

Trust Me, You've Had ENOUGH: The Use of Differential Relationships to Decrease the Likelihood of Binge Drinking in Different Contexts

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For my loving sister,
The one who was always there and always will be.

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Abstract

Counter binge drinking advertisements most commonly feature fear appeals, but this research moves away from this tradition and investigates the potential use of key relationships and binge drinking contexts in young university students' lives in counter binge drinking advertisements. This involved creating advertisements featuring one of three key relationships (either a best friend, mother or bartender) and one of two drinking contexts (either a 21st birthday or a Friday night out) and examining how these advertisements affected young university students' likelihood to binge drink, attitude towards the act of binge drinking, and attitude towards alcoholic products. A between subject factorial design was implemented, and data was collected through the distribution of a survey to 301 participants. Statistical analysis of the data showed that the context shown significantly influences young university students' likelihood of binge drinking and their attitude towards the act of binge drinking, while the relationship shown had a significant effect on their emotional and rational attitudes towards the advertisement. The type of relationship a young university student has with their best friend and mother also affected many of the results, while the gender of the spokesperson caused female university students to develop more negative attitudes towards the act of binge drinking than their male counterparts. Conclusions are drawn based on these results, and the implications for social marketers and the development of counter binge drinking advertisements is finally discussed.

Introduction

Almost like a rite of passage, binge drinking has become a part of the youth culture of New Zealand and is undertaken in a variety of contexts with a range of motivations and outcomes (Patterson, Hunnicutt & Stutts, 1992; Engineer et al., 2003; Coleman & Cater, 2005). The results of a national survey showed that of people aged 18 -24, 44% of men and 24% of women were shown to have dangerous drinking habits (Ministry of Justice, 2013). Both female and male young university students in New Zealand commonly drink 40% more than the proposed limit (4 drinks for women and 6 drinks for men) in a session of drinking (Kypri et al., 2002). Blackouts were reported by one third of the participants in Kypri et al.'s (2002) study, showing the detrimental effect of binge drinking among university students in New Zealand.

Binge drinking is closely related to common health risks, including hangovers, driving while intoxicated, injuries arising from confrontations and unsafe sex (Perkins, 2002; Young et al.,

2005). Unfortunately, many young people believe that the positive benefits of excessive drinking outweigh the negative consequences or risks, while other young people prefer not to think about the risks of binge drinking because it would interfere with their enjoyment of the activity (Patterson, Hunnicutt & Stutts, 1992). To add to this, young people often enjoy engaging in binge drinking behaviour and freely choose to do so (Coleman & Cater, 2005). Young people also do not believe that these outcomes will happen to them personally (Patterson, Hunnicutt & Stutts, 1992). To make matters worse, alcohol advertising companies develop advertisements that encourage the use of alcoholic products and their association with easing social facilitation and increasing one's sexual appeal (McCreanor et al., 2008). Therefore, it is no surprise that binge drinking is a major problem among the youth of New Zealand, and that the Alcohol Advisory Council of New Zealand identified young people as a particular source concern when developing counter binge drinking campaigns (Ministry of Justice, 2013).

Social marketers have utilised many different strategies in an attempt to reduce binge rates among New Zealand youth, such as the use of fear appeals, although few of these strategies have been successful (Chaloupka & Wechsler, 1996; Wolburg, 2001; Agnostinelli & Grube, 2002; Okoro et al., 2004). Government organisations (such as the Alcohol Advisory Council of New Zealand and the New Zealand Transport Agency) have sought to lessen the harm caused by youth binge drinking by designing and implementing advertising campaigns, warning labels, and even using celebrities endorsement. Despite these numerous campaigns, heavy drinking among young people has actually increased in recent years (Marcus, 2000).

Based on this information, this research aims to take a new approach to tackling the issue of excessive binge drinking among the youth of New Zealand as current strategies appear to be relatively futile. This research takes a unique approach, and evaluates the potential use of key relationships and drinking contexts in young people's lives in changing young university students' binge drinking behaviours and attitudes. This approach was taken because previous academic research has shown that young people respond well to communication originating from someone they have a relationship with, especially their friends, but also from parents and authority figures they can relate to (Waring & Sperr, 1982; Beck & Lockhart, 1992; Schulenburg et al., 1999; Wood et al., 2004; Bot et al., 2005). There is also previous academic literature that highlights the importance of the context in which young people choose to drink and the need for more academic research into the influence of drinking contexts (Kraft, 1982; Harford, Wechsler & Seibring, 2002; Neighbors et al., 2005). This research, therefore, combines these two ideas into a unique series of advertisements and examines the effectiveness of utilising key relationships and drinking contexts in the development of counter binge drinking advertising campaigns.

This research involved evaluating if and how key relationships and drinking contexts in young university students lives could be used to significantly young university students' attitudes towards the act of binge drinking, attitudes towards alcoholic products and their likelihood to binge drink in each of the contexts. To be more specific, this research investigates the effect of presenting young university students with advertisements featuring a spokesperson that represents an important relationship in their life (a best friend, a mother or a typical bartender) with that person providing safer drinking advice. This was coupled with one of two drinking contexts (a 21st birthday or a Friday night out) to examine the effect that the context and the relationship shown in a counter binge drinking advertisement could have on young university students' binge drinking related behaviours and attitudes.

To do this effectively, this thesis begins with an analysis of current academic literature related to binge drinking among youth and current methods of social marketing safer drinking advice to this target market (see p.6). The next section discusses the aims and hypotheses of this research (see p.36). The methodology is then presented, outlining the primarily quantitative nature of the research coupled with a small qualitative part to aid in developing a holistic understanding of the phenomenon (see p.45). The results are presented logically according to hypothesis testing (see p.65), followed by a section discussing the conclusions that can be drawn from this research and the implications for social marketers in New Zealand (see p.111). Finally, the limitations of this research are outlined while directions for future research are proposed (see p.137).

Literature Review

Binge Drinking and Related Health Impacts

Before effective measures to counteract excessive or binge drinking behaviour can be discussed or created, the term binge drinking first needs to be defined. This allows for a generally accepted understanding of the term throughout this research to ensure consistency of interpretation. Binge drinking is often defined as consuming five or more drinks in one session for men and consuming four or more drinks in one session for women (Okoro et al., 2004; Young et al., 2005; Pilling & Brannon, 2007). However, any attempt to quantify binge drinking raises questions about whether or not a number of units or drinks will lead to the same level of impairment for each and every person (Wolburg, 2001; Coleman & Cater, 2005; Guise & Gill, 2007). The argument here is that while one person may be excessively intoxicated and behaving inappropriately after the consumption of 4 alcoholic drinks, another person of different weight, height or age may be behaving in a perfectly socially acceptable manner, highlighting the inability to generalise when a person is excessively drunk to a number of drinks. Sometimes, binge drinking is not confined to a number of drinks exactly, but still is defined as an excessive consumption of alcohol in a single session (White, 2006). Binge drinking can also be defined in terms of the effects of the drinking on an individual. Coleman and Cater (2005, p.126) define bring drinking as “excessive drinking over the course of a single session resulting in a self-reported drunkenness”, an idea that is supported by Guise and Gill (2007). It is clear that there is no general consensus in academia concerning the precise definition of binge drinking. However, there is consensus that five alcoholic drinks for men and four drinks for women is a dangerous level of alcohol for both the drinker and for society (Coleman and Cater, 2005; Gruzca, Norberg & Bierut, 2009). For the purposes of this study, binge drinking is defined as consuming an excessive amount of alcohol in one session of drinking, which results in impairment for an individual, based on the definition of Coleman and Cater (2005) above. This is because it is not critical to define binge drinking with a number of drinks in this study as young people in New Zealand have a general knowledge of what binge drinking is and can answer questions appropriately based on their current understanding of this phenomenon.

Binge drinking, regardless of the definition in terms of number of drinks or effect on an individual, can have some serious negative short term and long term consequences. The negative short term implications of excessive or binge drinking have been widely acknowledged. These include an increased likelihood of acute alcohol intoxication, driving a

vehicle while drunk, injuries arising from confrontations, unsafe sex, and drug use to name a few (Perkins, 2002; Coleman & Cater, 2005; Young et al., 2005). Binge drinking has also been found to have significant negative long-term effects on health. Heavy alcohol consumption has been associated with significant drinking problems ten years after graduation, showing that excessive drinking at university can have long term impacts that many students may not consider (O'Neill et al., 2001). Pilling and Brannon (2007) found that occasional binge drinkers were five times more likely to report experiencing alcohol related problems than non-binge drinkers, and frequent binge drinkers (defined as binge drinking at least once a week) were 21 times more likely to experience alcohol related problems than non-binge drinkers. Binge drinking can have unfortunate effects on mental health as well, shown by Okoro et al. (2004) who found that binge drinkers scored significantly lower on the mental health scale than those who do not binge drink.

Considering the range and severity of these negative consequences and the abundance of anti-binge drinking advertising that communicates these consequences through a variety of media, the question of why young people binge drink at all comes to mind. Binge drinking is commonly portrayed in movies and television series as a fun and exciting social activity, and alcohol consumption is routinely associated with success with the opposite sex (Okoro et al., 2004). This is a time in a young person's life where intimate relations with someone they are attracted to become of great importance and the alcohol advertising industry understand this. The alcohol industry portrays the consumption of alcohol to be an enjoyable, fun and social activity, and according to social cognitive theory, young university students may see these advertisements and replicate the behaviour in order to achieve the benefits proposed by the advertisements (Hust, 2006). Hence, this literature review continues by examining students' and young adults' alcohol consumption behaviour to gain an understanding of why and how young university students drink excessively, in order to help in developing more effective ways of communicating safer drinking messages to them.

Students and Young People's Drinking Behaviour

At the turn of the last century, more young people were drinking on a regular or weekly basis than ever before. When they drank alcohol, they were consuming increasingly large quantities of alcohol, especially when they had planned a night of heavy drinking (Coleman & Cater, 2003). Given that such a culture has arisen, it is not surprising that university students in the United States, aged 18 to 25 years old, included the greatest number of binge drinkers compared to any other demographic group (Pilling & Brannon, 2007). Wechsler et al. (2000) found that nearly

half of undergraduate students qualified as binge drinkers and 23% of undergraduate students engaged in binge drinking at least once a week. It may come as no surprise then that university students have been identified as an at-risk population when considering binge drinking (Blanco et al., 2008). Fortunately, previous research has suggested that excessive drinking behaviour is typically short-lived for university students, as a student gets older they tend to partake in fewer situations where excessive drinking is expected and acceptable (Schulenburg et al., 1996). Kypri et al. (2002) examined New Zealand university students' drinking and proposed the use of university students in binge drinking research to examine the reputation for hazardous drinking that university students have compared to their non-student peers. Hence, a university student population has been chosen for this study in order to target those most at risk.

The unfortunate truth is that more undergraduate students are expected to die from alcohol related causes than those who will later receive postgraduate degrees in the United States alone (Wolburg, 2001). Many young students begin university with the expectation of becoming intoxicated in order to facilitate socialisation with other students on a fairly regular basis. The majority of students believe that is acceptable, and in many circumstances expected that they will engage in excessive drinking (Young et al., 2005). In fact, most young people who binge drink actually find it an enjoyable activity and choose to partake freely (Engineer et al., 2003). Despite this, most students do not consider themselves to be heavy drinkers (Guise & Gull, 2007). Even students who abstain from drinking can feel the negative effects of binge drinking, as they are often at risk when their friends get into fights or other such dangerous situations (Clap, Shillington & Segars, 2000). Therefore, it is imperative that academic knowledge of the behaviours and attitudes associated with youth alcohol consumption expands and is used to develop effective interventions to prevent or at least reduce harm (Patterson, Hunnicutt & Stutts, 1992; McCreanor et al., 2008). Hence, this research aims to improve counter binge drinking advertisements that target young university students' binge drinking related behaviours with the overall goal of advising social marketers on how to develop effective campaigns to reduce binge drinking rates among the youth of New Zealand.

Before this can be accomplished, a holistic understanding of the motivations behind and the perceived outcomes of binge drinking is required. Changing gender roles in society has had an impact on both young male and female university students' drinking patterns, so the role of gender in binge drinking behaviours is also explored in one the following sections. This is followed by a brief discussion about the binge drinking culture in New Zealand specifically in order to give some relevant information about the specific population of students being

examined in this research and provide a holistic view of binge drinking from a young university student's perspective.

Motivations for Excessive Drinking

Young people have a variety of different motivations for binge drinking and a variety of ways in which they become excessively drunk. It is clear that one of the primary motivations for young people consuming alcohol is enjoyment. Coleman and Cater (2005) found that the majority of young people actually enjoy getting highly intoxicated. The results of their study showed that binge drinking, and the effects that come with it were found to be mainly of a young person's own choice and were often welcomed. MacAskill et al. (1984) found that young people aged 15 to 24 years old primarily consume alcohol for pleasure. However, they also found that binge drinking was often structured around other priorities, such as studying. Binge drinking itself was also structured, where the purpose was to reach a high level of intoxication, to have fun and to reduce inhibitions. Hence, it may be difficult to get young university students to abstain from binge drinking because of the nature of their decision to engage in the activity and alcohol's perceived ability to facilitate enjoyment. Therefore, this research aims to examine possible ways in which students could be encouraged to consume less alcohol rather than ask them to abstain from alcohol consumption altogether.

Another key motivation for drinking among young people is social facilitation, namely the increased ease that some young people feel in social situations when they have consumed alcohol. Coleman and Cater (2005) reported social facilitation as the most common motivation for drinking among young people. Their participants found it much easier to approach someone when they were drunk, and found it easier to approach people who were also drunk. Therefore, alcohol was seen as a tool for easing social situations and interactions among peers as it provided young people with a sense of increased confidence. This shows that young people are conscious of at least some of the people who are present while they are in drinking situations and that young people value the opinions these people hold of them. It may be that a young person's behaviour could be significantly influenced by the people they choose to drink with, such as their peers. The influence of friends and peers was often reported as a motivation for drinking excessively in Coleman and Cater's (2005) study, as participants felt it was fun to keep up with their friend's drinking rates and to be at the same level of intoxication as their peers. Binge drinking was viewed as commonplace among young people, and there was a general belief that all teenagers and young people drink alcoholic products as they make the transition into adulthood. Hence, it is no surprise that perceived social norms and influences were found to be an important influence on young people's drinking by Coleman and Cater (2005) (where

social norms refer to the perceived normality and group acceptance of binge drinking). Engineer et al. (2003) found that young people felt as though they were safe when they were drinking among friends, and many participants said they relied on their friends to prevent them from behaving inappropriately when intoxicated. Therefore, it is clear that friends can play a major role in young people's drinking behaviour and their decision to engage in binge drinking.

Motivations for drinking among young people are not purely external to themselves with many young people feeling a variety of personalised, internal motivations for excessive drinking. An interesting motivation Coleman and Cater (2005) found were the individual, personal benefits that were perceived to originate from binge drinking. The main individualised motivation discussed was a sense of escapism, where a young person was able to escape from the stress or anxiety they were feeling. Alcohol enabled participants to forget their problems and relax. Common reasons for escapism were exam stress, splitting up with a partner or generally feeling upset. Engineer et al. (2003) found that young people were motivated by the perceived positive effects of alcohol, which were an increased level of confidence, friendliness and a desire to live in the moment. Therefore, it is important to remember that the people that a young person consumes alcohol with may not always have the same level of influence on a young person's behaviour and attitudes as there may be some individual and personal motivations for drinking that cannot be swayed by peer pressure or social norms. Excessive drinking is also often linked to independence, freedom and a desire to escape from everyday life. Engineer et al. (2003) concluded that a desire to push the limits (which meant seeing how much alcohol a young person could manage), difficulty judging the limits, and a belief that it was fun to lose control were key social risk factors relating to young people's motivations for drinking alcohol in excess.

Therefore, there are a range of both personal and social motivations for binge drinking among young people. By understanding each of these, and the important perceived risks and outcomes of drinking among this group, this research can begin to formulate more effective ways of targeting young university students who engage in binge drinking. Hence, this literature review now turns to examine what young people believe to be the key risks and outcomes of their excessive alcohol consumption.

Perceived Risks and Outcomes of Excessive Drinking

It is of critical importance to understand whether or not young university students view binge drinking as risky. If students do not perceive binge drinking to be risky, then advertisements need to change student's perceptions of binge drinking because the majority of social marketing

campaigns are developed on this assumption (Wolburg, 2001). Many university students can acknowledge that there are risks with drinking, but some do not believe they will ever happen to them personally or only perceive there to be very short term risks that are a worthwhile cost for an enjoyable night out. Patterson, Hunnicutt and Stutts (1992) showed that adolescents usually believe the benefits of drinking outweigh the risks. Several young people from their research mentioned that they preferred not to think about the risks of drinking as it would interfere with their thoughts of having fun, being free and independent. Hence, it is plausible that the majority of young people recognise their motivations for binge drinking but do not want to recognise the risks and negative results that could come with their behaviour.

Humans have been shown to have a significant level of difficulty dealing with risks and university students are no exception (Bettman, Payne & Staelin, 1986). Engineer et al. (2003) found that very few of the participants in their research saw themselves as being at risk when they became intoxicated. Adolescents may have difficulty imagining the risks associated with binge drinking because they may perceive there to be none, or there to be very few, or that they could not happen to them personally. Therefore, advertisers need to find a way to communicate to young people that the risks of drinking are not only real and vast, but can easily happen to them personally and are not a worthwhile cost for a night out. It is interesting to note that merely telling young people of the risks does not cause them to change their behaviour (Engs, 1989). Therefore, counter binge drinking advertising should aim not only to tell young students that their drinking behaviour has risks associated with it, but also how to minimise these risks.

The most common perceived outcomes of drinking for young people are health problems (Coleman & Cater, 2005). In Coleman and Cater's (2005) study, all the participants reported experiencing some negative health effects of drinking, including nausea or a hangover. The most common reported health related outcome was a regretted sexual experience. These authors found a range of other perceived results of drinking among young people, including binge drinking leading to young people compromising their safety in a variety of ways. The most common safety related outcome was walking home alone, though some young people reported an unrealistic sense of optimism when in danger or having made an irrational judgement (Coleman & Cater, 2005). Therefore, it is obvious that there are substantial risks to young people when consuming alcohol despite the fact that many young people cannot or do not want to acknowledge them. This research aims to explore some common alcohol consumption situations and examine if some of the people in a young university student's life may be effective in communicating safer drinking messages in order to minimise these risks and negative outcomes. Firstly, a holistic picture of young university students' binge drinking behaviours,

motivations and attitudes must be painted and therefore the next section examines how young university students react to counter binge drinking advertisements.

Students' Reactions to Counter Binge Drinking Advertisements

One of the primary purposes of this study is to examine how young university students respond to counter binge drinking advertisements that feature key relationships in their lives and common drinking contexts. This means examining how young university students react both emotionally and rationally to the advertisements specifically. It is critical that young people respond to a counter binge drinking advertisement as their emotional response can have an effect on the degree to which a young person finds the messages in the advertisement to be relevant, salient or entice them to change their behaviour (Rimer & Kreuter, 2006). Austin, Chen and Grube (2005) found no significant relationship between scepticism (logic-based processing) and alcohol use in youths aged 9 to 17. These authors suggest that purely logic based campaigns are unlikely to be successful. However, they found that scepticism appeared to increase an individual's awareness of advertising techniques and their susceptibility to them. This research theorised that merely presenting information to students about the risks of drinking may increase their knowledge of the risks but does not actually have any significant effect on their behaviour. This shows how important it is to find a way to enable students to relate to an advertisement as they need to have a reaction before they can consider changing their behaviour, especially when the behaviour is so often desired.

Targeting the audience properly and developing advertisements that suit them can often determine the success of an advertising campaign. Lee & Shin (2011) found that different people respond differently to anti-alcohol advertisements. It has been proposed that for media messages about safer drinking to be truly effective, advertisers need to take into account both message characteristics and unique individual characteristics in order to promote the audience's attention and encourage their information processing (Lee & Ferguson, 2002; Lee & Shin, 2011). Therefore, part of the success of alcohol counter-advertising depends on how the audience reacts to the advertisement.

The Elaboration Likelihood Model (ELM) proposes that there are two routes by which alcohol counter advertising may be processed. These are the central route, which involves a high level of thought on the relevant issue, and the peripheral route, where attitudes are formed based on relatively simple cues and without high levels of thinking about the issue at hand (Petty & Cacioppo, 1986). When going through the central route, consumers tend to pay more attention to the content of the message, scrutinise the information presented, elaborate on the message in

light of their own experience and knowledge, and make a decision based on the merits of the argument presented. In contrast, consumers who use the peripheral route rely on peripheral cues, such as the attractiveness or credibility of the source of the message or the music in the advertisement to make a judgement and create an attitude. The ELM proposes that attitude changes made through the central route are longer lasting and more resistant than those made through the peripheral route. Given that the goal of alcohol counter-advertising is most often used to change behaviour and attitudes for the long-term, this theory proposes that the central route would be the most effective route for consumers to take. However, in situations where the audience may only be moderately interested in the messages presented, it can be useful to incorporate peripheral cues as well to encourage consumers to become interested (Agnostinelli & Grube, 2002). This means that alcohol counter-advertisements should ideally employ both the logical presentation of factual information (for those who are motivated to elaborate and critically think on the issue) and peripheral cues (to encourage those who are not motivated to become interested) (Agnostinelli & Grube, 2002). For example, an anti-binge drinking advertisement may not be that interesting to a university student may become appealing if the message was presented by their favourite sports celebrity. It is important to note, however, that even if the central route is taken, there is no guarantee that this will result in a positive attitude change, as the effect of the message is also dependent on the how each person responds to it (Agnostinelli & Grube, 2002).

It is important to remember that each and every consumer will react in a different way to an advertisement, even if the difference between reactions is minimal. Petty and Cacioppo (1979) have extended their research beyond the ELM model and proposed that an increase in personal relevance increases the degree to which the message arguments in an advertisement are relied upon when a consumer forms an attitude. This is related to the concept of self-referencing, through which consumers create links between their own lives and experiences and the messages portrayed in an advertisement (Debrvec & Iyer, 1988, Burnkrant & Unnava, 1989). Burnkrant and Unnava (1989) concluded that consumers' recall of advertising messages was higher for those who felt a high level of self-referencing compared to those who feel a low level of self-referencing. They found that addressing people directly in an advertisement and encouraging them to remember similar memories encouraged a link between the advertisement's message and the consumer's memories that resulted in higher probability of recall of the advertisement's message. Hence, this study takes this into account and examines how young university students with high or low levels of self-referencing react emotionally and rationally to the counter binge drinking advertisements shown. This will help in understanding

the role that self-referencing can play in consumers' processing of counter binge drinking advertisements.

It is important to remember that gender may play a role in the way in which young university students consume alcohol and react to alcohol related advertising. Based on this, this literature review now examines the difference between the binge drinking related attitudes and behaviours of young men and women.

The Role of Gender in Young People's Drinking Behaviour

Traditionally, young men have been much more likely to engage in behaviours that are harmful to their health than young women (Saunders, 1980). In the previous century, male university students were seen to be far more likely to engage in binge drinking than female students. Drinking was seen as a masculine activity and alcohol consumption was more relevant to the male social identity than to the female social identity (Prentice & Miller, 1993). In 1987, it was clear that young men consumed much higher quantities of alcohol more frequently than young women, and they believed the risks associated with binge drinking to be less severe and less likely to happen to them personally (Beck & Summons, 1987).

However, social drinking norms have changed dramatically in recent decades. This is shown by the increase in the percentage of women participating in binge drinking from 6% in the early 1950's (Straus & Bacon, 1953) to 2 out of every 5 female university students in 2001 (O'Malley & Johnson, 2002). To add to this, Gruzca, Norberg and Bierut (2009) found that the risk of binge drinking among young women has been rising. These findings suggest that the rate of female university students engaging in binge drinking behaviour has significantly increased in recent times. It can be argued that this is due to the changing nature of the acceptability of women binge drinking. Some reports attribute this change to the fact that many women support equality in gender roles and believe they have the right to the same opportunities as men do, including binge drinking (Patterson, Hunnicutt & Stutts, 1992; Morse & Bower, 2002). This change in attitudes also coincides with the development of marketing of alcohol, which in recent years has begun to target women more extensively; implying that by drinking as much as men do women can achieve gender equality (Young et al., 2005). Hence, female undergraduate students may not feel confined by traditional gender roles and think they can embrace the opportunity to binge drink. In fact, Young et al. (2005) found that this change in gender roles has translated into men finding women more attractive when they are able to match them drink for drink. Hence, female university students may drink excessive amounts of alcohol in order to encourage social facilitation between themselves and the opposite sex and to appear more

attractive. With the gap between gender drinking norms narrowing, it would be interesting to investigate if gender has a significant impact on young university students' alcohol related attitudes and behaviour and if developing gender specific advertisements could have a significant effect on young female or male university students' binge drinking behaviours and attitudes.

Interestingly, Gruzca, Norberg and Bierut (2009) found that there has been no reduction in binge drinking rates among male university students aged 18 to 20 years in the past three decades in the United States. This shows that while it is becoming more acceptable for young women to engage in binge drinking, rates of young men binge drinking are not decreasing, and it remains socially acceptable for young men to participate in binge drinking. Hence, there is now a larger proportion of the young adult population that think is it socially acceptable for them to engage in binge drinking, making this study more pertinent than ever before. Harnett, Thom and Kelly (2000) designed a model of young men's (aged 16-24 years) drinking styles. They identified eight different styles, some of which relate to binge drinking. The most relevant ones to this research would be the 'adolescent' style (where cheap drinks result in the ability to get drunk fast), the 'therapeutic' style (where a person drinks to relieve stress or anxiety), and the 'recreational' style (where a person drinks in order to have fun and to achieve a high). This shows that young people have different styles of drinking, which may be closely related to their motivations for drinking, and social marketers need to understand that these styles and motivations could significantly impact young university students' binge drinking behaviours and attitudes and, therefore, the formation of counter binge drinking advertisements targeting these behaviour and attitudes.

There is evidence to suggest that young women are more influenced by their female peers than their male peers and young men are more influenced by their male peers than their female peers when binge drinking. Same-sex drinking norms (which are the social norms held by a young person's peers of the same gender) best explain alcohol use in undergraduate students, according to Korcuska and Thombs (2003). Lewis and Neighbors (2004) expanded on this and concluded that perceived same-sex drinking norms are more strongly associated with problem drinking than social norms that are not gender-specific, and that perceived same-sex drinking norms are better predictors of alcohol consumption for female students than for male students. These authors suggest that same-sex norms may be a more effective reference for anti-binge drinking interventions than norms that are not gender specific, especially for women. Hence, the potential influence of gender will be examined in this study to explore if young women and

young men should be targeted in different manners when designing and implementing counter binge drinking campaigns.

It is clear that the rates of young men and women partaking in binge drinking are too high in many western cultures, and New Zealand is no exception. This research offers an alternative perspective to the many studies based in the United States or the United Kingdom and explores the development of counter binge drinking advertisements that target New Zealand youth specifically. Hence, the following section explores the culture of binge drinking among New Zealand youth to provide an understanding of the unique culture the target population used in this research are part of.

The Culture of Alcohol Consumption in New Zealand

To provide some scope to this research, this next section examines the culture of alcohol consumption among young New Zealanders. Kypri et al. (2002) examined young university students drinking behaviours in New Zealand specifically. They determined that a substantial proportion of students often consumed more than the Alcohol Advisory Council of New Zealand's recommended maximum number of standard drinks in a sitting (4 drinks for women and 6 for men). Kypri et al. (2002) concluded that both male and female students in New Zealand typically drunk about 40% more than this proposed limit in a session of binge drinking. Blackouts were reported by one third of the participants in this study, showing the detrimental effect of binge drinking among university students in New Zealand.

Alcohol is a legal and widely available product in New Zealand, one which is often sought out by youth. Before the turn of the century, descriptions of drinking in New Zealand typically emphasised the masculine nature of the activity and that binge drinking was prolific (Stewart, 1997). The Sale of Liquor Act (1989) removed many controls of alcohol outlet density and lifted restrictions on trading hours. This resulted in a greater number and diversity of alcohol outlets in New Zealand and the introduction of alcohol sale in supermarkets. The Broadcasting Act (1989) allowed particular advertising of alcohol products, and by 1999 the legal age for the purchase of alcohol was lowered to 18 (Hill & Stewart, 1996; McCreanor et al., 2008). It was now easier than ever before for young New Zealanders to gain access to alcoholic products. To add to this, annual expenditure on alcohol advertising rose from approximately \$18 million in 1992 to \$36 million in 2005 in New Zealand (Huckle & Huakau, 2006). This meant that the youth of New Zealand were not only allowed access to alcohol more frequently and at a younger age but that they were also heavily encouraged to purchase and consume alcoholic products by the powerful alcohol industry and their savvy marketers. Hence, it should come as no surprise

that alcohol consumption rates among young people have raised in the last few decades (McCreanor et al., 2008). McCreanor et al. (2008) argue that it is the mix of these factors that have helped to create a toxigenic environment for young people where excessive intoxication is an almost expected outcome of many social activities. Hence, there is not only a gap in the academic literature that calls for more research into ways to lessen binge drinking rates among the youth of New Zealand, but also a need to implement the findings of such research in a real life setting in order to reduce rates of binge drinking and slowly begin to change the binge drinking culture of New Zealand.

The New Zealand Ministry of Health undertook a national survey from 2011 to 2012 exploring national drinking rates. It was found that people aged 18 -24 were found to be at the highest risk of hazardous drinking out of all the age groups surveyed. Of this age group, 44% of men and 26% of women were found to have dangerous drinking patterns (Ministry of Justice, 2013). The Alcohol Advisory Council of New Zealand identified young people as a particular source of interest in terms of excessive drinking though acknowledge that youth binge drinking behaviour could stem from mirroring adult binge drinking. They suggest that the role of parents in the supply of alcohol to their children, and the supervision of alcohol use among their children, needs to be examined (Alcohol Advisory Council of New Zealand, 2005). Hence, this study will examine the role that parents could play in advertisements targeting young university students' binge drinking related attitudes and behaviours in New Zealand. The next few sections of this literature review begin to do just this, examining the role that peers, parents and authority figures can play in a young person's decisions surrounding binge drinking.

However, academic research into young university students' drinking behaviours and attitudes specifically in a New Zealand context are rare. This opens an opportunity for research that builds on the findings of other academics in similar cultures or countries and to help increase the amount of academic social marketing research occurring in New Zealand. This information can then be used to hypothesise the effects of this research in other countries with similar cultures or histories. New Zealand, therefore, provides a unique and relatively untapped environment in which to formulate an anti-binge drinking experiment among youth. Given that this research differentiates itself with the investigation of the use of different relationships and contexts in binge drinking advertisements and how these could affect New Zealand's university aged youth, this literature review now turns to examine the known influences of peers, parents and authority figures in the formation of binge drinking related decisions among youth.

The Influence of Peers, Parents and Authority Figures

One of the primary aims of this research is to examine the possible use of different but important relationships in a young person's life and how these people could be used to convey a safer drinking message effectively. This section begins with potentially the most important group; a young person's peers.

Peer Influences

The transition from childhood to adulthood is a time of dramatic change where a person goes from relying on their parents for advice and socialisation to placing the emphasis on their friends and the development and maintenance of friendships. This makes a young person's peers very important in the development of their attitudes and behaviours, especially those based on alcohol consumption. Therefore, one way of potentially influencing young people's binge drinking attitudes and behaviours is to develop safer drinking norms among peers and to utilise the desire for socialisation that has previously been mentioned.

It is generally acknowledged that peer influences have a significant impact on young people's drinking behaviour (Morgan & Grube, 1991; Borsari & Carey, 2001; Wood et al., 2004). For example, peer influence has been found to have a significant impact on young people's initiation to excessive alcohol consumption and the continued substance abuse (Schulenburg et al., 1999; Wood et al., 2004; Bot et al., 2005). Previous research that has focused on the reasons for binge drinking has suggested that it is important to aim to change the culture of binge drinking among young people by establishing more sensible norms and expectancies around alcohol consumption (Coleman & Cater, 2005). Hence, this study will be exploring the potential role of a friend in counter binge drinking advertisements and how this key relationship could be used to significantly affect young university students' binge drinking behaviours and attitudes.

There are two distinct types of social influences related to adolescent drinking. The first are active social influences, which refer to the explicit and obvious offer of alcohol. This can include being offered a drink or having your drink refilled without asking, for example. Passive social influences, on the other hand, relate to an individual's perception and interpretation of the situation (Graham, Marks & Hansen, 1991). Passive social influences are usually perceived norms, which are beliefs about typical alcohol intake of one's peers, or social modelling, which relates to the imitation and modelling of the behaviour of one's peers (Wood et al., 2004). Perceived social norms have been related to heavy drinking and alcohol related problems among university students, and have been observed to have a very significant impact on university students' behaviour (Borsari & Carey, 2001; Larimer et al., 2003). Wood et al. (2004)

found significant associations between both peer and parental influences and young people's drinking behaviour. More specifically, both active and passive peer influences had a significant effect on heavy drinking and alcohol related consequences. Clapp, Shillington and Segars (2000) found that young university students think that drinking with friends is perceived to be safer than drinking with strangers. Friends were considered much more likely to look after one another than strangers while consuming alcohol. Friends were also often looked to in order to monitor drinking behaviour or sober drive. Based on this, it was proposed that young university students felt more comfortable binge drinking at parties and in bars when with their friends. Hence, the simple presence of friends can have a large impact on the decisions surrounding binge drinking that a young university student makes.

It is also interesting to note that peer influences may not all have the same effect on young people's drinking behaviour. Peer relationships can come in many shapes or forms, and different friendships have a different level of influence on a young person's drinking behaviour (Bot et al., 2005). Close friends have been found to significantly influence the initiation and persistence of a young person's alcohol use, while the close friends and friend group of a young person have a significant influence on whether or not a young person will reach high levels of intoxication (Urberg et al., 1997). Best friends are often considered to be the closest level of friendship. According to Urberg et al. (1997), the best friend has the highest level of influence, much higher than the friendship group a young person belongs to. Bot et al. (2005) extended academic knowledge of the influence of the best friend and found that the magnitude of the influence depends on the nature of the friendship. The key dimensions that can influence friendship characteristics are sociometric status (the perceived level of popularity) and the reciprocity of the friendship. Other factors discussed are the duration of the friendship and the amount of time spent together, but these authors also mention that an individual's age, sociability and need for affiliation could impact their susceptibility to peer influences. However, Bot et al. (2005) only examined young people aged 12 to 14 and so their results cannot be appropriately extrapolated to the population of young adults that attend university. Hence, this study will extend this academic understanding of the influence of friends and investigate if and how a best friend could be used to communicate a safer drinking message to young university students and how this could influence their binge drinking behaviours and attitudes.

A key aspect to the success of this research extends beyond the passive and social influences above and asks if and how friends could be used to convey a safer drinking message. Although it is clear that friends can significantly influence young people into engaging in binge drinking, it is uncertain if friends will be equally as influential when conveying a message of the opposite

nature. Haines (1996) investigated the believability of source information on health issues in the context of drinking, and found that friends ranked second to bottom of the list. This means that young university students did not view the health advice from their friends as very credible at all, with romantic partners and health professionals being deemed a lot more credible overall. However, this study was performed in 1996, and it would be interesting to see if the credibility of friends has risen in more recent years and if friends could be utilised in counter binge drinking campaigns.

Messages about alcohol come from a variety of sources, including television, print, the Internet, and many more. However, these messages do not only come from advertisers and the media, but more importantly from peers. When a young person discusses the positive or negative effects of alcohol with their peers, the marketing messages begin to become part of youth culture. This introduces a level of authenticity and immediacy that the media and the government cannot hope to replicate and increases the effects of the advertising campaign at no extra cost to the company at hand (McCreanor et al., 2008). In light of this, this research argues that utilising peer communication as a means of communicating safety messages about drinking may be the most effective way to reduce binge drinking rates. Hence, this research will explore the use of friends in counter binge drinking advertisements and their effectiveness as spokespeople promoting safe alcohol consumption.

This study extends beyond the potential extensiveness of the use of friends in counter binge drinking campaigns and also examines the effectiveness of two other prominent types of people in a young university student's life: a parent and a typical bartender. This will provide a more holistic understanding of how key relationships in a young person's life could be used in social marketing campaigns and which relationships may be the most effective in changing young people's binge drinking behaviours and attitudes. This literature review now turns to examine the current academic understanding parental influences before exploring the potential use of authority figures, such as a typical bartender.

Parental Influences

Young people begin to use alcohol long before they enter university, and once they are introduced into university their intake of alcohol usually increases (Baer, Kivlahan & Marlatt, 1995; Wood et al., 2004). This means counter alcohol advertisers need to examine influences on young people that originate from before university, and the influence of family is an important place to start. Parents can have a huge effect on a child's life and their influence may continue to be relevant to young people as they move into adulthood. The drinking related attitudes and

behaviour of parents may significantly affect a young person's attitudes towards drinking and their own drinking behaviour (Beck & Lockhart, 1992). Some academic authors have found a direct effect of parental influences on alcohol consumption behaviour in young people (Barnes & Farrell, 1992; Barnes et al., 1994), but other academic authors have found only an indirect effect (Dielman et al., 1993). For example, Austin, Chen and Grube (2005) found that parental guidance directly and negatively affects young people's choices to purchase and consume alcohol. It is clear that parents can have a significant effect on young people's drinking behaviour and attitudes, but more research is needed to explore how this can be utilised for social marketing purposes.

Some academic authors have aimed to explain the binge drinking behaviour of youth by examining their parents' drinking behaviour. Beck and Lockhart (1992) developed a model that links parental monitoring and enforcement of family policies to young people's misuse of alcohol. Their findings emphasise the central role that parents play in the education of young people about the risks and outcomes of excessive drinking. Most parents show concern over their children's alcohol consumption, but many fail to supervise and monitor their teenagers effectively or to enforce alcohol related rules consistently (Beck, 1990). This means that young people may have very different expectations of their parents drinking related attitudes and behaviour, and therefore each young person may respond differently to seeing a parent offering advice in an advertisement. Adolescents from low socioeconomic backgrounds have been found to consume more alcohol, and consume alcohol more often than their peers from higher socioeconomic backgrounds (Droomers et al., 2003). This shows that there are links between family life, the socioeconomic background of a young person and their drinking behaviour. Wood et al. (2004) showed that parental influences are still important when maturing into late adolescence. These authors highlighted that parental values and attitudes surrounding alcohol consumption were directly associated with youth alcohol abuse, and that perceived parental disapproval coincided with lower levels of heavy drinking behaviour. They suggest that interventions utilising parental influences should aim to facilitate communication between young people and their parents regarding acceptable levels of drinking.

Conversely, there have been academic authors that found no evidence of a link between parental drinking behaviour and the drinking behaviour of their adolescent children. Beck and Treiman (1996) found none of the perceived parental influences used in their study to be important in explaining young people's drinking behaviours, which calls into question the legitimacy of the claim that parents have a significant effect on young people's binge drinking behaviours. Given the opposing nature of the research on this phenomenon, this study aims to

explore how young people respond to a parental figure offering safer drinking advice and how this can affect their binge drinking behaviours and attitudes. This will provide a better understanding of how parents should be used to convey safer drinking advice and whether or not they should be used at all.

While acknowledging the proposed link between parental and child drinking behaviour, Wood et al. (2004) found that peer influences had much more significant influences on youth alcohol abuse than parental influences. Therefore, as young people start and progress through their tertiary education, their peers begin to exert greater influence on their drinking behaviour than their parents do. According to developmental theory, young people progressing through late adolescence are influenced by a sense of personal identity as they begin to assert independence from their family. This involves the shifting of the relative value from parental to peer influence (Wood et al., 2004). To add to this, older adolescents are more autonomous, which could result in young university students considering their parents rules and attitudes less when drinking alcohol (Cottrel et al., 2003). This decrease in the importance of parents may be filled with an increasing importance of peers (Bot et al., 2005).

However, some academic authors propose that rather than being supplanted by peer influences, parental influences remain important while peer influences raise in importance during adolescence (Duncan, Duncan & Hops, 1994; Windle, 2000). It could be that parental influences do not become less important as peer influences become more important, but that each of these influences should be treated differently as they have separate effects on young people's drinking behaviour. This research explores both the influences of parents and peers individually to examine the possible effects of each and their use in counter binge drinking advertising. However, both of these relationships are often of a more personal nature and develop over long periods of time. Therefore, this study also examines the possible use of an authority figure in a young person's life to see if someone with a less personal but more authoritative relationship may have a different effect on binge drinking behaviours and attitudes. This literature review now turns to explore relevant, typical authority figures in a young person's life (more specifically, a bartender) and young people's reactions to such authority figures.

The Influence of Authority Figures

Friends and family have been proven to have significant social influence on young people and their behaviour, but it is important to look beyond this close circle of influence and consider other relationships or groups of people that could have an impact on young people's decisions and behaviour. Once such group is authority figures; these are people whom young people tend

to have minimal or no personal relationship with, but who have the ability to set and enforce rules that must be obeyed. Authority is a legitimate power that does not need to be explained or defended (Thompson & Holland, 2002). Young people have been faced with a range of authority figures throughout their lives, such as their school teachers, lecturers and the government. But this research is taking on a binge drinking focus and has, therefore, chosen an authority figure that is representative of this context.

A bartender is a key authority figure in their bar, one who can restrict young people from purchasing alcohol or even instruct them to leave the premises. This is a legitimate power that cannot be instigated by friends or parents, making bartenders an interesting contrast to the previous relationships discussed so far. Bartenders have a unique relationship with the customers of their bar, as they are a person who usually has no physical or social contact with consumers outside of the bar setting (Rose, 1968). This is opposite to parents and friends, who play a vital role in young people's lives outside of alcohol consumption contexts.

Bartenders are prime candidates for assisting in minimising binge drinking and the harm it can cause, according to Waring and Sperr (1982). These authors found that bartenders are more sensitive to their own and others' drinking behaviour than other consumers, and they are reliable reporters of the behaviour they have witnessed. Bartenders also feel able and willing to intervene with consumers' drinking in order to prevent drunk driving. Therefore, bartenders could be ideal people to help minimise young students' drinking behaviour as they have the physical ability to prevent a consumer from obtaining a drink and the willpower needed to do so. Waring (1978) argues that the bartender could be particularly important for communicating information about sensible drinking behaviours to college-age youth but offer no quantitative data for this proposal. Therefore, this research undertakes a quantitative exploration of the potential effectiveness of bartenders in influencing young university students' binge drinking related attitudes and behaviours.

The potential effectiveness of a bartender in communicating safer drinking practices does not only rely on the competence, abilities and personality of the bartender, but also how the students themselves perceive the bartender. Although the bartender may be able to prevent a young person from obtaining a drink on a certain night, this may not be influential enough to cause a young person to change their attitudes on alcohol consumption or their behaviour the next time they drink. Clapp, Shillington and Segars (2000) found that the bartender was often viewed by young university students as a strong protective factor against alcohol related problems occurring. However, they do not explore this concept further, and invite more research into the effect a bartender can have on university students' drinking. Waring and Sperr

(1982) argue that the bartender is often viewed as a personal confidant, and advisor or a great listener. However, this research was conducted decades ago, and more current research is required to examine if young people's perceptions of bartenders and their potential influence has changed.

Smoking and alcohol consumption are both primarily viewed as socially undesirable behaviour that social marketers want to change. Lee, Moore and Martin (2003) conducted a study that examined the extent to which a new law stating that there was to be no smoking in bars was being upheld in California. Although this study examined smoking behaviour, the link between the desire to change drinking and smoking behaviours in a similar fashion means that this paper can be included in this literature review. The primary purpose of this study was to examine the extent of smoking in bars; however the authors also examined the relationship between patrons and staff in the bars, and their smoking behaviour. It was concluded that while many bars still subtly allowed smoking, the bars in which the staff also blatantly smoked appeared to have higher rates of smoking within the bar than those where employees merely allowed smoking instead of encouraged it. From this, it can be suggested that bar staff have an impact on patron's likelihood to engage in illicit or socially unacceptable behaviour. Therefore, when a bartender is not consuming alcohol and is discouraging the intake of more alcoholic products, young university students may be less likely to binge drink than if the bartender was encouraging alcohol consumption. At the very least, this paper helps to show that bartenders, their actions and opinions can have a significant effect on patron's behaviours in their bar.

Unfortunately, this is the extent to which this research could find academic research on the effectiveness of bartenders as authority figures. However, there is a range of broader research on how humans react to authority figures that can help frame this research. Milgram (1973) ran a series of experiments that highlighted how the majority of people would rather hurt other people than disobey an authority figure. For many people, obedience is a deeply ingrained behaviour, taught to us from birth and can override ethics and sympathy in some circumstances (Milgram, 1973). Milgram (1973) also found that most people will attempt to minimise the harm they cause to another person while still being able to obey the authority that is instructing them to inflict the pain. Based on this study, it could be proposed that young people would be likely to obey the bartender when they are instructed not to drink any more alcohol than if a friend were to instruct them due to the authoritative nature of the relationship with the bartender.

It is important, however, to look at all sides of the situation and remember that young people in western cultures may respond differently to forced authority than is currently proposed.

Western cultures tend to foster individuality and young people are at an age where they are finding ways to harness this. A belief in the value of the individual self has grown in parallel with a decline in submission to authority in western cultures in recent decades (Giddens, 1991). Thompson and Holland (2002) found that young people regard traditional authority figures, such as the police, with very little automatic respect. These authors showed that young people from western cultures believe that respect needs to be earned, and an authority figure's merit must be proven. Given that bartenders have no or few opportunities to earn the authority they are given (in the eyes of young people), it is plausible that young people will have very little respect for a bartender and their instructions or opinions. Considering the primary motivations young people exhibit for consuming alcohol and the voluntary nature of the act, is it plausible that young people will not respond well to authority figures, and in particular a bartender, instructing them to abstain from drinking. Therefore, this research aims to examine if young university students respect the authority of the bartenders and obey their instructions or if they rebel and respond in a negative light. Given the previous research on the probable effectiveness of bartenders as a confidante and their ability and willingness to prevent people from drinking excessively, this research proposes that young university students will be likely to stop drinking when a bartender instructs them to. However, young university students will simultaneously develop negative attitudes towards the bartender as a spokesperson because of western view of many young people that the bartender has not earned his authoritative power.

On a slightly different note, there is also the interesting case of whether or not parents are perceived as authority figures by their children who have begun tertiary studies. As mentioned previously, some authors have proposed that parental influences still remain important as young people begin drinking excessively at university (Barnes & Farrell, 1992; Barnes et al., 1994, Windle, 2000). Parents are often seen as authority figures when their children were young, though it is unclear if this continues to be the case once the child has begun tertiary studies and the journey into adulthood. University students have shown a desire for freedom and independence, and enjoy the opportunity that university gives them to exert these (Wood et al., 2004). Therefore, it could be that young people do not perceive their parents as authority figures anymore as their parents have much less control over their children's actions while they are at university and progressing into adulthood than they did while their children were younger. However, some young university students may still view their parents as authority figures, and perhaps these students will respond worse than their peers who have a friendly relationship with their parents due to the desire to rebel from authority figures. It would be intriguing to examine whether or not young university students perceive their parents as authority figures and if so, whether or not this has any effect on their drinking related attitudes

and behaviour. Based on this, this research includes a measure of the perceived closeness or authoritative nature of the relationship that a young university student has with their mother to explore if this has a significant impact on their reaction to the counter binge drinking advertisement presented to them.

While friends, parents and bartenders could each have a fascinating effect on young people's drinking behaviour and attitudes, there are other factors that must also be considered. One of these is the context in which young people drink. Where, when and with whom a young person drinks could have a significant effect on their drinking related behaviours and attitudes. Therefore, this research now turns to explore current academic literature on the possible impact of contextual elements on alcohol consumption among youth.

The Influence of Drinking Context

The context in which alcohol consumption occurs refers to the social and physical environment in which an individual is influenced by interpersonal, temporal and situational factors when consuming alcohol. There is no standard definition of a drinking context, but drinking contexts can be explained as where a person drinks, when a person drinks, and with whom a person drinks (Cahalan, Cisin & Crossley, 1969). Wilsnack, Wilsnack and Klassen (1984) proposed that why a person drinks should be added to this definition. The basic idea underlying drinking contexts is that the antecedents of alcohol consumption can be found in the interactions that an individual has in a particular environment (Harford, 1979). Jessor (1982) suggests that the five primary ways of exploring drinking contexts are to examine the location of the drinking, demographic characteristics of the event's participants, the meanings they associate with the drinking context, social controls and norms, and personal perceptions of the drinking context. Prior research has shown that levels of alcohol consumption are often situation specific, and this research aims to build on this academic understanding of alcohol consumption contexts.

The patterns of consumption displayed by young people may be quite different in different circumstances. For example, it is tautological that the majority of young people will drink more alcohol on the night of their 21st birthday than they would on a causal occasion, such as Friday night out. Neighbors et al. (2005) argue that context is an important aspect for researchers to consider when designing advertising to promote safer drinking among young people. When alcohol consumption is high, Clap, Shillington and Segars (2000) argue that contextual factors may be even more important in explaining drinking related consequences than in low consumption situations, and that the identification of which contexts are potentially the most dangerous could immensely improve the development of anti-binge drinking campaigns. Hilton

(1989) explored drinking contexts with respect to gender, and found that men tend to drink more than women in both public places (such as bars and restaurants) and in private contexts (such as their homes). Neighbors et al. (2005) proposes that few academic authors have specifically targeted events and contexts where extreme intoxication is likely to occur and that more research into this area is needed. Based on this, this study aimed to examine the effect of context on young university students' drinking related behaviours and attitudes and how this information could be used to inform counter binge drinking campaigns.

Two common contexts in which young university students drink alcohol are Friday nights out and their 21st birthday. These are two quite different but important contexts; a Friday night out is a regular opportunity to drink alcohol for many university students, while a 21st birthday is an important celebration that only occurs once in each student's life and is usually associated with a high level of alcohol intake. This study examines how these two contexts can affect young university students drinking related behaviours and attitudes.

University students have been known to frequently consume alcohol in the weekends, and often attend parties or bars to help facilitate their drinking. There is a social expectation for many university students in New Zealand that excessive alcohol consumption should occur at least once a week in the presence of friends. Harford, Wechsler and Seibring (2002) found that over 75% of university students attended campus parties or bars and the majority of students have five or more drinks on these occasions. Kraft (1982) examined alcohol related problems among university students and the contexts in which they drink, concluding that students tend to drink most frequently with their friends, on weekends, and at parties. It can be concluded the majority of university students drink excessively when they go out and attend parties or patronise bars. Heavy student drinkers were found to regularly patronise bars too. Interestingly, Hunter (1990) found that female students drank at parties and bars more often than any other context. Therefore, it appears that the most popular contexts in which students enjoy drinking are at bars or parties and on weekends. Hence, this study utilises a regular, casual drinking context and how likely university students are to binge drink in this sort of setting. A typical Friday night out has been chosen to represent this context as it is a popular night to go out at the start of the weekend in New Zealand and is representative of a regular drinking opportunity.

University students also consume excessive amount of alcohol in rarer, celebratory contexts. Although there are many reasons for celebration in a young university student's time at university, one's 21st birthday is a unique celebration that stands out. This is a very important night for many young university students, and it is socially expected that excessive drinking will occur. Neighbors et al. (2005) examined alcohol consumption on the night of a person's 21st

birthday. They argued that many academic authors have examined binge drinking, but very few had examined the effects of the context of particular events, such as a 21st birthday. The 21st birthday is usually a very important experience that occurs during the university years of a young person. In the United States, this is the legal drinking age, meaning a young person can now legally purchase and consume alcohol. Although the legal drinking age in New Zealand is 18 years, a similar experience is sought after by young people in both of these countries when they reach this age and young people often enjoy a good reason to celebrate and party. Neighbors et al. (2005) propose that young people often engage in more dangerous drinking on the night of their 21st birthday than on other nights of their lives, with many students participating in drinking games that usually end in intense intoxication. There have been many instances of hospitalisation or death of students after their 21st or 18th birthdays, such as Lydia Clark who drank 16 shots of alcoholic spirits on her 21st birthday and did not wake up the next morning (Reynolds, 2011). Neighbors et al. (2005) found no significant difference between the likelihood of binge drinking on a 21st birthday between men and women, and found that both genders were likely to go to a bar on their 21st birthday. These authors examined whether or not a birthday card encouraging safe drinking sent to the person having the birthday had any influence on their binge drinking activities for the night. They found no significant evidence to show that the card had any effect on men or women, and encourage researchers to explore other avenues to encourage safe drinking on the night of a young person's 21st birthday.

Therefore, this research aims to increase academic understanding of young university students' likelihood of binge drinking and the development of their binge drinking related attitudes when they consume alcohol in a celebratory context; in this case, the night of their 21st birthday. This contrasts from the more regular and casual drinking context of a Friday night out, and together the examination of these two contexts provides a more holistic understanding of the role that drinking contexts play in young people's binge drinking behaviours, decisions and attitudes.

Before effective counter binge drinking advertisements that utilise key relationships and drinking contexts in a young person's life can be developed, other marketing tools and strategies to promote safer drinking among young people need to be discussed. The following section, therefore, outlines the current methods of promoting safer drinking that have been employed and their effectiveness.

Promoting Safe Drinking and Intervention Strategies

A variety of strategies have been implemented throughout the world in order to reduce the harm caused by binge drinking to young people, and society as a whole. Some examples include

limiting young people's access to alcohol, increasing their knowledge of the risks of binge drinking, or promoting abstinence from alcohol consumption (Guise & Gill, 2007). So far, no single approach has been successful, and it may be that multiple strategies need to be utilised to be effective. As no single approach developed so far had been overtly effective, it is increasingly important to target interventions towards specific groups and behaviours, such as university students (Guise & Gill, 2007). This research takes a unique approach by exploring the possible use of key relationships in young people's lives and the contexts in which they drink in order to provide relevant information that can be used to develop counter binge drinking advertising strategies. This means that the advertisements developed in this research may appeal to young people more than advertisements that are targeted towards a wider, more general population would, and therefore, they will be more effective. This literature review now turns to examine some of the different ways in which advertisers promote safer drinking practices, beginning with anti-alcohol advertising.

Alcohol Counter Advertising

Alcohol advertising creates and displays environments where it is not only socially acceptable to consume alcohol, but that also show how alcohol can greatly improve one's social image. McCreanor et al. (2008) explain that alcohol companies often aim to create and maintain expectations, behaviours and social norms that encourage youth alcohol consumption. Alcohol promoters and advertisers create a range of advertisements that enable youth to relate to them by showing situations where their personal identity or the excitement of a situation can be enhanced with alcohol. These companies are successful by creating advertisements that are seen as cool and fun by young people. It is difficult to counteract this effectively, as abstaining from alcohol consumption cannot be portrayed as being as fun and pleasant as alcohol consumption is shown to be in these advertisements.

Alcohol counter-advertising has become commonplace in an effort to balance the effects of pro-alcohol advertisements on the consumption of alcohol in communities. Counter-advertising is considered to be the presentation of factual information through messages in the media. Counter-advertising is commonly seen in two forms, broadcasting (the use of television, print and radio advertisements) and warning labels on product packaging (Agnostinelli & Grube, 2002). These messages are often produced by the government, but can also originate from community action groups or the alcohol industry itself (Agnostinelli & Grube, 2002). However, industry sponsored advertisements have been argued to only exist to enhance a company's public relations image, and rarely present any information that show how young people can drink in moderation (Wolburg, 2001). Students in Agnostinelli and Grube's (2002) research

found public service announcements (PSAs) to be less enjoyable and appealing than industry sponsored advertisements, though the students also found the PSAs to be more realistic and believable. For decades, alcohol counter advertising has stressed factual information in an effort to educate or scare people into safer drinking practices. However, Agnostinelli and Grube (2002) concluded that emphasising factual information about binge drinking at the expense of emotional appeals could compromise the effectiveness of a PSA. Based on this, this research relies primarily on emotional cues and the use of different relationships in a young person's life to see how effective a more emotional approach could be.

It has been argued that alcohol counter-advertising is especially important for young university students, as they are at risk of heavy and problematic alcohol consumption and are deemed to be especially susceptible to alcohol advertising (Wechsler et al., 2000; Agnostinelli & Grube, 2002). Young people who binge drink usually find this to be a very enjoyable activity and freely choose to partake; few of these binge drinkers find their behaviour to be unacceptable or feel any need to change (Engineer et al., 2003). Therefore, advertisements that aim to get young consumers to abstain from alcohol consumption are not usually successful. Coleman and Cater (2005) propose that attempting to persuade young people to completely abstain from drinking would be futile. Engineer et al. (2003) argue that more effective advertising would promote safer drinking and target the behaviour around binge drinking by raising young people's awareness of some of the consequences of binge drinking, instead of merely advocating alcohol abstinence. Despite their excitement for getting drunk, many young people can recognise that alcohol is a drug and can have serious consequences. Although advertisements may not have any impact on their decision to binge drink the weekend after they see the advertisement, the information provided may have a long-term impact on their alcohol related decisions and cause them to consider the risks at some point (Engineer et al., 2003).

Most universities use campaigns that aim to lessen binge drinking in the hopes that this will lead to a minimisation of damage and harm caused by intoxicated youth (Wolburg, 2001). This is partly because binge drinking has become an accepted part of a young university student's life, and social norms dictate that it is not only acceptable, but expected. Agnostinelli and Grube (2002) found that students who can be classified as heavy drinkers were less likely to believe the PSAs than other students, which is unfortunate as heavy binge drinkers are the ones who counter advertising need to target the most. The motivation a person has to change their behaviour can depend largely on whether or not they can recognise they have a problem. Interestingly, most students do not consider themselves to be heavy drinkers. Young people who do not view their drinking behaviour as problematic may have limited motivation to think

about the problem and process factual information presented in a PSA. Therefore, the majority of them may not respond well to or relate to advertisements that target heavy drinkers as they do not believe they fall in this category. However, for those who already have a desire to change, modelling appropriate behaviour could be an effective way to encourage a change (Agnostinelli & Grube, 2002). It would be sensible not only to show young people that being safe and sensible while drinking is the best option, but also how to enact this. For example, some participants in Coleman and Cater's (2005) study highlighted the importance of eating and drinking water while consuming alcohol in order to reduce harm. This information could be used to develop an advertising campaign to minimise binge drinking by teaching young people techniques they can use while and before drinking in order to stay safe.

As mentioned previously, anti-smoking and anti-drinking campaigns often share many similarities as both aim to diminish the presence of certain behaviours in society and promote the safer use of, if not abstinence from, a certain product. Hence, this literature review draws on some relevant anti-smoking advertising research. Hill, Chapman and Donovan (1998) argue that not only were anti-smoking advertisements in 1998 ineffective when targeting young people, they also had a higher chance of backfiring as many young people did not like being targeted specifically when so many older adults share the same problem. They propose that communicating outcomes of smoking that are certainties, as opposed to outcomes that are probable is more effective, even if the certain outcomes are less severe or shocking. Also, beliefs about the consequences of one's actions are only able to influence behaviour if they come to mind when a person is about to perform the behaviour (Hill, Chapman & Donovan, 1998). Therefore, alcohol counter advertisements need to create ways to bring the beliefs promoted in anti-alcohol advertisements to the forefront of a young person's mind while they are in an alcohol consumption situation, and this study aims to develop advertisements that do exactly that.

It is important not only to examine how young people process alcohol counter advertising, but also what types of appeals advertisers can utilise when creating advertisements to counteract alcohol use and to explore their effectiveness in reducing rates of binge drinking. The next section of this literature review examines current techniques and tools social marketers use when developing counter binge drinking advertisements in order to inform the way in which this research developed the counter binge drinking advertisements used.

Different Types of Advertising Appeals and their Effectiveness

There are many different methods that advertisers can take to promote safe drinking messages and many tools that can be utilised to do so. The most common strategy for alcohol counter advertisements is the testimonial or informational approach, whereby factual information is provided in order to change behaviour. The information is typically presented by a celebrity, a person on the street, or by an expert in the area (Slater, 1999). This approach assumes that by providing information about drinking alcohol and its potential effects, audience awareness and their level of knowledge of the issue will rise and cause the unwanted behaviour to reduce. However, these designs are not necessarily appealing to their target audience and, therefore, are less likely to get consumers to think carefully about the issue at hand if they are not very interested to begin with (Agnostinelli & Grube, 2002).

Other common approaches include demonstrating the correct or more appropriate behaviour (for example, a person giving up their keys after drinking), evoking fear (showing horrific pictures of death or near death resulting from alcohol consumption), evoking empathy (showing victims of drunk driving or the reaction of a recently deceased person's family) and positive appeals (such as showing positive social interactions without excess alcohol being consumed) (Agnostinelli & Grube, 2002). However, Engineer et al. (2003) found that young people are more inclined to ignore safer drinking campaigns than other demographic groups and that young people felt they only truly learned from experience. This was primarily because these advertising campaigns were seen as 'lectures' and young people do not like being lectured to.

Social marketing communications often use fear appeals to encourage people to resist unwanted behaviours. Fear messages have been shown to obtain higher ratings of interest and perceived danger of binge drinking, although humour appeals were rated as much more pleasant and likeable (Lee & Shin, 2011). Some academic authors have found that advertisers can increase consumers' interest in an advertisement's persuasiveness through the use of a fear appeal (Hyman and Tansey, 1990; Higbee, 1969; King and Reid, 1990). There has also long been evidence that consumers remember advertisements with fear appeals better than advertisements that are warm and upbeat or advertisements without emotional appeals at all (Hyman & Tansey, 1990; Snipes, LaTour & Bliss, 1999). However, there is controversy about how much fear provides the optimal level of anxiety to promote a change in behaviour. Some studies have shown that stronger fear appeals can be more effective than weak fear appeals (Higbee, 1969), while others have found that evoking excessive amounts of fear can cause the consumer to feel intense levels of anxiety, meaning they cannot process the information presented properly (Tay & Watson, 2003). Tay (2005) suggests that high fear appeals are most

effective when paired with specific information about how consumers can then protect themselves. Therefore, if alcohol counter advertisers do use fear appeals, they should not just try to elicit fear but also show how to avoid the unfortunate consequences shown.

The effectiveness of fear appeals could be dependent on the person viewing the advertisement, as each and every person in the target audience could react differently. Tay and Watson (2003) showed that fear appeals tend to polarise the audience, where some will accept the message presented, and others will completely reject it. Snipes, LaTour & Bliss (1999) argue that the optimal level of fear in a fear appeal depends on the individual watching the advertisement. This means that while one consumer may find an advertisement to have an acceptable level of fear and be enticed to think about the issue at hand, another may see the same fear appeal and become too anxious to consider the message of the advertisement. Hence, fear appeals may not be the best way to target a large number of young alcohol consumers as they could feel varying levels of perceived acceptability of a fear appeal. Snipes, La Tour & Bliss (1999) argue that if advertisers choose to use fear appeals for health issues, they should ensure that consumers have a high knowledge of ways to prevent the situation portrayed in the advertisement from happening to them personally. Unfortunately, most anti-drinking advertisements in New Zealand merely tell young people not to drink excessively and provide very little, if any, information on how to drink alcohol more safely. This also indicates fear appeals may not be the best tactic for targeting young people in this context, as many do not know of or understand any ways in which to make their drinking safer.

Advertising is not the only tool that social marketers can utilise when creating counter binge drinking advertising campaigns. Therefore, this review now turns to examine other ways in which governments and social marketers have attempted to reduce rates of binge drinking and their effectiveness in achieving this goal.

Other Strategies for Reducing Binge Drinking and Promoting Safety

Advertising is by no means the only path that can be taken to promote safer alcohol consumption among young people. Governments have the power to create laws, and many of the options used internationally involve creating or changing laws or taxation in order to reduce drinking rates. Increasing the legal drinking age is the most widely used tool to reduce youth binge drinking and alcohol abuse. Other law changes have also been proposed, such as laws that raise the penalties for partaking in or facilitating underage drinking (Chaloupka & Wechsler, 1996). A common strategy to reduce binge drinking is to increase the price of alcohol through the introduction of a law or an increase in taxation of alcoholic beverages. Raising prices has

been proposed to be an effective way to target youth binge drinking because less young people will be then able to afford to drink heavily (Okoro et al., 2004). Interestingly, Chaloupka and Wechsler (1996) found that raising the price of alcohol significantly reduced the rate of binge drinking among young, female college students but had no significant impact on male students' drinking behaviour. However, very high increases in price were needed to achieve a moderate reduction in female binge drinking. The effect of doubling the taxation on alcoholic beverages was shown to only reduce binge drinking rates by 2% among female college students. Therefore, this process may not be the most effective method when aiming to significantly reduce binge drinking among university students in New Zealand, and therefore was not pursued in this study.

Potentially the most popular design internationally is introducing warning labels on the packages of alcoholic beverages. In 1989, the United States government passed a law that mandated that alcoholic beverages have a designated warning label on them highlighting the dangers of drinking and driving and the dangers of drinking while pregnant (Chaloupka & Wechsler, 1996). However, many studies have concluded that warning labels, even when used in conjunction with educational programmes, have failed to show a significant impact on improving health and safety (McCarthy et al., 1984; Patterson, Hunnicutt & Stutts, 1992). Hence, this strategy was also not pursued in the course of this research.

Another possible strategy for reducing binge drinking is compulsory education in schools. In New Zealand, it is compulsory for schools to teach children about sexual health to give them the information needed to make safe decisions. However, alcohol related education is not viewed in the same way and has not been introduced into health curriculums. Compulsory education about the outcomes and potential dangers of alcohol could be an effective way to teach the majority of young people before they begin drinking heavily (Coleman & Cater, 2005). This bears in mind that binge drinking is mostly a person's own choice, and would provide young consumers with the information that they need to make informed and safe decisions. This could be an important area for future research but is currently outside the scope of this research.

Evidently, there are numerous approaches that social marketers can take when aiming to reduce binge drinking rates among youth. Given that many of these approaches appear to be ineffective, this study develops a new approach to reducing youth binge drinking and investigates an unexplored usage of peers, parents and authority figures in conjunction with drinking contexts in changing youth drinking related behaviours and attitudes. Based on this literature review, the following study has been created and completed in order to achieve this

goal. The following section outlines the aims and hypotheses that were tested in the course of this research and the academic basis on which they were formed.

Aims and Hypotheses

Aims

One of the primary purposes of this research is to examine if and how key relationships in a young university student's life could be used to deliver a safe drinking message in two common contexts in which young university students consume alcohol. This involves examining the effect of utilising a best friend, mother or a typical bartender in a counter binge drinking advertisement that is presented simultaneously with either the context of a 21st birthday or a Friday night out. This research aims to use the advertisements developed (see Appendix One for details) to investigate how to change young university students' attitudes towards the act of binge drinking, attitudes towards alcoholic products and their likelihood of binge drinking in each of the two contexts. It is also necessary to examine how young university students respond emotionally and rationally to the advertisements themselves in order to determine their usefulness for social marketers, which is the other primary aim of this research.

This research will improve the academic understanding of the possible influence of key relationships in a young university student's life when used in counter binge drinking advertisements, and how these could be used to change or reinforce binge drinking related attitudes and behaviours among youth. More specifically, this study will examine key female relationships in a young university student's life and the influence of a female best friend, a mother and a female bartender on drinking behaviour. This research also furthers the understanding of the influence of the context in which young people choose to drink on their binge drinking behaviours and attitudes. The results of this research will aid in creating more effective intervention strategies and safer drinking advertising campaigns when targeting young people, and more specifically, when targeting young university students.

Hypotheses

Based on the academic literature discussed previously the following hypotheses have been developed. These hypotheses reflect the nature of this research; namely that they examine the potential use of a best friend, a mother or a typical bartender with either the context of a 21st birthday or a Friday night out in counter binge drinking advertisements.

From the literature review, it can be concluded that friends can have a significant effect on young people's binge drinking behaviour through various forms of peer pressure. Peer

influences have been shown to be a major influence in the initiation and continual use of alcohol in young people's lives (Wood et al., 2004; Bot et al., 2005). Clapp, Shillington and Segars (2000) found that friends have a powerful influence on young university students' drinking behaviour and Engineer et al. (2003) concluded that young people were more likely to drink excessively in the presence of friends because they perceived it to be a safer drinking environment than when they were alone or with strangers. Peers can influence young people's drinking through active social influences, such as pouring a friend a drink (Graham, Marks & Hansen, 1991) and passive social influences, such as the influence of social norms (Borsari & Carey, 2001; Wood et al., 2004). This means that both the direct and obvious actions that a young person's friends take in alcohol consumption situations and a young person's perceptions of their friend's binge drinking behaviour could have a significant impact on a young person's decisions surrounding excessive drinking.

Social interaction theory examines how people interact with each other and how their behaviours are changed by the presence and influence of others (Turner, 1988). It is clear that one of the main motivations young people exhibit for excessive alcohol consumption is social facilitation and interaction; namely to impress or fit in with a group of peers (Coleman & Cater, 2005). This idea is related to the concept of normative social influence, which is the proposition that a person will conform to the expectations of a group in order to be accepted by them (Nolan et al., 2008). As friends are very important to young university students, it is possible that some young people drink alcohol in order to remain part of a certain group of friends and are willing to conform to the group norms to impress their peers. Coleman and Cater (2005) found that keeping up with friends was a primary motivation for excessive drinking among youth, and that youth found their night to be much more fun when they remained at the same level of intoxication as their peers.

There is the question of which friend to utilise in this research or whether a group of friends would be most effective. Urberg et al. (1997) found that a best friend has the highest level of influence on young people's drinking behaviour, and a much more significant influence than the friendship group. Bot et al. (2005) found that the magnitude of the influence of a friend depends on the nature of the friendship. The dimensions that influence friendship characteristics are numerous, ranging from sociometric status (perceived level of popularity) to the reciprocity of the friendship. However, Bot et al. (2005) only examined young people aged 12 to 14, and so their results cannot be extrapolated to the population of young adults that attend university. These authors do propose that the effects of peer influence may be even greater in older young adults as drinking becomes more regular and a larger variation of alcohol is often consumed,

which may result in a heavier level of intoxication. In light of this information, this research proposes that the best friend will have the highest level of influence on attitudes towards excessive drinking and binge drinking behaviour and, therefore, a best friend figure has been chosen for use. Given that friends are the most likely to be present while drinking occurs and that they can easily influence drinking behaviour through both active and passive social influence, the following hypotheses propose that the best friend will be the most influential of the three relationships examined in this study.

The second relationship that is examined in this research is a mother. Parents usually have a more long term influence on young people because parents are present for the majority of a young person's life before university. Therefore, the relationship young people have with their parents and their parents' views and attitudes towards alcohol consumption could influence young university students' alcohol consumption behaviour and attitudes. Most young people try alcohol before they start university, showing that relationships formed before university can influence their alcohol consumption behaviour (Baer, Kivlahan & Marlatt, 1995; Wood et al., 2004). Adolescents that come from low socioeconomic backgrounds tend to consume more alcohol, more frequently than their peers from other socioeconomic backgrounds, showing that the family environment in which a young person is raised can have a significant effect on their drinking behaviours (Droomers et al., 2003). The views that one holds of their parents may continue to be important to a young university student as they move into adulthood. Some academics have shown that parents have a direct effect on young people's alcohol consumption (Barnes & Farrell, 1992; Barnes et al., 1994) while other academics have only found indirect effects (Dielman et al., 1993). Beck and Treiman (1996) found none of the perceived parental influences used in their study to be important. They suggest that interventions utilising parental influences should aim to facilitate communication between young people and their parents regarding acceptable levels of drinking. Therefore, it is inconclusive if parents have a significant impact on young university students' drinking behaviour and attitudes. This research therefore aims to explore how parents could be used in advertising to encourage safer drinking among young people, and whether or not they should be used at all.

The power of parents may be dependent on the type and strength of the relationship that a young person has with their parents. As explained previously, many young people from a western background do not respect forms of authority that they do not perceived to have been earned (Thompson & Holland, 2002). Parents often have to play an authority figure's role in their child's life, and although this form of influential power may be less important as a young person enters university, the response a young person has to their parents instructions

surrounding alcohol may depend on how they perceive their parent's right to authority and whether or not they've have earned the respect desired. For example, a young person with a positive, close relationship with their parents may believe their parents have earned their authoritative power and, therefore, respect their wishes surrounding alcohol consumption, or at least take them into account when partaking in alcohol consumption. On the other hand, young people who do not believe their parents have earned their authoritative power may reject their wishes surrounding alcohol consumption. This is just one example of how the relationship a young person has with their parents could influence their reaction to their parents encouraging safer drinking problems. Therefore, this research proposes that young university students will react differently to their parents promoting a safer drinking message depending on their relationship with their parents.

Interestingly, Wood et al. (2004) found that peers have much more robust influences when compared to parental relationships, as peers begin to exert a greater amount of influence of young people as they go through university and as youth gain independence from their families. To add to this, older adolescents are more autonomous, which could result in young people considering their parents rules and attitudes less when drinking (Cottrel et al., 2003). This decrease in importance of parents may be filled with an increasing importance of peers (Bot et al., 2005). However, other academic authors believe that instead of being supplanted by peer influences, parental influences remain important even as peer influences rise (Duncan, Duncan & Hops, 1994; Windle, 2000). Hence, parents may still be very important, and their level of influence may depend on the type of relationship a young person has with their parents. Like with friends, there are many different types of relationships that young people share with their parents. Wood et al. (2004) extended previous research on parental influence on alcohol consumption among young people to show that parental influences are still important when maturing into late adolescence. These authors demonstrated that parental values and attitudes surrounding alcohol consumption are directly associated with youth alcohol abuse, and that perceived parental disapproval coincided with lower levels of heavy drinking behaviour. Hence, it could be postulated that young adults with a friendly, close relationship with their parents may value their opinions, and therefore drink less when they know their parents disapprove. However, those who have a distant, authoritative relationship with their parents may feel the desire to defy their parents' authoritative power and may continue to drink excessively. Hence, the emotional dimensions of the relationship between parents and young university student could have an interesting impact on the ability of the parents to influence their child's drinking behaviour and attitudes.

Lastly, a more distant, authoritative relationship is to be examined in light of this research. Bartenders have a unique and interesting relationship with young consumers of alcohol. Unlike the other relationships examined in this study, this is a relationship that does not exist outside the alcohol consumption situation in a bar (Rose, 1968). Bartenders have been chosen in this research as an authority figure in young people's alcohol consumption situations because bartenders have the mental and physical ability to prevent university students from purchasing and consuming alcohol while they are in a particular bar. This kind of power cannot be seen in the other relationships examined in this research, providing an interesting point of contrast. Waring and Sperr (1982) proposed that bartenders could be highly important and influential in assisting the minimisation of binge drinking and the harm it can cause. Bartenders could also be ideal sources of information on drinking and its impacts as they are proposed to be often viewed as personal confidantes or great advisors of those who are drinking (Waring & Sperr, 1982). Waring (1978) proposed that the bartender could be particularly important for communicating information about safer drinking behaviours to college-aged youth, but offered no quantitative evidence for this proposal. Hence, this research aims to fill this gap by examining the importance of a bartender in encouraging safer drinking practices among young university students through quantitative research. Clapp, Shillington and Segars (2000) found that bartenders can be seen as a strong protective factor against some unfortunate consequences of alcohol consumption. From this, it may be plausible that university students would respond well to a bartender encouraging safer drinking. On the other hand, many young people, especially in western cultures that foster individuality, do not respect authority figures that they do not view as having earned their authority (Thompson & Holland, 2002). It is also plausible that the bartender may not be seen by young university students as a legitimate source of authoritative power, and therefore the bartender's opinions and instructions would not be respected. However, this is more general research on the response of Western young people to authority figures, and the academic research surrounding bartenders specifically encourages that they are an authoritative figure with the potential for a positive effect on binge drinking behaviours among youth. Hence, this research proposes that young university students will respond to the bartender's safer drinking advice, but it will be less effective than the best friend's advice as they have had the opportunity to develop a much more close and personal relationship with their best friend.

The other key aspect of this research is the investigation of the influence of drinking contexts, namely, a 21st birthday and a Friday night out. It is plausible that the patterns of alcohol consumption displayed by young people may be very different in different contexts; for example, many young people may drink significantly more on their 21st birthday than on a

Friday night out which is not attached to a special celebration. Clapp, Shillington and Segars (2000) argue it is critical that contexts in which high consumption of alcohol is likely to occur are identified as these are potentially the most dangerous contexts. Therefore, this research aims to further the current research on the influence of context on young university students' drinking behaviour by exploring two common situations in which one may be enticed to drink alcohol; a Friday night out and a 21st birthday.

Kraft (1982) found that university students tend to drink alcohol with their friends on weekends and at parties most heavily, and that heavy drinkers often patronised bars as well. A Friday night out encapsulates this idea well, as most students drink on the weekend and they tend to go out to parties or bars. Harford, Wechsler and Seibring (2002) examined university students' behaviour at campus parties or bars. These authors found that over 75% of the university students in their research attended these events, and the majority of those who attended consume five or more drinks while there. Hence, there is a culture of excessive alcohol consumption among young people in most universities in recent years and it has become quite common and acceptable to drink excessively weekly (Young et al., 2005). Many young university students believe that this is part of the experience of university and engage in drinking alcohol to be social with other students on a weekly basis. Wechsler et al. (2000) found that 23% of students in their study engaged in binge drinking at least once a week, and nearly half of the undergraduate students qualified as binge drinkers. Therefore, this research will examine the drinking related behaviours, expectations and attitudes of young university students in the context of a regular Friday night out.

The 21st birthday is often seen as an important night in a young person's life, and many young university students seek out a night of partying, drinking and fun. Neighbors et al. (2005) examined alcohol consumption on a 21st birthday, and found that young people often drunk a lot more alcohol on their 21st birthday than they would on a typical night out. Many students were found to participate in drinking games which lead to dangerous levels of intoxication. Many students feel negative health related consequences of drinking excessively, such as a hangover, and some are even hospitalised after the celebrations of their 21st birthday. However, Neighbors et al. (2005) argues that although many academic authors have examined binge drinking among young people, further research is needed into the influence of the context of a 21st birthday.

Based on this information and the other more extensive information on the influence of relationships and contexts discussed previously in the literature review, hypotheses 1, 2, 3, 4 and 5 have been developed as follows:

H₁: Counter binge drinking advertisements featuring a best friend will have a greater significant effect on a young university student's attitudes towards and likelihood of participating in binge drinking and attitudes towards alcoholic products than the advertisements that feature a mother or a bartender.

H₂: Young university students will have a significantly greater positive attitude towards binge drinking and alcoholic products, and a significantly greater likelihood of binge drinking on the night of their 21st than on a Friday night out.

H₃: Counter binge drinking advertisements that feature a best friend will have a significantly greater effect on a young person's likelihood of participating in binge drinking, attitudes towards alcoholic products, and attitudes towards binge drinking on a Friday Night out than on the night of a young university student's own 21st birthday ONLY IF they have a close, personal relationship with their best friend.

H₄: The presence of a mother figure in a counter binge drinking advertisement will have a significantly greater effect on a young university student's attitude towards alcoholic products, attitude towards the act of binge drinking, and likelihood of participating in binge drinking on the night of a young university student's 21st birthday than on a Friday night out ONLY IF they also have a close, friendly relationship.

H₅: Counter binge drinking advertisements that feature a bartender will have a significantly lesser effect on a young person's likelihood of participating in binge drinking, attitudes towards binge drinking, and attitude towards alcoholic products on the night of a young university student's 21st birthday than on a Friday night out ONLY if they have a close, friendly perception of a typical bartender.

Neighbors et al. (2004) showed that perceived same-sex drinking norms are a greater predictor of young people's drinking behaviour than drinking norms that are not gender specific. Female drinking norms among peers appeared to have the greatest influence on young women, more so than male drinking norms influence on young men. Hence, this research proposes that female university students will respond better to the female relationships presented in the stimulus shown in this research than male university students.

H₆: Counter binge drinking advertisements that feature a female spokesperson will have a significantly greater effect on a young *female* university student's likelihood to binge drink, attitude towards binge drinking and attitude towards alcoholic products than on a young *male* university student's attitude towards and likelihood to binge drink.

The next hypothesis moves away from the possible use of the advertisements in this study in influencing young university students' binge drinking related behaviours and attitudes. Instead, hypothesis 7 and 8 both explore how the use of key relationships and drinking contexts in counter binge drinking advertisements can influence how young university students emotionally respond to the advertisement and rationally respond to the message the advertisement is conveying.

There is a multitude of research discussed previously that indicates the potential effectiveness of a best friend in influencing the binge drinking decisions of youth (see Coleman & Cater (2005) or Wood et al. (2004) for example). It has been proposed that an advertisement featuring a best friend will, therefore, elicit a significantly greater response than an advertisement featuring a mother or a best friend when examining binge drinking behaviours and attitudes. The next hypothesis proposes that this influence extends beyond influencing young university students' binge drinking behaviours and attitudes and will also be the most effective in eliciting an emotional response and encouraging a more positive view of the message of the advertisement.

Hypothesis 7 also proposes that the best friend will have a significantly greater effect in the context of a Friday night out. Neighbours et al. (2005) showed that youth typically consume more alcohol on the night of their 21st and examined how peers can play a vital role in encouraging such consumption. Taking this into account, hypothesis 7 proposes that youth will not respond well to being told to stop binge drinking on a celebratory occasion. However, they may respond much better when binge drinking is not considered to be the social norm and therefore, hypothesis 7 proposes that an advertisement featuring a best friend will elicit the best emotional responses and attitudes towards the message of the advertisement when utilised with a Friday night out.

H₇: An advertisement featuring a best friend will have a significantly greater effect on a young university student's emotional response to the advertisement and attitude towards the message of the advertisement than an advertisement featuring a mother or a bartender ONLY IF the advertisement also presents a context where excessive drinking is not the social norm (in this case, a Friday night out).

The level of self-referencing that a consumer feels with an advertisement can significantly affect their attitude formation and their recall of the message of the advertisement, where those who feel a high level of self-referencing have a much higher chance of recalling the message (Petty & Cacioppo, 1979; Burnkrant & Unnava, 1989). Burnkrant and Unnava (1989) found that

addressing people directly in advertisements and encouraging them to recall similar memories increased the consumer's chance of recalling the message. Taking these findings into account, the counter binge drinking advertisements developed for this research address the consumer directly and encourage a recall of a situation where their best friend, mother or a bartender may have advised them to stop binge drinking. The following hypothesis therefore proposes that those who feel a high level of self-referencing with the advertisement they see (i.e. they feel they can closely relate to it) will report more positive reactions to the advertisement.

H₈: Young university students will have a greater significant emotional attitude towards the advertisement and attitudes towards the message of the advertisement when presented with an advertisement featuring a best friend than when presented with an advertisement featuring a bartender or a mother figure ONLY IF they report high levels of self-referencing with the advertisement.

This thesis now turns to discuss the method used in order to test these hypotheses and achieve the aims of this research. This includes discussing the participants chosen, the procedure used, and the scales used to develop the survey questions, for example.

Method

Participants

New Zealand university students have been proposed to be an appropriate population for use in binge drinking related research as they have a serious reputation for hazardous drinking compared to their non-student peers (Kypri et al., 2002). Hence, a population of young university students in New Zealand was chosen for this study to be representative of young people and to target those deemed most at risk.

The choice of participants for this research was based on the purpose of exploring young university students' likelihood of engaging in binge drinking and the development of their binge drinking related attitudes after viewing a counter binge drinking advertisement featuring a key relationship and drinking context in their lives. Based on this, the population for this research is young adults who currently attend a university in New Zealand, and a sample was taken from this population. The participants will be male and female university students that currently attend a university in New Zealand. They will need to be between 18 and 25 years old to ensure that the study examines young university students' drinking behaviour and attitudes. There will be no bias in terms of ethnicity, gender or income. There will be the opportunity to win one of three \$50 vouchers to encourage people to participate.

For any research, the sample size is determined by the optimum number of participants needed to make correct inferences from data collected (Marshall, 1996). Central limit theorem proposes that a minimum of 30 participants is needed to obtain normally distributed data for hypothesis testing (Adams, 2009). This research will, therefore, aim to have at least 40 participants in each cell of the 2x3 matrix explained below, totalling to at least 240 participants. This number will allow for some incompleteness or dishonesty in survey answers.

The aim of quantitative sampling is to obtain a sample that is representative of the population in order to make appropriate and accurate generalisations about the population from the data collected (Marshall, 1996). The sampling method employed in this research will be convenience sampling, a non-probability sampling technique. This is a process whereby participants are chosen because they are easily accessible for the researcher (Marshall, 1996). This technique has been chosen because of the difficulty of preparing a list of the population for this research, as obtaining the necessary information on every tertiary student in New Zealand would take time and funding that is not available for this research. A complete knowledge of the members

of the population is needed for true probability based sampling to be undertaken. Hence, a non-probability technique was chosen. Convenience sampling was also chosen because of the difficulty in gaining access to those chosen through a probability sampling technique, even if a list of members of the population could be obtained. By using convenient sampling, students who are interested in this research will participate, meaning a lot less time and money needs to be spent on sampling. These are some of the main benefits of using convenient sampling; the limited time and money that need to be spent in order to be successful (Marshall, 1996). However, there are clear disadvantages to convenient sampling, such as an inability to accurately generalise the results to the population level. Therefore, this research invites researchers with more resources to replicate this study using a probability sampling technique to ensure validity of the results in generalising them to the population level.

Two methods were used to recruit students to participate from the University of Canterbury in New Zealand. Young students who attend this university were easily accessible and convenient to the researcher as well as being representative of the population being examined. The first distribution method was sending an email to classes of undergraduate students that included an online link to the survey. The undergraduate classes chosen ranged over several degrees and disciplines including accounting, geography, marketing and management. The purpose of this was to obtain a sample of students with different interests to ensure that this research is not solely representative of students with one type of degree or speciality. The second method used to approach this target group was to distribute posters around the university that promoted the survey. This poster was very similar to the email sent out, and aimed to reach those who do not check their emails regularly. The survey was active for four weeks, after which time it was determined that an appropriate number of responses had been collected and the survey was made inactive.

Procedure

The procedure was simple; participants were invited to seek out a website that held the questionnaire. Participants were then exposed to one of six print advertisements in an online setting and then asked a series of questions in an online survey. These questions explored their reactions to the advertisement they saw and their more general attitudes towards and usual behaviours surrounding alcohol consumption (see Appendix 3 for the survey questions). They were offered incentives to participate and asked to enter their email address at the end to contact them if they win the prize. This process took each participant approximately 15 to 20 minutes.

The Internet was chosen as a means of distribution due to the many benefits that more traditional methods of communicating with consumers, such as print and television, cannot provide. The Internet is easily accessible in New Zealand and is an excellent solution for marketers who aim to communicate with large numbers of people. When considering the rising costs of the production and airing of a television advertisement, the use of the Internet as a promotional tool is relatively cheap, making it a perfect distribution tool for a low budget research project such as this one (Pilling & Brannon, 2007). The Internet facilitates two-way communication between consumers and marketers, and allows marketers to obtain responses in real time, which was essential to ensure this research was completed within the limited time frame (Kreuter et al., 2000). Acknowledging these benefits, this study used the Internet to obtain all the survey responses required. The Internet allows students to complete the survey in their own time, which increases the number of students who are likely to participate as they can do so at a time that is convenient for them personally.

Despite the rising popularity of the Internet among youth, not everyone uses the Internet every day and this research needed to take into account this limitation. Posters were distributed through the university campus to target those who have access to the internet but choose not to use it often. This uses a print format to encourage those who do not have a prominent online presence to participate, aiming to keep potential biases among the sample collected to a minimum. All of the participants were shown one of six advertisements, as mentioned previously. The next section describes the stimulus created for this research and how and why this was done.

Stimulus

One of the key challenges of this research was developing advertisements for participant to view that would test the effectiveness of the elements that needed to be tested and only those elements. This required substantial research into different ways that counter binge drinking messages have been developed and promoted and based on this research, the actual development of entirely new stimulus and a unique message.

There have been a variety of different messages developed that promote safe drinking and a variety of different methods of communicating them to consumers. Haines (1996) examined anti-alcohol advertising in campuses in the United States and found that common messages included support of abstinence, responsible drinking (including eating before and while drinking) and the association of binge drinking with negative consequences (such as unsafe sex or getting into fights). However, this research aims to go beyond promoting a safe drinking

message and explore the role of different key relationships in young people's lives and the context in which they drink in promoting safe drinking. Haines (1996) proposes four rules of developing a message for young people that promotes safer drinking practices. These are keeping it simple, telling the truth, being consistent and highlighting the norm of moderation. Hence, this research has developed a series of advertisements with these four keys ideas in mind.

As many students are sceptical towards advertisements that attempt to change their drinking behaviour, advertisers need to take care to ensure elements of the advertisement are relatable and make it as easy as possible for the student to get involved and enjoy the advertisement. One way in which to do this is by ensuring that the sources of information in the advertisement are credible (Haines, 1996). Therefore, this research used a series of advertisements that utilises real and relevant relationships in young university students' life. These are a bartender, who plays a key role in facilitating access to alcohol, a mother who has often had an influential relationship with their child throughout their life, and a best friend of a young university student. Haines (1996) found that advertisements that utilised photographs of students attracted students more than any other design element. Therefore, this research utilised an actual university student to represent the best friend figure. The use of these relationships added realism to the advertisements presented and allowed the researcher to examine the effects of these key relationships without potential bias from other aspects of advertisements.

Based on this information, this study utilised a 3 (best friend, mother, bartender) x 2 (Friday night out, 21st birthday) between subjects factorial design. This meant that each participant was randomly assigned to an advertisement that depicts one of the two drinking contexts with one of the three people stated above encouraging safer drinking practices. These advertisements were consistent in every aspect except for the spokesperson in the advertisement and the drinking context referred to. The font, the placement of the spokesperson, the advice they provide all remained the same – the photos were even in black and white to ensure there was no elicitation of more positive or negative emotions due to different colours in each advertisement. This ensures the highest possible level of consistency and enables the analysis of the effect of only the relationship and context shown in each advertisement.

A pre-test was undertaken in order to determine what the advice of the spokespeople would be, as this was not something that was not able to be based on previous academic findings (no relevant papers could be found that actively displayed the advertisements they used). However, the advice still needed evidence to support that this was a relevant and effective advice to give. Therefore, the following section outlines the pre-test that was completed and the results of this

quantitative test. The final version of the advertisements developed and used for this research can be found in Appendix One.

Pre-Test

The formation of the advertisements used in this research is crucial to its success; each aspect of the advertisement must be based on a solid foundation of necessity and research. The aspects of the advertisements that are not being deliberately manipulated to examine the effect of different key relationships or contexts need to remain the same in all advertisements. The use of black and white colour with a plain background was an obvious choice to avoid distraction in the advertisements, but the decision of what the safer drinking message that each relationship is conveying was a more difficult one. Therefore, a pre-test was run in order to discover what advice young university students would respond the best to and therefore what wording would be used in the advertisements in this research.

The following statements were developed and respondents were asked to rate the potential effectiveness of each statement in stopping them from consuming any more alcohol and how well they would react if their mother/best friend/bartender said that to them. This was implemented by asking respondents to indicate their answer on two 7 point scales. The first one ranged from 1 = Not at all effective in stopping me drinking to 7 = extremely effective in stopping me drinking. The second scale ranged from 1 = I would not respond at all well to this to 7 = I would respond very well to this.

The statements presented for testing are as follows:

1. "Look, I'm [insert relevant relationship], trust me when I say you shouldn't drink anymore tonight"
2. "I don't think you should drink any more tonight"
3. "I think you've had enough to drink tonight"
4. "You will stop drinking now"
5. "Don't you think you've had enough to drink tonight?"

The relevant relationships that were inserted in the first one were either 'your mother', 'your best friend', or 'a bartender'. The pre-test was run using the survey software Qualtrics and was implemented using convenience sampling. The survey was available for 24 hours, and a total of 31 responses were recorded, which was deemed an appropriate amount for a pre-test of this nature.

Overall, statement 1 and statement 5 were the most effective and had the most positive responses over all three relationship types. The relevant data has been summarised in the table below:

Relationship	Statement 1		Statement 5	
	Mean Effectiveness	Mean Response	Mean Effectiveness	Mean Response
Mother	5.27	4.65	5.10	4.81
Best Friend	5.23	5.23	4.97	4.90
Bartender	4.83	4.39	4.93	4.87

Table 1: The Mean Scores for the Effectiveness of Each Statement in Stopping Drinking Behaviour and the Mean Emotional Response to the Statement.

From the above data, it is clear that when one’s mother was saying the statement, Statement 1 and Statement 5 were almost equal overall, making both of these statements an appropriate choice for this relationship. However, for the best friend, the mean effectiveness and response were both significantly higher for Statement 1 than for Statement 5. Unfortunately, it was the opposite for the bartender, with the mean effectiveness and mean response being significantly higher for Statement 5 than for Statement 1. Given that the one of the aims of this research is to examine the effect of different relationships on the alcohol related behaviour and attitudes of young university students, Statement 1 was chosen as it highlights the nature of the relationship in the advertisement much more effectively than Statement 5.

Now that the development of the stimulus has been explained, it is important to discuss the independent variables, the dependent variables and covariates chosen for this study and the scales used to measure these in the questionnaire. This is done in the following sections to allow an understanding of the exact process through which the questionnaire was developed and the origins of the questions participants were asked.

Measures

Independent Variables

The independent variables for this research are the context in which drinking occurs (a 21st birthday or a Friday night out) and the key relationship in a young person’s life (a best friend, a mother or a bartender). By using these two contexts, this research aimed to highlight how context can be an important aspect in determining how young people approach binge drinking and that in some contexts, such as one’s 21st birthday, binge drinking is considered to be more

acceptable. The relationships presented by the people in the advertisements will be a best friend, a mother and a bartender. These people all represent very different relationships in a young person's life, ranging from someone who is very close and knows the individual well but has no authoritative power (best friend) to someone without close relationship with the individual but a lot of authoritative power (bartender).

Dependent Variables

There are a range of dependent variables that were examined in this research to determine if and how the independent variables stated above have a significant effect on these concepts. These dependent variables are outlined below; including an explanation of the scale chosen to measure said dependent variable and a discussion of the origin of the scale.

Please note that all the scales utilised in this research were 7 item scales to enable ease of comparability and data analysis in this research, even when the original scale that a measure is based on is measured with a different number of scale items. Some of the scale items in the following scales were reverse coded in order to evaluate each participant's response for authenticity. Please refer to Appendix Three to see the entire questionnaire.

Attitude towards the Advertisement (Emotional Response)

As mentioned previously, it important to measure how young university students respond emotionally to counter binge drinking advertisements, such as these ones, as this could affect if and how they choose to change their drinking related behaviours and attitudes. This could also affect whether they choose to discuss the advertisements with their friends and therefore enhance word-of-mouth exposure of the advertising campaign, meaning the overall success of the campaign could significantly increase if the target market responds in the desired way and choose to discuss the campaign. Hence, a measure of the emotional attitude towards the advertisement that the participants developed after seeing one of the six advertisements has been created based on previous similar scales.

The scale that attributed to the creation of the measure of young university students' emotional attitude towards the advertisement is the *Affective Response to Advertisement (Overall)* scale (Singh et al., 2000) from the Marketing Scales Handbook. This scale typically uses a series of 7 point scales to measure a person's affective reaction to an advertisement, which is exactly what this research needed to examine through the development of an *Attitude towards the Advertisement (Emotional Response)* scale. There are 12 scale items in this scale, 8 of which were

used as they were the most relevant items to this research. This scale has a Cronbach's alpha of 0.80, making it a reliable scale to use. Only one scale was required to inform the creation of the *Attitude towards the Advertisement (Emotional Response)* scale as the *Affective Response to Advertisement (Overall)* scale measures exactly what was needed and no further additions were needed.

Attitude towards the Message of the Advertisement

It is not only important to measure a young university student's emotional attitude towards the advertisement overall, but also to look deeper and to examine their attitude towards the message that the advertisement is conveying. This is important to assess as young people have been exposed to counter binge drinking messages throughout their lives and it would be interesting to see if these advertisements reinforce or change young university students' attitudes towards this kind of message and to see the development of their attitudes towards this specific message.

The *Attitude towards the Message of the Advertisement* was based on a few scales, the first of which is the *Attitude towards the Ad (Message)* scale (Singh, 1994) from the Marketing Scales Handbook. This scale has a Cronbach's alpha of 0.88, which makes it a highly reliable scale to use. It uses 7 point bipolar adjectives to examine a person's attitude towards the message in an advertisement they have seen. There are 7 original scale items, 5 of which have been included in this research as 2 scale items were not as appropriate for the research context of anti-binge drinking advertisements as the other scale items.

The second scale that was used to develop a measure of young university students' attitudes towards the message of the advertisement they saw was the *Persuasiveness of the Ad (Cognitive Change)* scale (Reichert, Heckler and Jackson, 2001) from the Marketing Scales Handbook. This scale has a Cronbach's alpha of 0.79, making it a reliable scale to use, and utilises a series of 7 point statements to measure the degree to which a person believes that an advertisement has influenced them to be more knowledgeable or think differently about a topic. The scale items ranged from 1 = very much to 7 = not at all and there are four scale items, all of which were used in this study. These two scales were combined to produce the overall scale for *Attitude towards the Message of the Advertisement*.

It should be noted that this scale and the previous scale were not combined to make one variable, which would be called *Attitude towards the Advertisement*. This is firstly because this separation has been undertaken by academics before, as proven by the number of authors quoted above and below from the Marketing Scales Handbook. However, this was also done

because consumers may have had a different emotional response to the advertisement than to when they are asked to critically and logically examine their reaction to the message the advertisement is conveying. This is more of a rational response and therefore requires a different thought process to the emotional response discussed above. Hence, these two attitudes were measured and analysed separately.

Attitude towards the Act of Excessive Drinking

Another key aim of this study was to examine young university students' binge drinking related attitudes and how anti-binge drinking advertisements featuring a key relationship and drinking context in their lives might affect these attitudes. One of the relevant attitudes that needed to be measured is young university students' attitude towards the act of binge drinking. Therefore, the *Attitude towards the Act of Excessive Drinking* scale has been developed to measure how the respondent feels about excessive drinking after seeing one of the six advertisements, regardless of whether or not they would undertake the activity in the context shown.

The *Attitude towards the Act of Excessive Drinking* scale used in this research was developed through adapting two scales. The first scale is the *Attitude towards the Act* scale (Ajzen & Fishbein, 1980) from the Marketing Scales Handbook. This scale measures the participant's overall evaluation of engaging in an activity. The *Attitude towards the Act* scale most commonly employs a series of 7 point likert scales. This scale is reliable as it has a Cronbach's alpha between 0.85 and 0.95. This is because a few academic authors have used this scale and obtained different reliability results, but all the results are at an acceptable level of reliability. Although there are eight original scale items, not all of these scale items pertained to the context of this research, and so the five most relevant scale items were chosen and used. These have been altered slightly to cater for alcohol consumption research, but the basic premise of the scale items remains the same.

The *Attitude towards the Act (Consuming a Food Item)* scale (Crites, Fabrigar & Petty, 1994) from the Marketing Scales Handbook was the second scale used to create the *Attitude towards the Act of Excessive Drinking* scale. This scale is also reliable, with a Cronbach's alpha of 0.88. It utilises 7 point semantic differential scales and has five scale items. Some of these scale items were very similar to the items from the *Attitude towards the Act* scale discussed above, and so were not included to avoid repetition. Using aspects of these two scales, the *Attitude towards the Act of Excessive Drinking* scale was developed for use in this research.

Attitude towards the Product (Alcohol)

Attitude towards the Product (Alcohol) was measured in order to gain an understanding of how participants view products that contain alcohol after seeing the stimulus they were shown. This is another key attitude that needed to be examined and differentiates attitudes towards the act of binge drinking and attitudes towards the actual alcoholic products themselves. This provided an analysis of the effects of the counter binge drinking advertisements in this research on young university students' specific attitudes towards alcoholic products or the act of binge drinking as a university student may view these two concepts very differently.

Attitude towards the Product (Alcohol) was measured through adapting two scales, the first of which is the *Attitude towards the Product (Food)* scale (Arias-Bolzmann, Chakraborty and Mowen, 2000) from the Marketing Scales Handbook. This scale uses a series of 7 point semantic differential scales to measure a participant's attitude towards a product category, in this case towards food and beverages. This scale has a Cronbach's alpha of 0.96 and is therefore assumed to be reliable. There are 11 original scale items, though the ones that did not overlap with the following scale were used in this research.

Features from the *Attitude towards the Object (Interesting)* scale (Neelamegham and Jain, 1999) from the Marketing Scales Handbook were also included. This scale utilises 7 point semantic differential scales to measure a person's thoughts on how fun or exciting an object is. This scale has a Cronbach's alpha of 0.94 and is therefore also assumed to be reliable. There are five scale items, though some of them are similar or exactly the same as scale items in the *Attitude towards the Product (Food)* scale and were omitted to avoid repetition. The combination of these two scales formed the *Attitude towards the Product (Alcohol)* scale used in this research.

Likelihood to Engage in Excessive Drinking

This research aimed not only to explore how counter binge drinking advertisements featuring key relationships and drinking contexts could affect young university students' binge drinking related attitudes but also their behaviour. Hence, a scale that measured young university students' likelihood to engage in binge drinking in the context shown in the advertisement they saw was developed.

The *Likelihood to Engage in Excessive Drinking* scale was based on the *Behavioural Intention* scale (Ajzen and Fishbein, 1980) from the Marketing Scales Handbook. This scale measures the likelihood of a consumer to engage in a particular behaviour. The Cronbach's alpha for this scale ranges from 0.8 (Zhang and Buda, 1999) to 0.99 (Jones, Mothersbaugh and Beatty, 2000),

showing that this scale is reliable. The majority of authors cited in the Marketing Scales Handbook used 7 point semantic differential scales for measuring this construct, which will be how this scale will be represented in this research. There were eight original scale items, but not all the scale items were relevant to an alcohol consumption context. Therefore, the five appropriate scale items were used.

Self-Referencing

Self-referencing is a measure of how much a participant believes the advertisement relates to them or represents them personally. This is important to measure in this research because it shows if the participant felt they could connect with the advertisement and can relate to it. This could affect the attitudes formed regarding the advertisements itself and therefore the effectiveness of the advertisements in this research. Self-referencing is an important variable to consider when developing counter binge drinking advertisements that aim to elicit an emotional or rational response. Therefore, a scale to measure young university students' level of self-referencing with the advertisement they just saw has been included.

In this research, the examination of self-referencing will be based on the two following scales. The first was produced by Kwai-Choi Lee, Fernandez and Martin (2002) and measured the degree to which a subject self-referenced an advertisement on a series of 5 point scales from strongly agree to strongly disagree. This scale has a Cronbach's alpha of 0.84 and is therefore assumed to be reliable. This scale has four scale items, all of which were used but changed slightly to fit with the drinking related context of this research.

Burnkrant and Unnava (1989) also developed a self-referencing scale, whereby participants were asked a series of questions and asked to rate their answers of a series of 7 point scales from 1 = strongly agree to 7 = strongly disagree. The three statements asked explored subjects' agreement or disagreement with the idea that the message of the advertisement 'seemed to be written with me in mind', 'seemed to relate to me personally' and 'made me think about my personal experience with [the product]'. This scale has a Cronbach's alpha of 0.81, making this another reliable scale to use. These two scales were combined to create the *Self-Referencing* scale used in this research.

Covariates

Covariates are used to provide elements of real life into research; they acknowledge the presences of forces outside of a laboratory setting that could have an effect on the outcome of an

experiment. It is important to include relevant covariates when designing experiments in order to produce research that is considered externally valid (Yzerbyt, Muller & Judd, 2004). Hence, this section outlines the covariates that were chosen to be included in statistical analysis in this study. They were chosen due to their relevance in the context of this research and in real life applications of the findings.

Gender

Gender was measured through a simple scale where participants chose either male or female. Participants were offered the option of preferring not to answer this question.

Age

Age was measured through inviting the participant to enter their age in years into a blank part of the survey. Participants were offered the option of preferring not to answer this question, though this information was critical in order to evaluate if the participant was in the appropriate age range for this study. Therefore, those who indicated they were above 25 years of age or did not want to disclose their age were not included in the analysis.

Ethnicity

Ethnicity was measured based on the options provided by the New Zealand government in the New Zealand Census. This was to ensure there was no bias in the choosing of ethnicity options but also to limit the number of possible options as to include every ethnicity would have been impractical. However, it is acknowledged that not all participants would fit into the prescribed ethnicities below and an option to enter their own ethnicity manually was included to allow for this. The options available when filling out the New Zealand Census and used in this research are (Statistics New Zealand, 2005):

1. New Zealand European
2. Maori
3. Samoan
4. Cook Island Maori
5. Tongan
6. Niuean
7. Chinese
8. Indian
9. Other – Please state:

Attitude towards the Relationship in Question (Parents, Best friend or Bartender)

It is important to consider that every young person has a different relationship with their mother and best friend and a different opinion of a typical bartender. For example, while some young university students may think they have a close, personal relationship with their mother others may feel they have a more distant, authoritative relationship with their own mother. This could influence the effectiveness of each of these relationships in conveying a safer drinking message. Therefore, a measure of each participant's attitude towards their relationship with their best friend, their mother and their opinion of a typical bartender has been included. This aided in examining if the participant's attitude towards their relationship with the person in question has any influence on a young person's likelihood to binge drink or their attitude towards binge drinking.

Attitude towards the Relationship is Question will be measured differently depending on which relationship is being examined, where each relationship has a different scale associated with it, and all participants were asked questions about all three relationships. The three scales to be used are *Relationship with Parent*, *Relationship with Best Friend* and *Relationship with Bartender*.

Attitude towards Relationship with Mother

The *Attitude towards Relationship with Mother* Scale measured how a participant views their relationship with their own mother. This was used to examine the extent to which the participant believes they have a more close and personal or a more distant relationship with their mother.

The *Attitude towards Relationship with Mother* Scale was based upon a few scales, the first of which is the *Parent-Adolescent Communication (Openness)* (Palan, 1998) scale, which is used to evaluate the perceived closeness of the relationship between a parent and their child. This scale has a Cronbach's alpha of 0.85 for adolescents' perception of their mothers, making this scale a reliable one to use. This scale uses 5 point likert scales and there are 10 scale items. *Attitude towards Relationship with Mother* will also be developed using the *Parent-Adolescent Communication (Problems)* scale (Barnes and Olson, 1982) from the Marketing Scales Handbook. This scale is used to evaluate if the participant has a more distant relationship with their parents. This scale has a Cronbach's alpha of 0.71 when used by adolescents discussing their mothers. This scale utilises 5 point likert scales and also has 10 scale items though only those that did not overlap with other scale items from the previous and following scales were included.

Wood et al. (2004) utilised a series of scales to examine parental relationships with young adults. The first of which is the *Parental Support* scale, which was designed to examine a young person's perceptions of their parents' involvement and affection toward the young adult. Responses were indicated on a series of 5 point scales ranging from 0 = strongly disagree to 4= strongly agree, with reliability (alpha) of 0.81. The scale items are as follows 'I can count on my parents to help me out if I have some kind of problem' and 'my parents spend time talking with me'. The second scale used by Wood et al. (2004) to examine relationships between parents and their children is the *Parental Attitudes and Values* scale. This scale utilised a series of 3 point scales from 0 = approve, 1 = wouldn't care and 2 = disapprove. This scale has a Cronbach's alpha of 0.74, making it reliable, and asked respondents how their parents would feel if they performed a range of activities, such as driving under the influence of alcohol. The relevant scale items from these two scales were included in this research. Based on these four scales, the *Attitude towards Relationship with Mother* Scale has been developed to provide an understanding of the participant's attitude towards their relationship with their mother.

Attitude towards Relationship with Best Friend

The *Attitude towards Relationship with Best Friend* scale was developed in order to assess the extent to which a young university student views their relationship with their best friend to be of a close and personal or a more distant nature. The *Attitude towards Relationship with Best Friend* scale was developed through adapting a series of current scales.

One way in which the relationship with a friend can be measured is by examining the extent to which an individual will ask for a friend's advice or help when purchasing a product. Although this does not encapsulate the relationship entirely, aspects of the *Purchase Communication (Peer)* scale (Darden & Perreault, 1976) from the Marketing Scales Handbook will be used in this research. This is because this research aims to examine the potential use of best friends in decreasing binge drinking rates, which are close related to the extent to which alcohol is purchased. This will also shed light on the extent to which friends' opinions are important when young university students are purchasing alcoholic products. This scale utilises a series of five point likert scales (from disagree to agree) to measure a person's interest in discussing products and seeking product related information from their friends. There are three scale items which were adapted slightly in order to ask about alcoholic products. This scale has a Cronbach's alpha of 0.82 and is therefore deemed to be reliable (Bush, Smith & Martin, 1999).

The *Susceptibility to Peer Influence* scale (Bearden, Netemeyer and Teel, 1989) from the Marketing Scales Handbook was also used here. This scale can be used to examine the degree to

which a person tends to find information about products by observing other people's behaviours and asking their opinions. From the literature review, it is clear that youth are often passively influenced by their peers' drinking behaviours, making this an important aspect to consider in the development of the *Attitude towards Relationship with Best Friend* scale. This scale uses series of 7 point likert scales with a Cronbach's alpha of 0.87, making the scale a reliable one to use. There are 12 scale items. The scale items that related to friendships were used primarily in this research while those that did not relate to friendships were excluded.

Dibble, Levine and Park (2012) developed the *Unidimensional Relationship Closeness Scale (URCS)* to measure the closeness of a relationship with a partner, friend or family member. This scale has a Cronbach's alpha of 0.92 and is measured on a series of 7 point likert scales from 1 = strongly disagree to 7 = strongly agree. There are 12 original scale items that provide a blank space for the researcher to write which type of relationship is being examined. In this research the term best friend was used and the most relevant scale items to this research were utilised. The combination of these three scales formed the *Attitude towards Relationship with Best Friend* scale used in this research.

Attitude towards Relationship with Bartender

Lastly, young university students' perception of their relationship with a typical bartender needs to be examined. This is quite different to the previous two examinations of relationships as this is not a relationship of a typical nature. The *Attitude towards Relationship with Bartender* scale has been developed to examine the extent to which young university students perceive a typical bartender as a distant but authoritative source of power or whether they view a typical bartender more like a friend with a relationship of a closer nature. Like the previous two scales, this was included in this research to gauge the extent to which the opinion of a typical bartender that a young university student has could affect the extent to which a counter binge drinking advertisement influences their binge drinking behaviour and attitudes.

Given that the bartender has a relationship with a young person that is almost entirely based on circumstance and authority, the scale to measure the relationship with the bartender was based on perceived authority. This was measured by adapting the *Parental Style (Authoritarian)* scale (Carlson & Grossbart, 1998) from the Marketing Scales Handbook. This scale has a Cronbach's alpha of 0.60, making it a relatively reliable scale. The scale measures the degree to which a parent demands unquestioning obedience from their children. This is applicable to this research because the bartender has the ability to refuse a young person any more alcoholic beverages and their word is final, just as an authoritative parent's word would be. This is representative of

the typical role a bartender plays when dealing with intoxicated youth. The majority of the scale items were included, though some of the scale items could not be because they were not relevant to a bartender-patron relationship.

However, there is the potential for some young university students to have formed an opinion of a typical bartender that goes beyond respecting their authoritative power. Hence, the relevant scale items from the *Unidimensional Relationship Closeness Scale (URCS)* have also been included as the authors invite other researchers to fill in the blank spaces with the relationship required (Dibble, Levine and Park, 2012). This scale has a Cronbach's alpha of 0.92 and is measured on a series of 7 point likert scales from 1 = strongly disagree to 7 = strongly agree. Although a typical bartender may be an unconventional relationship to examine using this scale, it is appropriate for this research to examine the extent to which young university students believe they have a more personal relationship with a typical bartender that goes beyond mere authority. The integration of these two scales helped to produce the *Attitude towards Relationship with Bartender* scale used in this research.

Perceived Acceptability of Drinking Excessively in Different Contexts

Each and every young university student holds a different opinion on how acceptable it is to engage in binge drinking and how that acceptability changes in different contexts. Given that one of the key motivations of this research is to examine how context affects young university students' likelihood to engage in binge drinking and their binge drinking related attitudes, it was important to consider the extent to which they believe it is acceptable to binge drink in a variety of different situations. Their opinions on each context's socially acceptable level of binge drinking could have an effect on their likelihood to binge drink in a given situation and the attitudes that they develop. Therefore, a measure of a young university student's opinion on the acceptability of drinking excessively in a variety of contexts was included.

The *Perceived Acceptability of Drinking Excessively in Different Contexts* scale is based on the *Drinking Contexts* scale developed by O'Hare (1997), which examined the situations in which people consume alcohol. This scale assessed the likelihood of young people drinking excessively in different situations when a range of social, emotional and situational factors were influencing the young individuals. The scale utilises 5 point scales where 5 = extremely high, 4 = high, 3 = moderate, 2 = low and 1 = extremely low. This scale has a Cronbach's alpha of 0.82 for convivial drinking, 0.85 for negative coping and 0.81 for intimate drinking, making it a reliable scale to use. There are 10 scale items relating to convivial drinking contexts, 8 scale items relating to personal intimate drinking and 5 scale items that relate to negative coping. This sums to a 23

scale items, which makes the task laborious for participants, so the 14 most relevant scale items to this research were chosen and included in the creation of the *Perceived Acceptability of Drinking Excessively in Different Contexts* scale.

Health Consciousness

Excessive alcohol intake has frequently been linked to negative health related consequences, both in the short and long term. It is likely that the degree to which a young university student is health conscious and their desire to remain in a healthy state could have an effect on their binge drinking behaviours and attitudes. Hence, a measure of health consciousness has been included.

The *Health Consciousness* scale was used to measure how aware a participant is of their health and the degree to which they take appropriate actions to remain healthy. The *Health Consciousness* scale was developed based on the *Health Behaviours (Preventative)* scale (Jayanti and Burns, 1998) from the Marketing Scales Handbook. The scale has a Cronbach's alpha of 0.81 meaning that it is a reliable scale to use. This scale uses a series of three-point item scales, where 1 = never, 2 = sometimes, and 3 = always. There are 17 scale items, though this is an excessive amount to include in a short survey. Therefore, the 8 most relevant items that did not overlap with the following scale were chosen use.

Self-efficacy can also influence the degree to which a person believes they can successfully engage in healthy behaviours. Therefore, the *Health Consciousness* scale will also include aspects of the *Self-Efficacy (Health)* scale (Jayanti and Burns, 1998) from the Marketing Scales Handbook. The scale has 5 scale items with five point likert scales that measure a person's expectation and ability to carry out behaviours that may mitigate health threats. This is perfect for use in the *Health Consciousness* scale as it is required to measure the extent to which young university students are health conscious enough to disengage from binge drinking activities. This scale has a Cronbach's alpha of 0.72 making this scale reliable. These two scales were used to create the *Health Consciousness* scale utilised in this research.

Tendency to Engage in Alcohol Consumption

The majority of young university students have been exposed to alcohol and alcohol related promotions in many different circumstances before the running of this experiment. Each young university student has an idea of how likely they are to engage in alcohol consumption in general, and this has the potential to affect how likely they are to engage in excessive alcohol consumption in the context presented to them in the counter binge drinking advertisements of this research. Hence, the *Tendency to Engage in Alcohol Consumption* scale was developed to measure how often a participant would consume alcohol in general, regardless of the context or

relationship shown to them in the advertisement. This includes examining how often a participant purchasing alcohol as well as how often they consume it.

A young university student's tendency to engage in alcohol consumption can be partially attributed to the number of alcoholic products they purchase. Therefore, the *Tendency to Engage in Alcohol Consumption* scale was partially based on the *Purchase Frequency (Product Specific)* scale (Dahl, Manchanda and Argo, 2001) from the Marketing Scales handbook. The scale utilises a series of 7 point scales to assess a consumer's experience with buying a particular product. This scale is reliable as it has a Cronbach's alpha of 0.80. There are three scale items, all of which have been used in this research.

Chen et al. (2005) measured alcohol use by measuring each participant's the frequency of drinking alcohol in the last 12 months. This was ascertained by using a 10 point scale from 1 = not at all to 10 = every day. This is exactly what is needed for this research and therefore this question was also involved in the development of the *Tendency to Engage in Alcohol Consumption* scale.

Perception of Peers and their Drinking Behaviour

The literature review highlighted the significant effects that peers' drinking behaviour can have on young people's drinking behaviour, both actively and passively. Therefore, it is plausible that a young university student's perception of their peers and their drinking behaviour could influence their own decisions surrounding alcohol consumption. Therefore, the *Perception of Peers and their Drinking Behaviour* scale in order to assess how young university students view their peers drinking behaviour and the social acceptability of such behaviour.

The *Perception of Peers and their Drinking Behaviour* scale was developed through adapting the *Smoking-Related Beliefs (Popularity)* scale (Pechmann & Shih, 1999) from the Marketing Scales Handbook. This scale utilises 9 point semantic differential scales to measure the coolness and desirability of someone who smokes. This scale is used to evaluate how someone views their peers in this respect or how someone sees themselves. Although this scale relates to smoking instead of drinking, smoking and drinking are both typically viewed as negative behaviours in which youth often indulge and are often grouped together during health related discussions. This scale has been changed slightly to represent an alcohol consumption situation for this research. This scale has a Cronbach's alpha of 0.94 for reference group evaluations, making it a reliable scale to use. There are 6 scale items, all of which have been included in this research.

The *Perception of Peers and their Drinking Behaviour* scale will also use features of the *Smoking-Related Beliefs (Poise)* scale (Pechmann & Shih, 1999) from the Marketing Scales Handbook. This scale uses 9 point semantic differential scales to measure the self-confidence and independence that a person's associates with someone who smokes. This can be used to examine how an individual sees themselves or how someone perceives smokers are seen by others. The Cronbach's alpha for this scale is 0.93 for reference group evaluations, which is how it will be used in the context of this study, making it a reliable scale to use. There are 6 scale items, most of which have been used in this research. The items that were excluded were done so because they are very similar or exactly the same as items from the previous scale.

The *Smoking-Related Beliefs (Social Stature)* scale (Pechmann & Shih, 1999) can also contribute here as it examines the perceived intelligence and success of someone who smokes. This scale has a Cronbach's alpha of 0.91 for reference group evaluations, making it a reliable scale, and utilises a series of 9 point semantic differential scales. There are four scale items, all of which have been used in this research. The combination of the three scales was used to develop the *Perception of Peers and their Drinking Behaviour* scale used in this research.

Drinking Locus of Control

Locus of control relates to the degree to which a person believes that things that happen in their life are in their own control. In a binge drinking context, locus of control relates to the extent to which a person believes their binge drinking behaviour is within their own control or beyond their control. Therefore, the *Drinking Locus of Control* scale was developed to examine the extent to which a young university student believes they have control over their own drinking behaviours and the outcomes of their drinking in general. This scale was based on Keyson and Janda's (2007) *Drinking-Related Internal-External Locus of Control Scale*. This is a self-report of an individual's choices, where each participant must choose which of the two alternatives presented is most like them. This scale assesses the degree to which the respondent believes that they have control over what occurs in their life (internal locus of control) or alternatively, the extent to which they believe they have little control over what occurs in their life and fate plays a major role (external locus of control) with respect to alcohol related behaviours and attitudes. The authors propose that heavier drinkers and drinkers who are more alcohol dependent will have more external locus of control than those who are not classified as problem drinkers. There were 25 original scale items, but this research chose the 10 scale items that were relevant to a younger age group of university students in the creation of the *Drinking Locus of Control* scale used in this research.

These scales were all combined to form the survey used in this research in order to gather responses from relevant participants.

Data Analysis

An initial qualitative aspect was included in this research whereby 10 young university students were asked a series of questions in a one-on-one interview. The information gathered during these interviews was analysed using hermeneutic analysis techniques. This is discussed more in the following section where the results of this qualitative aspect are discussed.

The main research was quantitative and undertaken through the distribution of a survey. Once an appropriate number of survey responses had been recorded, the data was extracted from Qualtrics (the survey software used) and entered into SPSS. SPSS was then used for all data analysis including tests for normality, homogeneity, kurtosis, skewness and the transformation of variables in order to allow the correct analysis to be undertaken. Outliers were found a series of MANCOVAs were performed. The results of these MANCOVAS produced the results that are discussed in the following section.

Results

Qualitative Interviews

A preliminary qualitative aspect was included in this research in order to gain a more comprehensive understanding of the youth drinking culture in New Zealand through the provision of primary sources of information. The information gathered here was used to help frame the quantitative aspect of this research. Qualitative studies aim to provide an understanding of complex psychological ideas (Marshall, 1996) so that researchers can develop a holistic picture through the analysis of detailed reports from informants about a topic (Srivastava & Thomson, 2009). The inclusion of this qualitative aspect aimed to provide this level of understanding beyond the information that the literature review could provide.

A series of interviews were conducted with male and female university students between the ages of 18 and 23 (meaning they were in the target population for this research). Ten interviews were conducted that lasted approximately 15 minutes each. Each interviewee was asked a series of questions relating to their current binge drinking behaviour, their attitudes towards binge drinking and those who undertake the activity, what circumstances they would consider binge drinking in, and how they would respond if their mother, best friend or a bartender were to tell them they should stop drinking (please see Appendix Two for the questions asked in the interviews). These interviews provided insight into whether or not the context in which young people binge drink or the people they drink with could have any influence on their attitudes towards binge drinking and their likelihood to undertake binge drinking.

The data was analysed using hermeneutic analysis, which involves finding and interpreting meaning in written words. This technique takes a holistic approach by repeatedly testing interpretations against the data collected to devise a coherent, holistic interpretation (Moss, 1994). It was important to begin with this type of research because despite the vast amount of research on young people's drinking behaviours and attitudes in general, there is very little research that examines solely young New Zealanders drinking related behaviours and attitudes or how key relationships in young people's lives could be harnessed in an advertising context to convey a safe drinking message. It was therefore important to gain an understanding of the culture of young people's drinking in New Zealand in order to formulate a fully justified quantitative research approach. It should be noted that this was the sole purpose of the qualitative aspect of this research and the primary data collection and analysis methods for this research are of a quantitative nature.

It was concluded that contextual factors and the person conveying a safer drinking message would have different effects on the young people interviewed, with the majority of young people admitting they would consume more alcohol on the night of their 21st birthday than on a typical Friday night out. Most of the young people interviewed admitted they would react worst towards out of the three relationships examined, and attributed this to the fact that they bartender does not know them personally. A few participants responded well to the bartender providing safe drinking advice, though they were not sure that they would actually heed the advice and stop drinking. Participants were most likely to listen to their best friend overall as they felt that their best friend had the most objective viewpoint and would have experienced drinking situations with them previously, and therefore had the necessary knowledge and friendship level to come to the conclusion that they had consumed too much alcohol.

The interesting aspect was the influence of a mother, where some people said they would seriously listen to and take the advice of their mother, while others said they would be more likely to ignore their mother. After further questioning, it was discovered that those who had closer, more personal relationships with their mother were more likely to take her advice on drinking, while those with a more distant relationship believed their mother did not know them well enough to come to this conclusion and therefore decided to ignore the advice. This prompted this research to explore the nature of the relationships between each of the participants and their mother, their best friend, and a typical bartender to examine how young people's perceptions of these relationships may influence their reaction to being told to stop binge drinking. Based on this information, the first few hypotheses of this research reflect the potential influence of the nature of the relationship a young university student has with their mother, best friend or a typical bartender. This was the key way in which the qualitative aspect of this research helped to inform the main quantitative aspect. However, the information gathered from the interviews showed a need to examine the potential use of the three key relationships (best friend, mother and typical bartender) when targeting young people in counter binge drinking advertising as they all have the potential to be effective in conveying a safer drinking message.

Quantitative Results

Sample Characteristics

A total of 301 surveys were completed for this research, 208 of which were collected through recruiting university students through email correspondence. The remaining 99 surveys were collected through the promotion of the survey through posters. However, only 261 survey

responses were able to be used for data analysis. This was because 37 responses were not fully completed and therefore had to be removed. 23 participants were over the age of 25 and therefore their responses were not relevant for this research. Thirteen scale items were reverse coded in order to detect participant responses that were not authentic and delete them from the sample. Fortunately, only one of the remaining responses appeared to be inauthentic. This meant a total of 63 responses had to be deleted before analysis could begin. Each manipulation was therefore seen by 40 participants.

The majority of participants were in the required age bracket (18 – 25), with a total of 241 participants in this bracket. There was a slight skew towards female participants with 62% of the participants being female and only 38% of participants being male, which has the potential to bias the results. The majority of participants identified with being New Zealand European (79.3%), while 7.9% identified with being Indian, 1.2% identified with being Maori, and 0.8% identified with being Indian. 9.1% of participants identified with a different ethnicity that was not listed, including American, African and British and Thai for example. 1.7% of participants preferred not to be identified with any particular ethnicity. All participants identified that they currently attend a university in New Zealand.

Assumption Testing

The first step in the quantitative analysis of data is to check the assumptions that are made in order to perform the statistical tests required. For example, some statistical tests assume a normal distribution of data and therefore the data needs to be examined for the degree to which it is normally distributed. The first step is to examine the reliability of the variables created, then to test for outliers, followed by tests for the normality of the data. After these tests are performed statistical tests can be run. Hence, the following sections explain the assumption testing that has been performed on the data collected from the survey results.

Reliability of the Variables Created

The questions asked in the survey were used to create variables for analysis. These variables each represents a construct that needed to be examined in this research. Therefore, before they can be used for data analysis, they first need to be examined to ensure their internal validity is high enough to make valid conclusions and deductions. Cronbach's Alpha is a widely used measure of reliability. This test was developed by Lee Cronbach in 1951 to measure the internal consistency of a scale or test, and is expressed by a number ranging from 0 (no internal consistency) to 1 (perfect internal consistency) (Cronbach, 1951). This is important to test in

order to discover the amount of measurement error in the tests and to examine the interrelatedness of the items within the scale used (Tavakov & Dennick, 2011).

It should be noted that although the Cronbach's Alpha value of the scales that were used to design the scales used in this research are appropriately high, it is still important to run a reliability test for the scales used in this research because of two key reasons. Firstly, the scales used were slightly different from the original ones they were based on as many of the scales had to be altered slightly to account for the drinking related context of this research. Secondly, the alpha value depends on the number of cases that the test is examining. This means that the fewer participants each project has the lower the alpha value will be (Tavakov & Dennick, 2011). This means that the alpha values of the original scales may be higher due to a higher number of participants examined in the original study. Therefore, reliability tests were run on every variable created, using SPSS to do so.

The variables created are as follows, along with their measure of reliability. Based on previous social science academic authors results, a Cronbach's alpha of at least 0.65 and preferably over 0.7 appears to be acceptable (Faleye, 2008; Garson, 2012). Some variables had an original Cronbach's alpha below this threshold, but when each reliability test was run in SPSS, there was an option to indicate what the reliability would be if each of the scale items were to be deleted. This showed which items could be deleted in order to raise the reliability of the entire scale. The items were subsequently deleted until the scale reached the desired threshold of 0.65, with most of the following variables reaching a Cronbach's alpha of at least 0.7 and 8 variables reaching a Cronbach's alpha of over 0.8.

Variable	Initial Cronbach's Alpha	Final Cronbach's Alpha	Number of Scale Items Deleted
<u>Dependent Variables</u>			
Attitude toward the Advertisement (Emotional Response)	0.593	0.777	2
Attitude towards the Advertisement's Message	0.599	0.766	1
Likelihood to Binge Drink	0.030	0.930	2
Attitude towards the Act of Binge Drinking	0.645	0.899	1
Attitude towards the Product (Alcohol)	-	0.904	0
Self-Referencing	-	0.807	0
<u>Covariates</u>			
Relationship with Mother	-	0.812	0
Relationship with Best Friend	-	0.796	0
Relationship with Bartender	0.488	0.670	2
Acceptability of Drinking in Different Contexts	-	0.903	0
Tendency to Engage in Binge Drinking	-	0.905	0
Attitude towards a Typical Student Drinking	-	0.926	0
Health Consciousness	-	0.779	0
Locus of Control	0.552	0.641	2

Table 2: Cronbach's Alpha of Scales used in this Research

Despite the fact that two scale items had been removed, *Locus of Control* was unable to reach the threshold of 0.65. This variable was very close to the threshold, however, (Cronbach's Alpha of 0.641) and therefore has been included in the analysis. However, this means that the test for significant results has to be stricter, which means that any results using this variable must be clearly significant to be counted (all significant results that are borderline were not included). This helps to account for the slightly limited reliability of this variable and future research is recommended to ensure that results utilising this variable are definitely applicable in contexts outside of this research.

Gender, Age and *Ethnicity* were not measured for their reliability as these are very commonly measured constructs that the general population understand thoroughly and therefore they can be relied upon to consistently measure the same construct each time.

The difference between the reliability results of the original scales that these scales were based on and the scales used in this research can be attributed to a variety of factors. The most likely cause is that the scales in this research were used for a specific area of research (a binge drinking context) as opposed to being designed for more generalised use. The scales were slightly adapted to account for the drinking context surrounding this research and for the target population. Some scale items had to be deleted from the total scale because they did not relate to this research context. Scale items were occasionally deleted because there were too many scale items and the inclusion of all of them would have made the survey time consuming. If this situation arose, then a shortened but academically verified version was looked for and used if found. There is also a difference in population parameters where the original scales were developed for general use when targeting unspecific target markets, whereas the scales used in this research were targeted specifically towards young university students. These factors combine to provide insight into the reasons why some of the scales in this research did not have as high Cronbach's alpha values as the original scales they were based on. However, the most important thing to consider is that all but one of the variables tested had a high enough Cronbach's alpha value to be considered reliable and numerous variables had a Cronbach's alpha over 0.8. This means that the variables used for statistical hypothesis testing in this research are reliable.

Outlier Detection

A key step in the cleaning of data for statistical use is the detection and possible deletion of outliers. An outlier is an observation that deviates significantly to the rest of responses in the data and can affect the normality of the distribution of data (Garson, 2012). The presence of outliers can be attributed to a variety of reason, ranging from measurement error (Garson, 2012) to natural deviations in human responses to the topic at hand (Grubbs, 1969). Either way, they can interfere with the validity of data analysis results and can be removed if this if found to be true.

The data collected from participants was tested for outliers, and 14 responses were found to be simple outliers (outliers that only occur with respect to a single variable) and 3 were found to be multivariate outliers (outliers that occur with respects to multiple variables) (Garson, 2012). This was done by graphing a series of box and whisker graphs for each variable created, in which any response outside the basic box and whisker graph was displayed on its own with a blue dot and therefore determined to be an outlier, a method of outlier detection that was proposed by Garson (2012). These response numbers were recorded. Normality tests and MANCOVAs were then run including and excluding the outliers to examine if they significantly

affected the outcome of the data analysis tests. The outliers made no statistically significant difference when the tests were undertaken and were, therefore, included in the results used in the data analysis. This was done in the interest of preserving the originality and validity of the data and because they presented no statistical reason to remove them from the data set.

A possible reason for why there were outliers but they made no significant difference to results is that they occurred due to the nature of the study and the inherent variability in the answers given (Grubb, 1969). Humans are not predictable, and all have different opinions, even if they are only slightly different. This means that some participants' opinions may have been different from the majority opinion and therefore they would have presented as an outlier. It is appropriate in this case to leave the outliers in the sample and to continue to run the statistical data analysis with them included (Grubb, 1969). The presence of outliers could also be attributed to the small sample size, and if the sample size were to increase in a replication of this study these outliers may not have been identified because there may be enough other participants who share their opinion to group them in with the majority.

Measures of Normality

In an ideal world, all data would be normally distributed. A normal distribution occurs when the data fits perfectly into a bell shaped curve with the centre point as the mean. Multivariate normality occurs when each dependent variable is normally distributed with respect to the other dependent variables (Garson, 2012). This is one of the assumptions that needed to be proved or disproved before running any analysis of variance tests on the data in this research.

A Shapiro-Wilk test was undertaken to examine the extent to which the data is normally distributed. This test was chosen because it is a test for normality that is recommended for small to medium populations (under 2000 participants), a category which this research fits (Garson, 2012). The null hypothesis is that the data is normally distributed. For all of the dependent variables tested, the significance level was less than 0.05, ($p=0.000$), which means that the null hypothesis was rejected. Therefore, the data is not normally distributed. However, this does not need to hinder the performance of statistical tests on the data, only that the outcomes of the tests need to be clearly statistically significant (once again, no outcomes that are borderline significant will be accepted).

It is also important to explore skewness and kurtosis when examining the normality of the data. Kurtosis is a measure of how flat or peaked a normal distribution is, where a kurtosis value of 0 represents a perfectly normal distribution. A positive value indicates that the distribution has a higher peak than normally distributed data (leptokurtic distribution), while a negative value

indicates that there are more values found in the tail ends of the distribution than if the data was normally distributed (platykurtic distribution) (DeCarlo, 1997; Garson, 2012). Skewness, on the other hand, is a measure of the extent to which the distribution of values within the data set deviates around the symmetry of the mean. A skewness value of 0 represents a distribution that is perfectly symmetrical around the mean. A negative value of skewness indicates that the left hand side tail is longer than normal, and therefore the distribution has a relatively low number of low values. The distribution is then said to be skewed to the left. A positive value for skewness indicates the opposite, as in, the right hand side of the tail is longer and therefore the distribution has a relatively lower amount of high values. This is described as the distribution being skewed to the right (Blanca et al., 2013). The results for the skewness and kurtosis for the dependent variables can be found in the following table.

Variable	Skewness	Standard Error of Skewness	State of the Normality of the Data	Kurtosis	Standard Error of Kurtosis	State of the Normality of the Data
<i>Attitude towards the Ad (Emotional Response)</i>	0.107	0.157	Normally distributed	-1.063	0.312	Platykurtic distribution
<i>Attitude towards the Message of the Ad</i>	-0.465	0.157	Skewed to the Left	-0.401	0.312	Normally distributed
<i>Attitude towards the Act of Binge Drinking</i>	0.545	0.157	Skewed to the Right	0.402	0.312	Normally distributed
<i>Attitude towards the Product (Alcohol)</i>	-1.073	0.157	Skewed to the Left	0.711	0.312	Leptokurtic distribution
<i>Likelihood to Binge Drink</i>	-0.260	0.157	Normally distributed	-1.309	0.312	Platykurtic distribution
<i>Self-Referencing</i>	0.232	0.157	Normally distributed	-0.663	0.312	Platykurtic distribution

Table 3: The Kurtosis and Skewness Values of the Dependent Variables.

As you can see, none of the variables has a score of 0 for either skewness or kurtosis. However, if the skewness or kurtosis lies within $\pm 2x$ the standard error on either side of 0 then they are considered to be at an acceptable level of skewness or kurtosis (Garson, 2012). Therefore, Attitude towards the Message of the Ad and Attitude towards the Act of Binge Drinking are within the acceptable range for kurtosis (within 0 ± 0.624) and Attitude towards the Ad

(Emotional Response), Likelihood to Binge Drink and Self Referencing are within the acceptable range of skewness (within 0 ± 0.314). Once these tests of normality and the data cleaning processes were completed, the data was then used to undertake a series of MANCOVAs in order to test the hypotheses. The following sections discuss the reason for performing such tests and the results of each of the tests relative to the hypotheses.

MANCOVA and Hypothesis Testing

Multivariate Analysis of Covariance (MANCOVA)

Researchers use analysis of variance tests (ANOVAs) to examine the statistical difference between three or more group means and an MANCOVA is an extension of this test to include multiple covariates and dependent variables (Hair, Lukas & Miller, 2008). An MANCOVA examines the influence of one or more independent variables on the dependent variables while controlling for the effects of the covariates, and the null hypothesis is that one or more of the independent variables have no statistically significant effect on the dependent variables. An MANCOVA tests for a significant difference between two group means. This has been chosen as the primary tool of data analysis as there are multiple dependent variables and covariates to be examined, and this type of test allows this to be undertaken simultaneously. In order to undertake any analysis of variance testing, certain assumptions must be made. One of these is that all the observations must be independent of one another (Berger, n.d.). This was ensured by the number of participants viewing each manipulation totalling at least 40.

An initial MANCOVA was run with *Context* and *Relationship* as the independent variables followed by some MANCOVAs with new independent variables created from covariates. The initial MANCOVA showed no significant interaction effects between *Context* and *Relationship* on any of the dependent variables. This indicates that there was no statistically significant difference in the means for all the dependent variables between the six manipulations, including *Likelihood of Binge Drinking*, *Attitude towards the Act of Binge Drinking*, *Attitude towards the Product (Alcohol)*, *Attitude towards the Advertisement (Emotional Response)*, and *Attitude towards the Message of the Advertisement*. The covariates examined were *Relationship with Mother*, *Relationship with Best Friend*, *Relationship with Bartender*, *Self-Referencing*, *Acceptability of Drinking in Different Contexts*, *Tendency to Engage in Binge Drinking in General*, *Attitude towards Typical Student Drinking*, *Health Consciousness*, *Drinking Locus of Control*, *Gender* and *Ethnicity*. Please note that the covariate *Age* is never included in analysis as its sole purpose was to differentiate those who were in the required age bracket (18-25) and those who were not in order to only use relevant responses from young university students in the data analysis.

However, this MANCOVA provided some interesting main effects, which includes examining if there is a significant difference between the group means for the dependent variables based on one of the independent variables. These results have helped answer some of the hypotheses, and how they do so is discussed in the following section on hypothesis testing. It is important to note that any results of an MANCOVA that have a p value above 0.05 are considered not to be statistically significant, which means that the null hypothesis will be rejected. Hence, the p values are all reported in the following sections to illustrate whether or not each test found significance at the population level.

Hypothesis Testing

The initial MANCOVA used *Relationship* and *Context* as the independent variables. All of the dependent variables and covariates discussed in the previous section were included in this main MANCOVA.

As mentioned previously, there was no statistically significant interaction effect between the two independent variables on the dependent variables. Therefore, there was no statistically significant difference between the mean score for *Likelihood to Binge Drink* ($F=0.556$, $df=2$, $p=0.574$) or *Attitude towards the Act of Binge Drinking* ($F=0.016$, $df=2$, $p=0.984$) or *Attitude towards the Product (Alcohol)* ($F=0.026$, $df=2$, $p=0.974$) between the three groups and between the two contexts. This means that the effect of the context and the relationship shown do not have any statistically significant effect on young university students' likelihood to binge drink, attitudes towards binge drinking and attitudes towards alcoholic products when examined together in entirety. This implies that there is no statistically significant difference between the effect of a counter binge drinking advertisement featuring a best friend on young university students' likelihood to binge drink, attitude towards binge drinking and attitude towards alcoholic products and the effect of counter advertisements featuring a bartender or a mother in either the context of a 21st or a Friday night out.

Although *Relationship* and *Context* do not have any significant effect when examined together, their individual main effects could still be interesting. Also, given that this does not aid in answering any of the hypotheses, the next step was to examine the main effects from this MANCOVA with the aim of answering the following hypotheses, beginning with hypothesis 1.

H₁: Counter binge drinking advertisements featuring a best friend will have a greater significant effect on a young university student's attitudes towards and likelihood of participating in binge drinking and attitudes towards alcoholic products than the advertisements that feature a mother or a bartender.

This hypothesis aimed to examine the effectiveness of the three relationships presented in the counter binge drinking advertisements and more specifically investigate if the advertisements featuring a best friend would be most effective.

Unfortunately, there were no significant main effects that were relevant for this hypothesis as there was no statistically significant difference between the mean scores for *Likelihood to Binge Drink* ($F=1.390$, $df=2$, $p=0.251$), *Attitude towards the Act of Binge Drinking* ($F=0.350$, $df=2$, $p=0.705$) and *Attitude towards the Product (Alcohol)* ($F=0.464$, $df=2$, $p=0.630$) between the three groups (those who saw an advertisement featuring a best friend, a mother or a bartender). This means that there is no statistical evidence to support hypothesis 1.

Therefore, there is no statistically significant difference between the effect on a young university student's likelihood of binge drinking, attitude towards binge drinking and attitude towards alcoholic products that an advertisement featuring a best friend has when compared to the effect of an advertisement featuring a mother or a bartender. This suggests the relationship featured in counter binge drinking advertisements has no direct effect on young people's likelihood to binge drink, attitude towards binge drinking and attitude towards alcoholic products. It is important to note that this finding does not mean these three people are ineffective at conveying this message, but instead that these three relationships are equally as effective. Although previous literature suggests that youth are significantly influenced by their friends, perhaps this is only true if it is of a positive reinforcement nature and not of a negative nature. To clarify, perhaps close friends can have a significant influence when encouraging young university students to binge drink but are no more effective than a bartender or a mother when encouraging young university students to stop binge drinking. Hence, there would be no statistically significant difference between the effectiveness of a best friend and a bartender or a mother. However, further analysis would need to be undertaken to determine if this is the cause.

Another likely reason that there was no significant difference between the effectiveness of these three people is that attitudes are hard to change; they are formulated from a personal decision and require time and effort to change for the better. Therefore, seeing one advertisement may not have a significant effect on young university students' attitudes towards alcoholic products in general, regardless of whom they saw in the advertisement. For example, the mean score for *Attitude towards the Product (Alcohol)* was highest for those who saw an advertisement featuring a mother ($\mu=5.05$, $\sigma=1.249$), followed by those who saw an advertisement featuring a bartender ($\mu=5.05$, $\sigma=1.249$), followed lastly by those who saw an advertisement featuring a best friend ($\mu=5.05$, $\sigma=1.249$). Although there was no statistically significant difference between

these means, it is clear that young university students all have a generally positive attitude towards alcohol after seeing these advertisements. Even though the advertisement is encouraging safer drinking practices, young university students still have an overall positive opinion of alcoholic products after seeing this advertisement, suggesting that their attitudes may not have changed much at all. However, further analysis is needed to draw these conclusions definitively, and future research is invited to do so. Also, this conclusion does not provide reasoning for the lack of significant difference in likelihood to binge drink between the three relationships seen.

The initial MANCOVA was able to be used to examine the outcome of hypothesis 2 as well. This hypothesis turns to examine the role of contexts as opposed to relationships shown in an advertisement, and proposes that young university students will be more likely to binge drink and have greater positive attitudes towards binge drinking and alcoholic products on the night of their 21st than a Friday night out.

H₂: Young university students will have a significantly greater positive attitude towards binge drinking and alcoholic products, and a significantly greater likelihood of binge drinking on the night of their 21st than on a Friday night out.

There was no statistically significant difference between the mean score for *Attitude towards the Act of Binge Drinking* ($F=1.893$, $df=1$, $p=0.170$) between the two contexts. Hence, this part of the hypothesis 3 was not supported by statistical evidence. This means that there is no significant difference between young university students' attitudes towards binge drinking on the night of their 21st compared to a Friday night out. However, there was a statistically significant difference between the mean score for *Attitude towards the Product (Alcohol)* ($F=4.830$, $df=1$, $p=0.029$) and *Likelihood to Binge Drink* ($F=12.913$, $df=1$, $p=0.000$) between the two contexts, which provides statistical data that supports these two aspects of hypothesis 3.

The mean score for *Attitude towards the Product (Alcohol)* was significantly higher for the context of a 21st Birthday ($\mu=5.05$, $\sigma=1.249$) than in the context of a Friday night out ($\mu=4.89$, $\sigma=1.495$), regardless of the relationship shown in the advertisement. Although there is not a large difference between these two mean scores, this does mean that young university students have a more positive attitude towards alcoholic products on the night of their 21st birthday than on a Friday night out. To add to this, the mean score for *Likelihood to Binge Drink* was significantly higher for the context of a 21st Birthday ($\mu=4.45$, $\sigma=2.078$) than for the context of a Friday night out ($\mu=3.95$, $\sigma=2.004$). This means that young university students are significantly

more likely to engage in binge drinking on the night of their 21st birthday than on a Friday night out.

Overall evaluation of Hypothesis 2: There was no statistical evidence to support the part of this hypothesis the proposed that young university students would have a more positive attitude towards the act of binge drinking on the night of their 21st compared to a Friday night out. However, the other two parts of this hypothesis that proposed that young university students would be more likely to binge drink and would have greater positive attitudes towards alcoholic products were supported by statistical evidence.

These results could be attributed to the culture that surrounds a 21st birthday in a western country, such as New Zealand. This culture dictates that a 21st birthday is a unique night of celebration and should be treated as such. This celebration could encourage more positive attitudes towards alcoholic products as young people become excited about what drinks they will buy and possibly are more prepared to pay more for interesting drinks due to the unique celebration. This culture also involves a higher amount of peer pressure to engage in binge drinking than normal as this is a once in a lifetime opportunity. Hence, many young university students may be more likely to engage in binge drinking because of their own excitement about their 21st birthday but also because of peer pressure and social norms. Unfortunately, these findings are quite tautological but are useful in confirming common beliefs about how contextual elements can influence young people's perceptions of binge drinking and likelihood to partake.

The interesting aspect of these results is the fact that there was no significant difference between young university students' attitudes towards binge drinking between the two contexts. This may be because the majority of young people develop an attitude towards binge drinking, and this is an attitude that may be extremely hard to influence, much harder than their attitudes towards alcoholic products or likelihood to binge drink. Therefore, even though young university students are susceptible to peer pressure and become more likely to drink and develop more positive attitudes towards alcoholic products due to the excitement of consuming something new or interesting, this unique night of celebration does only happen once. Therefore, it may not play a large enough role in a young university students life overall to significantly change their views of the act of binge drinking. It is plausible that a young university student may succumb to peer pressure or decide to partake in the culture surrounding a 21st and engage in binge drinking when they would not have on a more regular night out, even if they have a negative attitude towards the act of binge drinking. After all, it is only one night out of their whole life, so even if it does contradict their overall attitude towards

binge drinking there may be other potential positive outcomes, such as fun and social interaction, which makes the decision worth making and following through with.

This results relating to this hypothesis shed valuable light on the influence of context on young peoples' drinking behaviours and attitudes that will significantly help in the development of effective counter binge drinking advertisements in the future. However, it would also be interesting to examine how the combination of context and relationship shown in a counter binge drinking advertisement may affect young university students' likelihood to binge drink, attitudes towards binge drinking and attitudes towards alcoholic products in the two contexts. This idea is explored in the following three hypotheses, which also examine the extent to which the perceived closeness of the relationship in question in the young university student's life may affect their binge drinking related behaviours and attitudes. The first of the three hypotheses specifically examines the effect of utilising a best friend figure in counter binge drinking advertisements:

H₃: Counter binge drinking advertisements that feature a best friend will have a significantly greater effect on a young person's likelihood of participating in binge drinking, attitudes towards alcoholic products, and attitudes towards binge drinking on a Friday Night out than on the night of a young university student's own 21st birthday ONLY IF they have a close, personal relationship with their best friend.

In order to test for this hypothesis in SPSS the responses of participants who saw an advertisement that included a best friend figure needed to be selected and differentiated from those who saw a mother or a bartender. This was done to ensure that only the responses that related to answering this hypothesis were included in the data analysis.

The scale variable *Relationship with Best Friend* was then recoded into a categorical variable through the process of median splitting to allow this data to be used as an independent variable. This process involves finding the median and then creating a new variable with only two options, one of which includes all responses that are above and including the median and the other option including all responses below the median score. In this case, the new variable *Type of Relationship with Best Friend* was created with two categories: those who had a distant relationship with their best friend (below the median) and those who had a close, personal relationship with their best friend (above and including the median). This was also done for *Relationship with Mother* and *Relationship with Bartender* to create the new categorical variables *Type of Relationship with Mother* and *Type of Relationship with Bartender* respectively for use in data analysis to aid in answering following hypotheses.

A new MANCOVA was then run using *Type of Relationship with Best Friend* and *Context* as the independent variables. The dependent variables included *Likelihood to Binge Drink*, *Attitude towards the Act of Binge Drinking*, *Attitude towards the Product (Alcohol)*, *Self-Referencing*, *Attitude towards the Advertisement (Emotional Response)* and *Attitude towards the Message of the Advertisement*. All of the covariates from the previous MANCOVA were included in this analysis. The covariates and dependent variables here remain the same for the two subsequent MANCOVAs, but the independent variables change.

There were no statistically significant interaction effects between the independent variables on any of the dependent variables when this MANCOVA was run. This means there was no statistically significant difference between the mean scores for *Attitude towards the Product (Alcohol)* ($F=1.389$, $df=1$, $p=0.242$), *Attitude towards the Act of Binge Drinking* ($F=0.004$, $df=1$, $p=0.949$) or *Likelihood to Binge Drink* ($F=0.108$, $df=1$, $p=0.743$) between the two contexts between the two groups (type of relationship with best friend). This means that the type of relationship a young university student has with their best friend and the context in which they are drinking have no significant effect on that university student's likelihood to binge drink, attitude towards binge drinking or attitude towards alcoholic products. Therefore, there is no statistical evidence to support hypothesis 3. However, there were some main effects that can aid our understanding.

Firstly, there was a significant difference in the mean score for *Likelihood of Binge Drinking* between the two contexts ($F=4.828$, $df=1$, $p=0.031$). The mean score for *Likelihood of Binge Drinking* was significantly higher on the night of a 21st birthday ($\mu=4.36$, $\sigma=2.197$) than on a Friday night out ($\mu=3.32$, $\sigma=1.947$). This means that young university students who have seen a counter binge drinking advertisement featuring a best friend are significantly more likely to binge drink on the night of their 21st birthday than a Friday night out. Although this finding is tautological, it helps to confirm previous findings and confirms that the presence of a best friend in a counter binge drinking advertisement cannot change the likelihood of a young university student engaging in binge drinking activities.

Secondly, there was a significant difference in the mean score for *Attitude towards the Product (Alcohol)* between the two levels of relationship with best friend (either a perceived close or distant relationship) ($F=8.073$, $df=1$, $p=0.006$). The mean score for *Attitude towards the Product (Alcohol)* was significantly higher for those who have a closer relationship with their friend ($\mu=5.20$, $\sigma=1.053$) than for those who have a more distant relationship with their best friend ($\mu=4.42$, $\sigma=1.053$) after seeing an advertisement featuring a best friend. This means that if a young university student has a close relationship with their best friend they have positive

attitudes towards alcoholic products after seeing an advertisement featuring a best friend. This is an interesting finding, as it would be expected that if a young university student has a close relationship with their best friend they would be more influenced by the advertisement that features a best friend telling them to stop drinking, and therefore their attitudes towards alcoholic products would be negatively affected.

On the other hand, there was no significant difference between the mean scores for *Attitude towards the Act of Binge Drinking* between the two types of relationship ($F=0.129$, $df=1$, $p=0.720$). The mean score for those who had a close relationship with their best friend ($\mu=2.39$, $\sigma=0.991$) was not significantly different to those who had a distant relationship with their best friend ($\mu=2.30$, $\sigma=0.991$). This is interesting when compared to the previous finding, as it suggests that it does not matter what kind of relationship a young university student has with their best friend, their attitude towards the act of binge drinking is consistently negative after viewing a counter binge drinking advertisement featuring a best friend.

Overall evaluation of hypothesis 3: There was no statistically significant evidence to support hypothesis three. However, it can be confirmed that young university students who see a counter binge drinking advertisement featuring a best friend are more likely to drink on the night of their 21st than on a Friday night out, regardless of how close their relationship with their best friend is. Although it is tautological that young university students are more likely to binge drink on the night of their 21st birthday than on a Friday night out, it is interesting that this is not significantly affected by how close their relationship is with their own best friend, even after seeing an advertisement featuring a best friend advising them to stop drinking. This means that it does not matter how close or distant the relationship a young university student has with their best friend is, counter binge drinking advertisements will have the same effect on young university student's likelihood to binge drink. This may be because young people have the ability to choose who their friends are and therefore although this study has divided the responses into those with a close relationship with their best friend and those who have a distant one, young university students will only choose a best friend they want to be friends with and therefore may have a more positive relationship with them overall. Therefore, the concept of a distant relationship with a best friend may not be as applicable here due to the voluntary nature of friendships. However, this does acknowledge that some young university students are closer to their best friends than others and provides an interesting finding in that the use of best friends in counter binge drinking advertisements only has a significant effect on young university students' attitudes towards alcoholic products but not their likelihood to binge drink. On the other hand, you cannot choose your mother, and you have little control over who

the bartender who serves you is, and therefore there may be more variation in the answers after seeing advertisements featuring these two relationships. However, further analysis into the effects of seeing these two relationships are needed to draw these conclusions.

An interesting finding from the analysis of this hypothesis is that young university students who have a close relationship with their best friend have a significantly more positive attitude towards alcoholic products than those who have a more distant relationship with their best friend after seeing a counter binge drinking advertisement featuring a best friend. This may be because young people who have a close relationship with their best friend may be more likely to drink alcoholic products with their best friend or drink alcoholic products with their best friend more regularly, and therefore they develop positive associations between alcoholic products and fun times with their best friend, or at least develop a more positive attitude than those who undertake these drinking activities with their best friend less frequently. As mentioned previously, attitudes can be very difficult to change and are more difficult to change the more they are valued. Therefore, those who have a closer relationship with their best friend may have more solidified positive attitudes towards alcoholic products than those who have a distant relationship with their best friend making their attitudes harder change after seeing a counter binge drinking advertisement.

It is also interesting to note that although the type of relationship young people have with their best friend had a significant effect on their attitudes towards alcoholic products, this did not have a significant effect on young university students' attitudes towards the act of binge drinking. This further supports the potential reasoning stated above, as young university students may have developed positive attitudes towards alcoholic products because of their positive exposure to them in the presence of their best friend. However, this does not necessarily mean they undertook binge drinking with their best friend and may have had experiences that involved drinking, but not binge drinking. Hence, it is plausible that young university students with close relationships with their best friend develop more positive attitudes towards alcoholic products but keep their negative attitudes towards binge drinking. There was a large disparity between these two attitudes too, with the mean score for *Attitude towards the Product (Alcohol)* ($\mu=4.42$ and 5.20) being significantly higher than the mean score for *Attitude towards the Act of Binge Drinking* ($\mu=2.39$ and 2.30). This means that young university students have positive attitudes towards alcoholic products and strongly negative attitudes towards the act of binge drinking after seeing an advertisement featuring a best friend, which is quite interesting as it could be expected that these two attitudes might be related.

Given that this research aims to examine the effectiveness of a best friend, a mother and a typical bartender in counter binge drinking advertisements, the next section of results that are discussed pertain to answering the hypothesis related to the effectiveness of a mother figure specifically, which is hypothesis 4:

H₄: The presence of a mother figure in a counter binge drinking advertisement will have a significantly greater effect on a young university student's attitude towards alcoholic products, attitude towards the act of binge drinking, and likelihood of participating in binge drinking on the night of a young university student's 21st birthday than on a Friday night out ONLY IF they also have a close, friendly relationship.

In order to answer this hypothesis, a new MANCOVA was run using with *Type of Relationship with Mother* and *Context* as the independent variables. *Type of Relationship with Mother* was created through the process of median splitting and from the original independent variable *Relationship*. This split the responses into two groups; firstly, those who have a close relationship with their mother (above and including the median) and those who have a distant relationship with their mother (below the median). The dependent variables and covariates included are those included when discussing the results of hypothesis 3.

Firstly, there were no significant interaction effects between the independent variables on the dependent variables. Therefore, there was no statistically significant difference between the mean score for *Likelihood to Binge Drink* ($F=0.090$, $df=1$, $p=0.765$), *Attitude towards the Product* ($F=0.109$, $df=1$, $p=0.745$), or *Attitude towards the Act of Binge Drinking* ($F=0.152$, $df=1$, $p=0.698$) between the two groups between the two contexts. Therefore, there is no statistical evidence to support hypothesis 4.

Unfortunately, the mean score for *Attitude towards the Act of Binge Drinking* was not statistically significant between the groups ($F=0.464$, $df=1$, $p=0.489$) or between the two contexts ($F=0.124$, $df=1$, $p=0.725$) when the main effects were examined. There was also no statistically significant difference between the mean scores for *Likelihood to Binge Drink* between the two groups ($F=2.657$, $df=1$, $p=0.0108$). This means there is no direct relationship between the types of relationship that a young university student has with their mother and their likelihood to binge drink or attitude towards alcohol after seeing a mother figure in a counter binge drinking advertisement. This implies that it does not matter whether a young university student had a close and personal relationship or a distant relationship with their mother; they will respond in the same way to seeing a counter binge drinking advertisement featuring a mother figure.

Hence, there is no statistical evidence to support hypotheses 4. However, there were some interesting main effects that can increase understanding of this area.

There was a statistically significant difference between the mean score for *Likelihood to Binge Drink* between the two contexts ($F=07.502$, $df=1$, $p=0.008$), and a significant difference for the mean scores for *Attitude towards the Product (Alcohol)* between the two groups ($F=9.247$, $df=1$, $p=0.003$) in the population. These results help to further academic understanding of how and when the mother figure could be used in anti-binge drinking advertisements.

The mean score for *Attitude towards the Product (Alcohol)* was higher for students who have a distant relationship with their mother ($\mu=5.58$, $\sigma=1.048$) than for those who have a close, personal relationship with their mother ($\mu=4.78$, $\sigma=1.642$). This means that although both groups of students have a more positive view of alcoholic products than a negative view, students who have a distant relationship with their mother have a more positive attitude towards alcoholic products than those who have a closer, personal relationship with their mother overall. This may be because those who have a closer, more personal relationship with their mother probably value their mother's opinions and advice more than those who have a distant relationship with their mother. This means they may have listened to and considered their mother's advice about alcoholic products and the negative effects on one's health, and therefore established a slightly less positive view of alcohol than those who have a distant relationship with their mother.

Secondly, there was a statistically significant difference between the mean scores for *Likelihood to Binge Drink* between the two contexts in the population ($F=7.502$, $df=1$, $p=0.008$). The mean score was higher for those saw the advertisement featuring a 21st birthday ($\mu=4.85$, $\sigma=1.846$) than for those who saw the advertisement featuring a Friday night out ($\mu=4.09$, $\sigma=2.016$), regardless of whether or not they had a close or distant relationship with their mother. This shows that young university students are more likely to binge drink on the night of their 21st birthday than on a Friday night out, which confirms previous findings but also highlights that the presence of a mother figure in a counter binge drinking advertisement does not change the likelihood of binge drinking that a young university student feels in a given context.

Overall evaluation of this hypothesis 4: There was no statistical evidence to support hypothesis 4. This means that there is no statistically significant difference between a young university student's likelihood of binge drinking, attitude towards binge drinking and attitude towards alcoholic products after seeing an advertisement featuring a mother, regardless of what context the advertisement is based upon or how close their relationship with their mother is. This can

be related back to the results of the previous two hypotheses and confirms the fact that a mother and a best friend both have the same level of effectiveness in the two contexts examined when aiming to influence young university students' likelihood to binge drink.

However, when context is removed, young university students who have a distant relationship with their mother have a more positive attitude towards alcoholic products than those who have a closer relationship with their mother. This could be because young university students who have a closer relationship with their mother may feel more respect towards their mother's attitudes and may be more likely to listen and respond to the drinking related advice their own mother has given them in the past than their peers with a distant relationship with their own mother. Hence, young university students with a close, personal relationship with their own mother may respond more positively when a mother figure encourages them to be safe with alcoholic products in a counter binge drinking advertisement, causing their attitudes towards alcoholic products to be relatively more negative. This is intriguingly opposite to the results of seeing the best friend, where young university students who saw a best friend figure developed more positive attitudes towards alcoholic products if they felt their relationship with their own best friend was of a close and personal nature than if they felt their relationship was of a more distant nature. Perhaps this is because best friends often share in the fun and enjoyment of alcohol consumption (which could encourage more positive attitudes to develop), whereas mothers often convey the necessity of being safe while consuming alcohol and the potential risks (which could encourage relatively more negative attitudes to form). However, future research would be needed to confirm if this is the cause behind this intriguing finding.

The second main effect confirmed that young university students are more likely to binge drink on the night of their 21st than on a Friday night out, regardless of the type of relationship they have with their mother. Although the first half of this finding is tautological, it is interesting that the type of relationship a young university student has with their mother has no bearing on their likelihood to binge drink. This may be because young university students do not usually binge drink with their parents and so do not consider them to a great extent when deciding whether or not to participate in binge drinking.

The last relationship that needs to be examined is that of a typical bartender. This is a rather different relationship to examine compared to the mother and the best friend, but this relationship has once again been split into two categories for analysis. These categories are referred to as a distant or close relationship with a typical bartender for the sake of comparability and ease, but it should be noted that this research examined the extent to which young university students respected a typical bartender and the extent to which they viewed

them as a sort of friend or confidante. Therefore, the perceived closeness of this relationship focuses on the authoritarian power that bartenders have while also examining the extent to which young university students feel they are friendly with a typical bartender and can trust their advice. The results for hypothesis 5 examine the potential usefulness of a typical bartender in counter binge drinking advertisements, and hypothesis 5 is as follows:

H₅: Counter binge drinking advertisements that feature a bartender will have a significantly lesser effect on a young person's likelihood of participating in binge drinking, attitudes towards binge drinking, and attitude towards alcoholic products on the night of a young university student's 21st birthday than on a Friday night out ONLY if they have a close, friendly perception of a typical bartender.

This hypothesis is a little different to the two previous hypotheses. Most university students have their own specific mother and best friend, but not all university students will have a relationship with a bartender. Hence, a typical bartender has been used, and the measure of *Relationship with Bartender* measured something a little different to the last two measures of relationship closeness, instead measuring the degree to which a young university student views a typical bartender as a confidante and friend and the appropriateness of their authoritative power. Therefore, this hypothesis examined how young university students perceive a typical bartender and how their attitudes and behaviours would change if a typical bartender told them to stop drinking.

A new categorical variable was created called *Type of Relationship with Bartender* through the process of median splitting the scale variable *Relationship with Bartender*. This split the responses into two groups; firstly, those who perceived a typical bartender with respect and friendliness (above and including the median) and those who perceived a typical bartender with little or no respect or friendliness (below the median).

A MANCOVA was run using *Type of Relationship with Bartender* and *Context* as the two independent variables after the file had been split to only analyse cases that had been shown an advertisement featuring a bartender. The dependent variables and covariates remained the same as the previous two hypotheses.

There was no statistically significant interaction effect between the independent variables on the three key dependent variables. This means there was no statistically significant difference between the mean score for *Attitude toward the Product (Alcohol)* ($F=0.209$, $df=1$, $p=0.649$), *Attitude towards the Act of Binge Drinking* ($F=0.012$, $df=1$, $p=0.913$) or *Likelihood of Binge*

Drinking ($F=0.059$, $df=1$, $p=0.809$) between the two contexts and the two types of perception of a typical bartender. This means there is no statistically significant difference between how likely a young university student is to drink, their attitudes towards binge drinking and their attitudes towards alcoholic products on their 21st birthday or a Friday night, regardless of the extent to which they view a typical bartender with respect and friendliness. Therefore, there is no statistical evidence to support hypothesis 5.

It should also be noted that there was also no statistically significant main effects that could enhance academic understanding of this area when examining the main effects of the independent variables separately on each of the three key dependent variables. This means that it does not matter if a young university student has respect for and values the opinions of a bartender or not, or what context they are drinking in, their attitudes towards alcoholic products, attitude towards binge drinking and likelihood to binge drink will not change after viewing a counter binge drinking advertisement featuring a bartender. This is an interesting finding as it shows that when young university students are presented with an advertisement replicating advice from a bartender it does not matter what context they are in or how much they like or respect the bartender, they will react and behave in the same way.

Although there was no statistically significant difference between the mean scores for each of the dependent variables, this MANCOVA provided some insight into how young university students reacted after seeing an advertisement featuring a bartender, regardless of context or the extent to which they view the bartender with respect or as a confidante. Young university students who have just seen an advertisement featuring a bartender have positive attitudes towards alcoholic products (mean scores between 4.86 and 5.28), a negative attitude towards the act of binge drinking (mean scores between 2.39 and 2.53), and are more likely than not to binge drink (mean scores between 4.13 and 4.61) in both the context of a Friday night out and a 21st birthday, regardless of the extent to which they respect a typical bartender.

Overall Evaluation of Hypothesis 5: There is no statistical evidence to support hypothesis 5. This means that there is no statistically significant difference between a young university student's likelihood to binge drink, attitude towards binge drinking and attitude towards alcoholic products on either the night of their 21st or a Friday night out after seeing a counter binge drinking advertisement featuring a bartender, regardless of how they perceive a typical bartender. However, it can be concluded that regardless of context or perceptions of a bartender, young university students have a positive attitude towards alcoholic products, a negative attitude towards the act of binge drinking, and are more likely than not to binge drink in either context after seeing an advertisement featuring a bartender. This could be because of

very similar reasons to the last hypothesis, mainly that attitudes are very difficult to change, and young university students may have previously established positive attitudes towards alcoholic products but negative attitudes towards the act of binge drinking that are difficult to influence with only one exposure to a counter binge drinking advertisement featuring a bartender. These may originate from the positive and fun experiences with alcoholic products that they have had in the past, but also from the negative consequences they have experienced from binge drinking.

A very interesting development is the finding that young university students are equally as likely to binge drink in both contexts (their 21st birthday and a Friday night out) after seeing a counter binge drinking advertisement featuring a bartender. This is very different from the results from the previous two hypotheses, where those who saw an advertisement featuring a best friend or a mother were significantly more likely to binge drink on their 21st birthday than on a Friday night out. This difference is rather intriguing and shows that the influence of a bartender is not related to the context in which the drinking is occurring. It can be theorised that this is due to the nature of the relationship that young university students have with a bartender. While young university students create long term relationships with their best friend and especially their mother, the relationship that a young university student has with a typical bartender is fleeting. This means that both a best friend and a mother have multiple opportunities to face a young university student to discuss their binge drinking behaviour and it is therefore understandable that a young university student may respond badly when instructed to stop binge drinking in a drinking context, especially a celebratory one. However, a typical bartender has no previous opportunities or the ability to discuss such behaviour in a different context and so perhaps young university students do not consider the context in which a bartender choose to discuss their drinking behaviour when they develop an opinion about the advice and their likelihood to binge drink after hearing it. Therefore, while the context in which a mother or a best friend choose to discuss binge drinking behaviour might be critical, context is not important when a young university student decides how likely they are to binge drink after seeing an advertisement featuring a typical bartender.

It is also interesting that this is the only relationship shown in the advertisements that resulted in no significant interaction or main effects. This suggests that advertisements featuring a best friend or a mother may be more effective when attempting to change specific attitudes, such as attitudes towards alcoholic products, because they have been shown to have some significant main effects.

The previous three hypotheses have focused on the effects of the relationships and the contexts shown in the advertisements. However, there are other relevant concepts to be considered, such

as the potential influence of the gender of the spokespeople used in the advertisements. The next hypothesis acknowledges the fact that this study only used female spokespeople in counter binge drinking advertisements and examines if the presence of female spokespeople would be more influential for female university students than male university students.

H₆: Counter binge drinking advertisements that feature a female spokesperson will have a significantly greater effect on a young *female* university student's likelihood to binge drink, attitude towards binge drinking and attitude towards alcoholic products than on a young *male* university student's attitude towards and likelihood to binge drink.

In order to evaluate the validity of this hypothesis a new MANCOVA was run with *Relationship* and *Gender* as the independent variables. This was done in order to assess the effect of gender of a university student and the relationship they saw in the advertisement on their likelihood to binge drink and attitudes towards binge drinking, which could not be achieved while *Gender* was used as a covariate. The dependent variables were *Likelihood to Binge Drink*, *Attitude towards the Act of Binge Drinking*, *Attitude towards the Product (Alcohol)*, *Self-Referencing*, *Attitude towards the Advertisement (Emotional Response)* and *Attitude towards the Message of the Advertisement*. The covariates included were *Acceptability of Drinking in Different Contexts*, *Attitude towards a Typical Student Drinking*, *Tendency to Engage in Binge Drinking*, *Health Consciousness*, *Locus of Control*, *Ethnicity*, *Relationship with Mother*, *Relationship with Bartender* and *Relationship with Best Friend*.

There was no statistically significant interaction effect between *Gender* and *Relationship* on *Likelihood to Binge Drink* ($F=0.075$, $df=2$, $p=0.928$), *Attitude towards the Act of Binge Drinking* ($F=1.143$, $df=2$, $p=0.867$) or *Attitude towards the Product (Alcohol)* ($F=0.524$, $df=2$, $p=0.593$). This means that there is no statistically significant difference between young male university students and female university students' likelihood of binge drinking, attitudes towards the act of binge drinking or attitude towards alcoholic products after seeing a counter binge drinking advertisement, regardless of what kind of relationship is presented to them in the advertisement.

Unfortunately, there was also no statistically significant effect for *Likelihood to Binge Drink* between the two groups ($F=1.040$, $df=1$, $p=0.309$). This means there was no statistically significant difference between the likelihood to binge drink for male and female university students after seeing the counter binge drinking advertisements. Hence, this part of hypothesis 6 is not supported by statistical evidence. To add to this, there was no statistically significant difference between the mean score for *Attitude towards the Product (Alcohol)* between the two

genders either ($F=0.228$, $df=1$, $p=0.634$). This means that this part of hypothesis 6 is also not supported by statistical evidence.

However, there was a useful main effect that showed that there was a statistically significant difference between the mean score *Attitude towards the Act of Binge Drinking* for young male university students compared to young female university students ($F=12.618$, $df=1$, $p=0.000$). The mean score for *Attitude towards the Act of Binge Drinking* was significantly higher for young male university students ($\mu=2.84$, $\sigma=1.207$) than for young female university students ($\mu=2.29$, $\sigma=1.030$), regardless of which relationship they were shown in the advertisement. This means that young male university students had a more positive attitude towards the act of binge drinking than young female university students after seeing the counter binge drinking advertisements. Hence, there is statistical evidence to support this part of hypothesis 6. However, it is important to note that overall, university students mean score for *Attitude towards the Act of Binge Drinking* were very low after seeing any of the combinations of advertisements, which is a positive outcome of these advertisements.

Overall evaluation of hypothesis: There is no statistical evidence to support the first two parts of hypothesis 6, meaning that there is no statistically significant difference between the effect that the presence of a female spokesperson in a counter binge drinking advertisement has on young female university students' likelihood to binge drink or attitude towards alcoholic products when compared to young male university students' likelihood to binge drink or attitudes towards alcoholic products, regardless of context.

However, there was statistical evidence to support the other part of hypothesis 6, meaning that there was a difference between male and female university students' attitudes towards the act of binge drinking after seeing an advertisement featuring a female spokesperson. To be more specific, female university students have significantly more negative attitudes towards the act of binge drinking than male university students after seeing these advertisements. This can be attributed to the idea that female university students may be able to relate more to the female spokesperson and therefore more likely to listen to a spokesperson of the same gender as them. This idea is supported by the fact that young women are more likely to be influenced by their female friends than their male friends (Korcuska & Thombs, 2003), and this may be able to be extended to other female relationships, such as a mother or a bartender. Therefore, as young female university students listen to the advice of the spokesperson more and potentially relate to the advertisement more, they are more likely to consider the advice of the spokesperson and therefore their attitude towards binge drinking changes. Provided that female university students do relate more or have a stronger reaction to the advertisement, it is perceivable that

this could affect their attitude towards the act of binge drinking in a negative way and therefore they could develop more negative attitudes towards the act of binge drinking when compared to male students.

Conversely, it may be that young male university students do not relate as well or listen to the advice of these advertisements because they feature female spokespeople. For example, male university students probably have male best friends and hence would not have responded as well to the advertisement featuring a female best friend. This would most likely mean that the influence of the advertisement on young male university students' attitudes towards the act of binge drinking was not as great as the influence on young female university students' attitudes.

It is important to note that both of the mean scores for male and female university students were very low for *Attitude towards the Act of Binge Drinking*, meaning that all the advertisements did elicit a negative response overall but the response of the female university students was significantly more negative. This supports the idea that the gender of the spokesperson in a counter binge drinking advertisement can make a significant difference, and future research into the effect of advertisements featuring male spokespeople would be very beneficial to enhance understanding of this area.

However, this should only be taken into account when aiming to change young university students' attitudes towards the act of binge drinking, as the relationship shown in a counter binge drinking advertisement has no significantly different effect on the likelihood to binge drink and attitudes towards alcoholic products of young male university students or young female university students. It could be that although young female students may be more likely to listen to the advice of the advertisement and hence change their views of the act of binge drinking to become more negative, they are still just as likely to binge drink as their male counterparts. This may be because they do not think about the advertisement when they decide if they will binge drink on a given occasion, especially after only seeing this advertisement once. Therefore, this form of counter binge drinking advertisement may be most useful when aiming to change young university students' long term attitudes towards the act of binge drinking with the aim of decreasing their rate of binge drinking eventually instead of targeting their likelihood to binge drink directly.

It is also interesting that there was no significant difference in the attitudes towards alcoholic products between male and female university students after seeing the advertisements. This could be because the advertisements do not specifically show any alcoholic products or refer to them, and hence the advertisement did not have a significantly different effect on male and

female university students. However, it is worth noting that the mean scores for both genders were quite high (4.94 and 5.03), as is consistent with previous findings. This can also be related back to the fact that having a positive attitude towards alcoholic products can originate from the positive and fun times spent with friends while drinking alcoholic products but not binge drinking, which helps to develop positive views of alcoholic products. Given that the advertisements did not specifically discuss alcoholic products it is not a surprise that the attitudes towards alcoholic products of male and female students were not significantly different here.

Given that one of the proposed explanations for the significant difference between the mean scores for *Attitude towards the Act of Binge Drinking* for male and female university students utilised the idea that female university students may relate more to the female spokesperson, it should be noted that there was no significant difference between the mean scores for *Self Referencing* between the two groups ($F=0.180$, $df=1$, $p=0.672$). This means that there was no significant difference between how male and female university students related the advertisement back to themselves. However, this measure examines the extent to which they could relate to the advertisement as a whole and whether or not it seemed to be aimed at them personally. This does not measure whether or not they related well to the spokesperson being a female or a male. Therefore, it can still be theorised that young female university students may have had a more negative attitude towards the act of binge drinking when compared to male students because they related better to a female spokesperson than their male counterparts. However, this cannot be confirmed, and future research is invited to include a measure of self-referencing with the spokesperson to examine if this is the reason behind this significant difference in attitude towards the act of binge drinking between the two groups.

Another possible reason for this is that young female university students have a generally more negative attitude towards binge drinking than their male peers. Although it is assumed to be a result of their reaction to the advertisement, there was no measure of their attitude towards binge drinking before they saw the advertisement and therefore no way to measure if this had changed. Hence, future research should examine female and male young university students' attitudes towards binge drinking before and after exposure to the stimulus in order to examine if this significant effect is due to the advertisement or a more general attitude towards binge drinking.

One of the primary purposes of this research was to examine how different aspects of advertisements could affect young university students' likelihood to binge drink and attitudes surrounding binge drinking. However, it is also important to examine how university students

emotionally and rationally react to these advertisements as whether or not they have a positive reaction could also affect their overall effectiveness. Hence, this is what the following hypotheses examine.

H₇: An advertisement featuring a best friend will have a significantly greater effect on a young university student's emotional response to the advertisement and attitude towards the message of the advertisement than an advertisement featuring a mother or a bartender ONLY IF the advertisement also presents a context where excessive drinking is not the social norm (in this case, a Friday night out).

In order to test this hypothesis, a MANCOVA was run with *Relationship* and *Context* as the independent variables and *Attitude towards the Ad (Emotional Response)* and *Attitude towards the Message of the Advertisement* as the dependent variables. The covariates were *Self-Referencing*, *Acceptability of Drinking in Different Contexts*, *Tendency to Engage in Binge Drinking in General*, *Attitude towards Typical Student Drinking*, *Health Consciousness*, *Drinking Locus of Control*, *Gender* and *Ethnicity*.

There was no statistically significant interaction effect between *Relationship* and *Context* on *Attitude towards the Advertisement (Emotional Response)* ($F=1.272$, $df=2$, $p=0.282$) or *Attitude towards the Message of the Advertisement* ($F=0.979$, $df=2$, $p=0.377$). This means that there is no statistically significant difference between young university students' emotional responses to the advertisement and attitude towards the message of the advertisement, regardless of what relationship and context they were presented with in a counter binge drinking advertisement. Hence, there is no statistical evidence to support hypothesis 7. However, there were some interesting main effects that can aid in academic understanding of this area. There was a statistically significant difference in the mean scores for *Attitude towards the Ad (Emotional Response)* ($F=6.841$, $df=2$, $p=0.001$) and *Attitude towards the Message of the Advertisement* ($F=11.200$, $df=2$, $p=0.000$) between the three groups, regardless of the context shown.

The mean score for *Attitude towards the Advertisement (Emotional Response)* was significantly higher for young university students who saw an advertisement featuring a mother ($\mu=3.18$, $\sigma=1.016$) than for those who saw a bartender ($\mu=2.82$, $\sigma=1.012$), followed by those who saw a best friend ($\mu=2.55$, $\sigma=1.091$). This means that young university students who see a counter binge drinking advertisement featuring a best friend have the most negative emotional response to the advertisement compared to those who saw a bartender or a mother. However, it is worth pointing out that all three relationships elicited negative emotional responses with the

mean score for the advertisement featuring a mother still definitively in the negative side of the scale.

The mean score for *Attitude towards the Message of the Advertisement* was significantly higher for young university students who saw an advertisement featuring a best friend ($\mu=5.66$, $\sigma=1.106$) than for those who saw a bartender ($\mu=5.55$, $\sigma=1.052$) or a mother ($\mu=4.85$, $\sigma=1.081$). This means that young university students have a more positive response to the message of a counter binge drinking advertisement if it features a best friend than if it features a mother or a bartender, regardless of the context shown. Interestingly, this is the opposite finding than for emotional responses towards the advertisement as the advertisement featuring a best friend elicited the highest score as opposed to the lowest. It is once again important to note the inverse nature of the responses overall where all three relationships elicited positive attitudes towards the message of the advertisement.

However, there was no statistically significant difference in the mean scores for *Attitude towards the Message of the Advertisement* ($F=3.116$, $df=2$, $p=0.079$) between the two contexts, regardless of the relationship shown. This means that there was no significant difference in young university students' rational response to the message of the advertisement when presented with either of the two contexts. However, it is still important to note that the mean scores were 5.29 ($\sigma=1.081$) for the night of the 21st birthday and 5.49 ($\sigma=1.081$) for a Friday night out, which shows that young university students formed positive attitudes towards the message of the advertisement in both contexts.

There was a statistically significant difference in the mean scores for *Attitude towards the Advertisement (Emotional Response)* ($F=4.131$, $df=2$, $p=0.043$) between the two contexts, regardless of what relationship was shown. The mean score for *Attitude towards the Advertisement (Emotional Response)* was significantly higher for young university students who were presented with the context of a 21st birthday ($\mu=2.94$, $\sigma=1.105$) than those who were presented with the context of a Friday night out ($\mu=2.75$, $\sigma=1.026$). This means that young university students formed more positive emotional attitudes towards the advertisement if it featured a 21st birthday than if it featured a Friday night out. However, both of these mean scores are very low, signalling that young university students had a negative emotional response to both contexts that were shown.

Overall Evaluation of Hypothesis 7: There was no statistical evidence to support hypothesis 7. This means that there is no statistically significant difference between young university students' emotional responses to the advertisement and attitude towards the message of the

advertisement regardless of what relationship and context they were presented with in a counter binge drinking advertisement in the population.

However, it is worth noting some of the main effects that can improve academic understanding. Young university students who saw an advertisement featuring a best friend had the lowest mean score for *Attitude towards the Ad (Emotional Response)* overall. This means that after seeing a best friend in a counter binge drinking advertisement they were *less* insulted, confused or shocked by the advertisement, for example, than those who saw an advertisement featuring a mother or a bartender. This may be because the opinion of the best friend in this topic area is usually held with higher regard, and therefore young university students may be more likely to listen to their best friend and not get as offended as if their mother or a bartender told them to stop binge drinking. To add to this, young university students who saw an advertisement featuring a 21st birthday had higher mean score for *Attitude towards the Advertisement (Emotional Response)* than those who saw the context of a Friday Night out. This means that those who saw the advertisement featuring a 21st birthday were more shocked and insulted than those who saw an advertisement featuring a Friday night out. This may be because young university students view their 21st birthday as a unique rite of passage and believe they have more of a right to drink excessively on such a special occasion. Therefore, they have become more insulted and shocked by the idea of being told to stop drinking on the night of their 21st than on a more regular drinking occasion, such as a Friday night out.

To clarify, the *Attitude towards the Advertisement (Emotional Response)* scale asked how insulted, confused, shocked the respondent felt, for example, and therefore those who scored highly felt more shocked, confused and insulted. The respondents were also asked if the advertisement made them feel good or pleased but these items were then reverse coded. Hence, a higher score means that the respondent felt strong negative emotions towards the advertisement.

On the other hand, young university students who saw an advertisement featuring a best friend had a higher mean score for *Attitude towards the Message of the Ad* compared to those who saw a mother or a bartender. This means that young university students who saw a best friend in a counter binge drinking advertisement felt more strongly that the message of the advertisement was of a more positive nature, that it was fair and good in its intentions. This may be because of a similar reason as the last result, as young university students may be more likely to listen to and rationally respond to their best friend giving advice than if it was their mother or a bartender. This could be due to the fact that friends are most likely to be present when young university students choose to binge drink and due to the fact that young university students

actively choose their best friends while they have no choice of who their mother is and little choice as to who their bartender is. Hence, when a best friend figure is shown to be giving safe drinking advice young university students develop a more positive rational attitude of the message the advertisement is conveying.

However, there was no significant difference between the mean scores for *Attitude towards the Message of the Ad* between the two contexts. This means that it does not matter what the implied drinking context of the advertisement is (either a 21st or a Friday night out), young university students will respond the same way to the message of the advertisement. This may be because young university students believe a safer drinking message is pertinent in many situations and can be applied to both contexts where binge drinking is the social norm and where it is not. It is worth noting that all of the mean scores for *Attitude towards the Message of the Advertisement* were high, which means that young university students generally thought that the message of the advertisement was a positive one. This means that young university students do believe the idea of conveying a safer drinking message in different relevant drinking contexts is important and they respond well overall to counter binge drinking advertisements with this message.

The last hypothesis extends on this idea and examines the role that self-referencing may play in affecting young university students' emotional and rational responses to counter binge drinking advertisements after seeing advertisements featuring the three key relationships.

H₈: Young university students will have a greater significant emotional attitude towards the advertisement and attitudes towards the message of the advertisement when presented with an advertisement featuring a best friend than when presented with an advertisement featuring a bartender or a mother figure ONLY IF they report high levels of self-referencing with the advertisement.

The first step in answering this hypothesis is to create a new categorical variable from the scale variable *Self Referencing*. This was done through median splitting, a method that has been discussed previously, and was labelled *Level of Self Referencing*. The two categories for this new scale were those who felt a high level of self-referencing with the advertisement they saw (above and including the median) and those who felt a low level of self-referencing with the advertisement they saw (below the median). This was then able to be used as an independent variable in data analysis.

The final MANCOVA was run using *Level of Self Referencing* and *Relationship* as the independent variables. The dependent variables included *Likelihood to Binge Drink*, *Attitude towards the Act of Binge Drinking*, *Attitude towards the Product (Alcohol)*, *Attitude towards the Advertisement (Emotional Response)* and *Attitude towards the Message of the Advertisement*. All of the covariates discussed in the results of Hypothesis 7 were included.

There was a statistically significant interaction effect between with *Level of Self Referencing* and *Relationship* on *Attitude towards the Advertisement (Emotional Response)* ($F=3.449$, $df=2$, $p=0.033$) in the population. This is represented in the graph below:

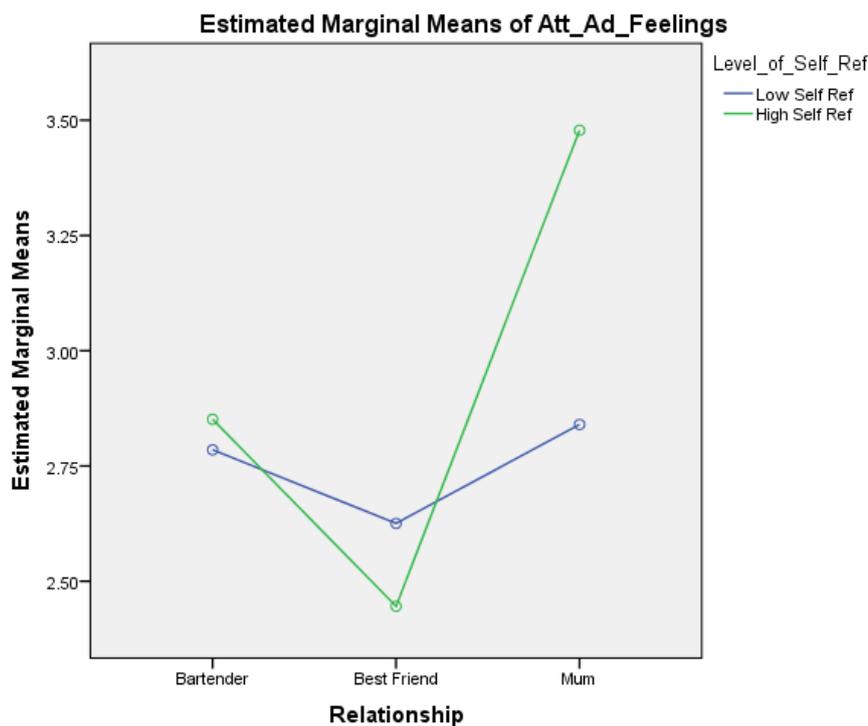


Figure 9: The Influence of Level of Self Referencing and Relationship on Attitude towards the Advertisement (Emotional Response).

The mean score for *Attitude towards the Advertisement (Emotional Response)* was significantly higher for those who felt a high level of self-referencing ($\mu=4.85$, $\sigma=1.081$) than those who reported a low level of self-referencing ($\mu=3.48$, $\sigma=0.878$) after seeing an advertisement featuring a mother. As you can see, there is large difference between these mean scores, and the mean score for those who reported high levels of self-referencing after seeing a mother figure was the highest mean score of attitude towards the advertisement overall. Remembering that a higher score for this scale indicates that young university students feel more shocked and insulted, this result means that of those who saw a mother figure in the advertisement, young

university student who felt they could relate more to the advertisement on a personal level had stronger negative attitudes towards the advertisement than those who did not feel they could relate to the advertisement personally.

On the other hand, the mean score for those who reported high levels of self-referencing ($\mu=2.85$, $\sigma=0.965$) were higher, but very similar to the mean score for those who reported low levels of self-referencing ($\mu=2.79$, $\sigma=1.071$) after seeing an advertisement featuring a bartender. Therefore, there is a significant difference, but not a large one, between the attitudes towards the advertisement of those who reported a high level self-referencing and those who reported a low self-referencing. This means that those who were able to relate to the advertisement personally felt stronger negative emotional attitudes toward the advertisement than those who did not relate to the advertisement personally after seeing an advertisement featuring a bartender.

In terms of those who saw an advertisement featuring a best friend, the mean score for *Attitude towards the Advertisement (Emotional Response)* was significantly higher for those who reported low levels of self-referencing ($\mu=2.63$, $\sigma=1.086$) than for those who reported high levels of self-referencing ($\mu=2.45$, $\sigma=1.105$). This means that after seeing an advertisement featuring a best friend, those who felt they could relate personally to the advertisement developed a more positive emotional response to the advertisement than those who did not feel they could relate personally to the advertisement. The high self-referencing condition that saw an advertisement featuring a best friend actually scored the lowest mean score of *Attitude towards the Advertisement (Emotional Response)* overall, indicating that young university students responded the most positively to advertisements featuring a best friend. Hence, there is statistical evidence to support this part of hypothesis 8.

It is important to note that even though those who reported high levels of self-referencing and saw an advertisement featuring a mother figure (and therefore elicited the strongest negative emotional attitudes towards the advertisement), only had a mean score of 4.85, which only slightly more negative than the neutral score of 4 out of 7. Hence, none of the advertisements elicited an extremely negative, shocked and insulted response but the advertisement featuring a best friend elicited a significantly positive response.

It is important to go beyond emotional response and examine how young university students responded to the message of the advertisement, a typically more rational decision. There was no statistically significant interaction effect between the two independent variables on *Attitude towards the Message of the Advertisement* ($F=0.591$, $df=2$, $p=0.555$). Hence, there was no

statistically significant difference between the mean score for *Attitude towards the Message of the Advertisement* between the two levels of self-referencing and the three relationships shown in the advertisements. Hence, there is no statistical evidence to support this part of hypothesis 8.

However, there was an interesting main effect that aids our understanding of this phenomenon. There was a statistically significant difference in the mean scores for *Attitude towards the Message of the Advertisement* between the three groups of relationships shown ($F=11.413$, $df=2$, $p=0.000$). The mean score for *Attitude towards the Message of the Advertisement* was the highest for those who were shown an advertisement featuring a best friend ($\mu=5.66$, $\sigma=1.106$), followed by those who saw an advertisement featuring a bartender ($\mu=5.55$, $\sigma=1.052$), followed by those who saw an advertisement featuring a mother ($\mu=4.85$, $\sigma=1.081$). This means that those who saw an advertisement featuring a best friend had the most positive response to the message that the advertisement was conveying, while those who saw a mother figure had the least positive response to the message the advertisement was conveying, regardless of their level of self-referencing with the advertisement.

It is interesting that for both emotional and rational responses to the advertisements, young university students favoured the advertisement featuring a best friend and disliked the advertisement featuring a mother with the advertisement featuring a bartender falling in between when relatively compared to one another. This is a very important finding for social marketers and the implications of such a finding are discussed in the discussion section that follows.

Overall evaluation of Hypothesis 8: The interaction effect showed that both the relationship shown in the advertisement and the level of self-referencing a young university student feels with the advertisement have a significant effect on how that university student will emotionally respond to the advertisement. The young university students who formed the most positive emotional attitudes towards the advertisement were those who felt a high level of self-referencing and saw an advertisement featuring a best friend. This means that there was statistical evidence to support the part of hypothesis 8 that relates to young university students' emotional attitude towards the advertisement. This is exactly what was expected, and could be because those who felt they could relate to the advertisement personally were potentially more likely to listen to the advice of the best friend figure as they can imagine their own best friend conveying that message to them easier than someone who does not feel they can relate to the advertisement. Hence, young university students who felt they could relate more to the advertisement on a personal level developed more positive attitudes towards the advertisement

and felt less shocked or insulted. On the other hand, those who could not relate to the advertisement personally felt more insulted, shocked and confused and this could be because they did not feel emotionally invested in advertisement or able to relate to the situation displayed. Hence, they developed more negative attitudes towards the advertisement because they do not enjoy being instructed by someone who is pretending to be like their best friend but who actually is not. This means that this would be the best approach for advertisers to take if their aim was *not* to shock or insult young university students while targeting young consumers who feel they can relate to these types of advertisements. Hence, utilising a best friend figure may not be the best approach for fear appeals in counter binge drinking advertisements.

The analysis showed that those who felt a high level of self-referencing created the most negative emotional attitudes towards the advertisement if they had been presented with an advertisement featuring a mother. This may be because young university students do not enjoy being told what to do by their mothers and that feeling becomes more pertinent if the student can relate easily to the advertisement and easily imagine their mother attempting to convey such a message. This does not mean that advertisements featuring a mother should be dismissed, however, only that they should be used in a different context. If an advertiser is aiming to develop counter binge drinking advertisements that elicit a negative emotional response, in a similar fashion to a fear appeal perhaps, then utilising a mother figure would be most effective.

Interestingly, the emotional response to the bartender was very similar for those who felt a high level of self-referencing and for those who felt a low level of self-referencing. Although those who reported high self-referencing reacted more negatively, the difference between the two mean scores was minimal. This may be because young university students do not often know their bartender personally or may have never been approached by a bartender who is attempting to convey a safer drinking message. This could mean that those who felt they could relate to the advertisement easily and those who could not both responded in similar ways as they are possibly less likely to have experienced a bartender providing safer drinking advice, as opposed to their mother or their best friend providing safer drinking advice. This relationship is typically one of a distant nature and therefore it is understandable that it did not elicit very strong emotional responses, instead being found to have mean scores for both those who felt high and low self-referencing that were in between the mean scores for the other two relationships examined. This means that using a bartender in an advertisement would not be as effective as using a best friend if the aim of the advertisement is to elicit a positive emotional response in those with high levels of self-referencing or as effective as using a mother figure

when attempting to elicit a more negative emotional response. Also, the mean score for the emotional response of those who saw a mother or a bartender but had low levels of self-referencing were very similar, making the advertisement featuring a mother the best option overall if the aim is to produce negative emotional attitudes towards the advertisement.

Unfortunately, the other part of hypothesis 8 was also not supported by statistical evidence. There was no statistically significant difference between how young university students responded to the message of the advertisement depending on both what relationship they saw in the advertisement and their level of self-referencing with that advertisement. However, there was a significant difference in young university students' attitudes towards the message of the advertisement based on the relationship they saw in the advertisement, regardless of their level of self-referencing with it. In this case, those who saw an advertisement featuring a best friend had the most positive attitudes towards the message of the advertisement, and those who saw a mother had the most negative attitudes towards the message of the advertisement, with those who saw a bartender falling in between. This is consistent with the findings from the other part of this hypothesis and may be attributed to the fact that young university students may be more likely to listen to the advice of their friends when considering binge drinking than the advice of their mother or a bartender, causing the development of more positive attitudes towards the message being conveyed by an advertisement featuring a best friend. This means that regardless of the level of self-referencing felt young university students who see a counter binge drinking advertisement featuring a best friend have the best rational responses to the message the advertisement is conveying. Therefore, advertisers who are aiming to target young university students utilising the power of the message of the advertisement should feature a best friend as this will elicit the most positive rational responses to the message conveyed.

While it is most critical to utilise statistical analysis to answer the 8 hypotheses in this research, many other interesting significant effects arose during the course of the analysis. Hence, the following section outlines the statistically significant effects found that related to the covariates used and how this information should be used for future research purposes. The section that then follows continues down this path and explores the other significant main effects that were discovered when running the series of MANCOVAs, but were not useful in answering any of the hypotheses.

Summary of Hypothesis Testing

The following table summarises the results of the hypothesis testing discussed previously for purposes of ease of interpretation. Please note that ATA refers to *Attitude towards the Act*, ATP

refers to *Attitude towards the Product*, LBD refers to *Likelihood to Binge Drink*, EATA refers to *Emotional Attitude towards the Advertisement*, and ATMA refers to *Attitude towards the Message of the Advertisement*.

<u>Hypothesis Tested</u>	<u>Independent Variables Used</u>	<u>Dependent Variables Used</u>	<u>Result</u>	<u>Interpretation</u>
Hypothesis 1	Relationship, Context	ATA, ATP, LBD, EATA, ATMA and Self Referencing	Not Significant: LBD: ($F=1.390$, $df=2$, $p=0.251$) ATA: ($F=0.350$, $df=2$, $p=0.705$) ATP: ($F=0.464$, $df=2$, $p=0.630$)	There is no significant difference between young university students' ATA, ATP and LBD after seeing an advertisement featuring a best friend, a mother or a bartender.
Hypothesis 2	Same as above		ATA: Not Significant ($F=1.893$, $df=1$, $p=0.170$) ATP: Significant ($F=4.830$, $df=1$, $p=0.029$) LBD: Significant ($F=12.913$, $df=1$, $p=0.000$)	There is no significant difference between young university students' ATA after seeing an advertisement featuring a 21 st birthday or a Friday night out. Young university students are significantly more likely to binge drink on their 21 st birthday, but form significant more positive attitudes towards alcoholic products on a Friday night out.
Hypothesis 3	Type of Relationship with Best Friend, Context	ATA, ATP, LBD, EATA, ATMA and Self Referencing	Not Significant No interaction effect between the two contexts and the two types of relationships.	There is no significant difference between the ATA, ATP and LBD between young university students with a close or distant relationship with their best friend and between those who saw an advertisement featuring a 21 st birthday or a Friday night out. However, young university students are significantly more

			<p>ATA: ($F=0.004, df=1, p=0.949$)</p> <p>ATP: ($F=1.389, df=1, p=0.242$)</p> <p>LBD: ($F=0.108, df=1, p=0.743$)</p>	<p>likely to binge drink on their 21st birthday than on a Friday night out after seeing an advertisement featuring a best friend.</p> <p>Young university students with a close relationship with their best friend formed significantly more positive attitudes towards alcoholic products than those with a distant relationship with their best friend.</p>
Hypothesis	Type of	ATA, ATP, LBD,	Not Significant	There is no significant difference between the ATA, ATP and
4	Relationship with Mother, Context	EATA, ATMA and Self Referencing	No interaction effect between the two contexts and the two types of relationships.	LBD of young university students with a close relationship with their mother and those with a distant relationship with their mother after seeing an advertisement featuring a mother and either a 21 st birthday or a Friday night out.
			<p>ATA: ($F=0.152, df=1, p=0.698$)</p> <p>ATP: ($F=0.109, df=1, p=0.735$)</p> <p>LBD: ($F=0.090, df=1, p=0.765$)</p>	
Hypothesis	Type of	ATA, ATP, LBD,	Not Significant	There is no significant difference between the ATA, ATP and
5	Relationship with Typical Bartender, Context	EATA, ATMA and Self Referencing	No interaction effect between the two contexts and the two types of relationships.	LBD of young university students with a perceived close relationship with a typical bartender and those with a perceived distant relationship with a typical bartender after seeing an advertisement featuring a typical bartender and either a 21 st

			<p>ATA: ($F=0.012$, $df=1$, $p=0.913$)</p> <p>ATP: ($F=0.209$, $df=1$, $p=0.649$)</p> <p>LBD: ($F=0.059$, $df=1$, $p=0.809$)</p>	birthday or a Friday night out.
Hypothesis 6	Gender, Relationship	ATA, ATP, LBD, EATA, ATMA and Self Referencing	<p>ATA: Significant ($F=12.618$, $df=1$, $p=0.000$).</p> <p>ATP: Not Significant ($F=0.228$, $df=1$, $p=0.634$).</p> <p>LBD: Not Significant ($F=1.040$, $df=1$, $p=0.309$)</p>	<p>Young female university students formed significantly more negative attitudes towards the act of binge drinking than young male university students.</p> <p>There was no significant difference between young female and young male university students' LBD and ATP after seeing an advertisement featuring a female spokesperson.</p>
Hypothesis 7	Relationship, Context	ATA, ATP, LBD, EATA, ATMA and Self Referencing	<p>Not Significant</p> <p>No interaction effect between the three relationships and the two contexts.</p> <p>EATA: ($F=1.272$, $df=2$, $p=0.282$)</p> <p>ATMA: ($F=0.979$, $df=2$,</p>	<p>There was no significant difference between the EATA and ATMA of young university students who saw an advertisement featuring a mother, best friend or a bartender and a 21st birthday or a Friday night out.</p> <p>Young university students who saw an advertisement featuring a mother developed significantly more negative EATA than those who saw a bartender, who in turn developed significantly more negative ATP than those who saw a best friend.</p>

			p=0.377)	Young university students who saw an advertisement featuring a best friend developed significantly more positive ATMA than those who saw a bartender, who in turn had more positive ATMA than those who saw a mother figure.
Hypothesis 8	Relationship, Level of Self Referencing	ATA, ATP, LBD, EATA and ATMA	<p>EATA: Significant Interaction Effect ($F=3.449, df=2, p=0.033$)</p> <p>ATMA: Not Significant ($F=0.591, df=2, p=0.555$)</p>	<p>Young university students who felt a high level of self referencing developed more negative EATA than those who felt a low level of self referencing after seeing an advertisement featuring a mother figure.</p> <p>Young university students who felt a high level of self referencing developed more positive EATA than those who felt a low level of self referencing after seeing an advertisement featuring a best friend.</p> <p>Young university students who felt a high level of self referencing developed more negative EATA than those who felt a low level of self referencing after seeing an advertisement featuring a bartender, but there was minimal difference between the mean scores.</p> <p>There was no significant difference between the ATMA of young university students who felt a high level of self referencing and those who felt a low level of self referencing.</p>

Table 4: Summary of Results of Hypothesis Testing

The Effects of Covariates

Some of the covariates examined had some interesting significant effects when the series of MANCOVAs were run. While the majority of the covariates had no statistically significant effect on the dependent variables, there were a few key covariates that had significant effects of multiple dependent variables that make them worth mentioning. This is because they could then be examined more thoroughly in future research and perhaps used as independent variables if needed.

Attitude towards a Typical Student Drinking had a statistically significant effect on young university students' *Attitude towards the Product (Alcohol)* ($F=11.868$, $df=1$, $p=0.001$), *Attitude towards the Act of Binge Drinking* ($F=24.907$, $df=1$, $p=0.000$) and *Likelihood of Binge Drinking* ($F=5.245$, $df=1$, $p=0.023$). This suggests that the likelihood of a young university student binge drinking, their attitudes towards alcoholic products and the act of binge drinking is affected by how they personally view typical university students who drink alcoholic products. This highlights the importance of social and peer influences in the formation of alcohol related attitudes and the decision to engage in binge drinking. Young university students binge drinking related attitudes and behaviours are significantly linked to their perceptions of a typical student engaging in binge drinking. This means that the degree to which a young university student believes that other young university students who binge drink are cool, intelligent and sexy, for example, influences how likely they are to binge drink and their drinking related attitudes. However, the nature of the connection between these concepts was not examined in this research, and it is highly recommended that this is used as an independent variable in future research to examine the importance of perceptions of peers in the decisions surrounding binge drinking and to potentially confirm the propositions of this study.

Acceptability of Drinking in Different Contexts had a statistically significant effect on young university students' *Attitude towards the Product (Alcohol)* ($F=21.482$, $df=1$, $p=0.000$), *Attitude towards the Act of Binge Drinking* ($F=5.019$, $df=1$, $p=0.026$), *Likelihood of Binge Drinking* ($F=18.709$, $df=1$, $p=0.000$) and *Self Referencing* ($F=11.128$, $df=1$, $p=0.001$). This means that a young university student's attitude towards the act of binge drinking, attitude towards alcoholic products, likelihood of binge drinking and the level of self-referencing they feel with the advertisement they saw are effected by how acceptable that young university student believes binge drinking is in a variety of different contexts, including a 21st birthday, a date and during the weekend, for example. This confirms there is a link between young university students' binge drinking related attitudes and behaviours and proposes that young university students may form decisions on binge drinking based on how acceptable they perceive it to be to engage in

drinking alcohol, in a range of different contexts. This finding helps to confirm the idea that social and peer influences are prominent in the decision to engage in binge drinking and form relevant opinions as the perceived social acceptability of drinking that a young university student feels is most likely based upon social acceptance or avoidance of certain behaviour in certain contexts. Hence, it would be interesting to examine the role that the general acceptability of drinking in different contexts could play in social marketing, and the formation of counter binge drinking advertisements and future research is invited to do so.

Lastly, *Tendency to Engage in Binge Drinking* had a statistically significant effect on young university students' *Attitude towards the Product (Alcohol)* ($F=35.423$, $df=1$, $p=0.000$), *Attitude towards the Act of Binge Drinking* ($F=4.621$, $df=1$, $p=0.033$), *Likelihood of Binge Drinking* ($F=43.946$, $df=1$, $p=0.000$) and *Self Referencing* ($F=5.799$, $df=1$, $p=0.017$). This implies that a young university student's attitude towards the act of binge drinking, attitude towards alcoholic products, likelihood of binge drinking and the level of self-referencing they feel with the advertisement are effected by that young university student's tendency to engage in binge drinking, regardless of context. This finding highlights the link between young university students' general tendency to engage in binge drinking without a specific context in mind and their binge drinking related attitudes and behaviours. It can be proposed that those who have a higher tendency to engage in binge drinking generally may have a higher likelihood of binge drinking in specific contexts, such as a 21st birthday or a Friday night out, but future research would need to be conducted to conclude such a proposition.

Other Significant Main Effects

There were a number of other results that were found to be significant in the course of this research that did not help in answering any of the hypotheses. This section outlines the results that were deemed to be important for the understanding of this phenomenon that would lead to important theoretical, practical and policy advancements.

One of the interesting main effects found while conducting the initial MANCOVA that did not aid in answering a hypothesis was that there was a statistically significant difference in the mean scores for *Self Referencing* between the contexts ($F=4.005$, $df=1$, $p=0.047$). The mean score for *Self Referencing* was significantly higher for young university students who saw an advertisement featuring a Friday night out ($\mu=3.48$, $\sigma=1.310$) when compared to the mean score for those who saw an advertisement featuring a 21st Birthday ($\mu=3.30$, $\sigma=1.282$). This indicates that young university students that saw an advertisement featuring the context of a Friday night out felt that they could more easily relate to the advertisement than those who saw the context

of the 21st birthday. This means that young university students feel they can relate easier to having someone encourage them to stop drinking on a Friday night out than on their 21st birthday. The reason for this coincides with previous findings and could be attributed to the fact that young university students view a 21st birthday as a unique celebration and therefore believe it is more appropriate to drink excessively than on a Friday night out because of the culture and the rarity of the occasion. This means that peers are probably less likely to advise young university students to stop drinking because they too understand the rarity and the culture surrounding this unique occasion. On the other hand, excessive alcohol consumption is not as expected or acceptable on more regular occasions of drinking and therefore friends of young university students may feel it is more appropriate to advise their friends to stop drinking on a Friday night out, for example. Therefore, young university students would be able to relate easier to the advertisement featuring a person advising them to stop drinking on a Friday night out than on a 21st birthday. This is an interesting finding as it proposes that young university students may feel more comfortable with and may be more likely to advice and take the advice of their friends in more regular drinking occasions than drinking occasions that are celebratory. Hence, future research is invited to explore this idea further to enhance academic understanding of the influence of context and self-referencing in the development of young university students' binge drinking related behaviours and attitudes.

There was an interesting main effect found when the MANCOVA using *Context* and *Relationship with Friend* as independent variables was run. There was a statistically significant difference in the mean scores for *Self Referencing* between the two groups (those who felt they have a close or distant relationship with their best friend) ($F=8.282$, $df=1$, $p=0.005$). The mean score for *Self Referencing* was significantly high for young university students who felt they have a close relationship with their best friend ($\mu=3.64$, $\sigma=1.337$) than those who felt they have a distant relationship with their best friend ($\mu=2.87$, $\sigma=1.104$). This means that young university students who feel as if they have a close relationship with their best friend felt as though they could relate more to the advertisement they saw than those who have a more distant relationship with their best friend, regardless of the context the advertisement was showing. This may be because young university students' that have a close relationship with their best friend may have best friends that are more likely to speak up and provide safer drinking advice than those who have a more distant relationship with their best friend. Hence, because they have perceived closer relationships, the best friend may feel it is more acceptable to advise their friend to stop drinking than if they had a more distant relationship.

This finding, along with the previous one, highlights the importance of self-referencing when developing counter binge drinking advertisements. This finding also highlights the nature of friendship in that although most people have a best friend not all people will have a close relationship with their best friend. This means that advertisers should be aware that young university students will have different responses to an advertisement featuring a best friend depending on how well they can relate to the advertisement and the kind of relationship they personally feel they have with their best friend. Most of all, these findings aid to confirm the fact that has been confirmed in many different ways in this research – that a young university student’s friends have a powerful impact and a great potential for use in counter binge drinking advertisements.

The results of this research have been both intriguing and numerous and it is time to combine the findings discussed here into logical conclusions that significantly aid in academic understanding of young university students’ reactions to counter binge drinking advertisements and their effects on binge drinking related behaviours and attitudes. Hence, the next section discusses the academic implications of this research but also explores the importance of this research for social marketers and they key ways in which the information presented here could be used to create and develop more effective counter binge drinking campaigns.

Discussion

This research aimed to explore areas of counter binge drinking advertisements that have not yet been explored and more specifically, to examine if and how key relationships in young university students' lives (a best friend, a mother and a typical bartender) could be used in conjunction with key contexts in which young university students drink in counter binge drinking advertisements. Hence, this section discusses the implications of the results and provides insight for the utilisation these results to produce more effective counter binge drinking campaigns. The best way to do this is to break the results into relevant sections, firstly, those that relate to young university students' binge drinking related attitudes and behaviours and secondly, those that relate to young university students' emotional and rational attitudes towards the counter binge drinking advertisements.

Section One: Young People's Drinking Related Attitudes and Behaviours

When examined simultaneously, the results showed no significant interaction effects between *Context* and *Relationship* on young university students' binge drinking related attitudes and behaviours, even when *Type of Relationship* was included in analyses. This means that a counter binge drinking advertisement that portrays a context in which a young person is considering binge drinking in (either a 21st birthday or a Friday night out) and the relationship shown (either a best friend, mother or a typical bartender) have no significant influence on young university students' likelihood to binge drink in that context, their attitudes towards the act of binge drinking and their attitude towards alcoholic products.

When context was removed from the equation, there was also no significant difference between the effectiveness of a best friend, a mother or a typical bartender on young university students' likelihood to binge drink, attitude towards the act of binge drinking and attitude towards alcoholic products. Although on the surface this may appear disheartening, this result provides valuable insight for social marketers and the development of counter binge drinking campaigns. The key aspect to note here is that all three relationships are equally as effective in eliciting negative attitudes towards the act of binge drinking, positive attitudes towards alcoholic products and a likelihood of binge drinking that is slightly high. Therefore, at a very basic level and before any other elements have been considered, it can be shown that any of these three relationships can be used in counter binge drinking advertisements to the same effect.

At a more interesting level, this finding highlights the importance of the use of key relationships in counter binge drinking campaigns. The simple act of being reminded by someone human, even someone who we may not have a close relationship with, has the ability to discourage young university students from binge drinking. This, in itself, has a significant influence on social marketing activities by showing the positive outcomes of utilising people and contexts that young university students can relate to in counter binge drinking campaigns. This is line with current social marketing campaigns in New Zealand, such as the “Shouty Sam” advertising where two young men are discussing drinking habits and how one of them, Sam, needs to change his behaviour when he drinks as it has become very socially unacceptable and unappealing (Health Promotion Agency, 2010). This advertising campaign encourages New Zealanders to have the courage to have a conversation with their friends or loved ones if they believe they have a drinking problem or act inappropriately while drinking. This research shows how this approach is definitely a step in the right direction and that the young people of New Zealand would respond well if a similar campaign was to be released that targeted their demographic specifically.

No social marketing campaign can rely on just one aspect to be successful however, and need to consider a variety of aspects in the development of successful counter binge drinking campaigns. Hence, this research goes beyond this important finding and investigates how other aspects of this research can influence young university students’ attitudes towards the act of binge drinking, attitudes towards alcoholic products and their likelihood of binge drinking and therefore, the development of counter binge drinking campaigns that target this demographic group.

Attitude towards the Act of Binge Drinking

Young university students proved to have very negative attitudes towards the act of binge drinking overall. This can be explained by the myriad of alcohol related advertising stimulus, parental and teacher advice and negative experiences that young people are exposed to throughout their lives. Any combination of a bad experience with negative health related side effects, parental advice to be safe when drinking alcohol, or a series of drink driving advertisements help youth form long term negative attitudes towards the act of binge drinking.

There was no statistical evidence to support hypothesis 2, as the results showed there was no significant difference between young university students’ attitudes towards the act of binge drinking after seeing an advertisement featuring each of the two contexts, a Friday night out or a 21st birthday (see pp. 75-77). Therefore, context plays no role in determining young university

students' attitudes towards the act of binge drinking. This indicates that young university students' attitudes towards the act of binge drinking are of an enduring, long term nature that cannot be swayed by a mere change in context. This is important for social marketers to take into account when developing counter binge drinking campaigns as it highlights the need for a really impactful and long lasting campaign in order to influence such an engrained belief.

When the type of relationship a young university student has with the person they saw in the counter binge drinking advertisement was also investigated, there was no statistically significant difference between the attitude towards the act of binge drinking of those with a close relationship with their best friend or a distant relationship with their best friend, meaning there was no evidence to support hypothesis 3 (see pp.79-83). Therefore, young university students who have a close or distant relationship with their best friend develop equally negative attitudes towards the act of binge drinking. Young university students have all been exposed to a similar amount of counter binge drinking advertisements and would often form the same negative attitude towards binge drinking as their best friend, regardless of how close their relationship with their best friend. To add to this, there was no statistically significant difference in attitudes towards the act of binge drinking between those who felt they had a close relationship with their mother or a typical bartender and those who had a more distant relationship after seeing an advertisement featuring a mother or a typical bartender respectively. Hence, there was no statistical evidence to support hypothesis 4 (see pp. 83-86) or hypothesis 5 (see pp. 86-89). Therefore, the type of relationship a young person has with their best friend, mother or a typical bartender has no influence on their attitude towards the act of binge drinking. This confirms the fact that it does not matter what relationship young university students have with the person conveying a safer drinking message or how close they perceive that relationship to be, they will develop negative attitudes towards the act of binge drinking as long as someone has gone out of their way to convey such a message. Hence, it is the need for a human connection, regardless of how close we perceive that connection to be, that is needed for safer drinking advice to be taken on board and negative attitudes towards the act of binge drinking to be developed.

There was one element of this research that was found to significantly affect young university students' attitudes towards the act of binge drinking – the gender of the spokesperson shown in the advertisement. Rather intriguingly, female university students developed less positive attitudes towards the act of binge drinking than their male counterparts after seeing an advertisement featuring a female spokesperson. This result provided statistical evidence to support the part of hypothesis 6 that related to young university students' attitudes towards the

act of binge drinking (see pp. 89-92). This is because a young female university student would be more likely to relate more to the advertisement personally, and therefore, they become more likely to listen to the message of the advertisement and develop more negative attitudes towards the act of binge drinking. Although both groups developed negative attitudes towards the act of binge drinking, female university students' attitudes were significantly more negative. This highlights the importance of considering gender in the development of counter binge drinking campaigns, and confirms an idea that has long been proposed; that young women bond with other women and are more likely to change their attitudes based on their advice. This is a really interesting finding, as the other results have shown the relentless and enduring nature of young university students' attitudes towards the act of binge drinking. The use of key relationships and context in counter binge drinking advertisements create negative attitudes towards the act of binge drinking, but all the changes in these were equally as effective. Perhaps then social marketers are underestimating the importance of gender in counter binge drinking advertisements as it has the unique ability to create significantly more negative attitudes towards the act of binge drinking among those who share the gender of the spokesperson.

The results of this research clearly highlight that young university students' attitudes towards the act of binge drinking are consistently negative after viewing counter binge drinking advertisements featuring key relationships and drinking contexts in their lives. This is a very positive result, as the aim of many social marketing campaigns is to develop negative attitudes towards the act of binge drinking. Counter binge drinking advertisements featuring key relationships and contexts in a young university student's life create and solidify negative attitudes towards the act of binge drinking and should therefore be considered when developing such advertising campaigns. However, some social marketers may need ways in which to significantly influence attitudes towards the act of binge drinking beyond the influential effect of all of these advertisements and should then look to the role of the gender of the spokesperson used. To add to this, social marketers can then focus on the effects of choosing different spokespeople and contexts on young university students' attitudes towards alcoholic products or their likelihood of binge drinking with the knowledge that these will all result in negative attitudes towards the act of binge drinking. This freedom enables social marketers to achieve many aims in one advertising campaign.

The reason behind this finding is simple; that attitudes are very hard to change. According to Dunham (1984), attitudes can be very extremely hard to change once they have been formed. Attitudes are created based on a personal decision and require an intense amount of time, effort and a good reason for a person to consider changing them. This enduring nature of an attitude is

even displayed within the core definition of an attitude, defined by Cacioppo, Petty and Crites (1994, p. 261) as “the general and enduring evaluative perception of some person, object or issue”. Given the exhausting array of advertisements, teachers’ and parents’ advice and peers’ experience of alcohol and the consequences of consuming it, most young people form opinions about the act of binge drinking at a young age. It is, therefore, easy to imagine that seeing one advertisement from this research may not have a significant effect on a young person’s attitude that they formed years ago. This is a good result for anti-binge drinking campaigns in general, showing that young people understand that the act of binge drinking can cause negative effects and have developed generally negative attitudes towards it. This means that social marketers need to continue to solidify these negative attitudes and this research presents a new and more personal way of approaching an anti-binge drinking campaign with this goal in mind.

If a social marketer were to aim to make these negative attitudes even more negative, they should consider how the gender of the spokesperson used in their advertisement will affect their target audience’s attitudes. More specifically, social marketers should be aware that young female university students will develop more negative attitudes than their male counterparts when presented with a counter binge drinking advertisement featuring a female spokesperson and, therefore, they should utilise female spokespeople when targeting female youth. Although future research would need to be undertaken to confirm this fact, it can also be proposed that male university students may develop more negative attitudes towards the act of binge drinking when presented with a counter binge drinking advertisement featuring a male spokesperson and therefore male spokespeople should be used when targeting a male audience.

However, there is the possibility that this result is affected by social acceptability bias, which is where participants of a study answer with what they believe is the socially correct answer (or what they think you want to hear) instead of indicating how they truly feel. This is often the case for socially stigmatised behaviours, and binge drinking could definitely be considered one (Rosenfeld, 2009). Young university students may have reported having negative attitudes towards the advertisement they saw because it is the socially acceptable attitude to have. This links to the fact that young university students’ likelihood to binge drink in both contexts was slightly higher (i.e. students were slightly more likely to binge drink than not). Hence, young university students in this study may have reported having negative attitudes towards the act of binge drinking to appear socially acceptable but simultaneously may be rather likely to perform the behaviour anyway. This is a limitation of many surveys and it cannot be confirmed if this is the case, but it is still important for social marketers to consider the use of key relationships and

drinking contexts in a young university student's life when developing counter binge drinking advertisements.

Despite attitudes towards the act of binge drinking being of a generally negative nature in this research, young university students developed generally positive attitudes towards alcoholic products after seeing the series of counter binge drinking advertisements. The following section explores what aspects of this research influenced young university students' attitudes towards alcoholic products and how this could impact the development on counter binge drinking campaigns.

Attitude towards Alcoholic Products

Overall, young university students developed generally positive attitudes towards alcoholic products after seeing the counter binge drinking advertisements in this study. At first glance, this may seem counterintuitive, but it is actually a very interesting result that suggests that young university students may view their attitude towards alcoholic products and their attitude towards the act of binge drinking as very separate and possibly unrelated constructs. This result was proposed to have occurred due to the enduring nature of attitudes and the potential for positive experiences with alcohol to occur without binge drinking. While binge drinking often results in a range of negative emotional or health related issues, the mere consumption of an alcoholic beverage does not necessarily have the same negative results. For example, young university students may celebrate the end of an exam with a friend with an alcoholic beverage, but will stop drinking before they could be considered to be binge drinking. Without the negative side effects, it is completely plausible that young university students who have positive experiences with alcoholic products without engaging in binge drinking could develop positive attitudes towards alcoholic products. To add to this, there might be university students who believe that alcoholic products bring them increased confidence and ease social interactions and therefore associate alcoholic products with positive outcomes. Considering the enduring nature of attitudes that make them extremely difficult to change, it is, therefore, understandable that young university students may have generally positive attitudes towards alcoholic products after seeing the counter binge drinking advertisements in this research.

Context had a very obvious effect here where young university students who saw an advertisement featuring a Friday night out developed significantly more positive attitudes towards alcoholic products than those who saw an advertisement featuring a 21st birthday, providing statistically significant evidence to support this part of hypothesis 2 (see pp. 75-77). This is rather interesting given that they simultaneously are more likely to binge drink on their

21st birthday than on a Friday night out (see the next section for details). This indicates that although young university students have a more negative attitude towards alcoholic products on their 21st birthday, they are more likely to drink them in order to facilitate binge drinking. Perhaps then this is based on the unique culture of a 21st birthday, whereby a young person is motivated by the desire to get drunk, whereas on a more regular occasion (such as a Friday night out) a young university student may be more likely to spend less money overall but more money on a single drink, thus increasing their ability to enjoy said drink and to develop more positive attitudes towards alcohol. The other possibility is that the social expectation to get drunk is so strong that it does not matter that young people may only feel like consuming a few drinks, there is such an immense pressure to have too much to drink. Therefore, young university students may develop relatively more negative attitudes towards alcoholic products on the night of their 21st birthday because they are reluctant to consume so many. However, future research would be needed to examine the causation behind these results.

Young university students developing more positive attitudes towards alcoholic products on a Friday night out means that social marketers who are aiming to encourage more negative attitudes towards alcoholic products, as many social marketers are, should feature a 21st birthday in their counter binge drinking advertisements. However, if social marketers are taking a newer approach and are aiming to develop positive attitudes towards alcoholic products then they should feature a Friday night out in their counter binge drinking advertisements.

It may seem counterintuitive to make recommendations for how to create more positive attitudes towards alcoholic products, but this research proposes that it could be in the best interest of social marketers to do so. Not only would this be a completely new approach to social marketing and therefore could be received well for its creativity, but this research suggests that young university students' attitudes towards alcoholic products and their attitudes towards the act of binge drinking and likelihood to engage in such an activity are very separate constructs. Many social marketers may assume that by helping to develop negative attitudes towards alcoholic products that young people will transfer this onto the development of their attitude towards the act of binge drinking and therefore develop more negative attitudes in this area, as well. However, this research highlights that young university students view these two attitudes very separately as one of these is generally of a more positive nature (attitude towards alcoholic products) while the other is definitely of a generally negative nature (attitude toward the act of binge drinking). The reasons for this difference have been discussed previously, but can be primarily attributed to the fact that youth can have a positive experience while consuming an alcoholic product and choose not to engage in binge drinking, therefore, forming positive

attitudes towards alcoholic products while retaining negative attitudes towards binge drinking and its consequences. Young university students believe that the consumption of alcoholic products is not a bad behaviour; it is the way in which they consume the alcoholic products that cause the negative consequences of binge drinking. Therefore, advertisers targeting binge drinking should refrain from instructing young people to develop negative attitudes towards alcoholic products in the hope these will foster negative attitudes towards binge drinking. Hence, social marketers can no longer rely on the transferring of negative attitudes and thoughts between these two attitudes. Given that young university students clearly like alcoholic products (as they have developed generally positive attitudes towards them), it may be time that social marketers stepped away from aiming to create negative attitudes towards alcoholic products and instead aimed to encourage positive attitudes being associated with positive experiences without engagement in binge drinking. Therefore, the positive nature of young people's attitudes towards alcoholic products could actually be utilised by social marketers as well by creating advertisements that are of a positive nature themselves, but encourage controlled, minimal consumption of alcohol in a fun, enjoyable environment. This research provides insight into how both aims can be achieved to provide social marketers with flexibility.

There was no statistically significant difference in responses for attitudes towards alcoholic products between male and female university students after seeing an advertisement featuring a female spokesperson, as shown by the results of the testing of hypothesis 6 (see pp. 89-92). Therefore, the gender of the spokesperson featured in the advertisement does not need to be considered when developing counter binge drinking advertisements that aim to influence young university students' attitudes towards alcoholic products. This means that both male and female university students will consider the advice of a female spokesperson to the same extent when developing their attitudes towards alcoholic products. This could be because the advertisements in this research showed no obvious link between the advertisement and the formation of one's attitude towards alcoholic beverages. Although the survey asked the question based on the advertisement just viewed, the advertisements themselves had no alcoholic beverages in them while they did directly discuss binge drinking and, therefore, may have had a more obvious link to young university students' attitudes towards the act of binge drinking and likelihood of binge drinking. Hence, young university students may not have seen the gender of the spokesperson as important when developing their attitudes towards alcoholic products as the spokesperson had no obvious link to alcoholic products, only an inferred one. To add to this, this result primarily reinforces the idea that attitudes towards the act of binge drinking and attitudes towards alcoholic products should be treated as separate constructs, as young people's

attitudes towards the act of binge drinking were significantly influenced by the gender of the spokesperson.

When the type of relationship a young university student has with their best friend, mother or a typical bartender was examined, the results begin to get rather intriguing. Although there was no statistically significant evidence to support hypothesis 3, results showed that of those who saw an advertisement featuring a best friend, young university students who felt they had a close relationship with their best friend developed more positive attitudes towards alcoholic products than those with a distant relationship with their best friend (see pp. 79-83). This was proposed to be due to the fact that those with a close relationship with their best friend would be more likely to have shared more positive experiences with alcoholic products with their best friend than those who have a more distant relationship. Conversely, of those who saw an advertisement featuring a mother, young university students with a close relationship with their mother developed more negative attitudes towards alcoholic products than those with a distant relationship. Although there was no statistically significant evidence to support hypothesis 4, this was an interesting result of the hypothesis testing (see pp. 83-86). This was intriguingly opposite to the result for a best friend, and was proposed to be because those who have a close relationship with their mother may be more likely to listen to the advice of their mother when it comes to drinking (which is most likely of a more negative tune) and, therefore, would develop the most negative attitudes towards alcoholic products. This result highlights the importance of considering the fact that spokespeople that mirror key relationships in young people's lives will draw up memories and experiences with a young person's own best friend or mother, which may also have an effect on their attitudes towards alcoholic products. However, this is a positive result as it shows that young university students tend to elaborate on counter binge drinking advertisements that feature a mother or a best friend and do relate them back to their own lives. Young people feel a need to know how an advertisement relates to them personally, and this is an important discovery given that the majority of young university students do not believe that their drinking is dangerous despite reporting dangerous levels of binge drinking (Guise & Gull, 2007).

Based on these results, social marketers who are aiming to develop more positive attitudes towards alcoholic products should utilise a best friend figure in their counter binge drinking advertisements if they know their target audience have a closer relationship with their best friend but should use a mother figure if they know that their target audience has a more distant relationship with their mother. Conversely, if social marketers are aiming to develop negative attitudes towards alcoholic products, a best friend figure can be used if the target market has a

more distant relationship with their best friend or a mother figure can be used if the target market has a close relationship with their mother. Although it may be difficult to obtain this information on a large scale, this research highlights the importance of considering the type of relationship young university students have with their own best friends and mothers respectively when developing counter binge drinking campaigns that utilise these relationships.

There was no statistical evidence to support hypothesis 5, which was shown by the fact that there was no statistically significant difference in the attitudes towards alcoholic products of young university students who feel they have a closer, friendlier relationship with a typical bartender and those who have a more distant, authoritative relationship with a typical bartender (see pp. 86-89). This is interesting given the critical difference in the development of young university students' attitudes towards alcoholic products between those who saw a mother figure and those who saw a best friend. However, this may be because young university students do not have the time required to create a close or distant relationship with a bartender and all of these students respected the bartender to a considerable extent. Therefore, the type of relationship a young university student has with a typical bartender may not be an important consideration when developing attitudes towards alcoholic products as this is such a fleeting relationship in their lives. Social marketers do not need to consider the extent to which young university students view bartenders as more of a friend and a confidant or more of an authoritative power as the effect of seeing a bartender in a counter binge drinking advertisement on their attitudes towards alcoholic products will be the same.

So far only the ability to influence binge drinking related attitudes has been discussed and it is critical that young university students' behaviour and potential ways to change their likelihood of binge drinking is now evaluated. Hence, the following section explores what aspects of this research influenced young university students' likelihood of binge drinking while providing advice for social marketers based on these results.

Likelihood to Binge Drink

After seeing the advertisements in this research, young university students' likelihood to engage in binge drinking in the context shown was reasonably high overall (more likely than not). It can also be confirmed that young university students are more likely to binge drink on the night of their 21st than on a Friday night out, meaning that results showed there is evidence to support this part of hypothesis 2 (see pp. 75-77). It has been proposed that young people often drink more alcohol on the night of their 21st than on any other night of their lives (Neighbors et al., 2005). To add to this, there is a unique culture of celebration where social pressures and norms

convince young people that it is more acceptable and even expected to binge drink on their 21st birthday specifically. Therefore, though it may appear tautological, it is important to provide information to confirm the idea that young university students are more likely to engage in binge drinking in celebratory contexts than on more regular nights out drinking. This finding fits with the observed culture of binge drinking in New Zealand while showing that celebratory contexts are the ones in which young people are most likely to binge drink. This result shows how important it is for advertisers to consider the context in which they are framing their advertisements and the context in which they are proposing that young people stop binge drinking.

The consideration of which context to use (either a 21st birthday or a Friday night out) when social marketers develop counter binge drinking advertisements comes down to the overall aims of their campaign. If they are aiming to reduce the rates of binge drinking on celebratory occasions then obviously a 21st birthday would be the best context to feature. Given that this is the context in which young university students are most likely to binge drink, it can be argued that this is the most important context in which to reduce rates of binge drinking. After all, there are an unfortunate number of reports of young people causing serious harm to themselves and to others while binge drinking on their 21st birthday (Reynolds, 2011). However, this is arguably because of the rarity of this celebration and the unique, indulgent culture that has grown around the 21st birthday. Given the fleeting nature of this context, social marketers who are aiming to reduce binge drinking rates among young people in the long term should utilise a Friday night out in their counter binge drinking advertisements. Although young people are significantly less likely to binge drink in this context than on the night of their 21st, this is a much more regular occasion and the targeting of binge drinking in this context could result in reducing rates of binge drinking in a more long term fashion. Therefore, the use of context and the results of this research should be based on the aims of the counter binge drinking campaign.

Interestingly, the three key relationships were equally as effective in influencing young university student's likelihood to binge drink, as shown by the results of hypotheses 3, 4 and 5. For example, those who felt they had a close relationship with their mother were equally as likely to engage in binge drinking compared to those who felt they had a distant relationship with their mother after seeing a counter binge drinking advertisement featuring a mother, providing no evidence to support hypothesis 4 (see pp. 83-86). The effectiveness of close and distant relationships with a best friend and a typical bartender were of the same nature, providing no evidence to support hypothesis 3 (see pp. 79-83) or hypothesis 5 (see pp. 86-89) respectively. This indicates that the extent to which a young university student believes they

have a close or distant relationship with the person providing the advice to stop drinking has no effect on their likelihood to binge drink. This also confirms the fact that each of the three relationships examined here is equally as effective in influencing young university students' likelihood of binge drinking, as was found from the results of hypothesis 1 (see pp. 75-77). The fact that all three of these relationships caused young people to indicate they would be slightly more likely to binge drink than not in both contexts is unfortunate. However, it is positive that young university students are only slightly more likely to binge drink than not, and given the culture of excessive drinking in New Zealand, this is most likely a significant decrease in how likely young university students were to binge drink before seeing the advertisements, especially on their 21st birthday. Future research that examines young university students' likelihood of binge drinking before and after the stimulus is shown could confirm this idea.

This result shows that social marketers do not need to actively consider how the use of specific relationships over others or the degree to which these relationships are of a close or distant nature will influence the effectiveness of their counter binge drinking advertisements in terms of young university students' subsequent likelihood to binge drink. This is a useful finding as it means that social marketers can utilise any of the three relationships examined in this research (a best friend, a mother or a typical bartender), and they will all be equally effective. Therefore, the choice of which of these three to use can be determined by what other goals the social marketers have in mind, such as changing young university students' attitude towards alcoholic products. However, it is still recommended that social marketers utilise one of the three relationships.

One result that is interesting to note is that after seeing an advertisement featuring a best friend or a mother, young university students were more likely to binge drink on the night of their 21st birthday than on a Friday night out, shown by the results of hypothesis 3 (see pp. 79-83) and 4 (see p. 84) respectively. This helps to confirm the findings of hypothesis 2 (pp. 77-79). However, after seeing an advertisement featuring a bartender, young university students were equally as likely to binge drink in both situations, as shown by the results of hypothesis 5 (see pp. 86-89). It was concluded that, therefore, a bartender's effectiveness is not context specific and has been theorised that this is due to the nature of the relationship with a typical bartender. Most young university students have a long lasting relationship with their best friend or mother, meaning that the context in which these relationships choose to approach their binge drinking behaviour could affect the response a young university student has. However, the bartender has a much more fleeting relationship with a young university student, making them less able to be a preventative measure of binge drinking and more able to act as a punitive measure after the

binge drinking has begun. Perhaps then a bartender should be utilised if the theme of the counter binge drinking campaign is to highlight the punitive measures that young people could have to face once they have had too much to drink, but a best friend and a mother should be utilised if a counter binge drinking campaign of a more preventative nature is to be designed. This means that although social marketers need to mainly focus on the context that they display their counter binge drinking advertisements in, they also need to consider the way in which the inclusion of a bartender versus a mother figure or a best friend could change the likelihood of binge drinking that a young university has after seeing the advertisement.

The gender of the spokesperson had no significant effect on young university students' likelihood to engage in binge drinking, as was shown by the lack of evidence to support this part of hypothesis 6 (see pp. 89-92). This means that both male and female university students were equally likely to binge drink after seeing a counter binge drinking advertisement featuring a female spokesperson. This indicates that both male and female university students are equally as receptive to a safer drinking message originating from a female spokesperson that mirrors a key relationship in their life, which provides social marketers with the freedom to choose which gender may be more appropriate based on other factors, such as how gender influence attitudes towards the act of binge drinking. Hence, social marketers do not need to consider the gender of the spokesperson when developing counter binge drinking advertisements that specifically target young university students' likelihood of engaging in binge drinking.

Social marketers can, therefore, focus mainly on the context in which they are framing their counter binge drinking advertisements and the context in which they are encouraging less binge drinking, while being able to freely utilise any combination of gender of the spokesperson and relationship shown that was utilised in this research. However, it is important to remember that the results of hypothesis 2 showed that, in both the context of a Friday night out and a 21st birthday, the mean score for likelihood to binge drink was high, meaning that young university students are likely to binge drink in both contexts. Given that young people appear to have generally negative attitudes towards the act of binge drinking and their positive attitudes towards alcoholic products are separate from their attitudes towards binge drinking, the results of this part of the research are potentially the most important. While it is important to solidify negative attitudes towards the act of binge drinking, the results of hypothesis testing has shown that young people are generally more likely to binge drink in both celebratory and non-celebratory contexts than not to binge drink. This needs to be changed if the rates of binge drinking in New Zealand are ever going to be reduced. Hence, advertisers should strongly

consider how to influence young university students' likelihood to binge drink while utilising the knowledge that the context shown in their advertisements can significantly affect this.

In terms of more specific advice, if advertisers are attempting to quell excessive drinking in contexts it is most likely to occur in, then they should utilise anti binge drinking advertisements that include the context of a 21st as hypothesis testing showed young university students are significantly more likely to binge drink on the night of their 21st than on a Friday night out. However, a 21st is a unique celebration and celebrations are a lot rarer than more common nights out, such as a typical Friday night out with friends, which could happen every week for some university students. Therefore, if advertisers are aiming to attenuate more widespread binge drinking that occurs on a more regular basis then they should develop counter binge drinking advertisements that feature a Friday night out. Although young university students were significantly more likely to binge drink on the night of their 21st than on a Friday night out, their likelihood of binge drinking on a Friday night out was still high, meaning that there is still a valid and logical reason for advertisers to use counter binge drinking advertisements featuring a Friday night out if they are aiming to target more regular occurrences of excessive drinking. This has the potential to decrease binge drinking to a much greater extent overall given the more regular occurrence of drinking on a Friday night out and therefore should seriously be considered by advertisers.

It is interesting that there were a reasonable number of factors that could affect young university students' attitudes associated with binge drinking and alcoholic products, but only context can influence their likelihood to binge drink. This could be because young university students may spend years developing their attitudes towards binge drinking and alcoholic products, but they make the decision about whether or not to binge drink in a particular context in a few hours, if not in a heartbeat. This could be because they do not feel the need to actively consider a variety of factors when deciding whether or not to binge drink as it is for a specific occasion rather than an enduring attitude. It is, therefore, understandable why young people may only consider the context in which they are about to consume alcohol in when they determine how likely they are to binge drink as they do not feel the need to consider a wider variety of factors.

This section examined how advertisers could utilise the results of the first few hypotheses to develop more effective anti-binge drinking campaigns that target young university students' binge drinking attitudes and behaviours. However, it is important to understand that how young university students respond to the advertisements, both emotionally and rationally, could play an interesting part in developing safer drinking habits among young people in New

Zealand. Hence, the next section examines the results of the last hypotheses and provides advice for how social marketers can develop advertisements that young people will react both positively and negatively to in order to achieve the goals of the advertising campaign.

Section Two: Advertisement Related Attitudes

Attitude towards the Advertisement

The way in which young people respond to social marketing advertisements, both emotionally and rationally, is an important aspect for advertisers to consider as it could significantly influence if they choose to consider the advice the advertisement is conveying. The way in which young people respond to counter binge drinking advertisements can have a significant effect on the degree to which they find the messages in the advertisement to be relevant, salient or entice them to change their behaviour (Rimer & Kreuter, 2006). Therefore, young university students' emotional response to the advertisement and attitudes towards the message of the advertisement were examined to see if advertisers need to consider these when developing advertisements featuring key relationships and drinking contexts in a young person's life.

Overall, young university students' emotional response to the advertisement was the most varied construct examined in this research, ranging from extremely positive responses to fairly negative ones. More specifically, young university students who saw an advertisement featuring a best friend developed the most positive attitudes towards the advertisement overall, whereas those who saw an advertisement featuring a mother developed the most negative attitudes towards the advertisement and reported feeling the most shocked, confused and insulted by it as shown by the results of hypothesis 7 (see pp. 93-96). This means that the mother figure would be the best spokesperson if the aim of the counter binge drinking campaign is to develop negative emotional attitudes towards the advertisement. This would be in line with current counter binge drinking campaigns and anti-drunk driving campaigns, which utilise fear appeals to elicit a shocked response in their target market in the hope that this will cause them to change their behaviour. On the other hand, a best friend figure would be the most useful in eliciting positive emotional responses to the advertisement, and could be very useful if social marketers decided to take a newer approach to counter binge drinking campaigns and move away from fear appeals. The exciting aspect of this result is the options for social marketers and the fact that each of the relationships elicits such different results that each will be extremely effective in their targeted use. The effect of showing a bartender could be found in between these two mean scores, making this relationship more of a neutral option.

The results of hypothesis 7 also revealed that when examining the effect of context, young university students who saw an advertisement featuring the context of a Friday night out developed more positive emotional attitudes towards the advertisement and reported feeling less insulted, shocked and confused than those who saw an advertisement featuring a 21st birthday. Based on this, it can be proposed that the context of a Friday night out should be featured if the aim of the campaign is to develop more positive attitudes towards the advertisement. Conversely, the context of a 21st should be utilised if the purpose is to develop more negative emotional attitudes towards the advertisement, such as in the use of fear appeals. Hence, advertisers have a huge range of options for both context and relationship in order to elicit the emotional attitude towards the advertisement that they are aiming for, which is rather exciting.

Young university student's attitudes towards the message of the advertisement were also measured in order to provide a much more rational examination of young university students' response to the advertisement they saw. The message of a social marketing campaign is often the most critical aspect to get right – this is the aspect that can make or break the campaign. If a young university student cannot decipher what the message of the campaign is, it could completely destroy the effectiveness of such a campaign in changing their binge drinking behaviour and attitudes. Therefore, young university students' rational response to the advertisement was thoroughly examined in this study. The results of hypothesis 7 showed that young university students who saw an advertisement featuring a best friend felt significantly more strongly that the message of the advertisement they saw was of a positive nature and had good intentions compared to those who saw an advertisement featuring a bartender, and even more strongly than those who saw an advertisement featuring a mother (see pp. 93-96). Given that most social marketers will be aiming to elicit positive responses to the advertisement of the message (i.e. Young university students believing that the message of the advertisement is of a positive nature), then the best friend figure would be highly recommended for use in counter binge drinking advertisements as this relationship elicits the best rational response to the message of the advertisement. However, if this was not the intention of the campaign, and a campaign was designed that aimed to elicit negative responses to the message of the advertisement then a mother figure would be the best relationship to feature. Once again, the bartender has fallen in the middle, providing more of a neutral option with no extreme benefits.

When context was examined, there was no statistically significant difference between the attitudes towards the message of the advertisement formed by young university students after seeing an advertisement featuring a 21st birthday or a Friday night out, based on the results of

hypothesis 7 (see pp. 93-96). This indicates that context does not play a significant role in the development of young university students' attitude towards the message of a counter binge drinking advertisement. This could be because the main aspect of these advertisements that may shock or insult a young university student is the key relationship shown and the overt promotion of safer drinking advice via a mother, a best friend or a bartender. Given the importance of these people in most young university students' lives, the emotional response of seeing these people conveying such an overt safer drinking message may overshadow the consideration of the context in which the advice is being given when young university students develop their attitudes towards the message of the advertisement. Although this would need to be confirmed in future research, it is highly advisable that social marketers consider the relationship used in their counter binge drinking advertisements as it will considerably effect young university students' attitudes towards the advertisement, while context needs to be considered for its effect on young university students' emotional attitudes towards the advertisement.

Social marketers, therefore, need to carefully consider what to include in their counter binge drinking advertisements depending on what kind of attitudes towards the advertisement they want to foster. As previously mentioned, many social marketers prefer to utilise fear tactics as is the more traditional route of changing unwanted behaviours. In this case, creating a counter binge drinking advertisement featuring a mother figure would be most beneficial as this creates the most negative, more specifically the most shocked, emotional attitude towards the advertisement among young university students. However, this comes with a price; young university students also develop the most negative attitudes towards the message of the advertisement when presented with one featuring a mother. This is a key thing to consider as the message of any social marketing campaign is usually a very important message to get across to the target audience, and this message is no exception.

The alternative option is to move away from attempting to shock young people into abstaining from binge drinking, but instead to create advertisements that young university students develop positive emotional and rational attitudes towards. If this is the goal of the advertisers then this research suggests that featuring a best friend in a counter binge drinking advertisement would be most effective as the counter binge drinking advertisements featuring a best friend elicited the most positive emotional attitudes towards the advertisement and the most positive rational attitudes towards the message of the advertisement overall. This could be a very interesting tactic for social marketers to consider as the use of fear appeals is growing old and expected, while the potential creation of positive emotional responses to counter binge

drinking campaigns has rarely been considered an option. Young people in New Zealand have been shown to react very well to anti-drug driving advertisements that utilise this idea and use humour to create positive responses instead of utilising the classic fear appeals. A great example of this is the huge positive reaction to the anti-drug driving advertisement that aired on television in 2013 in New Zealand, *Blazed – Drug Driving in Aotearoa*. This advertisement utilised a series of humorous tactics before emphasizing a series message at the end of the advertisement for consumers to walk away and consider. This advertisement was deemed to be an online hit, with over 500,000 views on Youtube.com alone by September 2013 (The New Zealand Herald, 2013). This highlights how the elicitation of positive emotional responses among New Zealanders after viewing social marketing campaigns is completely possible and actually much more popular than fear appeal based campaigns. Therefore, this research suggests that anti-binge drinking social marketers should follow a similar path and utilise a best friend figure to elicit positive emotional responses and a positive attitude towards the message of the advertisement.

There is one more aspect that needs to be investigated before overall conclusions could be drawn about young people's attitudes towards the advertisement; their level of self-referencing with the advertisement. The next section delves into the role of self-referencing in the development of rational and emotional attitudes towards the advertisement, leading into an overall concluding section about the value of the relationship shown, the context shown and the level of self-referencing in developing counter binge drinking campaigns aimed at young people.

Self-Referencing

The level of self-referencing a young university student feels towards an advertisement had the potential to greatly affect how they respond emotionally and rationally to the advertisement. Petty and Cacioppo (1979) showed that an increase in personal relevance of the advertisement increases the degree to which the message arguments in an advertisement are relied upon when a consumer forms an attitude. Self-referencing was therefore also examined in conjunction with young university students' attitudes towards the advertisements they saw.

From the results of hypothesis 8 (see pp. 96-101), it can be concluded that young university students who feel a high level of self-referencing with a counter binge drinking advertisement formed the most positive emotional attitudes towards the advertisement when it featured a best friend. However, when a young university student with this high level of self-referencing sees an advertisement featuring a mother figure, they developed the most negative emotional attitudes towards the advertisement. The mean score for the emotional attitudes of those who

saw a bartender in a counter binge drinking advertisement and felt a high a level of self-referencing was once again in between the responses towards advertisement featuring a mother or a best friend. This means that when a young university student feels they can easily relate to the advertisement, they respond most positively emotionally when they saw an advertisement featuring a best friend and most negatively if they saw an advertisement featuring a mother. This is in line with the results of hypothesis 7 (see pp. 93-96), and shows that if they target audience feels a high level of self-referencing then the results are the same as if self-referencing has not been examined. Hence, the advice for social marketers remains the same as in the previous section if the social marketers have determined the target audience to feel a high level of self-referencing with the advertisement.

The results become even more intriguing when young university students instead feel a low level of self-referencing with the advertisement. Based on the results of hypothesis 8 (see pp. 96-101), a counter binge drinking advertisement featuring a best friend still elicited the most positive emotional response when young university students felt a low level of self-referencing. However, this emotional response was much less positive overall than those who felt a high level of self-referencing after seeing an advertisement featuring a best friend. Hence, advertisements featuring a best friend should definitely be used by social marketers who are aiming to elicit positive emotional attitudes towards their advertisements and they can be used regardless of what level of self-referencing young university students feel with the advertisement. However, the advertisement will be much more effective in eliciting more positive emotional attitudes among those who feel a high level of self-referencing with the advertisement.

Once the advertisement shown was changed to a mother or a bartender, the emotional attitudes towards the advertisement that young university students developed became very similar. While those with a high level of self-referencing developed very negative emotional attitudes towards an advertisement featuring a mother with emotional attitudes towards a bartender being significantly more positive, when young university students with a low level of self-referencing were examined, they felt very similar levels of positivity emotionally towards the advertisements featuring a mother or a bartender. This was seen in the results of hypothesis 8 (see pp. 96-101), and is quite different from the results of hypothesis 7 (see pp. 93-96). This indicates that both a mother and a bartender would be almost equally as effective in eliciting negative emotional attitudes towards the advertisement when young university students do not feel they can easily relate to the advertisement. Given that for both high and low levels of self-referencing a mother figure elicits the most negative emotional responses, this research still

proposes that social marketers utilise a mother figure when aiming to develop negative emotional responses to their counter binge drinking campaigns. However, this result does highlight the need to carefully consider the use of a bartender as a more neutral option given that young university students who feel a low level of self-referencing will feel almost equally as negative emotions towards the advertisement as if they had seen an advertisement featuring a mother figure. Overall, the results of hypothesis 8 highlight the role that self-referencing plays in the development of emotional attitudes towards counter binge drink advertisements among young university students. It is a critical aspect to consider in the development of such advertisements, especially when young university students have a low level of self-referencing with the advertisement.

Despite the interesting interaction effect discovered when examining emotional attitudes towards the advertisement, the level of self-referencing a young university student feels and the relationship shown in a counter binge drinking advertisement had no effect on their attitude towards the message of the advertisement. This means that both those who felt a high level of self-referencing and those who felt a low level developed equally as positive attitudes towards the message of the advertisement. This implies that perhaps the level of self-referencing a person feels is more influential when they are developing emotional attitudes towards the advertisement than in the development of their attitude towards the message the advertisement is conveying. This could be because the message of these advertisements is one that young university students have been exposed to many times before and from many different platforms, as proposed previously. The message that binge drinking is not a good idea is one that young people have frequently been exposed to through advertising, peers, parents and other media forms, for example. Hence, this is perhaps another attitude that has taken years to form and has become one of an enduring nature for both those who feel they can easily relate to counter binge drinking advertisements and those who cannot.

One could argue that although this information is intriguing and potentially very useful, it could be extremely difficult to implement on a large scale as it is impractical to discover the level of self-referencing that the entire youth population of New Zealand feels towards proposed counter binge drinking advertisements. However, these results show that if this is the case and such research cannot be undertaken, then a mother figure is the best to use when aiming to develop negative emotional attitudes towards the advertisement and the best friend is the most useful when creating counter binge drinking advertisements aiming to develop positive emotional responses. This is because young university students with both high and low levels of

self-referencing felt this way towards each of these relationships, though those with a high level tended to feel more strongly.

Conclusions and Implications

Overall, the results of hypotheses 7 (see p.89) and 8 (see p.94) reveal that young university students believe that the message that the counter binge drinking advertisement featured in this research were conveying were of a positive nature and had good intentions. This was influenced by what relationship was displayed in the advertisement, where young university students felt more strongly that the message of the advertisement was of a positive nature when they saw an advertisement featuring a best friend and felt this least strongly when they saw an advertisement featuring a mother. The context shown and the level of self-referencing felt had no significant influence on young university students' attitudes towards the message of the advertisement. However, this results highlights that young university students do feel that the message to stop binge drinking is of a positive nature and respond well to it, which means that they are open to this idea. This opens a window for social marketers to find a way to harness this more rational response and overarching attitude towards the message of counter binge drinking advertisements.

On the other hand, young university students' emotional attitudes towards the advertisement were influenced by all the factors tested here; namely, their level of self-referencing, the context and the relationship shown in the advertisement. Young university students with high levels of self-referencing that saw an advertisement featuring a best friend had very high positive emotional responses, while those with low levels of self-referencing that saw an advertisement featuring a mother had extremely negative emotional attitudes towards the advertisement. This may be because this attitude only had minutes, if not seconds, to form before the participant was asked to evaluate their emotional response to that advertisement. Although they may have heard the message of the advertisement in many social marketing campaigns before, they have not been exposed to these particular advertisements before and therefore developed their emotional response to the advertisement they saw in a matter of seconds. This could make their emotional attitudes towards the advertisement a lot more flexible and impressionable as they are not as solidified as their attitudes towards the message of the advertisement. Based on this, it is important that social marketers consider all three of these aspects before developing a counter binge drinking advertising campaign if they desire to produce either positive or negative emotional responses to the advertisements. Therefore, this research proposes that this is one of the most important factors for advertisers to consider as the impact of choosing the wrong relationship to present in a counter binge drinking advertisement can have a significant

effect on young university students' emotional attitudes towards the advertisement and their attitude towards the message of the advertisement.

Section Three: Overall Conclusion and Policy Implications

The days of merely presenting a good health message to a target audience and hoping they will follow it are long gone. Social marketers can no longer afford to merely present youth with an idea that is good for their health through common advertising methods as young people are becoming more desensitised with the myriad of advertisements they see each and every day. Cottie and Ritchie (2005) found that overall attention to advertising is decreasing. This means that advertisers are called upon to create more unique and capturing advertisements in order to grab and retain the attention of their target market, and social marketers are no exception. Even within the social marketing sphere, anti-binge drinking campaigns have to compete with other prominent health issues, such as smoking, weight loss, drink driving, domestic violence and more recently, drug driving.

To add to this, counter binge drinking campaigns also have to battle against alcohol advertising that encourages the sale of alcoholic products and its use among young people. Between 2001 and 2005 young people's exposure to pro-drinking campaigns increased by 41% and logically it can be assumed that this number continues to increase (Center on Alcohol Marketing and Youth, 2006). To add to this, between 2001 and 2003, young people in the United States were 96 times more likely to view an advertisement that promoted the alcohol industry than one that discourages underage drinking (Center on Alcohol Marketing and Youth, 2005). Although underage drinking is not the focus of this research, this statistic highlight the unfortunate truth that social marketing campaigns, specifically anti-binge drinking campaigns, are often underfunded and do not have the budget necessary to actively and successfully compete with large alcohol producing corporations. Hence, social marketers need to be even savvier, creative and informed when producing counter binge drinking campaigns that target youth as their limited number of advertisements need to be unique enough to be remembered.

In light of these facts, this research has the potential to have a major impact on the way in which social marketers design anti binge drinking campaigns and the research that is necessary before they can be implemented on a national scale. From this research, it can be concluded that drinking contexts are an extremely important aspect to consider when developing advertising campaigns as they can have a significant influence on young university students' attitudes towards alcoholic products and likelihood to binge drink. In fact, the context shown in a counter binge drinking advertisement was the only factor examined here that significantly influenced

young university students' likelihood to binge drink in that context, making it one of the most critical aspects of this research to consider in the development of counter binge drinking campaigns that aim to reduce the rates of binge drinking among youth. This research also highlights the fleeting nature of the decision on one's likelihood to engage in binge drinking as a young university student only considers the contexts in which the binge drinking could occur before making this decision.

Young university students' attitudes towards alcoholic products were also influenced by the type of relationship they have with their own best friend or mother, if they saw an advertisement featuring a best friend or mother figure respectively. Interestingly, their attitude toward alcoholic products was not influenced by the extent to which they saw the bartender as an authority figure or as a friend. Young university students' attitudes towards the act of binge drinking, on the other hand, were significantly influenced by the gender of the participant after seeing a female spokesperson in the advertisement. This was the only time the gender of the spokesperson needed to be considered, but had an interesting effect whereby female university students developed more negative attitudes towards the act of binge drinking than their male counterparts. Therefore, this aspect must be considered in the development of counter binge drinking campaigns aiming to change young university students' attitudes towards the act of binge drinking. All three of the key relationships examined (mother, best friend or bartender) were proved to be equally as effective in influencing young university students' attitudes towards the act of binge drinking and likelihood to binge drink. Therefore, it is highly advised that advertisers consider the context, the gender of the spokesperson, and the relationship shown in the advertisements as well as and how each of these may affect their target market's binge drinking attitudes and behaviours.

In terms of attitudes towards the advertisements themselves, the relationship shown in the advertisement proved to be very important, especially when considered with the level of self-referencing a young university student feels with the advertisement. However, context cannot be forgotten and proved to have an interesting effect, affecting only young university students' emotional attitudes towards the advertisement, but not their attitudes towards the message it was conveying. Therefore, it is critical that advertisers consider the relationships and context shown in the advertisements as well as the potential level of self-referencing of their target market when aiming to develop either positive or negative attitudes towards the advertising campaign. This is important information to consider because if young people were to develop negative views of the advertisements themselves then this could impact the development of

their binge drinking related attitudes and behaviours after seeing the advertising campaign, especially if this was not intentional.

As mentioned previously, many social marketers use fear tactics to entice emotional responses among their audiences in an effort to reduce unwanted behaviour. However, there is evidence to suggest that while fear appeals create an emotional response, they often to do also create the desired behaviour (Cotte & Ritchie, 2005). Not to mention there are a huge number of current social marketing campaigns that utilise fear tactics causing many young people to become desensitised to the horrific scenes they see and meaning that less and less people are remembering them. Fear based advertisements have become expected from social marketers, meaning it is now time to try something new and unexpected. There is a potential to move away from the norm of using fear tactics in the social marketing industry and to harness other marketing techniques to capture and retain the attention of young audiences. Instead of solely using fear tactics, perhaps social marketers could examine the possible use of different drinking contexts in advertisements in order to reduce young people's likelihood to binge drink as there was a significant difference this young university students' likelihood to binge drink between the two contexts investigated here. Perhaps showing violent scenes of car crashes or unfortunate regrets after a sexual experience while drunk are not the best way to encourage young people to stop binge drinking. This research proposes that social marketers should move away from fear tactics and attempt to use other ways to encourage safer drinking among young people, such as using their friends or family to communicate this message in different contexts. It is the purpose of many fear appeals to induce intense emotions that discourage the target market from engaging in a certain behaviour, such as binge drinking. However, this research shows that advertisements featuring different drinking contexts can have an impact on a young university students' likelihood to binge drink in the context shown. To add to this, context also had an effect on their attitudes towards alcoholic products and the relationships shown caused intense emotional responses to the advertisement, showing that imitating advice from a parent or a friend in different drinking contexts could be more effective than using pure fear tactics.

In New Zealand, humour has been used in recent years by social marketers, such as *Blazed – Drug Driving in Aotearoa*, which featuring three children imitating how their fathers act when they drive after using marijuana as previously mentioned (New Zealand Herald, 2013). This advertisement used humour to entice the audience to pay attention but finished on a serious note by posing a disturbing rhetorical question; "Drug Driving, is it really that safe?" This utilises the seriousness that many fear tactics attempts to convey while capturing the audience with humour. The key differentiating factor is the newness of this tactic, meaning that many

people within the target market have begun to discuss this unique advertisement. This raises awareness hugely and is an interesting step forward for the social marketers targeting drug driving. Therefore, it would be interesting to see if key relationships and drinking contexts could be used in a humour based counter binge drinking campaign and examine if their effectiveness was any different from the advertisements used in this study, which would not typically be classified as humorous.

The discrepancies between the results of the initial qualitative interviews and the quantitative experiment in this research are interesting. While those who were interviewed felt that they would be less likely to binge drink if their best friend encouraging them to stop binge drinking, the survey results showed that there was no statistically significant difference between the likelihood of binge drinking between those who saw an advertisement featuring a mother, best friend or a bartender. This may be because those who were interviewed were asked specifically about their own best friend and how they would react if that person encouraged them to stop binge drinking. Conversely, the advertisements showed a spokesperson who was used to represent a young university student's best friend. Therefore, while a young university student may be significantly less likely to binge drink if their best friend encouraged them to stop, the spokesperson may look nothing like their best friend meaning the young person is less likely to respond well and reduce their likelihood of binge drinking. To add to this, an advertisement cannot hope to replace a real life conversation. While the advertisement is communicating from a piece of paper or a billboard, the conversation between two best friends includes elements of body language, tone, the potential for physical contact, the immediacy of occurring when and where the binge drinking occurs, and many other important factors that could make a real conversation between two friends, a mother and child or even between a young person and a bartender more effective in changing young people's binge drinking behaviours and attitudes than an advertisement. This could be the cause of the discrepancies between the two forms of research but future research would be required to ensure this was the reason. Unfortunately, producing advertisements featuring each and every young person's best friend would be costly and impractical for social marketers in New Zealand. Using a spokesperson to represent a typical best friend is the most cost effective and closest option to replicating the conversation discussed above, but clearly does not have the same effects. Hence, although previous research concluded that young people are influenced by their peers (Coleman & Cater, 2005; Wood et al., 2004) maybe this is only true in real life situations and cannot be correctly applied to an advertising situation. Hence, there was no statistically significant difference between the effectiveness of the three key relationships overall on young university students' binge drinking attitudes or behaviours, despite the clear difference in the qualitative results.

Some people believe marketing exists to sell you products you do not need, causes you to want products you never knew you wanted and waste your money that should be spent on more meaningful things. This research aims to show just one way in which marketing can be used for good, to help those who do not yet understand they need help and to help young people to understand that binge drinking is detrimental but drinking alcohol does not need to be. Social marketers utilise marketing to make the world a better place and this research aimed to aid these marketers by providing informative advice in the creation and production of effective counter binge drinking campaigns using key relationships in a young person's life as spokespeople and key contexts in which binge drinking can occur. For we can have a culture of drinking without having a culture of excess and we need to encourage young people to take part in the former not only to benefit themselves, but society as a whole.

Limitations and Future Research

No research is without limitations and it is important to address these while paving the way for future research. Hence, this section discusses some of the methodological and contextual limitations of this research while exploring how these limitations could be dealt with in future research and exploring other interesting related avenues, which academic researchers could explore to advance academic understanding of this area even further.

Firstly, this research focused primarily on social motivations for binge drinking and the effect of key relationships in young people's lives providing safer drinking advice. Hence, this research has not delved into individual based motivations behind binge drinking and how they may affect young university students' binge drinking related attitudes and behaviours. Coleman and Cater (2005) found a variety of perceived personal benefits experienced while drinking, such as a sense of escapism where young people can escape from the stress and anxiety in their lives. Therefore, if a young person's main motivation for binge drinking is of an individualistic nature then perhaps the effect of their mother, a bartender or their best friend advising them to stop binge drinking may be minimal. Hence, the motivations behind binge drinking among youth (specifically whether they be of a more personal or a more social nature) should be investigated in conjunction with the findings of this research to gain more insight into whether and how key relationships in a young person's life and the contexts in which they drink alcohol should be used in counter binge drinking advertisements.

Secondly, the drinking context shown in a counter binge drinking advertisement proved to have a significant influence on many aspects of young university students' binge drinking behaviours and attitudes and their attitudes towards the advertisement, but only two key contexts were explored in this research. The 21st birthday was used to symbolise a unique night of celebration and the Friday night out was used to represent a more causal, regular night of drinking. However, there are many contexts in which young people consume alcohol that were not investigated here, including dates, other celebrations (an 18th birthday or graduation, for example) or Saturday nights as opposed to Friday nights. Therefore, future research should examine how utilising different potential drinking contexts may affect young university students' reactions to counter binge drinking advertisements and their drinking related attitudes and behaviours to see if the use of different contexts can have a significantly different impact on youth binge drinking related attitudes and behaviours.

There is an unfortunate but clear culture of binge drinking among young people in New Zealand. Previous literature has shown that young people are influenced by peer pressure and the opinions of those whom they choose to drink with (Coleman & Cater, 2005; Wood et al., 2004). Hence, researchers should also continue research into the possible use of friends and close relationships in encouraging a safer drinking message. Word of mouth is where one person from the target market encourages another to buy the product or explains the benefits that product can provide. This method is often viewed as one of the hardest but most effective methods of marketing, and has been proven to be more effective than paper based advertisements (Herr, Kardes & Kim, 1991). Therefore, social marketers should investigate ways to use word of mouth to communicate a safer drinking message among young people. A potential way to do this could be to design and implement an advertising campaign that encourages young people to tell their friends when they believe they have had enough to drink and attempt to remove the social stigma from the idea of stopping friends from drinking. The results of this research could help in the development of such a campaign by showing the influence of utilising a best friend figure in counter binge drinking advertisements and it would be good to see these results being expanded upon and used in such a positive way.

Engs (1989) advises advertisers not only to inform young people of certain risks, but also to tell them how to minimise these risks or mitigate them all together. Merely telling young people of the risks associated with excessive drinking does not encourage them to change their behaviour, and they need to be shown how to do so. In the interest of examining the effectiveness of the key relationships and contexts shown, the advertisements in this research did not advise young people how to stop binge drinking but instead focused on whom the advice came from. Therefore, future research should investigate the effectiveness of the key relationships shown in this research when not only providing their opinion, but also providing a way in which the young person could stop their binge drinking habit. Such research would build on the results of this research and enhance academic understanding of this phenomenon overall.

The academic understanding of the use of key relationships and contexts in young people's lives in counter binge drinking advertising could be improved if more key relationships in a young university student's life were to be examined for their potential use in counter binge drinking advertisements as this research only examined three relationships. For example, a romantic partner would be an interesting relationship to research as many young university students have a romantic partner and could be significantly influenced by their opinions and their instructions to stop binge drinking. Other relationships that could be used include siblings, teachers or even perhaps a group of friends instead of one best friend. Each of these

relationships may be more or less effective in changing young university students' binge drinking related attitudes and behaviours than a bartender, best friend or mother figure and therefore should be investigated thoroughly in future research when combined with the results of this research. Such an investigation would provide a holistic picture of the influence of key relationships in counter binge drinking advertisements on youth binge drinking behaviours and attitudes.

The limited exposure participants had to the advertisements in this research is a key issue. Participants had only one exposure to the advertisement in a controlled setting. In a more realistic context, the target market would be exposed to the advertisements many times through many different media over a series of weeks or months. Cacioppo, Petty and Crites (1994) propose that attitude change can occur due to repeated exposure to a stimulus. Therefore, it would be interesting to conduct a longitudinal study that examines if the effectiveness of the key relationships and contexts in this research change over time and exposure level.

There were a few limitations with the methodology undertaken in this research. Firstly, this research relied on students' self-reports of their relationships with their mother and best friend, their perceptions of a common bartender and their views of common student drinking behaviour. Wood et al. (2004) reported that their reliance on students' self-reports of their parents attitudes was a limitation of their research as it does not provide a complete picture and the attitudes of the parents themselves should have been investigated too. This is also a limitation of this research as it has solely relied on students' self-reports. Therefore, future research should investigate a young university student's peers' actual opinions, not just how they believe their peers view them in order to provide a more holistic understanding of this phenomenon and how peers and other key relationships should be used in counter binge drinking advertising campaigns.

Another limitation of this research is that it utilised a solely student population. This was done because young university students are often seen as representative of the young people of New Zealand while providing a much smaller, more manageable and easily accessible population base. However, there are many young people who do not attend university and these people need to be represented too. Therefore, future research should include young people who are not university students and compare the results of those who are university students and those who are not to see if the results are the same or if these groups should be treated differently when preparing counter binge drinking advertisements.

Thirdly, although the use of convenience sampling was necessary due to time, financial and access constraints in this research, the use of this non-probability sampling technique could hinder the generalizability of the results. Although care was taken to ensure that sampling was as fair and random as possible, the use of a probability based sampling regime would increase the robustness and generalizability of the conclusions drawn by removing any form of bias from the collection method. Future research with more time and larger financial budgets should repeat this research using a probability based sampling method to ensure the results are the same and not significantly influenced by the use of a non-probability sampling method.

In terms of the demographics of the sample, it should be noted that the sample was rather limited with respect to ethnic diversity. The majority of the participants identified with being New Zealand European, which limits the generalizability of the findings to young university students of other ethnicities. This research also primarily examined the ethnicities found in New Zealand and hence is not representative of ethnicities that are not prominent in New Zealand. Therefore, it would be a good idea to replicate this study in other countries that have different prominent ethnicities to examine if young university students from ethnicities that were not examined in this research respond differently to counter binge drinking advertisements featuring key relationships in their lives and key drinking contexts. In addition, 62% of participants were female, which has the potential to bias the results towards female opinions and perceptions of the advertisements. Hence, future research should examine if the results are different if even gender distribution of the participants was achieved.

The utilisation of female spokespeople in this research allowed for some very interesting results and analysis into the link between the gender of the spokesperson and the gender of the participant. However, it can be argued that the sole use of female spokespeople in the counter binge drinking advertisements is a potential limitation of this research. Therefore, it would be interesting for future research to use both female and male relationships in counter binge drinking advertisements and compare and contrast the effectiveness of each of them in influencing young female and male university students' binge drinking behaviours and attitudes. Given that female students responded more strongly to the female spokespeople than male students did when developing their attitudes towards the act of binge drinking, it can be hypothesised that male students would react more strongly when developing their attitudes towards the act of binge drinking after seeing a male spokesperson. However, the only way to confirm this is for future research to explore the effectiveness of using male spokespeople and this research thoroughly encourages the academic marketing community to do so.

While there are many limitations of this research, this research has made a significant impact on academic understanding of youth binge drinking and the ways in which social marketers can utilise key relationships and drinking contexts in a young university student's life to counteract anti-social behaviour. There are also many opportunities for exciting future research that have been opened up by this research, of which it is hoped that they are all explored in order to significantly develop academic of this phenomenon even further, and to improve the quality and the effectiveness of the counter binge drinking advertisements produced in New Zealand.

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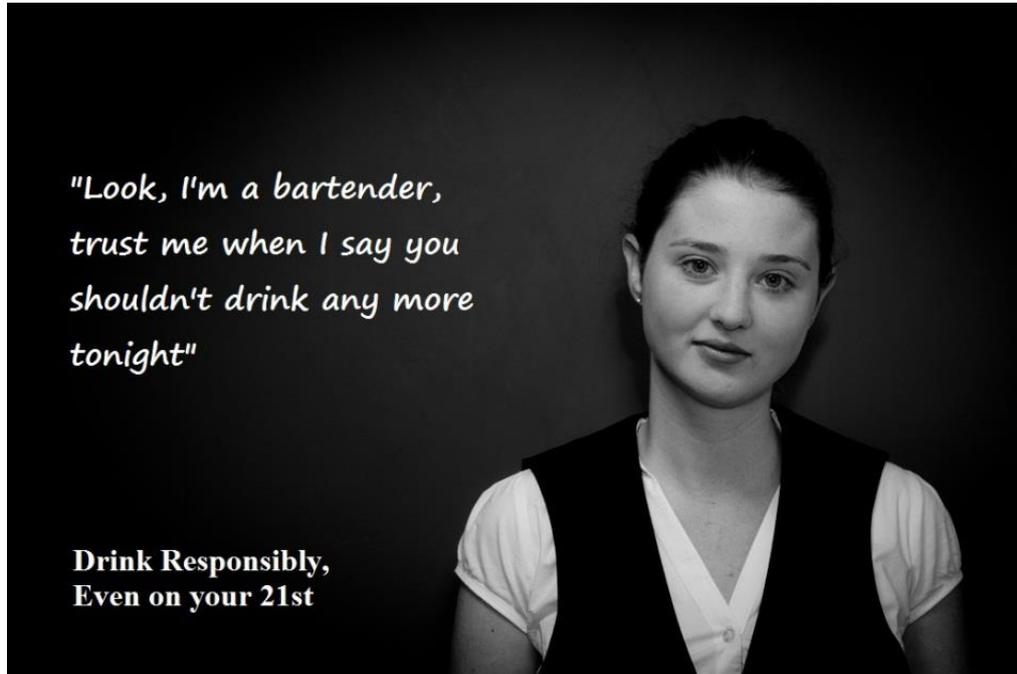
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Appendices

Appendix One: Advertisements Developed

Advertisement One: Bartender & 21st



Advertisement Two: Bartender & Friday night out



Advertisement Three: Best Friend & 21st



Advertisement Four: Best Friend & Friday night out



Advertisement Five: Mother & 21st



Advertisement Six: Mother & Friday night out



Appendix Two: Questions for Interviews

1. How often do you go out with your friends and drink alcohol?
2. What do you consider to be “binge drinking”?
3. Do you know anyone that you would consider to drink too much? Why do you think they do that?
4. Have you ever tried to stop someone from drinking too much? Why/Why not? What would you do or say to stop them?
5. What would motivate you to stop a friend from drinking?
6. How do you see your friends when they have had a lot to drink?
7. Do you have any friends that don’t drink when you go out? How do you view them?
8. If your friend said you’d had enough to drink, how would you react? How about if it was your mother? Girlfriend/Boyfriend? Barman?
9. Do you consider there to be any risks associated with drinking? If so, what are they?
10. What do you think of the culture of drinking among young people in New Zealand?
11. Have you seen any anti-binge drinking advertising? If so, how did you react to it?

Appendix Three: Quantitative Survey Questions

The following survey questions are in the form that was shown to the participants. This means that scale items were recoded after this in order to account for those which have been reverse coded originally. Some of the formats had to be slightly altered for use in a Word Document, but the scale items and questions asked are exactly the same as the Qualtrics version.

1. Please indicate the extent to which you agree or disagree with the following statements regarding the advertisement you just saw. The advertisement I saw made me feel:

	Strongly Disagree (1)	Disagree (2)	Somewhat Disagree (3)	Neither Agree nor Disagree (4)	Somewhat Agree (5)	Agree (6)	Strongly Agree (7)
Insulted	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Good	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Irritated	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pleased	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Repulsed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Amused	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Confused	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shocked	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. Please indicate your attitude towards the message you think is being conveyed in this advertisement. I think overall message of this advertisement is:

	1	2	3	4	5	6	7
Bad - Good	<input type="radio"/>						
Irritating - Not irritating	<input type="radio"/>						
Interesting - Uninteresting	<input type="radio"/>						
Fair - Deceptive	<input type="radio"/>						
Harmful - Harmless	<input type="radio"/>						

3. Please indicate the extent to which you agree with the following statements:

	Strongly Disagree (1)	Disagree (2)	Somewhat Disagree (3)	Neither Agree nor Disagree (4)	Somewhat Agree (5)	Agree (6)	Strongly Agree (7)
After seeing this ad, I can easily picture myself drinking alcohol.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can easily see similarities between myself and the person this advertisement is aimed at.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The ad seemed to be written for me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The ad made me think about my own experiences with alcohol.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The ad seemed to relate to me personally.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can relate to the message communicated in this ad.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. Given the context of the advertisement you just saw, please indicate your response to the statements below. I _____ drink 4 or more drinks that night

	1	2	3	4	5	6	7
Definitely would - Definitely would NOT	<input type="radio"/>						
Probably would NOT - Probably would	<input type="radio"/>						

It is _____ that I would drink 4 or more drinks that night

	1	2	3	4	5	6	7
Unlikely - Likely (1)	<input type="radio"/>						
Impossible - Possible (2)	<input type="radio"/>						

I _____ drink 4 or more drinks in that context

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)
Never - Always (1)	<input type="radio"/>						

5. After seeing the ad, I believe that excessive alcohol consumption is:

	1	2	3	4	5	6	7
Harmful - Beneficial	<input type="radio"/>						
Rewarding - Punishing	<input type="radio"/>						
Negative - Positive	<input type="radio"/>						
Unsafe - Safe	<input type="radio"/>						
A foolish choice - A good choice	<input type="radio"/>						
Bad - Good	<input type="radio"/>						

6. Please indicate the extent to which you think alcoholic drinks are:

	1	2	3	4	5	6	7
Pleasant to drink - Unpleasant to drink	<input type="radio"/>						
Taste Good - Taste Bad	<input type="radio"/>						
Dull - Exciting	<input type="radio"/>						
Social - Not Social	<input type="radio"/>						
Fun - Not Fun	<input type="radio"/>						
Not Appealing - Appealing	<input type="radio"/>						

7. Please indicate the extent to which you agree or disagree with the following statements

	Strongly Disagree (1)	Disagree (2)	Somewhat Disagree (3)	Neither Agree nor Disagree (4)	Somewhat Agree (5)	Agree (6)	Strongly Agree (7)
I can discuss my beliefs with my mother without feeling restrained or embarrassed.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I were in trouble, I could tell my mother.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My mother tries to understand my point of view.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I find it easy to discuss problems with my mother.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There are topics I avoid discussing with my mother.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My mother nags/bothers me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I don't think I can tell my mother how I really feel about some things.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am sometimes afraid to ask my mother for what I want.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When we are having a problem, I often give my mother the silent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

treatment.							
My mother and I want to spend time together.	<input type="radio"/>						
My mother and I disclose important personal things to each other.	<input type="radio"/>						
I consider my mother when making important decisions.	<input type="radio"/>						
My mother is a priority in my life.	<input type="radio"/>						

8. How do you think your mother would feel if you did the following?

	Strongly disapprove (1)	Disapprove (2)	Somewhat disapprove (3)	Neither Approve nor Disapprove (4)	Somewhat Approve (5)	Approve (6)	Strongly Approve (7)
Drank one or two drinks per day.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Drank four or five drinks per day.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Drank five or more drinks once or twice each weekend.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Drove after having five or more drinks.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

9. Please indicate the extent to which you agree or disagree with the following statements

	Strongly Disagree (1)	Disagree (2)	Somewhat Disagree (3)	Neither Agree nor Disagree (4)	Somewhat Agree (5)	Agree (6)	Strongly Agree (7)
I often seek out the advice of my friends regarding which alcoholic products to buy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I spend a lot of time talking with my friends about alcohol and alcoholic products.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is important that others like the alcoholic drinks that I buy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I like to know what alcoholic drinks and brands make good impressions on others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I have little experience with an alcoholic product, I often ask my friends about the product.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To make sure I buy the right alcoholic drink, I often observe what my friends are buying and drinking (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

10. Please indicate the extent to which you agree or disagree with the following statements regarding your closest friend

	Strongly Disagree (1)	Disagree (2)	Somewhat Disagree (3)	Neither Agree nor Disagree (4)	Somewhat Agree (5)	Agree (6)	Strongly Agree (7)
My best friend and I want to spend time together.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My best friend and I disclose important personal things to each other.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My best friend and I do a lot of things together.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I consider my best friend when making important decisions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My best friend is a priority in my life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My relationship with my best friend is important in my life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

11. Please indicate the extent to which you agree or disagree with the following statements regarding a typical bartender

	Strongly Disagree (1)	Disagree (2)	Somewhat Disagree (3)	Neither Agree nor Disagree (4)	Somewhat Agree (5)	Agree (6)	Strongly Agree (7)
A customer should be able to question the authority of a bartender.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A customer should honour the bartender and respect their authority.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Not all bartenders deserve the respect of their customers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A customer should respect the bartender because he/she is the bartender.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often consult the bartender to help choose the best alcoholic alternative available at a bar.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I have little experience with an alcoholic drink, I often ask the bartender about it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The bartender usually gives me good advice on how much I have had to drink.	<input type="radio"/>						
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12. Based on your personal experience, how would you rate the chances that you might find yourself drinking excessively in the following circumstances?

	Extremely Low (1)	Low (2)	Slightly Low (3)	Moderate (4)	Slightly High (5)	High (6)	Extremely High (7)
When I'm at a bar or club.	<input type="radio"/>						
When I'm at a party.	<input type="radio"/>						
When it's toward the end of the week or weekend.	<input type="radio"/>						
When I'm celebrating something important to me.	<input type="radio"/>						
When others around me are partying.	<input type="radio"/>						
When I'm with a close friend/few friends.	<input type="radio"/>						
When it is my 21st Birthday.	<input type="radio"/>						
When I'm finished work that I do for pay.	<input type="radio"/>						
When I'm on a date.	<input type="radio"/>						
When it's the beginning or middle of the week.	<input type="radio"/>						
When I'm lonely or	<input type="radio"/>						

homesick.							
When I've had a fight with someone close to me.	<input type="radio"/>						
When I'm having trouble relaxing, winding down.	<input type="radio"/>						
When I'm feeling sad, depressed, or discouraged.	<input type="radio"/>						

13. How often do you purchase alcoholic drinks on average?

	1	2	3	4	5	6	7
Very Rarely - Very Often	<input type="radio"/>						

When was the last time you purchased an alcoholic drink?

	1	2	3	4	5	6	7
Never have purchased - Purchased within the last month	<input type="radio"/>						

How familiar are you with purchasing alcoholic drinks?

	1	2	3	4	5	6	7
Not familiar - Very familiar	<input type="radio"/>						

14. How often have you drunk alcoholic drinks in the last 12 months?

- Never (1)
- Less than Once a Month (2)
- Once a Month (3)
- 2-3 Times a Month (4)
- Once a Week (5)
- 2-3 Times a Week (6)
- Every day (7)

15. Below is a series of statements. Your next task is to look at each pair of statements and select the option that you believe to be true for you. Please note you need to choose one of the 2 options presented on each line (e.g. either choose "I feel powerless to prevent myself from drinking when I am anxious or unhappy." or "If I really wanted to, I could stop drinking"). Then move on to the next two statements and choose one of them. Remember this is a matter of personal belief - there is no right or wrong answers. In some cases, you may find you believe both statements to be true or neither to be true. In this situation, please select the option that is you consider to be truer as far as you are concerned.

1.

- I feel powerless to prevent myself from drinking when I am anxious or unhappy. (1)
- If I really wanted to, I could stop drinking (2)

2.

- It is easy for me to have a good time when I am sober (1)
- I cannot feel good unless I am drinking (2)

3.

- I have control over my drinking behaviour. (1)
- I feel completely helpless when it comes to resisting a drink (2)

4.

- If someone offers me a drink, I cannot refuse them (1)
- I have the strength to refuse a drink (2)

5.

- Drinking isn't necessary in order to solve my problems (1)
- I just cannot handle my problems unless I take a drink first (2)

6.

- Drinking is my favourite form of entertainment (1)
- It wouldn't bother me if I could never have another drink (2)

16. How does a university student who drinks alcohol look to you?

	1	2	3	4	5	6	7
Not fun to be with - Fun to be with	<input type="radio"/>						
Not desirable to date - Desirable to date	<input type="radio"/>						
Sexy - Not sexy	<input type="radio"/>						
Not cute - Cute	<input type="radio"/>						
Ugly Looking - Good Looking	<input type="radio"/>						
Insecure - Confident	<input type="radio"/>						
Free to make own decisions - Not free to make own decisions	<input type="radio"/>						
Worried - Contented	<input type="radio"/>						
Stressed out - Relaxed	<input type="radio"/>						
Intelligent - Stupid	<input type="radio"/>						
Dumb - Smart	<input type="radio"/>						
Poor - Rich	<input type="radio"/>						
Unsuccessful - Successful	<input type="radio"/>						

17. How often do you undertake the following activities?

	Never (1)	Rarely (2)	Somewhat Rarely (3)	Sometimes (4)	Somewhat Often (5)	Often (6)	All of the time (7)
Eat a well-balanced diet.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Exercise regularly.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Take precautions against sexually transmitted diseases.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pay attention to your sugar intake.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Get enough rest and sleep.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Maintain a balance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

between 'work' and 'play'.							
Pay attention to the amount of alcohol you drink.	<input type="radio"/>						
Eat fresh fruit and vegetables.	<input type="radio"/>						

18. Please indicate the extent to which you agree with the following statements.

	Strongly Disagree (1)	Disagree (2)	Somewhat Disagree (3)	Neither Agree nor Disagree (4)	Somewhat Agree (5)	Agree (6)	Strongly Agree (7)
In the long run, people who take care of themselves stay healthy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People's ill health results from their own carelessness.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In general, I can do things that make me healthy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

19. Please select your gender:

- Male (1)
- Female (2)
- I would prefer not to answer this question (3)

20. Please indicate your age in years:

- 18-25 (1)
- 26-35 (2)
- 36-45 (3)
- 46-55 (4)
- 56+ (5)
- I would prefer not to answer this question (6)

21. Please indicate your ethnicity:

- New Zealand European (1)
- Maori (2)
- Samoan (3)
- Chinese (4)
- Indian (5)
- Other (if so, please write your ethnicity in the box below) (6) _____
- I would prefer not to answer this question (7)