentiality the focus groups will be held in a private meeting room within the halls of residence. Focus group participants will be asked to respect each other's privacy and to not share information disclosed by others in the group. Group participants will also be asked to share only information they feel comfortable about and reminded of their right to refuse to answer any particular questions.

The topic of alcohol can be potentially sensitive. The focus groups, particularly with resident students, could bring up distressing memories. For this reason at the end of the focus group, participants will be provided with the contact details of the University counselling service (should they feel the need to contact someone for support). *Publication of findings*. The research findings will be published as part of the PhD thesis. It is envisaged that a number of journal articles may also be published from the research.

Conflicts of Interest. The researcher is currently employed part-time in the position of Residential Manager of Orchard Park self-catered halls of residence on campus at The University of Waikato. As the manager of Orchard Park the researcher does not have any responsibility for, or contact with, the resident students of the three large catered halls of residence involved in the research project. The researcher does however have a collegial relationship with the managers of the three halls involved in the study. The researcher will need to be clear when meeting with the three hall managers, whether he is meeting with them to discuss research matters, or meeting to discuss collegial hall management matters.

Intention to pay participants. No focus group participants will be paid for their involvement in the focus groups. Food and non-alcoholic drinks will be provided at the beginning of the focus group. The provision of food and drink at halls of residence meetings is a common practice. The food will be provided by the halls of residence kitchen and is likely to take the form of orange drink, savouries and muffins.

Ethical	Statement.
Euncar	Statement.

The researcher will follow the ethical principles of the Sociological Association of Aotearoa (New Zealand) and The University of Waikato Ethical Conduct in Research Guidelines (Human Research). These ethical principles will be maintained with integrity throughout all stages of the research project. If any unanticipated ethical issues arise, then the researcher will bring these issues back to his supervisors and the Faculty of Arts and Social Sciences Ethics Committee (Human Research).

Applicant's signature:	Date
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(Letter of invitation to Residential Managers)

27.01-06

Dear

As a part of my PhD study I would like to conduct a focus group discussion with yourself and your colleagues to discuss issues surrounding the use of alcohol by resident students at The University of Waikato halls of residence.

This focus group discussion will provide insights in to the role alcohol plays in the life of resident students and also the impact alcohol use may be having upon the halls of residence community and residential staff.

Please find enclosed an information sheet and consent form for participation in the focus group. If you are interested in the focus group please sign and return the consent form in the self-addressed envelope. All comments shared within the focus group will remain anonymous and individual Residential Managers will not be identified in the research report.

Once the consent form has been signed and returned you have the right to withdraw from the focus group at any time prior to the commencement of the focus group and at any stage of the process.

Within the next five working days I will contact you to arrange an appropriate time and venue for the proposed focus group. I hope this provides you with the information that you need, but if you have any queries or questions please to not hesitate to contact me on (07) 838 4466 ext 6003.

Thank you for your time

Brett McEwan (M.Soc.Sci).

Dept of Societies and Cultures

The University of Waikato

(Focus Group Information Sheet and Consent Form)

The University of Waikato Halls of Residence
Alcohol Research Project

Information Sheet

Kia ora, my name is Brett McEwan. I am a PhD student in the Department of Societies and Cultures at The University of Waikato. I am undertaking a study of student drinking culture and student culture more generally at The University of

Waikato halls of residence. You are invited to take part in this study by

participating in a focus group discussion where we will discuss different aspects

of resident student drinking.

If you agree to take part in this study you will be asked to participate in a group

discussion taking approximately one hour of your time. This focus group will be

held at ***** halls of residence and refreshments will be provided. The

information gained from the focus group will provide the researcher with research

data which will be used in the development of a questionnaire to be used in a later

part of the study.

Your participation in this study is voluntary. You may withdraw from the study at

any time. You may refuse to answer any particular questions. All group

participants will be asked to respect the confidentiality of others' comments. No

focus group participants will be individually identified in any of the research

writings. If you would like a summary of the data gathered in this focus group

interview or of the findings of the research project, this can be supplied.

You may contact the researcher at any time at (07 8384466 ext 6003) if you have

any further questions or contributions. Alternatively, you can contact the

researcher's supervisor, Dr Maxine Campbell on 07 856 2889.

Thank you for the time you have taken to read this.

Brett McEwan (M.Soc.Sci)

Department of Societies and Cultures

The University of Waikato

bjmcewan@waikato.ac.nz

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CONSENT FORM

Name:
Date:
I have read and understood the information sheet explaining this research project
I understand that I may withdraw from the research project at any time without
penalty and without an explanation being required. I agree to maintain the
confidentiality of all information that arises during the focus group.
I consent to participate in this research project investigating resident student
drinking behaviours and associated issues at The University of Waikato halls of
residence
Signed:
Contact details: Phone
Cell phone
Email
Name Interviewer:
Date:
I accept the researcher requirements as outlined in this Information Sheet and
Consent form
Signed Interviewer:

(Letter of invitation to Residential Assistant Staff)

27.01-06

Dear

As a part of my PhD study investigating alcohol-related issues within The University of Waikato halls of residence, I would like to conduct a focus group discussion with 6-9 Residential Assistant staff. I am hopeful that this focus group discussion will provide insight in to the role alcohol plays in the life of resident students and also the impact alcohol use may be having upon the halls of residence community and residential staff.

Enclosed with this letter you will find an information sheet and consent form for participation in the focus group. If you are interested in participating in this focus group please sign and return the consent form in the self-addressed envelope. Places are limited to a maximum of 9 Residential Assistant staff. All comments shared within the focus group will remain anonymous and individual residential staff will not be identified in the research report.

If you participate in the study you have the right to withdraw from the focus group at any time prior to the commencement of the focus group and at any stage of the process. I will contact the nine participants and arrange an appropriate time and venue for the proposed focus group.

I hope this provides you with the information that you need, but if you have any queries or questions please to not hesitate to contact me on (07) 838 4466 ext 6003.

Thank you for your time

Brett McEwan (M.Soc.Sci).

Dept of Societies and Cultures

The University of Waikato

(Letter of invitation to Resident Students)

27.01-06

Dear Resident Student

As a part of my PhD study investigating alcohol-related issues within The University of Waikato halls of residence, I would like to conduct a focus group discussion with 6-8 residents from your hall. I am hopeful that this focus group discussion will provide insight in to the role alcohol plays in the life of resident

students.

Enclosed with this letter you will find an information sheet and consent form for participation in the focus group. If you are interested in participating in this focus group please sign and return the consent form in the self-addressed envelope. Places are limited to a maximum of eight residents. All comments shared within the focus group will remain anonymous and individual resident students will not

be identified in the research report.

If you participate in the study you have the right to withdraw from the focus group at any time prior to the commencement of the focus group and at any stage of the process. I will contact the eight participants and arrange a meeting time. The

venue of the focus group will be in the hall meeting room.

I hope this provides you with the information that you need, but if you have any queries or questions please to not hesitate to contact me on (07) 838 4466 ext 6003.

Thank you for your time

Brett McEwan (M.Soc.Sci).

Dept of Societies and Cultures

The University of Waikato

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(Focus Group Information Sheet and Consent Form for Residential Students)

The University of Waikato Halls of Residence

Alcohol Research Project

Information Sheet

Kia ora, my name is Brett McEwan. I am a PhD student in the Department of

Societies and Cultures at The University of Waikato. I am undertaking a study of

student drinking culture and student culture more generally at The University of

Waikato halls of residence. You are invited to take part in this study by

participating in a focus group discussion where we will discuss different aspects

of resident student drinking.

If you agree to take part in this study you will be asked to participate in a group

discussion taking approximately one hour of your time. This focus group will be

held at ***** halls of residence and refreshments will be provided. The

information gained from the focus group will provide the researcher with research

data which will be used in the development of a questionnaire to be used in a later

part of the study.

Your participation in this study is voluntary. You may withdraw from the study at

any time. You may refuse to answer any particular questions. All comments

shared in the focus group are confidential. No focus group participants will be

individually identified in any of the research writings. If you would like a

summary of the data gathered in this focus group interview or of the findings of

the research project, this can be supplied.

You may contact the researcher at any time at (07 8384466 ext 6003) if you have

any further questions or contributions. Alternatively, you can contact the

researcher's supervisor, Dr Maxine Campbell on 07 856 2889.

Thank you for the time you have taken to read this.

Brett McEwan (M.Soc.Sci)

Department of Societies and Cultures

The University of Waikato

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CONSENT FORM

Name:				
Date:				
I have read ar	nd understood the inform	mation sheet explaining th	is research project.	
I understand t	hat I may withdraw fro	m the research project at a	iny time without	
penalty and w	vithout an explanation b	peing required.		
I consent to p	articipate in this resear	ch project investigating res	sident student	
drinking beha	viours and associated i	ssues at The University of	Waikato halls of	
residence				
Signed:				
Contact detail	ls: Phone			
	Cell phone		_	
	Email		<u> </u>	
To help insure	that the focus group is a	balanced representation of th	e hall please circle	
the categories	listed below.			
Gender:	Male	Female		
Age:	17-21 years	22-26 years	26years plus	
Residence:	New Zealand student	International Students		
Name of Interviewer:				
Date:				
I accept the re	esearcher requirements	as outlined in this Informa	tion Sheet and	
Consent form				
Signed Interv	iewer:			

Student Culture

Student Culture discussion aims:

- To identify resident students' understanding of student culture.
- To identify how resident students gain their understandings of student culture.
- To identify the role of student alcohol use as a component of student culture.
- To determine whether resident students perceive any differences between halls of residence student culture and student culture more generally

Student Culture Discussion Questions:

I am interested in knowing some things about being a student at the University of Waikato and about the Halls of Residence.

- How would you describe a student at the University of Waikato, what are the characteristics?
- Do you think your view of being a University student has changed since you came to University? If it has changed, how has it changed?
- Are there any differences in how you would describe a Halls student compared to a non-Halls student?
- How does alcohol and drinking fit in to your description of a University student?
- Once you were on campus how long did it take for you to start feeling like a student?
- What happened to make you feel like a student?
- What are the parts of a student lifestyle that you enjoy and the parts you don't enjoy?
- How would you describe the Halls of Residence environment?
- What do you enjoy and not enjoy about the Halls of Residence environment?

Binge Drinking Environment

Binge Drinking Environment discussion aims

- To identify what resident students define as 'binge drinking' behaviour.
- To determine resident students' attitudes towards binge drinking behaviour.
- To identify connections between student culture and binge drinking.
- To identify the influencing factors from both within the halls of residence setting and external to the halls of residence setting, that may support the establishment and maintenance of a resident student binge drinking

Binge Drinking Environment discussion questions:

I am interested in knowing some things about drinking alcohol and particularly binge/excessive drinking.

- Is the phrase 'binge drinking' a term you and your friends would use to describe someone who has drunk a lot of alcohol? Or is there another term you would use?
- How would you and your friends describe binge/excessive drinking?
- If you or one of your friends was binge drinking, what would you and your friends think and feel about it?
- How do you think your being at University has impacted upon your view of binge drinking? Has your view changed much since you have been at University and if so, how?
- How has your being at a Halls of Residence impacted upon your view of binge drinking?
- What do you think at University encourages binge drinking behaviour?
- What do you think in the Halls of Residence encourages binge drinking behaviour?
- What do you think discourages some people from binge drinking?
- Is there anything at the University that discourages students from binge drinking?
- Is there anything in the Halls of Residence that discourages students from binge drinking?

Resident Drinking

Resident Drinking discussion aims:

- To determine resident student drinking patterns including the frequency of drinking, the location of drinking, the quantity of drinking, periods of time spent drinking, and the choices of alcohol consumed.
- To determine resident students' understandings of a 'standard drink'.
- To determine the frequency of drinking-related harms experienced by resident students who drink.
- To determine the frequency of drinking related harm imposed on others by resident students who drink.

Resident Drinking discussion questions:

- Do you drink alcohol?
- How often do you drink?
- What do you drink?
- Where do you do your drinking?
- How many drinks would you usually drink when drinking?
- What harms have you experienced while drinking?
- What harms have some of your friends experienced while drinking?

Resident Binge Drinking

Resident Binge Drinking discussion aims:

- To use existing official New Zealand guidelines in conjunction with the drinking patterns discerned in this research to determine the extent of binge drinking behaviour amongst the resident student population.
- To determine any differences and/or similarities between the level of binge drinking behaviour in the resident student population and the rates of binge drinking behaviour reported in previous New Zealand and international tertiary student alcohol studies.

Resident Binge Drinking discussion questions:

- Do you binge drink?
- When was the last time you binge drank?
- Why did you binge drink on that occasion?
- How often would you binge drink?
- What do you think encourages you to binge drink?

APPENDIX B: Phase One In-Depth Interviews Ethical Approval Application

University of Waikato Faculty of Arts and Social Sciences

Human Research Ethics Committee

Application for Ethical Approval

Brett McEwan
PhD Student
Department of Societies and Cultures

Contact at: bjmcewan@waikato.ac.nz

Phone: 07 838 4466 ext 6003

June 2006

Name of Researcher. Brett McEwan.

Department of Researcher. Societies and Cultures

<u>Title of Research Project</u>. Student Culture and Binge Drinking. An investigation of the relationship between student culture and binge drinking behaviour as it is manifested in the lived experiences of the University of Waikato halls of residence student population.

Status of the Research Project. During April and May nine focus group interviews were completed. The focus of this Ethical Application is to gain approval to undertake twelve in-depth interviews in June. Further ethical applications will be submitted to undertake a questionnaire survey in August and follow-up focus group interviews in October.

<u>Supervisors.</u> Associate Professor David Swain, Dr Maxine Campbell, and Dr Judith MacDonald, Department of Societies and Cultures

<u>Funding.</u> The researcher is the recipient of a Bryant Postgraduate Research Scholarship. A condition of this scholarship is that the recipient undertakes a postgraduate research project investigating an area of life within the University of Waikato halls of residence. Other than this stipulation the scholarship providers have no influence on the development of the research project, nor do they claim any ownership of the research findings.

Justification and Description of the Research Project. The project will investigate the relationship between student culture and binge drinking culture, and the impact that these cultures have upon resident student drinking behaviours at The University of Waikato halls of residence. In New Zealand, four quantitative studies have been undertaken evaluating tertiary student drinking behaviour. The findings of all four studies revealed that living in a hall of residence was a significant predictor of excessive alcohol use. This project seeks to complement the existing studies by means of a qualitative investigation of halls of residence student

alcohol use from the perspective of both hall students and staff. Attention will be given to exploring students' understanding of binge drinking culture and, conversely, safe drinking practices. It will also seek to identify influencing factors from both within and outside the halls of residence environment that support, or challenge the establishment and maintenance of binge drinking culture. This research will add a human face to the existing quantitative data, allowing a more nuanced understanding of the issue than is possible through quantitative methods alone. A detailed list of the research aims is given in the Appendix. It is envisaged that the data obtained from investigating the research aims will contribute to the development of future alcohol harm minimisation strategies within the halls of residence setting.

Data Collection.

A combination of both qualitative and quantitative research methods will be utilised during the three stages of the data collection process. The research population will be drawn from the managers, staff, and students living on campus at the three fully-catered halls of residence at The University of Waikato: Bryant Hall, Student Village and College Hall. In all, this comprises of a total research population of 800 students and 30 staff.

During the first stage of data collection nine focus groups (completed in April and May) and twelve in-depth interviews will be undertaken. The procedures for recruiting the twelve in-depth interview participants are outline below.

The second stage of data collection will involve a self-completion questionnaire distributed to all 800 resident students and 30 residential staff.

The third stage of data collection will involve five focus groups. A time line outlining the three data collection stages is given in the Appendix.

Procedures for Recruiting In-depth Interview Participants.

Twelve resident students (four from each of the three halls of residence) will be recruited to participate in the in-depth interviews. The researcher will hold an information session in each of the three halls of residence during meal time (in the hall dining room). A brief outline of the research project will be discussed and an invitation offered to any students who may wish to participate in an in-depth interview. All interested students will be given an information sheet and consent form to complete (see Appendix).

The consent form requests a range of demographic information including age, gender, number of years at university, if the student is a domestic student or an international student, and whether the student consumes alcohol or not. Those students who indicate that they do consume alcohol will also be asked to identify themselves as either a 'lighter drinker' who rarely gets intoxicated when drinking or a 'heavier drinker' who sometimes gets intoxicated when drinking'.

A total of four students will be selected to participate from each hall of residence including one non-drinker, one lighter drinker, and two heavier drinkers. Across the twelve interviews, students will be selected to provide a balance of gender, age, and number of years at university.

<u>Procedures in which the Participants will be involved.</u>

The interviews will be held in the students' halls of residence, using the hall meeting room. Each interview will take approximately 40-60 minutes. The interview will be tape-recorded and be guided by open-ended questions. At the end of the interview, information identifying the oncampus counselling service will be made available to the student (should any personal issues arise during the course of the interview. See point 13. *iii*).

Interview Questions.

The goal of the in-depth interviews will be to investigate how resident students view the four areas of Student Drinking, Binge Drinking, Student

Culture, and the Binge Drinking Environment. A list of the research aims and discussion questions is given in the Appendix and these are the same as those used in the initial focus group interviews. Using the principles of qualitative interviewing, the questions will in this case be used as a guide rather than as a structured interview schedule.

<u>Procedures and Time Frame for Storing Personal Information and Other</u> Data.

The information gained from the interviews in the form of written notes and tape recordings will be held by the researcher in a secure filing cabinet in his office at the University of Waikato. Transcriptions of the tape recordings will be undertaken by the researcher and stored similarly.

Ethical and Legal Issues.

Access to participants. This issue will be organised through meetings with the hall managers.

Informed consent. Introductory talks, information sheets and informed consent forms will be given to all interview participants before participating in the in-depth interviews.

Potential risk to participants. To maintain confidentiality the interviews will be held in a private meeting room within the halls of residence. Interview participants will also be asked to share only information they feel comfortable about and reminded of their right to refuse to answer any particular questions. The topic of alcohol can be potentially sensitive and the interview could bring up distressing memories. For this reason at the end of the interview, participants will be provided with the contact details of the University counselling service (should they feel the need to contact someone for support). Publication of findings. The research findings will be published as part of the PhD thesis. It is envisaged that a number of journal articles may also be published from the research.

Conflicts of Interest. The researcher is currently employed part-time in the position of Residential Manager of Orchard Park self-catered halls of residence on campus at The University of Waikato. As the manager of Orchard Park the researcher does not have any responsibility for, or contact with, the resident students of the three large catered halls of residence involved in the research project. The researcher does however have a collegial relationship with the managers of the three halls involved in the study. The researcher will need to be clear when meeting with the three hall managers, whether he is meeting with them to discuss research matters, or meeting to discuss collegial hall management matters.

Intention to pay participants. Students will not be paid for their involvement in the in-depth interviews however a block of chocolate will be given to thank them for their time.

Ethical Statement.

The researcher will follow the ethical principles of the Sociological Association of Aotearoa (New Zealand) and The University of Waikato Ethical Conduct in Research Guidelines (Human Research). These ethical principles will be maintained with integrity throughout all stages of the research project. If any unanticipated ethical issues arise, then the researcher will bring these issues back to his supervisors and the Faculty of Arts and Social Sciences Ethics Committee (Human Research).

Applicant's signature:	Date	
11 0 .		

(In-Depth Interview Information Sheet and Consent Form for Residential Students)

The University of Waikato Halls of Residence Alcohol Research Project

Information Sheet

Kia ora, my name is Brett McEwan. I am a PhD student in the Department of Societies and Cultures at The University of Waikato. I am undertaking a study of student drinking culture and student culture more generally at The University of Waikato halls of residence. The aim of this study is to better understand resident student drinking behaviour and to contribute towards the development of future alcohol harm minimisation strategies within the halls of residence setting.

You are invited to take part in this study by participating in an interview where we will discuss resident student drinking patterns and there associated consequences, student attitudes towards binge drinking behaviour, the role of alcohol in the development of both student culture and halls of residence culture, and factors that may impact upon resident student drinking behaviour.

If you agree to take part in this study you will be asked to participate in an interview taking approximately 40 minutes of your time. This interview will be held at ***** halls of residence and a block of chocolate will be provided to thank you for your time. The information gained from the interview will provide the researcher with research data and will help in the development of a questionnaire to be used in a later part of the study.

Your participation in this study is voluntary. You may withdraw from the study up to three weeks after your interview. You may refuse to answer any particular questions. All comments shared in the interview are confidential. No interview participants will be individually identified in any of the research writings. If you would like a summary of the data gathered in this interview or of the findings of the research project, this can be supplied.

Along with being a PhD student in the Department of Societies and Cultures, the

researcher is also the manager of Orchard Park halls of residence situated on-

campus. While the researcher is familiar with the other three halls of residence

involved in the study, he has no role in there management and all interview data is

confidential.

You may contact the researcher at any time on 07 8384466 ext 6003 if you have

any further questions or contributions. Alternatively, you can contact the

researcher's supervisor, Dr Maxine Campbell on 07 856 2889.

This research has been given ethical approval by the FASS Human Research

Ethics Committee. Any complaints regarding the research should be sent to the

FASS Human Research Ethics Committee secretary at charl@waikato.ac.nz.

Thank you for the time you have taken to read this.

Brett McEwan (M.Soc.Sci)

Department of Societies and Cultures

The University of Waikato

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INTERVIEW CONSENT FORM

(Please complete)

Name:							
				Dat	e:		
I have read and understoo	d the info	rmation	sheet	explaini	ing this	researc	h project.
I understand that I may wi	ithdraw fr	om the	researc	h proje	ct at any	y time v	vithout
penalty and without an ex-	planation	being re	equired	l.			
I consent to participate in	this resea	rch proj	ect inv	estigati	ng resid	lent stud	lent
drinking behaviours and a	ssociated	issues a	it The I	Univers	ity of W	/aikato	halls of
residence							
Signed:							
Contact details: Pho	one			Cell p	hone _		
Email				-			
To help ensure that the stude	ents interv	iewed ar	e a bala	nced rep	resentat	ion of th	e hall
population please circle the	categories	listed be	low.	•			
Gender:	Male		Fema	le			
Age Years:	17	18	19	20	21	22	23
24+							
Residence: New	v Zealand	student		Interr	national	Students	S
Year at University:	1^{st}	2^{nd}	3^{rd}	4^{th}	$5^{th}+$		
Do you drink alcohol:	Yes		No				
If you drink alcohol, do yo	ou consid	er yours	elf to b	e a Lig	hter Dri	inker or	a Heavie
Drinker?							
Lig	Lighter drinker			Heavier drinker			
(rarely gets intoxicated)		(sometimes gets intoxicated)					
(Interviewer to complete b	oelow)						
Name of Interviewer:B	Brett McE	wan	Da	te:			_
I accept the researcher req	uirement	s as outl	ined in	this In	formatio	on Shee	t and
Consent form: Signed Ir	nterviewe	r:					

APPENDIX C: Phase Two Survey Questionnaire Ethical Approval Application

University of Waikato Faculty of Arts and Social Sciences

Human Research Ethics Committee Application for Ethical Approval

Brett McEwan
PhD Student
Department of Societies and Cultures

Contact at: bjmcewan@waikato.ac.nz

Phone: 07 838 4466 ext 6003

September 2006

Name of Researcher. Brett McEwan.

Department of Researcher. Societies and Cultures

<u>Title of Research Project</u>. Student Culture and Binge Drinking. An investigation of the relationship between student culture and binge drinking behaviour as it is manifested in the lived experiences of the University of Waikato halls of residence student population.

Status of the Research Project. The aim of this Ethics Application is to gain approval to administer a questionnaire to halls of residence students in September. Focus group and in-depth interviews were undertaken between March and July. A further ethics application will be submitted to undertake follow-up focus group and in-depth interviews in October.

<u>Supervisors.</u> Associate Professor David Swain, Dr Maxine Campbell, and Dr Judith MacDonald, Department of Societies and Cultures

<u>Funding.</u> The researcher is the recipient of a Bryant Postgraduate Research Scholarship. A condition of this scholarship is that the recipient undertakes a postgraduate research project investigating an area of life within the University of Waikato halls of residence. Other than this stipulation the scholarship providers have no influence on the development of the research project, nor do they claim any ownership of the research findings.

Justification and Description of the Research Project. The project will investigate the relationship between student culture and binge drinking culture, and the impact that these cultures have upon resident student drinking behaviours at The University of Waikato halls of residence. In New Zealand, four quantitative studies have been undertaken evaluating tertiary student drinking behaviour. The findings of all four studies revealed that living in a hall of residence was a significant predictor of excessive alcohol use. This project seeks to complement the existing studies by means of a qualitative investigation of halls of residence student

alcohol use from the perspective of both hall students and staff. Attention will be given to exploring students' understanding of binge drinking culture and, conversely, safe drinking practices. It will also seek to identify influencing factors from both within and outside the halls of residence environment that support, or challenge the establishment and maintenance of binge drinking culture. This research will add a human face to the existing quantitative data, allowing a more nuanced understanding of the issue than is possible through quantitative methods alone. A detailed list of the research aims is given in the Appendix. It is envisaged that the data obtained from investigating the research aims will contribute to the development of future alcohol harm minimisation strategies within the halls of residence setting.

Data Collection.

A combination of both qualitative and quantitative research methods will be utilised during the three stages of the data collection process. The research population will be drawn from the managers, staff, and students living on campus at the three fully-catered halls of residence at The University of Waikato: Bryant Hall, Student Village and College Hall. In all, this comprises of a total research population of 800 students and 30 staff.

During the first stage of data collection eleven focus groups and twelve indepth interviews were undertaken.

This application applies to the second stage of data collection involving the distribution of self-completion questionnaires to 800 resident students. The procedures for administering the questionnaire are outlined below.

The third stage of data collection will involve five focus groups and six follow-up in-depth interviews. A time line outlining the three data collection stages is given in the Appendix.

Consultation Regarding The Distribution of Questionnaires.

The researcher has discussed the issue of questionnaire distribution with the Group Manager of Student Services, the Residential Manager and secretary of each hall of residence, and with a number of resident students during the first stage.

These discussions resulted in a consensus that if the questionnaires were initially delivered *en masse* to residents in their blocks, then it was highly likely that the questionnaires would become a focus of discussion and that residents were likely to ask each other how they had responded to particular questions. A number of the residents reported that if they had to complete the questionnaire with friends around them they were unlikely to be fully honest in responding to some questions or alternatively they could be prone to exaggerating some of their behaviors.

Procedures for Distributing Questionnaires.

It was decided that the best way to distribute the questionnaires would be to implement a two stage process.

The first stage of the questionnaire distribution would last two days.

During this time the researcher would administer the questionnaire from the hall dining room area (see below).

On the third day a questionnaire with an attached introductory letter and information sheet would be sent to resident students who had not participated in the survey, inviting them to complete the questionnaire. During this second stage, residents would have three days to complete the questionnaire and return it to the hall office (see below).

Stage One Dining Room Distribution.

Both students and staff reported that meal periods were an ideal time to complete a questionnaire. Almost all hall students enter the dining room on a daily basis to have a meal and/or to check their mail. Having the researcher in the dining room during these times would allow the

researcher an opportunity to invite residents to participate in the study and answer any questions residents may have about the study.

All residents undertaking the survey in the dining room area will be given an information sheet (see Appendix) and either a drinkers' questionnaire or a non-drinkers' questionnaire (see Appendix). Residents will be asked to complete the questionnaire at the back of the dining room area where there is space and privacy.

Chocolate Fish Reward and I-Pod Competition.

Once residents have completed the survey they will place their questionnaire in a locked survey box, be given a chocolate fish as a thank you, and will be offered the opportunity to enter into a competition to win an I-pod music player. The researcher will have a list of hall residents and if residents wish to enter into the I-pod competition their name will be highlighted on this list. The information sheet reassures residents that it will not be possible to link students from the list with any completed questionnaires. The value of having a list of hall residents is that it stops residents from completing more than one questionnaire to enter into the I-pod competition (or to get a second chocolate fish). It also provides a record of residents who have participated in the survey and thus identifies those residents who require the stage two follow-up.

Stage Two Mailed Questionnaire.

On the third day an invitation to participate in the survey (see Appendix) will be sent to residents who have not yet participated in the survey. This will also include a copy of the questionnaire and information sheet. These letters will be delivered through the hall internal mail system. Residents receiving the invitation letter will be given three days to complete the questionnaire and place it into the locked survey box held in the hall office. Residents who complete the questionnaire will be given a chocolate fish by the hall secretary and invited to enter into the I-pod competition. At the end of the fifth day the survey will close.

Researcher In-Hall Support Person.

In consultation with the Residential Managers and the Group Manager of Student Support Services, it was decided that one designated residential staff member at each hall will support the researcher during the questionnaire distribution process. This staff member will join the researcher while he administers the questionnaires in the dining room area and being a familiar person to the students can help with any queries students may have about the survey.

The Timing of Questionnaire Distribution across Halls.

It is envisaged that the researcher will distribute questionnaires starting in College Hall on a Sunday and a Monday, followed by Student Village on a Tuesday and a Wednesday finishing with Bryant Hall on a Thursday and a Friday.

Questionnaire.

Copies of the drinkers' questionnaire and the non-drinkers' questionnaire are given in the Appendix. The drinkers' questionnaire takes approximately ten minutes to complete and the non-drinkers' questionnaire approximately five minutes.

Procedures for Storing Personal Information and Other Data.

Completed questionnaires will be held by the researcher in a secure filing cabinet in his office at the University of Waikato. The survey data will be loaded onto the researcher's password protected lap-top computer and analysed using the computer software program SPSS.

Ethical and Legal Issues.

Access to participants. This issue has been addressed through meetings with the hall Residential Managers and the Group Manager of Student Support Services.

Informed consent. An information sheet will be given to all questionnaire participants with the questionnaire.

Potential risk to participants. The topic of alcohol can be potentially sensitive and the questionnaire could bring up distressing memories.

For this reason the contact details of the University counselling service is provided at the end of the questionnaire. .

Publication of findings. The research findings will be published as part of the PhD thesis. It is envisaged that a number of journal articles may also be published from the research.

Conflicts of Interest. The researcher is currently employed part-time in the position of Residential Manager of Orchard Park self-catered halls of residence on campus at The University of Waikato. As the manager of Orchard Park the researcher does not have any responsibility for, or contact with, the resident students of the three large catered halls of residence involved in the research project. The researcher does however have a collegial relationship with the managers of the three halls involved in the study. The researcher will need to be clear when meeting with the three hall managers, whether he is meeting with them to discuss research matters, or meeting to discuss collegial hall management matters.

Intention to pay participants. Students will not be paid for undertaking the questionnaire but a chocolate fish will be given to thank them for their time. Students will also be invited to enter into a competition to win an I-pod music player. One I-pod player will be available to be won at each of the three halls of residence. Student Support Services is supplying the I-pods and the chocolate fish.

Ethical Statement.

(Information Sheet)

The University of Waikato Halls of Residence Alcohol Research Project

Questionnaire Information Sheet

Kia ora, my name is Brett McEwan. I am a PhD student in the Department of Societies and Cultures at The University of Waikato. I am undertaking a study of student drinking culture and student culture more generally at The University of Waikato halls of residence. The aim of this study is to better understand resident student drinking behaviour and to contribute towards the development of future alcohol harm minimisation strategies within the halls of residence setting.

You are invited to take part in this study by completing the enclosed questionnaire that explores resident student drinking patterns and their associated consequences. It also surveys student attitudes towards binge drinking behaviour, the role of alcohol in the development of both student culture and halls of residence culture, and factors outside the halls of residence setting that may impact upon resident student drinking behaviour.

The questionnaire takes approximately 10 minutes to complete. If you are a non-drinker, please ensure you are given the non-drinkers' questionnaire. Your participation in this study is voluntary and you may choose not to answer any particular questions. The questionnaires are anonymous and no individuals will be identified from the survey forms.

A summary of the data gathered from the questionnaires will be presented to interested hall residents towards the end of the semester. The venue and date of this presentation will be advertised in your hall.

This research has been given ethical approval by the FASS Human Research Ethics Committee. Any ethical concerns regarding the research should be sent to the FASS Human Research Ethics Committee secretary at charl@waikato.ac.nz.

Along with being a PhD student in the Department of Societies and Cultures, I am

also the manager of Orchard Park halls of residence at the University of Waikato.

While I am familiar with the three halls of residence involved in the research

project, I have no direct role in their management or in any resident student

affairs.

You may contact me at any time on 07 8384466 ext 6003 if you have any further

questions or wish to withdraw from the study up to a week after submitting the

questionnaire. Alternatively, you can contact the researcher's supervisors Dr

Maxine Campbell or Dr David Swain on 07 856 2889.

Once you have completed the questionnaire please place it in the box marked

"Survey" in the dining room or in your hall office. You will be given a chocolate

fish to thank you for your time. You also have the opportunity to enter a

competition to win an MP3 player supplied by Student Services valued at \$54.00.

The staff member monitoring the survey will ask if you wish to have your name

highlighted on a hall residence list. There is no way that any name identified on

the hall list can be associated with any particular survey form.

There is one MP3 player to be won at each hall of residence and all resident

names highlighted on the residence list will be entered into the draw. The draw

for the MP3 player will be held during an evening meal in the dining room at a

date to be advertised.

If, after completing the questionnaire you have concerns about your drinking, we

recommend you make contact with the campus Student Counselling or Medical

services (ph 838 4201).

Thank you for your time on this matter.

Brett McEwan, PhD student.

Department of Societies and Cultures

The University of Waikato

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APPENDIX D: Phase Three Focus Group and In-Depth Interviews Ethical Approval Application

University of Waikato Faculty of Arts and Social Sciences

Human Research Ethics Committee Application for Ethical Approval

Stage Three: Six Focus Group Interviews and Six In-depth Interviews

Brett McEwan
PhD Student
Department of Societies and Cultures

Contact at: bjmcewan@waikato.ac.nz

Phone: 07 838 4466 ext 6003

September 2006

Name of Researcher. Brett McEwan.

Department of Researcher. Societies and Cultures

<u>Title of Research Project</u>. Student Culture and Binge Drinking. An investigation of the relationship between student culture and binge drinking behaviour as it is manifested in the lived experiences of the University of Waikato halls of residence student population.

Status of the Research Project. The researcher has previously undertaken focus group and in-depth interviews and administered a self-completion questionnaire. The aim of this Ethics Application is to gain approval to undertake a further six focus group interviews and six follow-up in-depth interviews. This second round of focus group and in-depth interviews will provide the researcher with an opportunity to clarify and consolidate the results of the recent questionnaire survey with hall students and staff.

<u>Supervisors.</u> Associate Professor David Swain, Dr Maxine Campbell, and Dr Judith MacDonald, Department of Societies and Cultures

<u>Funding.</u> The researcher is the recipient of a Bryant Postgraduate Research Scholarship. A condition of this scholarship is that the recipient undertakes a postgraduate research project investigating an area of life within the University of Waikato halls of residence. Other than this stipulation the scholarship providers have no influence on the development of the research project, nor do they claim any ownership of the research findings.

Justification and Description of the Research Project. The project will investigate the relationship between student culture and binge drinking culture, and the impact that these cultures have upon resident student drinking behaviours at The University of Waikato halls of residence. In New Zealand, four quantitative studies have been undertaken evaluating tertiary student drinking behaviour. The findings of all four studies revealed that living in a hall of residence was a significant predictor of

excessive alcohol use. This project seeks to complement the existing studies by means of a qualitative investigation of halls of residence student alcohol use from the perspective of both hall students and staff. Attention will be given to exploring students' understanding of binge drinking culture and, conversely, safe drinking practices. It will also seek to identify influencing factors from both within and outside the halls of residence environment that support, or challenge the establishment and maintenance of binge drinking culture. This research will add a human face to the existing quantitative data, allowing a more nuanced understanding of the issue than is possible through quantitative methods alone. A detailed list of the research aims is given in the Appendix. It is envisaged that the data obtained from investigating the research aims will contribute to the development of future alcohol harm minimisation strategies within the halls of residence setting.

Data Collection.

A combination of both qualitative and quantitative research methods will be utilised during the three stages of the data collection process. The research population will be drawn from the managers, staff, and students living on campus at the three fully-catered halls of residence at The University of Waikato: Bryant Hall, Student Village and College Hall. In all, this comprises of a total research population of 800 students and 30 staff.

During the first stage of data collection eleven focus groups and twelve in-depth interviews were undertaken.

During the second stage of data collection a self-completion questionnaire was administered to 800 resident students.

This application applies to the third stage of data collection and involves six focus group interviews and six follow-up in-depth interviews. As in the first stage of data collection the focus group interviews will include one residential manager group, two residential staff groups, and three residential student groups. The six follow-up in-depth interviewees will be chosen from the original twelve stage one in-depth interviewees. The procedures for undertaking these interviews are summarised below. A

time line outlining the three data collection stages is given in the Appendix.

Procedures for Recruiting Focus Group Participants.

Residential Managers Group (x1). In March 2006 the researcher undertook a focus group interview with the three hall residential managers. A letter of invitation will be given to the residential managers inviting them to participate in a second focus group interview (see Appendix), along with a focus group information sheet and consent form (see Appendix). Throughout the year the researcher has maintained contact with the managers regarding the research project and all three hall managers have indicated their support of the study.

Residential Staff Group (x2). In March 2006 the researcher undertook a focus group interview with nine residential staff. A letter of invitation will be sent to each residential staff member inviting them to participate in a focus group interview (see Appendix), along with a focus group information sheet and consent form (see Appendix). As in the March group, six to nine interested staff will be selected for each of the two focus groups based upon a balance of gender, age, staff experience and hall. It would be ideal to have at least two staff from each of the three halls in each group. Residential staff who participated in the March focus group will be eligible to participate in the October group, though their numbers will be limited to no more than four persons per focus group.

Resident Students Group (x3). Three student focus group interviews will be undertaken with one group from each of the three halls of residence. Following the same procedures used in April, the researcher will hold an information session in each of the three halls of residence dining hall during meal time. A brief outline of the research project will be discussed and an invitation offered to students who may wish to be part of in the hall focus group. Names will be taken from students who indicate an interest

in participating. All interested students will be sent an invitation letter (see Appendix), a focus group information sheet and consent form (see Appendix). Three male residents and three female residents will be randomly selected to participate in each hall focus group.

Procedures in which the focus group participants will be involved.

The interviews will be held in the students' halls of residence, using the hall meeting room. Each interview will take approximately 40 minutes. The interview will be tape-recorded and be guided by open-ended questions. At the end of the interview, information identifying the oncampus counselling service will be made available to the students (should any personal issues arise during the course of the interview).

Procedures for Recruiting Six In-depth Interview Participants.

During June and July this year the researcher undertook twelve in-depth interviews with selected residential students. Four students were chosen from each of the three halls of residence including one non-drinker, one lighter drinker, and two heavier drinkers. Across the twelve interviews, students were selected to provide a balance of gender, age, and number of years at university. At the end of the interviews the researcher asked interviewees if they would be interested in participating in a follow-up interview later in the year. All twelve interviewees indicated they would be happy to be approached for a follow-up interview depending upon availability.

The researcher will send an email to the original twelve interviewees asking if they would be interested and available to participate in a follow-up interview. A copy of the information sheet and consent form will be included with the email (see Appendix). The six interviewees will again be selected to provide a balance of the categories listed in the previous paragraph.

Procedures in which the in-depth interview participants will be involved. The interviews will be held in the students' halls of residence, using the hall meeting room. Each interview will take approximately 40 minutes.

The interview will be tape-recorded and be guided by open-ended questions. At the end of the interview, information identifying the on-campus counselling service will be made available to the students should any personal issues arise during the course of the interview.

Focus Group and In-depth Interview Questions.

During both the focus group and in-depth interviews, participants will be asked to discuss what they think of the results gained from the questionnaire survey administered at Student Village, College Hall, and Bryant Hall. The aim of these discussions is to gain both a student and a staff perspective of the survey results. The researcher will present a section of the survey results to each group/interview and use open ended questions to stimulate discussion.

Procedures for Storing Personal Information and Other Data.

Completed questionnaires will be held by the researcher in a secure filing cabinet in his office at the University of Waikato. The survey data will be loaded onto the researcher's password protected lap-top computer and analysed using the computer software program SPSS.

Ethical and Legal Issues.

Access to participants. This issue has been addressed through meetings with the hall Residential Managers and the Group Manager of Student Support Services.

Informed consent. An information sheet will be given to all questionnaire participants with the questionnaire.

Potential risk to participants. The topic of alcohol can be potentially sensitive and the questionnaire could bring up distressing memories.

For this reason the contact details of the University counselling service is provided at the end of the questionnaire. .

Publication of findings. The research findings will be published as part of the PhD thesis. It is envisaged that a number of journal articles may also be published from the research.

Conflicts of Interest. The researcher is currently employed part-time in the position of Residential Manager of Orchard Park self-catered halls

of residence on campus at The University of Waikato. As the manager of Orchard Park the researcher does not have any responsibility for, or contact with, the resident students of the three large catered halls of residence involved in the research project. The researcher does however have a collegial relationship with the managers of the three halls involved in the study. The researcher will need to be clear when meeting with the three hall managers, whether he is meeting with them to discuss research matters, or meeting to discuss collegial hall management matters.

Intention to pay participants. Students will not be paid for undertaking the questionnaire but a block of chocolate will be given to thank them for their time.

Ethical Statement.

The researcher will follow the ethical principles of the Sociological Association of Aotearoa (New Zealand) and The University of Waikato Ethical Conduct in Research Guidelines (Human Research). These ethical principles will be maintained with integrity throughout all stages of the research project. If any unanticipated ethical issues arise, then the researcher will bring these issues back to his supervisors and the Faculty of Arts and Social Sciences Ethics Committee (Human Research).

Applicant's signature:	Date
------------------------	------

(Residential Manager Focus Group Invitation Letter)

27.09-06

Dear

As a further part of my PhD study I would like to conduct a focus group discussion with you and your colleagues to discuss issues arising from the findings of the recent alcohol survey undertaken at Student Village, College Hall, and Bryant Hall.

This focus group discussion will provide insights in to the role alcohol plays in the life of resident students and also the impact alcohol use may be having upon the halls of residence community and residential staff.

Please find enclosed an information sheet and consent form for participation in the focus group. If you are interested in the focus group please sign and return the consent form in the self-addressed envelope. All comments shared within the focus group will remain anonymous and individual Residential Managers will not be identified in the research report.

Once the consent form has been signed and returned you have the right to withdraw from the focus group at any time prior to the commencement of the focus group and at any stage of the process.

Within the next five working days I will contact you to arrange an appropriate time and venue for the proposed focus group. I hope this provides you with the information that you need, but if you have any queries or questions please to not hesitate to contact me on (07) 838 4466 ext 6003.

Thank you for your time

Brett McEwan (M.Soc.Sci).

Dept of Societies and Cultures

The University of Waikato

The University of Waikato Halls of Residence Alcohol Research Project

Information Sheet

Kia ora, my name is Brett McEwan. I am a PhD student in the Department of Societies and Cultures at The University of Waikato. I am undertaking a study of student drinking culture and student culture more generally at The University of Waikato halls of residence. The aim of this study is to better understand resident student drinking behaviour and to contribute towards the development of future alcohol harm minimisation strategies within the halls of residence setting.

You are invited to take part in this study by participating in a focus group which will discuss the results of the recent alcohol survey undertaken at Student Village, College Hall, and Bryant Hall. This group discussion will provide the researcher an opportunity to gain a residential staff perspective of the survey results.

If you agree to take part in this study you will be asked to participate in an interview taking approximately 40 minutes of your time. This interview will be held at ***** halls of residence and a block of chocolate will be provided to thank you for your time.

Your participation in this study is voluntary. You may withdraw from the study up to three weeks after your interview. You may refuse to answer any particular questions. All comments shared in the interview are confidential. No interview participants will be individually identified in any of the research writings. If you would like a summary of the data gathered in this interview or of the findings of the research project, this can be supplied.

Along with being a PhD student in the Department of Societies and Cultures, the researcher is also the manager of Orchard Park halls of residence situated oncampus. While the researcher is familiar with the other three halls of residence involved in the study, he has no role in there management and all interview data is confidential.

You may contact the researcher at any time on 07 8384466 ext 6003 if you have any further questions or contributions. Alternatively, you can contact the

researcher's supervisor, Dr Maxine Campbell on 07 856 2889.

This research has been given ethical approval by the FASS Human Research

Ethics Committee. Any complaints regarding the research should be sent to the

FASS Human Research Ethics Committee secretary at charl@waikato.ac.nz.

Thank you for the time you have taken to read this.

Brett McEwan (M.Soc.Sci)

Department of Societies and Cultures

The University of Waikato

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CONSENT FORM

Name:	
Date:	
I have read and unde	erstood the information sheet explaining this research project.
I understand that I m	ay withdraw from the research project at any time without
penalty and without	an explanation being required. I agree to maintain the
•	information that arises during the focus group.
_	ate in this research project investigating resident student
	and associated issues at The University of Waikato halls of
residence	
Signed:	
Contact details:	Phone
Contact details.	Cell phone
	Email
NI	
Name interviewer: _	
Data	
Date:	
T (1 1	
_	er requirements as outlined in this Information Sheet and
Consent form	
C:1 I	
Signed Interviewer:	

27.09-06

Dear

As a part of my PhD study investigating alcohol-related issues within The University of Waikato halls of residence, I would like to conduct two focus groups with Residential Assistant staff where we will discuss the results of the recent alcohol use survey undertaken at Student Village, College Hall, and Bryant Hall. I am hopeful that these focus group discussions will provide insight in to the role alcohol plays in the life of resident students and also the impact alcohol use may be having upon the halls of residence community and residential staff. You are invited to take part in this study by participating in a focus group discussion

Enclosed with this letter you will find an information sheet and consent form for participation in the focus groups. If you are interested in participating in one of these focus groups please sign and return the consent form in the self-addressed envelope. Each group is limited to a maximum of nine Residential Assistant staff. All comments shared within the focus group will remain anonymous and individual residential staff will not be identified in the research report.

If you participate in the study you have the right to withdraw from the focus group at any time prior to the commencement of the focus group and at any stage of the process. I will contact the selected group participants and arrange an appropriate time and venue for the proposed focus group.

I hope this provides you with the information that you need, but if you have any queries or questions please to not hesitate to contact me on (07) 838 4466 ext 6003.

Thank you for your time

Brett McEwan (M.Soc.Sci).

Dept of Societies and Cultures

The University of Waikato

27.01-06

Dear Resident Student

As a part of my PhD study investigating alcohol-related issues within The University of Waikato halls of residence, I would like to conduct a focus group discussion with six to eight residents from your hall where we will discuss the results of the recent alcohol use survey undertaken at Student Village, College Hall, and Bryant Hall. I am hopeful that this focus group discussion will provide insight in to the role alcohol plays in the life of resident students.

Enclosed with this letter you will find an information sheet and consent form for participation in the focus group. If you are interested in participating in this focus group please sign and return the consent form in the self-addressed envelope. Places are limited to a maximum of eight residents. All comments shared within the focus group will remain anonymous and individual resident students will not be identified in the research report.

If you participate in the study you have the right to withdraw from the focus group at any time prior to the commencement of the focus group and at any stage of the process. I will contact the eight participants and arrange a meeting time. The venue of the focus group will be in the hall meeting room.

I hope this provides you with the information that you need, but if you have any queries or questions please to not hesitate to contact me on (07) 838 4466 ext 6003.

Thank you for your time

Brett McEwan (M.Soc.Sci).

Dept of Societies and Cultures

The University of Waikato

The University of Waikato Halls of Residence Alcohol Research Project

Information Sheet

Kia ora, my name is Brett McEwan. I am a PhD student in the Department of Societies and Cultures at The University of Waikato. I am undertaking a study of student drinking culture and student culture more generally at The University of Waikato halls of residence. The aim of this study is to better understand resident student drinking behaviour and to contribute towards the development of future alcohol harm minimisation strategies within the halls of residence setting.

You are invited to take part in this study by participating in a focus group which will discuss the results of the recent alcohol use survey undertaken at Student Village, College Hall, and Bryant Hall. This group discussion will provide the researcher an opportunity to gain a student perspective on the survey results.

If you agree to take part in this study you will be asked to participate in an interview taking approximately 40 minutes of your time. This interview will be held at ***** halls of residence and a block of chocolate will be provided to thank you for your time.

Your participation in this study is voluntary. You may withdraw from the study up to three weeks after your interview. You may refuse to answer any particular questions. All comments shared in the interview are confidential. No interview participants will be individually identified in any of the research writings. If you would like a summary of the data gathered in this interview or of the findings of the research project, this can be supplied.

Along with being a PhD student in the Department of Societies and Cultures, the researcher is also the manager of Orchard Park halls of residence situated on-campus. While the researcher is familiar with the other three halls of residence involved in the study, he has no role in there management and all interview data is confidential.

You may contact the researcher at any time on 07 8384466 ext 6003 if you have any further questions or contributions. Alternatively, you can contact the researcher's supervisor, Dr Maxine Campbell on 07 856 2889.

This research has been given ethical approval by the FASS Human Research Ethics Committee. Any complaints regarding the research should be sent to the

FASS Human Research Ethics Committee secretary at charl@waikato.ac.nz.

Thank you for the time you have taken to read this.

Brett McEwan (M.Soc.Sci)

Department of Societies and Cultures

The University of Waikato

CONSENT FORM

Name:							
Date:							
I have read and understood	the info	rmation	sheet e	xplaini	ng this r	esearch	project.
I understand that I may with	ıdraw fr	om the 1	esearch	n projec	ct at any	time wi	thout
penalty and without an expl	anation	being re	quired.				
I consent to participate in th	is resea	rch proj	ect inve	estigatir	ng reside	ent stude	ent
drinking behaviours and ass	ociated	issues a	t The U	Iniversi	ity of W	aikato h	alls of
residence							
Signed:							
Contact details: Phon	ne						
Cell _I	ohone _						
Emai	1						
To help ensure that the student	ts intervi	iewed are	a balan	ced rep	resentati	on of the	hall
population please circle the car	tegories	listed be	low.				
Conton	M-1-		F1	_			
Gender:	Male 17		Femal	e 20	21	22	23
Age Years:	17	10	19	20	21	22	23
	Zealand	student		Intern	ational S	Students	
Year at University:		2 nd	3 rd		5 th +	,	
Do you drink alcohol:	Yes		No				
•							
(Interviewer to complete be	low)						
Name of Interviewer:Bre		wan	Date	e:			
I accept the researcher requi				this Inf	ormatio	n Sheet	and
Consent form: Signed Inte							

The University of Waikato Halls of Residence Alcohol Research Project

Information Sheet

Kia ora, my name is Brett McEwan. I am a PhD student in the Department of Societies and Cultures at The University of Waikato. I am undertaking a study of student drinking culture and student culture more generally at The University of Waikato halls of residence. The aim of this study is to better understand resident student drinking behaviour and to contribute towards the development of future alcohol harm minimisation strategies within the halls of residence setting.

You are invited to take part in this study by participating in an interview where we will discuss the results of the recent alcohol use survey undertaken at Student Village, College Hall, and Bryant Hall. This interview will enable the researcher to gain a student perspective of these questionnaire results.

If you agree to take part in this study you will be asked to participate in an interview taking approximately 40 minutes of your time. This interview will be held at ***** halls of residence and a block of chocolate will be provided to thank you for your time.

Your participation in this study is voluntary. You may withdraw from the study up to three weeks after your interview. You may refuse to answer any particular questions. All comments shared in the interview are confidential. No interview participants will be individually identified in any of the research writings. If you would like a summary of the data gathered in this interview or of the findings of the research project, this can be supplied.

Along with being a PhD student in the Department of Societies and Cultures, the researcher is also the manager of Orchard Park halls of residence situated oncampus. While the researcher is familiar with the other three halls of residence involved in the study, he has no role in there management and all interview data is confidential.

You may contact the researcher at any time on 07 8384466 ext 6003 if you have any further questions or contributions. Alternatively, you can contact the

researcher's supervisor, Dr Maxine Campbell on 07 856 2889.

This research has been given ethical approval by the FASS Human Research

Ethics Committee. Any complaints regarding the research should be sent to the

FASS Human Research Ethics Committee secretary at charl@waikato.ac.nz.

Thank you for the time you have taken to read this.

Brett McEwan (M.Soc.Sci)

Department of Societies and Cultures

The University of Waikato

INTERVIEW CONSENT FORM

(Please complete)

Name:								
					Dat	e:		
I have read and unde	erstood	the info	rmatior	sheet e	explaini	ng this	research	project.
I understand that I n	nay witl	hdraw fi	rom the	researc	h proje	ct at any	time w	ithout
penalty and without	an exp	lanation	being r	equired	l.			
I consent to particip	ate in th	nis resea	irch pro	ject inv	estigati	ng resid	ent stud	ent
drinking behaviours	and ass	sociated	issues	at The U	Univers	ity of W	aikato l	nalls of
residence								
Signed:								
Contact details:	ne			Cell p	hone			
Email								
Gender:	17	Male		Fema		22	22	24.
Age Years: Residence:	17	18 Zealand	19	20	21 Intern	22 national S	23 Students	24+
Year at University:	New	1 st	2 nd	3 rd		5 th +	students	
Do you drink alcoho	ol:	Yes		No				
(Interviewer to com	nlete he	olow)						
Name of Interviewe	_		wan	Dat	to.			
I accept the research						formatic	n Sheet	and
Consent form: Sig	_			iiiicu ili	uns III.	omanc	ni blicet	, and
Consent form. Sig	neu III	CIVICWE	1.					

APPENDIX E: Drinkers' Survey Questionnaire

	HALLS ALCOHOL				<u>Y</u>		
	Please complete this questionnair	e if you ha	ve consu	med alcoho	l in the p	oast yea	ar.
١	All survey responses are confidenti Please answer the What we learn from your answers will be ve	questions a	s honestly a to this curre	as possible.	-	•	future
	What type of alcoholic drink do you usually drink, i.e. your most common drink? (please tick one box) If you have not consumed alcohol in the past year please request the 'Non-drinkers' questionnaire.	Bccr 01	Wine 02	Pre-mixed Mix Spirits Spi	-	o favourite Orink	
?	How often do you have a drink containing alcohol? (please tick one box)	Never	Less than monthly			or more week	
	We are interested in finding out w	hat students	do to keep	safe while dri	nking alco	hol.	
	ow often in the past SIX MONTHS have you have undertaken the following safe drinking practices when drinking:	Never	Rarely	Sometimes	Often	No Applica	
3.	Eaten food before going drinking?						$\left]_{05}\right]$
4.	Consumed non-alcoholic drinks (including water) between alcoholic drinks?	01	02	03	01]05
5.	Taken a taxi or bus home from town?				04		\bigcup_{05}
6.	Stayed with friends at all times when drinking?	01			04		
7.	Being careful not to leave drinks unattended due to drink spiking concerns?	01	02	03	04]05
8.	Stopped drinking alcoholic drinks when you feel you have had enough?				04		
9.	Listened to friends when they tell you that you have had enough to drink?	01	02		04		

THOUGHTS ON DRINKING

We are interested in knowing your thoughts on the following statements (Please tick if you agree, disagree or neither agree/disagree with the below statements).

		Disagree	Neither agree or disagree	Agree
10.	Alcohol helps me wind down and relax.	01		03
11.	I enjoy the buzz I get when I drink alcohol.	01		03
12.	When I drink it is easier to meet and get to know people.	01	02	
13.	It's never OK to get drunk.	01	02	03
14.	I know what a Standard Drink is.	01	02	03
15.	To stay in control of my drinking I count the number of drinks I have.	01	02	03
16.	I try not to drink so much that I will forget what I was doing or what happened.	01	02	03
17.	Its OK to get drunk as long as it's not every day.	01	02	03
18.	I usually know beforehand if I am going to get drunk.	01	02	03
19.	I don't drink alcohol for the intoxicating effect; I drink to join in with social and/or sporting activities.	01	02	03
20.	I drink to get drunk.	01	02	03
21.	It is okay for a male to get very drunk/wasted.	01	02	03
22.	It is okay for a female to get very drunk/wasted.	01	02	03
23.	Binge-drinking is measured by how often you drink.	01	02	03
24.	Binge-drinking is measured by how much you drink.	01	02	03
25.	Binge-drinking is measured by the reasons you drink.	01	02	03
26.	Binge-drinking is drinking to get drunk.	01	02	03

THOUGHTS ON BEING A STUDENT AND DRINKING

Please tick if you agree, disagree or neither agree/disagree with the below statements.

27.	Before Coming to University Before I came to university, I had a good idea of what university life would be like. Before I came to university I thought	Disagree	Neither agree or disagree	Agree 03
	university students partied a lot and drank a lot of alcohol.	01	02	03
29.	Now That I Am At University I think drinking alcohol is an important part of student culture.	01	02	03
30.	I think drunkenness is accepted by most students.	01	02	03
31.	I think the halls of residence rules restrict my drinking.		02	03
32.	I don't think you have to drink alcohol to fit in with others in a hall.	01	02	03
33.	I think drunkenness is very common in pubs on or around campus.	01	02	03
34.	I think people out in the community believe all university students drink a lot of alcohol.	01	02	03

EFFECTS

We are interested in knowing what effect others' drinking may have had on you?

	In the past SIX MONTHS as a result of OTHERS' DRINKING:	Never	1-2 Times	3-5 Times	On average Monthly	On average Weekly	
35.	How often have you been woken up by others returning home from town in the early hours of the morning? (Please tick one box).		02		04	05	
36.	How often have you had to 'baby-sit' a drunken student?	01	02	03	04	05	
37.	How often have you felt unsafe in the Hall because someone else was under the influence of alcohol?	01	02	03	04	05	
38.	If you have experienced any of the above effects (Q.35-37), have you been bothered by them e.g. upset or annoyed.	No S	Somewhat 02	Yes 03	Not applicab	le.	

DRINKING LIMITS

We are interested to know what indicators you might use to identify when to stop or slow down your drinking?

39.	When I start to feel a little drunk and tipsy. (please tick one box).	I will usually STOP drinking	I will usually SLOW my drinking	It does not influence my drinking	Not Applicable
40.	When I start to feel like vomiting.	01		03	04
41.	When I start to get too emotional.	01	02	03	04
42	When I start to feel aggressive or angry.	01	02	03	04
43.	When my head or the room starts spinning.	01	02	03	04
44.	When I reach my limit of counted drinks.	. Ol	0.2	03	04
45.	When I feel extremely tired and want to sleep.	01		03	
46.	When the night is boring and/or no fun.	01	02	03	04
47.	When I start to lose the ability to talk properly.	01	02	03	04
48.	When I start to lose the ability to walk properly	0 <u>l</u>	02	03	04
49.	When I vomit.	01	02	0,3	04
50.	My friends tell me to stop drinking.	. 01	02	03	04
51.	When I know I am drunk.	. 01	02	03	04
52.	When I know I am very drunk/wasted.		02	0,3	[H

ALCOHOL-RELATED EFFECTS

We are interested in knowing what effects you may have experienced because of drinking over the past six months.

	In the past SIX MONTHS:	Never	1-2 Times	3-5 Times	On average Monthly	On average Weekly
53.	How often have you been unable to pay your bills because you have spent too much money on alcohol?	[] [0]		03	04	05
54.	How often have you vomited ?	01	02	03	04	05
55.	How often have you physically hurt yourself in some way because of your drinking, eg. fallen over, etc.?	01	02	03	04	05
56.	How often have you been involved in a physical fight or behaved aggressively because of your drinking?	01	02	03	04	05
57.	How often have you passed out?	01		03	04	05
58.	How often have you ended up in a sexual situation you weren't happy about as a result of your drinking?	01			04	
59.	How often have you engaged in unplanned sexual activity as a result of your drinking?	01	02	03	04	05
60.	How often have you not used contraceptive protection when engaging in sexual activity as a result of your drinking?	01	02	03	04	05
61.	How often have you gotten into a vehicle with a driver who had too much to drink ?	01	02		04	05
62.	How often have you driven a vehicle while intoxicated from alcohol?	01	02		04	05
63.	How often have you missed a class because of your drinking?	01		03		
64.	How often have you failed to complete an assignment on time or do as well as you could have because of your drinking?	01	02	03	04	05
65.	How often have you had an impaired performance during a test or exam because of your drinking?	01	02	03	04	05

DRINKING

We are interested in finding out about how many Standard Drinks you have.

330 Bee		330ml Beer	750ml Beer	60ml Wine	750ml Wine	330ml KGB	330ml Cruiser	330ml JB	440ml Wood	330 Smirnoff	Double	
1sd		1sd	2.4sd	1sd	7.7sd	1.3sd Standar	1.3sd	1.3sd	1.7sd	1.9sd	Spirits 2sd	Spirits 37sd
					3 u	Standar	u Dimi					
							Drinks					
66.	How man	you hav					1 or 2	3 or 4	5 or	6 :]	7 to 9 	0 or more *
	you are dr *If 10 or r		ase specif	y how r	nany.		01	L02		J ₀₃	L04	05
67	On a muia			l 4	:e		Hours					
67.	On a typic				100 01		l hour	2 hours	3 hou	1	1 hours	5 or more *
	*If 5 or m	ore pleas	se specify	how m	any.		01	02		103	Ŭ-104	05
68.	How man	v Standa	nd Dainka	aantair	ina.		Drinks	2 1	5 or	, ,	7 to 9 1	0 or more *
00.	alcohol di	d you ha					l or 2	3 or 4	3 01	1	7 tis 9 1	o or more
	*If 10 or i		ase specif	y how r	nany.		. 01	02		103	0-1	05
69.	On your la	set drink	ina oceasi	ion who	t period		Hours I hour	2 hours	3 hou		hours	5 or more *
07.	of time di			ion wha	n period				3 1100]	+ Hours	
	*If 5 or m	ore pleas	se specify	how m	any.		U 01	U 02		103	U 04	05
70.	During the				largest							
	number of consumed							Number of Please estin		rinks		

THE SETTING IN WHICH DRINKING OCCURS We are interested in finding out where and when drinking occurs.

71	Frequency: In what setting do you most often drink alcohol (please tick only one box)?	In my In my In a In a family In my friends nightclub sports home Hall flat or pub club Elsewhere
72	Amount: In which of these settings do you drink the most amount of alcohol (please tick only one box)?	01 02 03 04 05 06
73.	When you are drinking in the hall how	Never 25% 50% 75% Always
	often would you leave the hall and continue socialising elsewhere, i.e. into town, the Don, or a friend's flat, etc?	of the time of the time of the time 0 0 0 0 0 0 0 0 0 0
74.	If you left the hall and went into town, how many Standard Drinks would you typically have in town? *If 10 or more please specify.	N/A None 1 or 2 3 or 4 5 or 6 7 to 9 more*
75.	If you left the hall and went to the Don bar on campus, how many Standard Drinks would you typically have at the Don?	N/A None 1 or 2 3 or 4 5 or 6 7 to 9 more*
	*If 10 or more please specify.	
76	In a typical week (if you are drinking), on which days do you usually drink alcohol (tick all days that apply)	Monday Tuesday Wednesday Thursday Friday Saturday Sun
77	In a typical week, on which day would your biggest drinking occasion usually occur (please tick one)	Monday Tuesday Wednesday Thursday Friday Saturday Sun

FINAL ALCOHOL QUESTIONS

78. 79. 80.	How often do you have six or more standard drinks on one occasion? How often would you get drunk? How often during the last year have you been unable to remember what happened the night before because you had been drinking?	Less th Never Monti		eekly Daily 04 05 04 05 04 05
81	Since you have been at university do you think your drinking has decreased, stayed the same, or increased?	Decreased 01	Stayed the same	Increased
82	Do you think your non-student friends back home drink more alcohol, less alcohol, or about the same amount of alcohol as students here at university?	Friends Drink less	Drink the same	Drink more
83.	Do you enjoy your drinking? (please tick one box)	Yes 01	No O2	
84.	Do you consider yourself to be a binge-drinker?	Yes	☐ to thi	u answered "No" s question please to question 86
85.	If you answered "Yes" to the previous question (Q.84) would the availability of resources supporting the reduction of binge drinking behaviour be useful to you?	Yes 01	No O2	03

DEMOGRAPHICS

86.	Gender.	Female	Male		
		01	02		
87.	Age. (please write in box)		Years		
00	W1'1		Second Third	Fourth	Graduate
88.	Which year are you currently in? (please tick one box)	Year 01	Year Year 02 03	Year	05
89.	In which Hall do you currently live?	Bryant Hall	College Hall		Student Village
		01	02		03
90.	Which of these ethnicity identities is most appropriate for you? (please choose one)		NZ Both uropean Maori and Pakeha European	Pacific Island People C	Chinese Other*
	*Other (nlease specify)	· · •••••••••••••••••••••••••••••••••••			

Thank you for your participation in this study.

A summary of the research findings will be presented on campus in October.

Posters advertising this presentation will be displayed in your Hall.

If. after completing this survey you have concerns about your drinking, we recommend you make contact with the campus Student Counselling or Medical services (ph. 838 4201).

Please place the completed questionnaire in the box provided in the dining room or office.

To thank you for your time you will be given a chocolate fish and an opportunity to enter a competition to win an MP3 player.

There is one MP3 player to be won at each hall.

APPENDIX F: Non-Drinkers' Survey Questionnaire

HALLS OF RESIDENCE NON-DRINKERS SURVEY

Please complete this questionnaire if you have not consumed alcohol in the past year.

Thank you for completing this questionnaire. We are very interested in getting responses from hall students who do not drink alcohol.

All survey responses are confidential. You will not and cannot be identified personally.

Please answer the questions as honestly as possible.

What we learn from your answers will be very valuable to this current research and will help direct future research.

THOUGHTS ON DRINKING BEHAVIOURS

Although you do not drink alcohol, we are interested in knowing your thoughts on the following alcohol related statements (Please tick if you agree, disagree or neither agree/disagree with the below statements).

		-	Disagree	Neither agree or disagree	Agree
1.	It's never OK to get drunk.	13	01	02	03
2.	I know what a Standard Drink is.	14	01	02	03
3.	It's OK to get drunk as long as it's not every day.	17	01	02	03
4.	It is okay for a male to get very drunk/wasted.	21	01	02	03
5.	It is okay for a female to get very drunk/wasted.	22	01	02	o3
6.	Binge-drinking is measured by how often a person drinks.	23	01	02	03
7.	Binge-drinking is measured by how much a person drinks.	2:1	01	02	03
8.	Binge-drinking is measured by the reasons a person drinks.	25	01	02	03
9.	Binge-drinking is drinking to get drunk.	26	01	02	03

THOUGHTS ON BEING A STUDENT AND DRINKING

Please tick if you agree, disagree or neither agree/disagree with the below statements.

				Neither agree	
	Before Coming to University		Disagree	or disagree	Agree
10.	Before I came to university, I had a good idea of what university life would be like.	27	01	02	03
11.	Before I came to university I thought university students partied a lot and drank a lot of alcohol.	28	01	02	03
12.	Now That I Am At University I think drinking alcohol is an important part of student culture.	29			
13.	1 think drunkenness is accepted by most students.	30	01	02	03
14.	I don't think you have to drink alcohol to fit in with others in a hall.	32	01	02	03
15.	I think drunkenness is very common in pubs on or around campus.	33	01	02	03
16.	I think people out in the community believe all university students drink a lot of alcohol.	34	01	02	03

EFFECTS

We are interested in knowing what effect others' drinking may have had on you?

	In the past SIX MONTHS as a result of OTHERS' DRINKING:		Never	1-2 Times	3-5 Times	On average Monthly	On average Weekly
17.	How often have you been woken up by others returning home from town in the early hours of the morning? (Please tick one box).	35	01	02	03	04	05
18.	How often have you had to 'baby-sit' a drunken student?	36	01	02	03	04	05
19.	How often have you felt unsafe in the Hall because someone else was under the influence of alcohol?	37	01	02	03	04	05
20.	If you have experienced any of the above effects (Q.17-19), have you been bothered by them e.g. upset or annoyed.	38	No S	Somewhat02	Yes 03	Not applicat	ole.

ACTIVITIES, FRIENDS & PRESSURES

21.	This year have you attended any hall organised activities that have included alcohol usage, e.g. hall parties. etc?	91	Yes	No * Please Quest	go to ion 23.
22.	If you answered "Yes" to question 21, did you enjoy the hall organised alcohol activities?	92	Yes 01	No O2	Sometimes 03
23.	This year have you attended any Waikato Student Union organised activities that have included alcohol usage, e.g. orientation, etc?	93	Yes	No *Please q Questi	
24.	If you answered "Yes" to question 23, did you enjoy the Student Union organised alcohol activities?	94	Yes 01	No O2	Sometimes
25.	Do you have friends in the hall who drink alcohol?	95	Yes	No *Please q Questi	
26.	If you answered "Yes" to question 25, do you socialise with your drinking friends while they are consuming alcohol?	96	Yes 01	No U2	Sometimes 03
27.	While fiving in the halls of residence environment have you ever felt pressure from other students to drink alcohol?	97	Yes	No *Please 9 Questi	
28.	If you answered "Yes" to question 25, how often have you felt pressure to drink alcohol?	98	Frequently 01	Periodically	Infrequently 03
29	Do you think the halls of residence organises enough non-alcoholic activities for residents?	99	Yes	No Do	Not Sure
30	Do you think the Waikato Student Union organises enough non-alcoholic activities for students?	100	Yes 01	No O2	Not Sure

31.	What are your reasons for not drinking alcohol? (Please tick appropriate boxes).	101	Religion Prohibits	Health Issues	Social Disapproval	Family Disapproval	Culture Prohibits	Other*	
	*Other (please specify)								
	DEMOGRAPHICS								
32.	Gender.		Female		Male				
		86	L] ₀₁		02				
				1					
33.	Age. (please write in box)	87		Years					
			First	Second	Third	Fourth	Graduate		
34.	Which year are you currently in?		Year	Year	Year	Year	Oradiate		
	(please tick one box)	88							
					0.11		0. 1.		
35.	In which Hall do you currently live?		Bryant Hall		College Hall		Student Village		
		89	01		02		03		
				NZ	Both	Pacific			
36.	Which of these ethnicity identities is		NZ	European	Maori and	Island	cot :	04.5	
	most appropriate for you? (please choose one)	90	Maori	or Pakeha	European 03	People	Chinese	Other*	
	*Other (please specify)	7U							

Thank you for your participation in this study.

A summary of the research findings will be presented on campus in October. Posters advertising this presentation will be displayed in your Hall.

Please place the completed questionnaire in the box provided in the dining room or office.

To thank you for your time you will be given a chocolate fish and an opportunity to enter a competition to win an MP3 player.

There is one MP3 player to be won at each hall.

APPENDIX G: Halls of Residence Alcohol Policy 2006

Alcohol Use in the Halls of Residence

Halls must comply with the University Alcohol Policy (see Official Circular 97/33).

The alcohol policy for the Halls does not attempt to prevent drinking but rather to foster a responsible approach by those who choose to use alcohol.

However, the excessive consumption of alcohol by some residents sometimes disrupts the communal life of the Hall. Residents whose drinking behaviour is clearly causing concern with the Hall will be encouraged to seek assistance to deal with the problem but may also face disciplinary action.

- Providing of Alcohol
 Alcohol may be served at Hall social functions with the approval of the Residential Manager, for example Hall special dinners.
- 2. Resident Usage of Alcohol
 - -Residents may consume alcohol in their rooms. Alcohol may not be consumed outside, or in block communal areas, i.e. stairwells, hallways and kitchenette areas. The Residential Manager may grant an exemption to the consumption of alcohol in communal areas for special occasions for functions.
 - -The consumption of alcohol must conform to the individual Halls 'Party Policy' and to the following regulations:
 - Individuals may not bring on to Hall property, or store, large quantities of alcohol.
 - Kegs, crates, home brewing apparatus, drinking apparatus (including funnels) are prohibited within Hall property.
 - Bottled beer may be prohibited in some Halls for safety reasons.
 - Residents are responsible for the behaviour of their guests.
 - From time to time individual and / or total alcohol bans may be imposed.
 - -Any misuse of alcohol by Hall residents and/or their friends will be dealt with under the 'Resident Misuse of Alcohol Policy'. An individual may be deemed to have consumed too much alcohol where she or he has been drinking and is behaving in one or more of the following ways:
 - being noisy and/or abusive
 - being obstructive to RAs or SRAs or other staff in carrying out of their duties
 - being obstructive to any other person
 - places himself/herself or others at risk in some way through his/her actions
 - damages, or is likely to damage, because of his/her actions or condition, the property of others, or of the Hall

- is in such a condition that they will not or cannot respond to instruction that they are being given by Hall or any other University staff
- causes a mess which needs to be cleaned up by the resident or others

Resident Misuse of Alcohol Policy

This policy is often referred to as the *Alcohol Management Three Strikes Policy*. Alcohol policies for the Halls do not attempt to prevent drinking but rather to foster a responsible approach by those who choose to use alcohol to enhance recreational and social activities.

It is recognized however, that the excessive consumption of alcohol by some residents disrupts the communal life of the Hall and its study environment. It can result in physical risk to residents, both drinkers and non-drinkers, in physical damage and mess and in serious breaches of rules.

Policy:

1. Purpose:

The purpose of this policy is to:

- To moderate the alcohol consumption of residents
- To educate residents in the consumption of alcohol.
- To support an individual's choice not to drink.
- To protect the physical well being of all residents, all who use the Hall, its grounds and the surrounding community.
- To indicate clear boundaries to alcohol use on Hall premises, or by residents, staff and visitors.

2. Guidelines:

- -This policy operates under the University of Waikato's general policy on <u>Alcohol on Campus</u>, the Halls <u>Disciplinary</u> policy and the Halls <u>Alcohol</u> used in Halls of Residence policy.
- -At the start of each academic year the Residential Manager will make all residents aware of the Hall's rules on Alcohol.
- -In the presence of residents, staff, including RAs and SRAs will provide good models of the use of alcohol.
- -Residents may not bring the Hall into disrepute by consuming large quantities of alcohol or by being obviously under its influence in public situations where they are identifiable by others as belonging to a University Hall of Residence.
- 3. Definition of Resident Alcohol Misuse

All incidents, which fit the following categories, are to be reported to the Residential Manager

- -An individual who is deemed to have consumed too much alcohol may face disciplinary action. An individual may be deemed to have consumed too much alcohol where she or he has been drinking and is behaving in one or more of the following ways:
 - -being noisy and/or abusive

- -being obstructive to RAs or SRAs or other staff in carrying out of their duties
- -being obstructive to any other person
- -places himself/herself or others at risk in some way through his/her actions
- -damages, or is likely to damage, because of his/her actions or condition, the property of others, or of the Hall
- -is in such a condition that they will not or cannot respond to instruction that they are being given by Hall or any other University staff
- -causes a mess which needs to be cleaned up by the resident or others

4. Disciplinary Procedures

- -The first report will result in the resident being seen by the Residential Manager. The Residential Manager may give a warning, issued a summary of justice, or refer the matter on to the Hall Disciplinary Committee.
- -A second report will result in the resident being seen by the Residential Manager. The Residential Manager may give a warning, issue summary justice, or refer the matter on to the Hall Disciplinary Committee. At this point the matter may be treated pastorally, if appropriate.
- -A third report will result in the resident being seen by the Residential Manager. Depending on the magnitude of the situation, along with other measures the resident may be referred on to the University Discipline Committee. The resident faces the possibility of having their residency terminated, plus any other measures the University may impose.

Party Policy

The Party policy is administered in conjunction with the Halls <u>Alcohol policy</u>, the Halls <u>Resident Misuse of Alcohol policy</u>, and the Universities <u>Alcohol policy</u>. Policy:

- -At Student Village, Bryant Hall and College Halls no parties are allowed within the blocks at any time. No drinking is allowed in stairwells, hallways or kitchenette/lounge areas. Residents can quietly drink in their rooms with a couple of friends.
- -Excessive noise and/or five or more people consuming alcohol within a room is classified as a party and will be dealt with under the Disciplinary Procedures.
- -At Student Village, Hall Bryant Hall and College Halls parties may periodically be held in a communal area with the Residential Manager's approval. Such parties must be arranged by the Residential Staff and/or the Resident's Association Executive. A Residential Staff member must be present at all times.