

The Virtual Jackpot!

The socio-cultural and environmental context of youth gambling

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The intention of this document is to report on focus groups and semi-structured interviews conducted with young people aged 15 – 24 to obtain a clearer understanding of the relationships between gambling behaviours and social, cultural, family and environmental contexts in the lives of young people in Queensland.

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1.0 Executive Summary

1.1 Introduction

Australia's social, political and economic climate has ensured that the current generation of young people has been raised in an environment where gambling is legally sanctioned and more importantly socially sanctioned as recreational activity. Whilst the majority of young people that gamble, do so in fairly developmental, transient and innocuous ways; others gamble in a more sustained, intense and sometimes destructive fashion (McClellan et al., 2006). Interstate and international research has revealed an alarming incidence of gambling related problems in people under 25 years of age, with prevalence rates two to four times that of the adult population (Delfabbro & Winefield, 1996; Hayatabakhsh et al., 2006; Productivity Commission, 1999; Shaffer, Hall & Vanderbilt 1997; Sullivan, 2005; Williams & Connolly, 2006).

Evidence indicates that the development and maintenance of gambling behaviours in young people are influenced by multidimensional factors incorporating bio-psycho-social determinants such as familial, social, cultural, environmental, emotional, personality and cognitive factors (Blaszczynski, 2000; Gupta, Derevensky & Marget, 2004; Hardoon & Derevensky, 2002). The path of action these factors take in determining the uptake and maintenance of problem, as opposed to recreational gambling behaviours, remains relatively unexplored in young Queenslanders.

1.2 Project Aims

This project has sought to explore the characteristics environmental, social, and familial contexts that could influence the development and maintenance of gambling behaviours in young people. Attention has been given to the attitudes, values, behaviours and experiences of Sunshine Coast young people, aged 15 to 24 years with a focus on the influence of new technologies such as the internet and mobile phones on gambling behaviours. The purpose of the project was to provide a deeper understanding of existing quantitative knowledge around this topic. The understanding gained from this qualitative research may help inform policy makers to implement prevention and early intervention initiatives that can reduce problematic gambling behaviour.

Based on a comprehensive review of relevant literature, the research has attempted to provide information about young gamblers in relation to:

- Contexts in which gambling behaviours occur including social, economic, emotional and family contexts.
- The social construction of gambling behaviours.
- The cognitive construction of gambling behaviours and gambling related beliefs.
- The relationship between family factors such as parental gambling, and young people's gambling.

- Negative and positive social consequences experienced by young people who gamble.
- Pre-contemplative behaviours associated with gambling.
- Settings in which young people's gambling occurs, and particularly the facilitating factors within settings.
- The influence technologies such as the internet and mobile phones have on the uptake and maintenance of gambling behaviours.

1.3 Overview of the Methodology

The primary research stages included 1) ethical approval, 2) review of literature and relevant websites, 3) data collection via focus groups and semi-structured interviews, 4) data analysis and 5) reporting.

To achieve the aims of the project the following activities were undertaken:

- Both Australian and international journal articles and research were reviewed. Additionally, gambling related websites were examined in order to guide the formulation of questions for focus groups and semi-structured interviews.
- An analysis of the Youth Gambling Questionnaire for information regarding the demographic characteristics of the sample and an overview of their attitude towards gambling.
- An analysis of data collected from focus groups and individual interviews held on the Sunshine Coast with young people between ages of 15 and 24 years.

1.4 Major Findings

Data gathered via questionnaires, focus groups and individual interviews revealed that (a) young people viewed and constructed gambling activities in numerous ways, (b) a number of factors in combination rather than any single factor motivated gambling behaviour, (c) a number of factors influenced the maintenance of gambling behaviour and (d) modern media such as the internet, mobile phone and interactive television have altered the way in which young people are exposed to and access gambling activities. The key findings are set out below:

Perceptions and Constructions of Gambling Activities

- A difference was found between the operational definition of gambling afforded by academic literature and the views of young people. For many participants gambling is perceived to be a broad set of activities rather than solely the 'staking of money or items of value on the outcome of an uncertain event that is determined by chance' (Australian Psychological Society, 1995-1997).

- For many young people, participation in gambling activities is translated to be part of Australia's tradition of taking risks and seen to play a role in maintaining the 'Aussie battler spirit'. They believe that gambling is intrinsic to current Australian identity and that a distinctive gambling culture is present within the nation. Conversely, some young people believe that gambling is an activity shared across a number of cultures and could be better defined as a global phenomenon.
- The positive attitudes that the young people hold towards gambling are reflected in their reports of participation. Analysis of the gambling survey conducted for this report revealed that young people, both under the age of 18 and over, participate in a wide range of gambling activities both with and without the use of money.
- Many young people have come into contact with people who not only participate in recreational gambling but also with people who gamble in a more sustained and detrimental manner. Young people clearly possess quite a comprehensive knowledge about the nature of gambling problems.
- During the focus groups and interviews a very small number of participants felt that they had experienced problem gambling behaviours or spoke about gambling patterns that could be indicative of gambling related problems. These include spending more than they could afford; believing that it possible to profit from gambling; borrowing money and regularly placing large bets.

Gambling Motives

- Young people believe that participation in gambling activities can enhance and complement social interaction. In fact, the opportunity to socialise was cited by participants as one of the chief motivators of gambling behaviour.
- Young people utilise gambling as a means of stimulation to relieve boredom, particularly during unstructured leisure time or unstructured periods in a young person's day in which they were waiting for another activity or event to occur.
- Young people consider healthy and constructive activities that they are involved in and value, to represent avenues for excitement, passion or life purpose that serve to decrease the desire to participate in gambling activities.
- The prospect of experiencing excitement motivates many young people to gamble. However, accounts of gambling as a mood enhancer were often strongly tied to experiences of winning, making it impossible to determine whether it is the winning or excitement that motivates and maintains young people's gambling behaviour.

- The opportunity to win money is a factor that influences only a small number of participant's initial gambling activities. More frequent are reports regarding the role a desire to win plays in repeating gambling behaviour after initial uptake had already occurred. A considerable number of young people recount that dreams, urges and desires that centre on winning, provoke them to try their luck at gambling games. Furthermore, the actual experience of an early win is highly influential on future gambling involvement

Influences on Gambling Behaviour

- Young people report that winning maintains their gambling behaviours during specific gambling occasions, thus influencing the length of time or money they invest in a particular gambling activity. Interestingly, the experience of losing also serves to encourage further gambling behaviours for some young people.
- While most young people cannot articulate the actual odds of particular gambling activities, almost all recognise that their chances of winning are slim. Despite this, young people's desire to win overrides their rationalization of the probability of a win. Young people are very aware of the discrepancies that exist between their intellectual knowledge/reason and the hope/emotions they possess about winning.
- Whilst the most common reliance on erroneous beliefs occurs despite the existence of conflicting knowledge, some individuals in the sample were found to base their gambling decisions on genuinely mistaken beliefs about the nature of randomness and role of chance. For instance a small number of young people reported that the use of a "strategy" or "system" could influence the outcome in games of chance. Other participants in the study believed that positive thoughts, mood, visualisation or lucky charms can facilitate winning at games of chance. Another more common belief was that of the gambler's fallacy, whereby past events of a random nature were thought to predict future outcomes.
- Family members appear to be a significant influence on young people's gambling attitudes and behaviours. In this study active encouragement in a variety of gambling activities was evident in the lives of young people that gamble. Parents and extended family members were reported to purchase scratch-lotto and lotto tickets for young people when requested; they regularly give scratch-its or lotto gifts on special occasions; supply young people with money to play on poker machines in licensed venues; form partnerships with young people when choosing lotto numbers, sport teams or horses to bet on or to play scratch-lotto and they also place bets on young people's behalf.
- Familial influence was seen not only through overt encouragement but also through processes of observation and imitation of gambling activities as well as parental tolerance towards underage gambling.

- Several types of parent-child communication strategies were reported as being utilised to promote awareness about the risks associated with gambling. While many participants reported that despite sharing in or at least observing recreational gambling within the family their parents did not address the risks of gambling in conversations with them. Other young people reported that their parents provided them with useful information about gambling which enabled them to make informed gambling choices. Some young people reported that their parents discouraged them from gambling without the provision of balanced information whilst others reported that they were not approached directly about gambling but rather were informed vicariously about the consequences of gambling by overhearing conversations.
- Peer pressure was seen to facilitate gambling behaviours in young people as non-participation in group gambling activities was viewed as a trigger for social exclusion. The threat of disconnection from a peer group was also seen to facilitate enabling behaviours because young people were reluctant to confront each other about gambling concerns. Furthermore, this study found that social approval in the form of peer recognition, acceptance and admiration was reported to be gained from participation in gambling activities.
- Conversely, for some participants the presence of peers actually had the opposite effect, decreasing the likelihood that they would engage in gambling activities.
- Young people frequently reported that experiences with other's problem gambling resulted in negative feelings towards gambling activities, an awareness of the harm it could cause and a decreased desire to participate in such activities.
- There is a perception amongst young people that those with propensity for risk taking or those with an 'addictive personality' are more likely to gamble than others. The qualities participants reported their peers to possess together with self-reported personality qualities could indicate that young people possessing personality traits of the sensation seeking range may be more likely to gamble.
- There appears to be consensus amongst young people that advertisements on television and in gambling venues/newsagencies promote gambling as a glamorous, exciting and a fun activity in which money can be made with ease. Some young people are highly critical of the way gambling is promoted depicted and others believe that their attitudes are positively influenced towards gambling as a result of promotional activities.
- Young people interpret the meanings of gambling prevention campaigns in a way that makes sense to their social environment and context. Whilst some young people believe that such campaigns reinforce awareness about the risks involved in gambling, for others the viewing of

prevention campaigns results in obfuscation, psychological reactance and discounting.

- A number of situational and structural characteristics of gambling venues and products are found to facilitate gambling behaviour including, the ease with which young people can access gambling opportunities, the low financial outlay required to participate and certain product and venue features such as bright lights, colours, décor, music/noises and the characters featured on poker machines (for example, *Queen of the Nile*).
- Exploration of the relationship between young people's beliefs and values regarding their finances and their gambling behaviour revealed that participants viewed money management skills or the lack thereof, to play a large role not only in their desire to gamble but also in the facilitation and maintenance of gambling behaviours.
- Regardless of age or gender, alcohol consumption plays a large role in gambling habits with many young people reporting that the consumption of alcohol motivates their gambling behaviour, increases impulsive gambling decisions, heightens their desire to take financial risks and lengthens the time engaged in gambling activities.

Gambling Involving Modern Technology

- Young people believe that the emergence of technologies such as the internet, mobile phone and interactive television have, to a large degree, altered the way in which people gamble. There is a perception that these media not only offer new avenues for opportunities to gamble, but that they also improve the ease of access to gambling services.
- Young people consider gambling services on the internet very easy to access through search engines, site links and pop-ups. In fact most young people report that when browsing the internet, exposure to gambling activities or promotion is difficult to avoid. They are also familiar with current protective measures used to enforce age restrictions on gambling activities and confident in their ability to evade these procedures.
- However, most participants in this study did not personally regard the internet as an appealing point of access to gambling services as it lacked opportunities for highly valued social contact and participants had concerns about financial safety of web based gambling products.
- Participants in this study had a very good awareness of the aspects of the internet that could become problematic for themselves or their peers.
- Young people appear to be aware of the opportunities available to gamble via their mobile phone. Gambling in this manner was often associated with the advertisements featured on commercial television that offered prizes to engage in games of skill (such as trivia) via the

mobile phone. Such activities were viewed by participants in this study to be intentionally aimed at a young cohort. Whilst considered appealing by some participants, this appeal was overridden by a perception of high costs involved in participation.

- Of those that had tried mobile phone gambling most reported that they were not satisfied with their experience and did not maintain their involvement. A small number of participants found gambling via the phone convenient and easy to access.
- Unlike monetary gambling through modern media, practice play via the internet, computer games or mobile phones is regarded quite positively by most young people and is particularly popular amongst male school students.
- For a small number of young people the use of practice play is cited as one of the factors that influence their future intention to gamble. For others however, involvement with online practice play or computer based gambling games results in a decreased desire to participate in future monetary gambling they tire easily of the games, and develop a sense of how quickly money can be lost.

Implications

The findings of this study have the potential to inform the development and implementation of education and prevention campaigns. It is recommended that policy makers implementing such initiatives consider the following:

- The current findings suggest that education needs to start at the most basic level – evaluating young people’s beliefs about gambling and informing them about what is and what is not a gambling activity. There is a need for young people to recognise that wagering money or betting equates to gambling. Conversely, young people need to recognise that whilst a number of activities may be recognised as types of ‘gambles’ one can take in life, ‘gambling’ is a separate and specific set of activities that can become addictive. Without young people’s recognition of this from the outset, the impact of education efforts may be reduced.
- The role that boredom and excitement play in motivating gambling behaviour may be an important factor to consider in the treatment of problem gambling in young people. If young people are utilising gambling to find meaning in their lives and to provide stimulation in the form of excitement, successful abstinence from that behaviour would need to be supported by the presence of some other activity that could replace the stimulus provided by gambling.
- Although, it is clear that some young people would benefit from education about odds and probability, our findings suggest this may not actually influence rates of participation in gambling activities. As recommended by Delfabbro (et al., 2005) any formal education about

odds and probability, whilst useful could be even more so when paired with strategies that promote greater insight into idiosyncratic belief systems and superstitious beliefs. In this way young people can be taught to have greater self-awareness and challenge their own beliefs (Delfabbro et al., 2005). Education should also target young people's critical analysis skills in order to influence the persuasiveness of advertisements and popular texts.

- Prevention efforts targeting youth gambling should be directed at both young people and also at their parents. Such efforts should not only focus on the provision of general information to parents about gambling and the risks involved in their children's participation, but should also encourage parents to initiate this communication. This in turn needs to be underpinned by strategies to ensure that information is delivered successfully.
- Broad-based education programs that not only educate young people about gambling but also emphasise social influence and enhance ability to resist passive social pressure should be utilised.
- The information young people revealed regarding gambling messages to which they are exposed by the media indicates that they would benefit from campaigns that create an awareness of the existence of gambling problems and consequences for young people. Campaigns should feature information that is relevant to issues currently present in young people's lives. Content should be presented in a balanced and neutral manner and campaigns should make attempts to reach young people without them having to purposely seek the information.
- As some young people believe that the development of gambling problems is limited to genetic or personality factors, education should provide information pertaining to the various ways in which an individual can develop excessive gambling behaviours. This should be provided with a view to engaging young people in the possibility that gambling is not a problem limited to a small number of pre-disposed individuals, but in fact a far reaching problem that can potentially affect any number of people for varying reasons.
- As gambling product features were found to have a substantial influence on young people, the introduction of more sophisticated, hi-tech poker machines, as proposed during the recent Future Trends in Gaming Conference in Queensland, may increase the appeal of poker machine play for some young people. The fact that new, technologically superior machines that match other digital devices with young people are familiar and interact on a daily basis also suggests that, as a demographic, they are being deliberately targeted.
- Money management skills such as budgeting, saving and maintaining finances should be considered an important part of any gambling education or prevention program.

- As many school students are already accessing practice play at their own leisure, the inclusion of experiential components in educational programs could prove successful by providing a safe and informative environment in which the 'mystery' and 'excitement' that surrounds gambling can be unveiled. Such inclusions may also demonstrate the actual odds of winning and losing. The internet may be an ideal medium through which to provide such education.

As a whole, the data collected in this study suggests that participants possess a good degree of insight into their behaviour and a general awareness of the various factors that influence their uptake and participation in gambling activities. Clearly, the provision of well informed and designed prevention and early intervention initiatives that target the dynamic and complex factors that initiate, motivate, influence and maintain young people's attitudes towards gambling and their uptake of various gambling activities would enhance young people's current knowledge and strengthen their propensity to evade the development of problematic gambling behaviours in the future.

2.0 Background

The following review will examine both international and national research as it relates to gambling behaviours in young people. In order to achieve this, definitions of gambling and problem gambling will be firstly explored. Subsequently, the review will examine Australia's gambling climate and the cultural role gambling plays within Australian society. Patterns of youth gambling will be reviewed and in particular, the existence of problem gambling in this cohort, followed by an outline of the negative consequences of gambling. A number of important factors, including familial, social, cultural, environmental, emotional, cognitive, and individual variables that may contribute to the uptake and maintenance of gambling in youth will be presented, as well as a review of research that investigates the protective factors in young people. Finally, problem gambling prevention strategies and avenues for further research will be considered with a particular emphasis on the role of the internet as both a facilitator of gambling behaviours and a medium through which prevention efforts can occur will be discussed.

2.1 Definitions of Gambling

Gambling is an international, primarily recreational activity that involves the participation of people from diverse cultural backgrounds, ages and socio-economic levels (McMillen, 1996a; Reith, 1999). Given that gambling is practised so widely, it is remarkable that little agreement has been documented in academic literature pertaining to the operational definition of gambling, and in particular the meaning of the term "problem gambling" (Messerlian & Derevensky, 2005; Griffiths, 1995).

Generally the word "gamble" is used to denote "taking a risk" (Lea, Tarpy & Webly, 1987). In keeping with other gambling research, this study defines gambling as an activity that does not incorporate all risk-taking behaviour, but instead includes only a limited range of such behaviour (Ladouceur & Walker, 1998). The Australian Psychological Society defines gambling as an activity that "involves the staking of money or items of value on the outcome of an uncertain event that is determined by chance" (Australian Psychological Society, 1995-1997).

Gambling fits into two broad forms, namely: games of skill and games of chance. Reith (1999) has proposed that the practical orientation of the player to the game is different in each form with games of skill implying the possibility of at least some mastery over the game (e.g. horse race betting and poker). While conversely, games of chance such as poker machines or lotto tickets imply submission to the blind laws of chance (Reith, 1999).

More specifically, the nature of gambling can be encapsulated in four distinct categories. Firstly, gaming can be defined as the exchange of money or item of value during a game (e.g. poker machine play). Secondly, betting is the wager of valuable items on a future event (e.g. horse race betting). Thirdly, lotteries

are the distribution of money occurring by random draw. Lastly, speculation involves the investment of money in business ventures, insurance or stock market activities (Perkins, 1950; Australian Psychological Society 1995-1997). Traditionally speculation was considered a valid form of gambling, however, in recent times there has been considerable debate amongst researchers about the inclusion of this category (Griffiths, 1995). Despite most researchers rejecting this category as a type of gambling, speculation is still being included in explanations of gambling contained in some educational materials. This alludes to the fact that there may be discord between wider societal perceptions of gambling and that of empirical researchers. This is concerning, as scientific research is intended to reflect the realities of society, not shape them.

Throughout the literature the term “problem gambling” has been utilised in various ways. The Australian Institute for Gambling Research broadly defines problem gambling as “the situation where a person’s gambling activity gives rise to harm to the individual player, and/or his or her family, and may extend into the community” (Victorian Casino and Gaming Authority, 1997). In other literature, the term refers to individuals who, display gambling behaviours that may give rise to harm in individual, familial or wider social networks, they nonetheless fall short of the diagnostic criteria for “pathological gambling”, but the individual is assumed to be in a preliminary stage of this progressive disorder (Lesieur & Rosenthal, 1991).

During recent decades a “medical model” based on the APA’s DSM-III criteria for pathological gambling has both explained problem gambling, and underscored the measurement of its prevalence (Svenson, 2001). The most recent DSM criteria (DSM-IV) classifies pathological gambling as an Impulse Control Disorder involving “persistent and recurrent maladaptive gambling behaviour... that disrupts personal, family, or vocational pursuits” (APA, 1994, p. 615-617). To be diagnosed as a pathological gambler one must meet at least five of the following DSM-IV criteria:

1. Is preoccupied with gambling (e.g. preoccupied with reliving past gambling experiences, handicapping or planning the next venture, or thinking of ways to get money with which to gamble).
2. Needs to gamble with increasing amounts of money in order to achieve the desired excitement.
3. Has repeated unsuccessful efforts to control, cut back, or stop gambling.
4. Is restless or irritable when attempting to cut down or stop gambling.
5. Gambles as a way of escaping from problems or of relieving a dysphoric mood (e.g. feelings of helplessness, guilt, anxiety, depression).
6. After losing money gamblers often return another day in order to get even ("chasing" one's losses).
7. Lies to family members, therapist, or others to conceal the extent of involvement with gambling.
8. Has committed illegal acts, such as forgery, fraud, theft, or embezzlement, in order to finance gambling.
9. Has jeopardized or lost a significant relationship, job, or educational or career opportunity because of gambling.

10. Relies on others to provide money to relieve a desperate financial situation caused by gambling (APA, 1994).

The use of the DSM-IV criteria for determining the existence of problem gambling in youth has been opposed for several reasons. Experts have expressed concern that the criteria were developed from adult-based research, and currently rigorous validity evaluation of the criteria for youths is lacking (Shaffe et al., 1997; Derevensky, Gupta & Winters, 2003). Furthermore, the criteria may not represent the full range of gambling problems that can exist in youth (Dickerson, McMillen, Hallebone, Volberg & Woolley, 1997). Shaffer and Hall (1996) have proposed a promising alternate classification model that possesses features relevant to youth (McClellan & Winters, 2006). The system they propose classifies gambling in terms of problem severity. For example, level zero includes those who have never gambled; level one is for individuals who have gambled, but are not experiencing any gambling-related problems; Level two gamblers can be considered “at-risk”, experiencing some sub-clinical problems related to gambling while, level three gamblers are those individuals who meet formal criteria of pathological gambling, such as experiencing five or more DSM-IV symptoms (McClellan & Winters, 2006). The advantages inherent in the Shaffer & Hall system are that the two intermediate categories are likely to be highly relevant when characterising tertiary and younger gamblers. Furthermore, the level two category offers researchers and practitioners a conceptual basis for studying the developmental transitions from less severe to more severe forms of gambling involvement (McClellan & Winters, 2006). This system is broad enough to encompass all those who could be identified as having a problem with their gambling, regardless of age.

Research has revealed that young people’s perceptions of gambling and problem gambling are distinct from that of the academic community. Wiebe and Falkowski-Ham (2003) found that young people are likely to define the types of activities they engage in, such as betting on card/board games or physical activities, as distinct from their understanding of ‘gambling’. Canadian research has also found that most young people did not immediately relate their daily activities such as coin tossing, scratch tickets, cards and video games to the word ‘gambling’ (Skinner, Biscope, Murray & Korn, 2004). In the study, young people’s views of gambling varied according to age and gambling type. For example, “daring” and “friendly betting” were identified as positive activities used by younger adolescents to relieve boredom and establish social relationships. Gambling was perceived as separate from “daring” due to its association with money. What is evident is that young people possess their own perceptions and definitions of gambling that reflect the emphasis they place on social relationships. Current research seems to indicate that although definitions used by young people incorporate definitions utilised in empirical and professional discourses, they also challenge these same definitions. This disparity in language and understanding indicates, deeper insight into young people’s perceptions of gambling is needed.

2.2 The Culture of Gambling

Throughout history, gambling has existed as a universal activity practised across a wide variety of cultures (McMillen, 1996a; Reith, 1999). In an Australian context, European settlement marked the establishment of gambling as a significant cultural pastime (Costello & Millar, 2000; Winter, 2002). Despite the complex political battles concerning the morality of gambling in the late 1800s and early 1900s, in time gambling shed its socially 'evil' image and emerged as a core element of the national character (Selby, 1996; Costello & Millar, 2000).

Many social scientists, writers and popular commentators have claimed that Australia has developed a distinctive gambling culture (McMillen, 1996b). For example, novelist Frank Hardy (1978, p. 74) wrote that "our country was pioneered in the spirit of a gambler's throw". Throughout history, gambling has been an activity which was portrayed as a "right" of every citizen that reflected the freedom and hope of Australians (McMillen, 1996b; Lynch, 1990). Australian public participation in, and acceptance of the Melbourne Cup, is a prime example of the current gambling climate. It is an event shrouded in egalitarian mythology and transcends a number of previously unpassable social and economic borders. In other words, it is an event which both the poor and the rich are able to attend (Costello & Millar, 2000). In this way it is celebrated for its ability to bring a nation to a halt and unify across class and value/belief barriers, with even strong anti-gambling campaigners partaking in Cup Day fever (Costello & Millar, 2000). Cup Day has not only united the populace, it has also established a link between sport, gambling and politics (Costello & Millar, 2000).

Contemporary gambling patterns mirror positive societal attitudes and are driven by aggressive marketing and media glamorisation (Secomb, 2004). The media, corporations and the government have the power to shape public attitudes and opinions and manufacture a form of social consensus that becomes regarded and accepted as "truth" (McMullan & Mullen, 2001). A Canadian study examining the news coverage of gambling found that the press promoted and disseminated favourable beliefs and values surrounding gambling (McMullan & Mullen, 2001). Corporate sources "naturalised" their beliefs as harmless and inevitable, with gambling being an inextricable part of the new leisure order. Further, the harmful societal and economic effects of gambling were disavowed or individualised which could result in the personalisation of any problems and infer an abrogate of social responsibility (McMullan & Mullen, 2001).

Similar patterns to those discussed above can also be seen in Australia. For example, *The Courier Mail* featured an article which reported on the world's top surfers coming together at Queensland's Gold Coast to compete in blackjack for charity (Stolz, 2006). Celebrity poker challenges have become a feature on commercial and satellite networks, normalising and romanticising gambling simultaneously. Popular media portrayals such as these also promote

favourable beliefs about gambling through the depiction of gambling as a charity event that will inject funds back into society. Glamorisation of gambling can be seen through Lotto, Tatts and Power Ball draws on the television featuring attractive and stylish women or men, and the advertisements that situate 'winners' in fairy tale, 'happily-ever-after' narratives. The media continually portrays gambling as a medium through which the "average Joe" has the opportunity to make millions of dollars, transforming his or her life and, if so inclined, that of others. For example, *The Sunshine Coast Daily* (Morgan, 2006) printed an article featuring a local primary school teacher, who had recently become a father, celebrating his 'achievement' which was to be a high-stakes contender in a gambling event. It is evident that, in Australia marketing approaches and the media have had a large role in defining the social reality of gambling. The current climate of gambling and the perpetuation of the myth that Australia's a gambling nation can also be seen in the lottery trust and poker-machine corporator, Tattersall's public statement which declares 'Australian's love to gamble' (Costello & Millar, 2000).

Costello & Millar (2000) have highlighted the importance of the colourful imagery and humour that surrounds traditional Australian gambling. Mythology and cultural imagery used by the media and society at large to promote and celebrate gambling events and activities are crucial to the lives and character of communities and nations (Costello & Millar, 2000). However, Costello & Millar (2000) argue that when 'mythology is commodified, repackaged, and sold back to the very people it purports to celebrate, it loses its charm.' They stress that there is distance between traditional notions of social gambling and the finely tuned gambling products being aggressively marketed in modern times. Thus, new commercial gambling should not be packaged to reflect the same values as past recreational gambling and should not be justified on the basis that Australians, as a whole, love to bet (Costello & Millar, 2000).

Gambling as a leisure activity is fuelled not only by cultural forces but also political and economic factors (Costello & Millar, 2000). Gambling has been extensively legalised and sanctioned by the government due to its ability to generate lucrative revenue (Derevensky & Gupta, 2001; Williams, Connolly, Wood & Nowatzki, 2006). Australians spend more money on gambling than on alcohol or tobacco (Productivity Commission, 1999), and the sheer extent of Australia's gambling practice can be seen in statistical data that indicates the mere fact of being born in Australia operates as a risk factor for gambling behaviour (Jackson, 1999; University of Melbourne Problem Gambling Research Program, 1999). It is evident that the modern social, political and economic climate has ensured that the current generation of youth have been raised in an environment where gambling has been legally and socially sanctioned, as well as being considered a popular and acceptable recreational activity (Williams, Connolly, Wood, Nowatzki, 2006).

2.3 Patterns of Adolescent Gambling

Given the widespread societal acceptance of gambling it follows that youth would, in varying degrees, partake in this behaviour. International statistics

indicate that approximately 80% of adolescents have participated in gambling activities (National Research Council, 1999; Shaffer & Hall, 1996). While there has been some debate over the rate of Australian youth gambling, research suggests that prevalence compares favourably with the findings of international studies (Delfabbro & Thrupp, 2003). Delfabbro, Lahn and Grabosky (2005) conducted a study involving young people from the Australian Capital Territory, aged 11 to 19 years. It was found that 70.4 per cent of all respondents had gambled within the 12 months prior to completing the study's survey. As a whole, current literature suggests that 60 to 80 per cent of young people gamble at least once a year (Queensland Government, 2006). While individual studies conducted in Australia vary in terms of the exact prevalence rates of youth gambling, a majority of studies reveal that some proportion of youth do in fact participate in gambling on a seldom to frequent basis (The South Australian Centre for Economic Studies, 2003).

The breadth of gambling activities that youth participate in is quite extensive. Different types include, card, dice and board games with family and friends, betting with peers on games of personal skill (e.g. bowling, playing arcade or video games for money or prizes), raffles, sports betting, wagering on horse and dog races, bingo, slot machines and table games in casinos, pull tabs and lottery tickets, playing VLTs and wagering on the internet (Jacobs, 2000). Studies have shown that underage youth have infiltrated every form of legal, organised and informal gambling activities (Jacobs, 2000). While betting on poker machines, horse racing and lotteries are illegal for those under 18, like underage drinking, enforcement of these laws among those who are underage can be difficult (Moore & Ohtsuka, 1997). Delfabbro et al. (2005) conducted a study examining popular types of gambling in school students, years 7 to 12 and found youths engaged in an assortment of gambling activities. It was revealed that the most popular types of gambling were private card games (40%) and bingo/scratch cards (41%), racing (32%) and gambling on sporting events (26%) (Delfabbro et al., 2005).

Gambling activities practiced by children and adolescents are not consistent across groups of differing geographical location, age and gender. The forms of gambling engaged in by young people have been found to vary according to whether they live in the city or country (Australian Council of Social Service, 1997), while longitudinal studies have revealed that gambling preferences change with age (The South Australian Centre for Economic Studies, 2003). As young people mature they move from informal to increased legalised activities and from games of skill and sports betting to games involving continuous play in licensed venues. (The South Australian Centre for Economic studies, 2003). Finally, the patterns of youth gambling also vary as a function of gender. For example, a greater proportion of males have been found to play electronic gaming machines, to be involved in sports betting and play private card games than females (Queensland Government, 2006).

Technological developments such as the internet, mobile phone and sophisticated video games have transformed the way youth use their leisure time (Barnse, Katz, Korbin & O'Brien, 2005). In particular, the internet has become an integral part of young people's daily recreational, work,

communication and study activities (Australian Bureau of Statistics, 2001). In 2001, young people aged 15-24 years were found to be the highest proportion of Australian's to access the internet of any age group (ABS, 2001). In Queensland, the Australian Bureau of Statistics (ABS) (2001) found that 57% of young people had access to the internet, with the home being the place most net access occurred. Research data has not only revealed high patterns of technology usage by young people, but has also revealed that young people hold positive attitudes towards digital media and place importance upon modern technology. A recent study revealed that the internet and the mobile phone surpassed more traditional media outlets such as the television and radio in the 'couldn't live without' status for Australian young people, aged 13- 24 (Yahoo & OMD, 2005). Given the widespread availability and use of modern technology coupled with the reality that young people have grown up with the expectation that computers and particularly the internet will offer many opportunities for leisure activities (Barnse, Katz, Korbin & O'Brien, 2006), the online environment is a modern medium that potentially holds appeal for young people who desire to access gambling services.

Undeniably a web search through any standard search engine using the term "internet gambling" can generate a plethora of gambling related sites, which are potentially accessible to young people both 18 years of age and those that are under the legal age (McMillen & Grabosky, 1998). A review and comparison of these online websites consistently revealed features such as ease of access, flashy colours, blinking screens, pictures of attractive men and women, incentives for membership, prompts for further play and rapid speed of play - all of which may be appealing characteristics to young people.

A variety of games are available including more traditional gambling activities such as blackjack, baccarat, roulette, lottery and sports bets. Moreover, the internet now offers many opportunities to wager on the outcomes of popular entertainment. Centrebet, an Australian internet gambling provider, accepts wagers on not only sports and racing but also all manner of local and international political, media and entertainment events. For example, over the last 12 months members could wager on the following events and contests: the American Presidential Election, Big Brother (Australian and international versions), Eurovision Song Contest, Idol (Australian and International versions), Academy Awards and Oscars, X Factor, the World Sauna Championships and the Finnish Wife Carrying World Championships. The fact that more than \$100,000 was wagered on the 2007 Australian Big Brother series is confirmation of the popularity of entertainment gambling (The Sunshine Coast Daily, 2007).

Despite a great expansion in the number of internet gambling options available (GAMCARE, 2005), studies indicate that at present, electronic forms of gaming are the least popular amongst young people (O'Neil, Wetton & Duerrwald, 2003; Delfabbro et al., 2005). A study conducted by Byrne (2004) explored the attitudes towards and use of online gambling in young people aged 12-24 (n=2087) (Derevensky & Gupta, 2007), and found that 4.1% of participants (7.8% of males; 2.3% of females) had wagered on the internet during the past year. Of those an overwhelming number (80.4%) indicated that their internet

wagering was done from home, using personal credit cards, a family credit card (with and without parental consent), debit cards, personal cheques and wire/bank transfers as means of payment (Derevensky & Gupta, 2007). A variety of various reasons outlining why young people chose to gamble on the internet were provided, the most popular being competition (60%), convenience (40%), 24 hour accessibility (33%), privacy (33%), high speed of play (33%), good odds (33%), fair/reliable payouts (33%), bonus money (27%), graphics (20%), sex appeal (20%) and anonymity (20%) (Derevensky & Gupta, 2007).

Low rates of youth internet wagering may suggest that existing regulatory controls restricting underage access to internet gambling are functioning reasonably well. In contrast, the low participation rates may reflect that internet education has been successful in ensuring youth are technologically savvy and wary of the monetary and personal safety issues that are involved with internet use. Nonetheless, modern technology and the rapidity of changes to hardware, rise of sophisticated software and the uptake of broadband combined with aggressive marketing means it remains a potential source of gambling for youth.

The mobile phone is another modern distribution channel for gambling participation by young people (O'Neil et al., 2003; Productivity Commission, 1999). Currently several Australian gambling providers offer services that allow people over the age of 18 to place bets via a phone call and also by way of sms. Beyond the mobile phone gambling options available at present, it seems that there is vast potential for this market to expand in Australia. In fact Jim McKay, former Managing director of Two Way (the leading provider of interactive applications and technology in Asia Pacific) predicted that Australia, among other Asian Pacific countries, would eventually be at the forefront of growth for usage of interactive television, SMS-TV and mobile gaming and gambling products (Two Way TV Australia, 2005). Industry movement has supported this prediction. In 2006 Intralot, the world's second largest gambling company made a submission to the Victorian Government proposing the introduction of betting on computerised games via mobile phones (Roy, 2006). Opponents have argued that this was designed to deliberately target a young market (Roy, 2006). While Intralot denies this notion, it is clear that new opportunities for gambling are appearing in Australia.

While the prevalence of mobile phone gambling amongst young people is yet to be explored, the popularity of mobiles themselves within this demographic is well established. A study examining adolescent mobile phone use in Australia revealed that 83% of the sample possessed a mobile, 58% reported having no parental rules about their mobile phone use and 16% reported feeling 'unable to control their mobile phone use' (Australian Psychological Society, 2004). In terms of gambling, these statistics are concerning as it could be hypothesised that not only do a large proportion of adolescents potentially have access to gambling via their mobiles but some may be able to use their phone for gambling (or at least "play for fun" gambling activities) without parental consent. Furthermore, the lack of control of mobile use by some adolescents could be transferred to mobile phone gambling activities. It is evident that further

research is required to explore young people's use of modern technology as a means to access a variety of gambling options and the implications this.

Different forms of gambling are also being accessed through a range of school activities. Schools may be unwittingly promoting gambling through fundraising ventures including lottery/raffle draws, casino nights and permitting card playing among parents, teachers and students (Messerlian, Derevensky & Gupta, 2005). The use of gambling for a "good cause" can influence people's attitudes and enable a positive perception of the activity (Griffiths, 1997). The association of activities such as the lottery with a good cause may soften people's attitudes towards gambling in general and may erode the social stigma surrounding other gambling activities such as horse race betting and casino gambling (Griffiths, 1995). Although this theory has not been empirically tested among the youth demographic, it is reasonable to suppose that the socially condoned gambling access provided by schools may act as a pathway to future gambling in young people.

In short, gambling is readily available to young people and generally viewed in a positive light. Studies have shown that young gamblers are likely to regard gambling as an acceptable activity that provides enjoyment, fun and excitement, much the same as adult attitudes (Delfabbro et al., 2005; Hardoon et al., 2002). For most young people, gambling is perceived as a fairly innocuous activity, that is partaken in primarily for entertainment purposes (Delfabbro, et al., 2005). However, the fact remains that there is a significant minority who have developed, or are vulnerable to, acquiring serious gambling related problems.

2.4 Young People and Problem Gambling

From the late 1990s problematic youth gambling has been receiving an increasing amount of systematic attention, due to the recognition that youth gambling may represent a significant public health issue (Korn & Shaffer, 1999). Many Australian prevalence studies have revealed alarming incidence rates of gambling related problems in young adults. For example, Delfabbro & Thrupp (2003) found that people under the age of 25 represented over one quarter of all problem gamblers in Australia.

Although a vast amount of research has been undertaken, consensus has not been reached among experts pertaining to the extent of problem gambling in youth. Comparison of research findings has proved difficult due to inconsistencies in the conceptualisation of problem gambling, the use of different survey instruments and differing age cut offs (Delfabbro et al., 2005). Other findings point to gambling problems in adolescents being difficult to observe and subsequently measure, because unlike alcohol, tobacco and other drug use there are no visible signs of intoxication or consumption (Messerlian et al., 2005). Despite this, considerable research supports the claim that approximately 4%-8% of adolescents between 12 and 17 years of age gamble at a pathological level, and another 10%-15% are at risk of developing a serious problem (Derevensky & Gupta, 2004a; Derevensky, Gupta & Winters, 2003; Hardoon & Derevensky, 2002; Jacobs, 2000; National Research Council, 1999).

The rates of incidence are two to four times that of adults, which points to the fact that gambling related problems in youth may in fact be more prevalent than in the adult population (Delfabbro & Winefield, 1996; Hayatbakhsh et al., 2006; Productivity Commission, 1999; Shaffer, Hall & Vanderbilt 1997; Sullivan, 2005; Williams et al., 2006).

Just as research indicated that males are more likely to gamble than females, men are more likely to be problem gamblers than women. Hayatbakhsh et al. (2006) conducted Queensland-based research in which it was found that males rather than females were significantly more likely to experience at-risk gambling problems such as, loss of control, guilt, financial difficulties, health complications, job related difficulties and problems with family and friends. This trend is reflective of international patterns of problem gambling (Gupta, Derevensky & Marget, 2004).

A vast volume of research suggests that early involvement in gambling is highly predictive of gambling problems in adulthood (Griffiths, 1995; Jacobs, 2000). Early gambling studies found that 37% of Gamblers Anonymous members have reported that their gambling had begun by the time they were aged 10, 49% reported between ages 11 and 19 and only 14% reported gambling initiation at age 19 or older (Dell, Ruzicka & Poisi, 1981). More recent research has confirmed that the career development of a problem gambler typically begins before the age of 10 (Blaszczynski, Walker, Sagris & Dickerson, 1997).

Although, adult problem gamblers typically begin gambling when they are underage, not all young people who come into contact with gambling will develop a problem later in life. Research examining patterns of adolescent risky behaviours, such as delinquency, alcohol dependence and substance misuse, suggest that such behaviours are generally limited to the period of adolescence and do not necessarily lead to significant long-term psychosocial or physical problems (Hayatbakhsh et al., 2006). In a study conducted by Delfabbro et al. (2005), it was revealed that younger school students gambled more than older students of legal gambling age. This finding that problem gambling commencing at a young age may lessen as the young person matures, supports the theory proposed by Hayatbakhsh et al. (2006). Whilst these results suggest that for some young people problem gambling will pass as they mature, just as other issues typical to adolescence become less significant towards adulthood, it should be acknowledged that there is a cohort of young people for whom gambling problems do not lessen with time. Thus it is imperative to identify what may and may not be the risk factors for a “longer term” gambling problem as opposed to a “passing phase”. Furthermore, it is important to examine the protective factors that hold influence over the pathways that gambling behaviours in youth may take.

2.5 Negative Consequences of Gambling

Gambling is well entrenched in Australian culture, nonetheless, a large proportion of professionals, parents and the general public fail to view gambling among youth as a serious problem. Whilst youth issues such as cigarette

smoking, alcohol and substance abuse have prompted widespread concern, youth gambling problems and the associated negative consequences have been largely ignored or downplayed by adults and youth's themselves (Azmier, 2000; Gupta & Derevensky, 2000; Law, 2005). Despite the economic and recreational benefits of gambling, harmful impacts of the gambling industry exist (Queensland Office for Gaming Regulation, 2003).

Problem gambling can impact on the psychological, behavioural, social, legal and family/interpersonal domains of a young person's life. The following table presents the harms that have been associated with gambling problems in adolescents.

Table 1: Consequences of gambling problems in adolescents.

Negative Consequences	Studies reporting on behaviour/issue
Delinquency and criminal behaviour	Gupta et al. (2004). Jackson (1999). Ladouceur, Dube & Bujold (1994). Productivity Commission (1999).
Poor academic performance	Gupta et al. (2004). Ladouceur, Dube & Bujold (1994). Lesieur et al. (2001).
Absenteeism from school and early school drop out	Derevensky & Gupta (2004a). Griffiths (2003). Jackson (1999). Jacobs (2000).
Disrupted family and peer relationships	Delfabbro et al. (2005). Hayatbakhsh et al. (2006). Ladouceur, Dube & Bujold (1994).
Financial difficulties and bankruptcy	Law (2005). Delfabbro et al. (2005). Hayatbakhsh et al. (2006).
Housing crisis and homelessness	Gambler's Help Youth Action Group and Youth Affairs Council of Victoria (2004). Law (2005).
Substance abuse involving alcohol, tobacco and other drugs	Gupta et al. (2004). Shaffer & Korn (2002). Queensland Government (2002). Potenza, Steinberg, McLaughlin, Wu, Rounsaville & O'Malley (2000).
Suicidal ideation and suicide	Penfold, Hatcher, Sullivan & Collins (2006). Zangeneh & Hason (2006). Productivity Commission (1999).
Mental health outcomes such as anxiety and depression	Gupta & Derevensky (2000). Hayatbakhsh et al. (2006).

It is evident that there is a range of negative consequences that may be experienced by young problem gamblers. These factors have far-reaching effects, influencing not only individuals, but also families, communities and health services as well (Engwall, Hunter & Steinberg, 2004). The Productivity Commission (1999) has reported that “if any other product or service caused these levels of social harm to the public health, to families and young people, it would, in all likelihood be banned or highly regulated.” Research has indicated that adverse gambling consequences are likely to continue to affect an individual throughout their lifespan with a majority of youth problem gamblers maintaining some kind of gambling behaviour in adulthood (Griffiths, 1995; Jacobs, 2000). This points to the importance of early detection of the factors that contribute to the development of destructive gambling behaviours.

2.6 The Uptake and Maintenance of Gambling Behaviours

A comprehensive understanding of the factors that surround youth gambling is still in its infancy. Considerable evidence indicates that it is a multidimensional problem, incorporating bio-psycho-social determinants (Blaszczynski, 2000; Gupta et al., 2004; Hardoon et al., 2002). Acknowledging this, the following section will explore familial, social, cultural, environmental, emotional, personality and cognitive factors in relation to the uptake and maintenance of gambling behaviours in young people.

2.6.1 Familial Factors

Research has consistently revealed that certain familial factors pose a risk for adolescent gambling (Langhinrichenson-Rohling, Rohde, Seeley & Rohling, 2004). For example, adolescent problem gamblers are likely to have a parent who is a pathological gambler or who has some other form of addiction (Jacobs, 2000; Wood & Griffiths, 1998). Not surprisingly, the rate of problem gambling is higher for adolescents whose parents gamble at any level compared to adolescents whose parents are non-gamblers (Govini, Rupcich, Frisch, 1996).

Parents not only influence adolescent gambling through overt modelling of gambling behaviours but also vicariously encourage gambling through the purchase of ‘scratchy’ tickets as gifts for young people or through forming partnerships with young people on lottery tickets (Derevensky & Gupta, 2001; Secomb, 2004). The age of onset of gambling behaviour represents a significant risk factor for problem gambling, with the younger the age of initiation into gambling activities the greater the risk of developing a gambling-related problem (Derevensky & Gupta, 2001). Accordingly, family members may both overtly and covertly endorse and encourage the initiation and continuation of a potentially harmful activity (Felsher, Deverensky, Gupta., 2003).

It has been proposed that the family’s role in the development of gambling behaviour can be explained by social learning theory. Observational learning and modelling may shape the behaviours of adolescents who learn to replicate and preserve behaviours that are visible and reinforced (Hira & Monson, 2000; Hayatbakhsh et al., 2006). This pattern of influence may be coupled with youth

remaining uninformed about the harmful impacts of gambling due to a lack of education from their parents. As most parents fail to see the negative consequences associated with youth gambling, they are more likely to talk to their children about responsible drinking habits or the negative effects of smoking than they are responsible gambling. As a result, youth tend to be less informed about gambling than they are other risky behaviours (Gupta and Derevensky, 2000)

Common genetic factors may also predispose family members to gambling disorders (Ibanez, Blanco, Perez de Castro, Fernandez-Pinquera & Saiz-Ruiz, 2003). Studies of biological twins are a means through which the role of genetic, common environmental, and/or unique environmental influences can be examined. A study conducted by Eisen et al. (1998) is currently the main source of evidence for the genetic influence in the aetiology of problem gambling (Ibanez et al., 2003). Eisen et al. (1998) obtained data from male-male monozygotic and dizygotic twin pairs who served in the military during the Vietnam era. Results revealed that familial factors accounted for 35% to 54% of the five individual symptoms of pathological gambling behaviour (inheritance and/or experiences shared by twin siblings during childhood). Further analysis of the sample supported Eisen et al.'s (1998) conclusions, revealing that common genetics may contribute towards a vulnerability to pathological gambling (Slutske et al., 2000). Despite the caution that should be taken in generalizing these results to non-veteran cohorts the Eisen et al. (1998) study represents important research that provides preliminary evidence to suggest that familial factors have a key influence when evaluating the risks for pathological gambling behaviour.

Taken together, familial research indicates that key influences on gambling behaviours, perceptions and the incidences of early exposure to gambling activities are parental and/or family based (Adelaide Central Mission, 1998). It seems that the seeds of interest in gambling are planted at early stages from within the family environment. However, family factors alone may be insufficient to foster the development of gambling related problem behaviours (Eisen et al., 1998; Nower & Blaszczyński, 2001). External influences such as social norms, culture, media and peer group exposure and/or pressure can occur later in life, further effecting the development and maintenance of problem gambling.

2.6.2 Social Factors – Peers

Just as social learning mediates the relationship between parental behaviours and youth gambling, peer behaviours and values may have an impact on youth gambling patterns. Research has consistently found that adolescents display gambling behaviour as a result of friends' engagement in similar practices (Griffiths, 1990; Hira & Monson, 2000; Derevensky & Gupta, 2001). Dowling, Clarke, Memery & Corney (2005) conducted a study involving apprentices in the building and construction industry in Australia. It was found that 14% of gamblers with at least one gambling-related problem reported being influenced by workmates, tradespeople were considered the most influential followed by other apprentices. Further studies have revealed that adolescent probable pathological gamblers perceive that they have more peers, particularly friends,

with gambling problems and substance abuse problems. These findings are consistent with the literature indicating that gambling is part of peer culture (Hardoon et al., 2002).

Research has been conducted to explore the pathways through which social factors may exert their influence on youth gambling. As yet, it is unclear whether individuals seek out peers with similar interests and engage in these mutual activities, or whether peer pressure acts as a precipitating factor in the development of gambling behaviours (Hardoon & Derevensky, 2001). Sociological theory holds that similarity and peer affiliation may be important factors in the development of risk behaviours, whereby individuals participate and relate to peer groups and activities with similar interests, values and beliefs (Hardoon et al., 2001).

Alternatively, research findings may be explained by Bandura's (1977) social learning theory (Hardoon & Derevensky, 2001). Youth may be attracted to the gambling environment because being known as a gambler or risk-taker among peers may lead to social recognition, approval or peer acceptance (Gambler's Help Youth Action Group and Youth Affairs Council of Victoria, 2004; Hardoon & Derevensky, 2001, Moore & Ohtsuka, 1997). Youth gambling may be perceived as a right of passage into adulthood, similar to the ways in which adolescent smoking and drinking are understood (Hardoon & Derevensky, 2001). Delfabbro & Thrupp (2003) have claimed that

In male social groups in particular, gambling is likely to be viewed as a display of courage, or a willingness to take risks and those who gamble are admired by their peers because they have successfully forayed into activities that adult society has deemed inappropriate for adolescents (p. 326).

This pattern can be seen in the Australian building industry. Gambling behaviour in this predominantly male peer group is likely to be characterised by competition, whereby young people participate in gambling activities in order to achieve acceptance, recognition, approval and admiration from their peers (Dowling et al., 2005). Although gambling may possess potential "social benefits" for youth, some adolescents may not be able to maintain a safe level of gambling. Thus, while peer interactions centred on gambling can provide social reinforcement, they can also support "unproductive norms" that potentially foster problem gambling behaviours in youth (Hardoon & Derevensky, 2001).

In summary, while initial gambling behaviours may typically be set in motion and occur with family members, as youth get older they tend to turn to their peer groups and gamble with friends (Derevensky, Gupta & Emond, 1995; Gupta & Derevensky 1997). Recent research has revealed that peer gambling may be more influential in the establishment of gambling normalisation patterns than family factors (Hira & Monson, 2000; Magoon & Ingersoll, 2005). For example, Hira & Monson (2000) conducted a study of American college students in which it was found that the gambling expenditure of best friends was the most significant predictor of gambling behaviour suggesting that peer gambling may

be the factor with the greatest influence over gambling behaviour in college students (Hira & Monson, 2000). Despite such findings, the role of peer influence in youth gambling has been largely overlooked by researchers (Hira & Monson, 2000), but as the above-mentioned evidence indicates, the social environment has great potential for influencing young people's behaviour and more research in this area must be conducted.

2.6.3 Cultural & Demographic Factors

Australia possesses a cultural and social climate in which socio-economic status, educational attainment, ethnicity, sex role patterns and social norms may play a role in the development of gambling behaviours.

Despite some inconsistent findings, sex has been found to be a pervasive factor likely to affect the gambling habits of youth. Literature has revealed that gambling is more popular amongst adolescent males than females (Derevensky & Gupta, 2000a, 2000b; Jacobs, 2000). A study conducted in the ACT revealed that males (14.1%) were more likely than females (5.7%) to be frequent gamblers (Delfabbro et al., 2005). As mentioned above, problem gambling is more prevalent for males than females (Delfabbro et al., 2005; Moore & Ohtsuka, 1997). These results may be attributed to the fact that traditionally in Australia, gambling has been perceived as a predominantly male pursuit. Gambling as a part of male culture can be seen in studies revealing that parents encourage gambling behaviours in their sons (Huxley & Carroll, 1992; Ladouceur et al., 1994). Additionally, boys are more likely than girls to play (or be encouraged to play) competitive games involving tests of physical skill or courage. This may reflect in their choice of gambling activities later in life, with boys appearing to have a stronger preference than girls for activities that resemble sporting activities (Delfabbro et al., 2005). Cultural and broad societal gender values such as these no doubt contribute to male dominance of the Australian gambling scene.

It is important to note that while males still represent a large proportion of the gambling population, gambling has become more feminised and socially acceptable for women within the past decade (Heater & Patton, 2006). Previously, gambling took place within masculine domains such as racetracks, sports venues and betting shops, where women were historically either excluded or marginalised. Currently, casinos, hotel bars and restaurant lounges represent more legalised, accessible and gender neutral, if not welcome venues for women. As gambling has become increasingly accessible and socially acceptable, females and males to varying degrees are at risk for becoming problem gamblers (Heater & Patton, 2006).

While international research has consistently indicated that socio-economic status (SES) influences both youth gambling problems and participation in gambling activities, the role that SES plays in youth gambling within Australia is not so clear (Gilliland & Ross, 2005; Hayatbakhsh et al., 2006; Welte, Barnes, Wieczorek, Tidwell & Parker, 2001). Hayatbakhsh et al. (2006), has found that in Queensland a strong association between SES and gambling problems does not exist. Findings revealed that only moderate associations between the

economic status of a family and young adult gambling exist; specifically, both low and high-income families were less likely to have children who gambled (Hayatbakhsh et al., 2006). Further Australian research is required to explore the relationship between SES and gambling behaviours and determine whether lower SES precedes or is a consequence of gambling behaviour (Hayatbakhsh et al., 2006).

Research has also found that ethnicity is another demographic variable that influences gambling behaviours in youth. A study conducted by Delfabbro et al. (2005) revealed that students who spoke a language other than English at home comprised a large proportion of the problem gambler group. These results support those of Moore and Ohtsuka (2001) who found that in Victoria, despite indications that, overall, Asian students were found to gamble less than non-Asian students, the Asian group was more likely to experience gambling problems. Delfabbro et al.'s (2005) research revealed that a highly significant association existed between Indigenous status and problem gambling, with 28% of the Indigenous students in the study classified as problem gamblers compared to only 4.1% of the non-Indigenous students. Foote (1996) has argued that gambling may feature predominantly in Indigenous communities as a form of social exchange. However, other experts have suggested that Indigenous and non-Indigenous youths are influenced by gambling in distinct ways due to broader differences in social and economic hardship (Delfabbro et al., 2005). For example, Indigenous communities are generally more marginalized than non-Indigenous communities (Schissel, 2001), which may result in a lack of leisure activity options for youths. Additionally, they may be more likely to experience unemployment and poverty which means they are able to allocate a larger portion of time to activities such as gambling (Delfabbro et al., 2005). Further research is required to investigate the role ethnicity plays in gambling behaviours.

According to a number of studies, the level of educational attainment is another demographic factor that can affect gambling behaviour. Hayatabakhsh et al. (2006) found that young males with lower levels of education were likely to spend a high amount of money on gambling, and conversely, children of highly educated mothers were less likely to gamble than others (Hayatabakhsh et al., 2006). The 2003-04 Queensland Household Gambling Survey found that a large proportion of the problem gambling group was comprised of people who had completed their schooling in year 10 (Queensland Government, 2006), which correlates with the above findings.

Experts in the field have hypothesized that demographic factors such as educational attainment, sex and socio-economic status may independently influence the development of gambling behaviours. However, studies exploring the relationship between these factors and gambling patterns have provided mixed results. As a whole the research can be interpreted to suggest that an accumulation of demographic factors may place youth at greater risk of gambling problems. That is to say, young males of lower socio-economic status who have a low level of educational attainment may be particularly susceptible to gambling (Productivity Commission, 1999).

2.6.4 Environmental Factors

Several studies have examined the effects of exposure to gambling advertising in the initial uptake of gambling products or in the maintenance of gambling behaviour (Delfabbro et al., 2005). Derevensky & Gupta (2001) found that youth are not immune to lottery advertisements, with 39% of underage adolescents in the study reporting that they would be more likely to purchase a lottery ticket directly as a result of viewing advertising material. While young people are influenced by media, probable pathological gamblers were found to be the most susceptible to lottery advertisements (Derevensky & Gupta, 2001; Gambler's Help Youth Action Group and Youth Affairs Council of Victoria, 2004; Walker, 1992). In an effort to illustrate the persuasive power of advertising, Secomb (2004) highlights the dangers of gambling, explaining that the media may desensitise young people to the possibility of gambling being harmful, through its positive narrative and imagery the media constructs a story that presents the audience with a "winner", conveniently overlooking that there are also thousands of losers. (Derevensky & Gupta, 2001; Secomb, 2004). Secomb (2004) further argues that gambling addiction is often portrayed as aberrant and atypical rather than a large problem, individualising what is also a social issue (Secomb, 2004). Although, the impact of gambling advertising on the youth population has been under-researched, current evidence suggests that adolescents can not only recall gambling advertising but are also willing to purchase gambling products as a result of viewing and interacting (humming the tunes, recalling the imagery) with them.

Gambling behaviour is also facilitated by situational determinants such as the location of the gambling outlet and the structural characteristics of the venue, including light, colour and sound effects (Griffiths, Parke, Wood & Parke, 2005). An individual's ability to access a venue, including his or her proximity to gambling outlets is correlated with the frequency of gambling, increased amount of money spent on gambling and an increased number of problem gamblers (Griffiths, 1995; Jacobs, 2000). International studies have found that pathological gambling in youth can be attributed to the ease of accessibility to all forms of gambling (Gupta et al., 2004). Furthermore, many venues normalise gambling as a fun family activity by providing outlets and entertainment for young children in the form of playgrounds as well as inexpensive family meals (Secomb, 2004).

As discussed previously, due to the cultural sanction of technology within the younger generation, the online environment is a modern medium that potentially holds appeal for young people to access gambling services. What is concerning is that certain features and structural characteristics of the internet could be seen to be encouraging online gambling behaviours in young people. Subsequently, the nature of online gaming itself may cause it to be a potential risk factor for the development of problem gambling behaviour (Drabsch, 2003).

The reasons for this are multiple. The internet allows a wide variety of games to be accessed on a 24-hour basis (Griffiths & Wood, 2000). Of particular concern are the countless sites that offer free practice play or 'try before you buy'. Although a person does not have to risk any of their own money, these games

display winnings and losses in terms of dollars (Wiebe & Falkowski-Ham, 2003), meaning that young people and even children can learn how to gamble on “adult” games and thus future gambling behaviours may be reinforced. International studies have in fact revealed practice play on the net is used significantly more by individuals under the age of 18 than the 18-24 age group (43% versus 33% for males; 42% versus 29% for females) (Byrne, 2004). Other studies have revealed that at least 25% of youth with serious gambling problems and 20% of those at-risk for a gambling problem reported playing online using practice/trial sites (Hardoon et al., 2002). What has also been discovered is that some internet operators use inflated payout rates during practice play which could promote the development of erroneous beliefs thus, trigger some players to try their luck with real money games (Sévigny, Cloutier, Pelletier & Ladouceur, 2004). The movement from practice play to games with real money may present risk to young people as the use of electronic cash for online gambling could hold less psychological value than “real” cash (Griffiths & Wood, 2000). For young people in particular this could lead to “suspensions of judgment” for those who are not used to dealing electronically or otherwise with large sums of money.

While most websites involving gambling demonstrations or practice play are not specifically targeted at youth, there are online spaces that appear to be aimed directly at the younger demographic and which feature gambling like games or links to gambling sites. For example, ‘Neopets’ is an online virtual pet site where people can interact with other pet owners and can take care of virtual pets by feeding them and providing them with toys and other accessories using currency called Neopoints, earned by playing gambling like games. These games include the Scratchcard Kiosk, Deserted Fairground Scratchcards, Fruit Machine, Stock Market, The Neopian Lottery, Wheel of Excitement and the Food Club (where players can compare stats and wager on which Neopet will be able to eat the most). Due to the nature of the Neopet site (i.e. a free service offering play/imaginary activities with colourful, animated and cute creatures), it is clear that young people in particular would be attracted to these sites. In the past this site was cross-promoted in Australia by McDonalds who offered a free Neopet with every Happy Meal and advertised the Neopets website on their packaging and the McDonalds website (McPherson, 2004). On becoming aware of the presence of gambling games on the site, McDonalds shut down the gambling components of the Neopets website however, on conclusion of the McDonalds promotional period and at present, the gambling games remain available for access on the Neopets site.

Another instance, of young people having access to gambling games through a seemingly ‘safe and trustworthy’ website is the Yahoo! Kids! Webpage. Yahoo! Kids! is a ‘browsable, searchable directory of Internet sites for kids’ (Yahoo! Kids, 2007a). Although Yahoo! purport to have each site that is featured as a link “carefully checked by an experienced educator to ensure the content and links are appropriate for kids aged 7-12’ (Yahoo! Kids, 2007), one of their games links, contains advertising and access to both free gambling games and gambling with money activities. To Yahoo’s credit, on their help page they do inform users that “the Internet is constantly changing. If you find something here that somehow morphed into a REJECT site, please let us know

by emailing us. If we agree, we'll yank it in a minute' (Yahoo! Kids, 2007b). However, the fact remains that even with the most stringent policies in place it is difficult to prevent young people from coming across gambling material on the net that as Derevensky, Gupta & McBride (2006) assert, may prime youth for later gambling behaviour.

Given that in Australia general browsing has been found to be, among other things, one of the most popular home internet activities for youth (ABS, 2000) coupled with the fact that there is a proliferation of gambling related services and marketing materials on the net, the potential for young people to come across such materials is high. Derevensky & Gupta (2007) have stated that:

The lure and enticement of these games, accompanied by colourful graphics and enticing photos make them particularly attractive to young males. Popular Hollywood celebrities including Pamela Anderson, Nikki Cox, and James Woods actively promote internet gambling sites. Advertising slogans that the individual can be the next big winner are widespread and souvenirs for gambling on their site (e.g. caps, mugs, key chains, t-shirts etc) are common.

Further research is required to investigate the internet as a vehicle, which acts to familiarise youth with gambling.

Another characteristics of online gaming that may cause it to be a potential risk factor for the development of problem gambling behaviour is that unlike gambling at a physical outlet it is easier to avoid and/or circumvent restrictive age limits (Griffiths & Wood, 2000; Griffiths, Parke, et al., 2005). The Federal Trade Commission, a U.S. Government department, conducted an informal survey of over 100 popular U.S. gambling websites to determine the access and exposure teens have to online gambling (Federal Trade Commission, 2002). It was revealed that the gambling sites had inadequate or hard-to-find warnings about underage gambling prohibitions, and that some 20% had no warning at all. The survey also found that these gambling sites had no effective mechanisms to block minors from entering (Federal Trade Commission, 2002). Smeaton & Griffiths (2004) conducted a comparable survey with similar results, finding that there is not much in the way of age verification from most sites and that the current system is open to abuse (Smeaton & Griffiths, 2004). On examination of an Australian registered gaming site, SportsBet, it was found that a person registering only had to tick a box to confirm whether they were 18 years of age or older. While 100 points of ID are required to claim any winnings, there is nothing to stop a minor from obtaining a copy of their parents' identification (e.g. copy of their driver's license etc.) and sending it in. It is clear that while Australian online gambling sites seem to be a little more stringent with age checks than international sites there is still very little to stop a determined young person who wants to gamble.

Due to these various and specific online characteristics, some experts have argued that the internet provides a 'natural fit' for compulsive gambling (O'Neil, 1998). There have been a small number of studies that have suggested that excessive internet users are more likely to engage in internet gambling

(Morahan-Martin & Schumacher, 1997; Scherere & Bost, 1997). Research has also indicated that the prevalence rates for probable pathological gambling amongst young gamblers on the internet are remarkably high (Derevensky & Gupta, 2007). Byrne's (2004) study revealed that 18.8% of young people who gambled on the internet were pathological gamblers (using the DSM-IV-MR-J criteria) and a further 22.5% of internet gamblers were identified as at risk for a gambling problem. However caution should be taken when interpreting this data. Research investigating the nature of internet use by young problem gamblers is extremely limited. It is yet to be determined whether internet gambling results in more problem gamblers or alternatively, individuals with gambling problems are attracted to gambling on the internet (Derevensky & Gupta, 2007). As a whole these studies may act as preliminary data to demonstrate that the internet may be a medium that in various ways encourages both recreational gambling behaviours and problem gambling behaviours (Griffiths & Wood, 2000).

Another technological medium in a young persons' environment that may prepare them for gambling experiences is the mobile phone (Gambler's Help Youth Action Group and Youth Affairs Council of Victoria, 2004). Several aspects of phone use such as instant gratification by means of communication with friends and losing track of time may serve as preparation for the experience of gambling on pokies and possible overuse of credit to fund gambling (Gambler's Help Youth Action Group and Youth Affairs Council of Victoria, 2004). An Australian study has found that a majority (51%) of adolescents have all their phone costs paid by their parents, thus, the lack of connection between phone use and the accumulation of debt/value of money may also prepare youth for the experience of gambling (Gambler's Help Youth Action Group and Youth Affairs Council of Victoria, 2004).

Currently, an Adelaide-based company known as 'txt2-bet' is one of the leading service providers for sms based gambling in Australia (txt2, n.d). The txt2-bet website portrays their service a convenient way to wager on sports without having to physically access a TAB or set up an account. Promoters highlight that their service can be accessed 24 hours a day, while at work or with family and enables punters to place bets on last minute 'hot tips'. Providers such as these offering easily accessible services and opportunities for impulse betting could facilitate excessive or irresponsible gambling behaviours. It could be argued that the use of txt2-bet and similar services involving SMS betting have been normalized due to countless popular television programs including *Australian Idol*, *Dancing with the Stars*, *Big Brother* and *Video Hits* that regularly invite viewers to vote or enter competitions via SMS.

Since Mark Griffith's seminal work on adolescent gambling in the mid 1990's a vast amount of research has surfaced exploring the nature of gambling in young people (Derevensky & Gupta, 2007). While this research has greatly fuelled knowledge about the role traditional types of gambling may play in young people's lives, the evolution of modern technology and its expanding role in the lives of young people has created a gap in scientific knowledge that relates to the nature of use and the role the internet and mobile phones play in young people's gambling behaviours (Derevensky & Gupta, 2007). While there has

been several expert theoretical propositions put forward and opinion papers published about the risks and impacts of internet gambling on young people, there is very little peer reviewed and published empirical research available pertaining to internet and mobile phone gambling in youth (LaPlante, LaBrie, Nelson, Schumann & Shaffer, 2007). This is in part due to the fact that without any easily obtainable biological estimates of gambling, many studies have relied upon retrospective self-report data (LaPlante et al., 2007). Consequently, the present knowledge about the effect of internet gambling on young people is very limited and while tentative speculations can be made more research is required to explore the nature of adolescents' involvement in internet gambling.

2.6.5 Emotional Context

Emotional factors may be an antecedent to gambling behaviours in youth. In various studies problem gamblers have been found to be generally less psychologically adjusted, experiencing lower self-esteem (Gupta & Derevensky, 1998), higher rates of depression (Getty, Watson & Frisch, 2000) and anxiety (Ste-Marie et al., 2006). Researchers have suggested that gambling can satisfy important needs by relieving the anxiety and depression caused by unhappy life experiences (Delfabbro et al., 2005). As gambling acts to regulate or enhance mood states there is the chance this is something upon which youth may become dependent (Delfabbro et al., 2005). The mood alteration and its cause (gambling) then acts as a reinforcer and subsequently gambling behaviour is maintained over time (Ste-Marie, Gupta & Derevensky, 2006).

Feelings of boredom in youth can also lead to gambling behaviours. Moore and Ohtsuka (2000) found that a number of adolescents experience leisure time as unsatisfying and boring; indicating more leisure time may be a predictor of more frequent gambling behaviour (Moore & Ohtsuka, 2000). These results have been paralleled in other studies that document a correlational relationship between parental employment and gambling. Jackson (1999) suggests that among other factors, boredom resulting from unsupervised leisure time may result in increased gambling behaviours.

2.6.6 Cognitive Context

There is a strong body of literature maintaining that decision-making in relation to gambling may not function as a rational or objective process (Ferland, Ladouceur, Vitaro, 2002; Delfabbro et al., 2005). Gambling behaviours may be governed by false or irrational perceptions of the objective odds of gambling, the nature of randomness, the role of skill in gambling and the perceived profitability of gambling (Delfabbro et al., 2005). Adolescent problem gamblers in particular are vulnerable to irrational or misguided perceptions of their gambling activities (Delfabbro et al., 2005; Joukhador, Bkaszczynski, McCallum, 2004; Jefferson & Nicki, 2003).

Research has revealed that perceptions and beliefs about winning are subject to a range of cognitive distortions (Hardoon et al., 2001). Young people have been found to believe that their chances of winning are greater than they are for others (Moore & Ohtsuka, 1997). This is particularly evident in boys where

such a belief can fuel higher gambling frequency (Hardoon et al., 2002). Young people have also been found to overestimate the probability of winning (Delfabbro et al., 2005). Griffiths (1990, 1993) found that young people overestimated the likelihood of scoring a large jackpot on fruit machines, believing that these machines payed out more than is actually the case.

Just as perceptions of winning can influence gambling behaviours, the experience of winning and losing can also influence gambling in youth. Hayatabakhsh et al. (2006) contends that the experience and memory of a big win may serve to encourage further gambling behaviours in young people. It was found that a greater proportion of young adults (46%) could recall a big win, as opposed to only 19% who remember a big loss (Hayatabakhsh et al., 2006). Delfabbro et al. (2005) has found that the experience of a win may also have implications for problem gamblers, with research revealing that young problem gamblers were significantly more likely to indicate having had a large win when they first started gambling (54%). The experience of losing, rather than functioning as discouragement has been found to increase the probability that an individual will continue to gamble. Derevensky & Gupta (2001) assert that near misses may produce the excitement of a win, whereby the player perceives they are not continuously losing but always close to winning and that this experience facilitated the purchase additional lottery tickets (Derevensky & Gupta, 2001).

A common misconception among gamblers is that of perceived control. The illusion of control or perceived control has been defined as a gamblers tendency to over-estimate their ability to influence outcomes (Langer, 1975; Langer & Roth, 1975). That is, gambling activities are understood by many participants to involve some sort of skill and there is a greater chance of winning if a person perceives they have the skills necessary to influence the outcome (Hardoon et al., 2002). Beliefs of this nature have been identified amongst young people as well. Derevensky, Gupta & Della-Cioppa (1996) reported that Canadian children in grades 4, 6 & 8 demonstrated, at this early age, an illusion of control with 56% of participants believing gambling involved a lot of skill and 31% believing gambling involved a little skill. Young problem gamblers in particular have been found to hold strong irrational control beliefs (Moore & Ohtsuka, 1999). Moore & Ohtsuka (1999) found that young problem gamblers had a great deal of faith in their ability to influence chance and “beat the system”. A number of participants even believed that they may be able to will their lucky numbers to come up or that concentration or thinking positively may facilitate their winning at games of chance.

The “gamblers fallacy” is another common belief related to illusion of control (O’Conner et al., 2000). It is a false heuristic in which the belief is held that past events of a random nature can predict future outcomes (i.e. a losing streak is followed by a period of increased chance for a win) (O’Conner, Ashenden, Raven et al., 2000). Hayatabakhsh et al. (2006) found that a small proportion of young adult gamblers (22.4%) believed that a win was ensured after many losses. Although, a majority of participants did not endorse the gambler’s fallacy, estimates were based on responses from all young adult gamblers, and

from this; it is possible to conclude that a higher incidence of faulty cognitions may be found in problem gamblers (Hayatbakhsh et al., 2006).

Research indicates that many young people do not have an accurate understanding of the true odds of gambling activities (Delfabbro et al., 2005). Interestingly, Delfabbro et al. (2005) found that young problem gamblers and non-problem gamblers did not differ in terms of their understanding of the objective odds of gambling activities. This indicates that the possession of objective knowledge of mathematics and statistics may not protect people from either an interest in gambling or other false perceptions (Delfabbro et al., 2005). This pattern has been supported in a study that revealed a student's understanding of the negative mathematical expectation of gambling activities does not decrease their likelihood of gambling, their likelihood of being a problem gambler, the amount of time they spend gambling or the amount of money they spend gambling (Williams & Connolly, 2006).

The theory of Cognitive switching, proposed by Sevigny & Laduceur (2004) may explain how even objective knowledge of gambling outcomes in youth fails to influence gambling behaviour. Although problem gamblers may share similar objective knowledge of gambling as others, they may differ in the way they utilise and evaluate this information (Delfabbro et al., 2005). Problem gamblers may engage in a process of cognitive switching in which they will revert to irrational strategies and personal idiosyncratic beliefs when they are gambling (Sevigny & Laduceur, 2004). These personal beliefs tend to over-ride more objective considerations (Delfabbro et al., 2005). Williams and Connolly (2006) have provided support for these conclusions, finding an improved knowledge of odds and mathematical expectation in students did not change their attitudes towards gambling.

2.6.7 Personality Variables

A number of individual factors of the sensation-seeking range have been proposed as predictors of gambling behaviours (Hardoon et al., 2002). As pathological gambling is categorised as an impulse control disorder by the DSM-IV-TR a number of studies have been conducted to explore the relationship between impulsivity and gambling in youth. Vitaro, Arseneault & Tremblay (1999) have defined impulsivity as possessing four characteristics:

- (a) excessive sensitivity to potential reward and desire for immediate reinforcement,
- (b) tendency to respond impetuously without forethought about negative consequences,
- (c) excessive insensitivity to threatened punishment (or non-reward) and
- (d) deficits in inhibitory control that keep the person responding despite the risk of negative consequences.

Longitudinal research has revealed that gambling during adolescence can be predicted by impulsivity, specifically youths who have an inability to either foresee or cease acting when faced with negative consequences are more likely to become problem gamblers by late adolescence, regardless of their socio-

familial history, gambling experience or personality attributes (Vitaro, Arseneault & Tremblay, 1999). National research, conducted in Melbourne has revealed similar patterns with impulsivity predicting problem gambling for both males and females aged 14-25 years (Moore and Ohtsuka 1997).

Vitaro, Arseneault & Tremblay (1999) conducted longitudinal research to predict problem gambling in males at age 17 based on impulsivity measures collected at 13 and 14 years. Results revealed that gambling during adolescence was predicted by impulsivity, and that there was an increased risk for impulsivity in early adolescence, particularly for those who had an inability to either foresee or cease acting when faced with negative consequences, and these youths were more likely to become problem gamblers by late adolescence.

Neuro-developmental theory has provided a context for understanding the impulsivity-gambling relationship. Chambers & Potenza (2003) reviewed data pertaining to the neurodevelopment of motivational circuitry in adolescence. It was concluded that in the adolescent brain, unlike the adult brain, impulse-promoting substrates operate more robustly, while those inhibiting impulses are not yet maximised (Chambers & Potenza, 2003). These conditions are not thought to represent an abnormality, rather they serve to optimise age appropriate experiential opportunities and learning mechanisms. However, these neuro-developmental characteristics do render adolescents biologically vulnerable to the development of gambling problems.

Other studies have found that youth with serious gambling problems score high on thrill and adventure seeking, intensity seeking and disinhibition scales of sensation seeking measures (Gupta & Derevensky, 1998; Nower & Blaszczynski, 2001). For example, Powell, Hardoon, Derevensky and Gupta (1999) have found that young pathological gamblers score higher than their peers on sensation seeking. Recent research has confirmed these results revealing that both young male and female disordered gamblers had a higher preference for strong, sensory stimulation (intensity seeking) than their peers (Nower, Derevensky & Gupta, 2004). However, disordered gamblers did not demonstrate a partiality for seeking out new and diverse experiences (novelty seeking). Both the Powell et al. (1999) and Nower et al. (2004) studies demonstrate that for some youth the appeal of gambling lies in its highly repetitive but intensely stimulating nature which has an ability to generate arousal and excitement and facilitate mental escape (Nower, Derevensky & Gupta, 2004).

Another individual factor that has been explored in gambling research is that of an individual's style of coping with adversities. Nower, Derevensky & Gupta (2004) found that stress-coping styles varied significantly depending on the level of gambling involvement and the gender of the person. Disordered gamblers were more likely to avoid stressors by engaging in distracting behaviour and activities or by engaging in fantasy, denial and substance use. Further studies have found that pathological gamblers use more emotion (i.e. rumination) and distraction-oriented coping skills than non-gamblers and social gamblers (Gutpa et al., 2004). These studies taken together may suggest that

those who engage in coping strategies involving rumination and distraction-orientated activities may be more likely to develop an addiction.

Researchers have proposed that youths' propensity for risk-taking, desire for excitement and lowered levels of impulse control may explain the relationship between substance abuse and gambling. Many studies have revealed correlations between gambling behaviour and the use of illicit substances, such as tobacco, alcohol and cannabis (Delfabbro et al., 2005; Dickson, Derevensky & Gupta, 2003; Fisher, 1999; Hayatbakhsh et al., 2006; Shaffer & Korn, 2002). Hayatbakhsh et al. (2006) asserts that it is unlikely that adolescents' substance use directly leads to the uptake of gambling but rather, the findings may be interpreted to indicate that the personal characteristics such as impulsivity and coping-style that predispose one to substance use and abuse, also impact on ones gambling behaviour (Hayatbakhsh et al., 2006).

In summary, it would seem that a number of risk factors can influence the uptake of gambling and development of problem gambling behaviours in youth (Baszczynski, 2000; Gupta et al., 2004; Hardoon et al., 2002). These factors include features of the familial, social, cultural, environmental, emotional, personality and cognitive contexts of a young person's life. Coupled with these risks are features of a young person's life that may serve to protect them from engaging in problem gambling. As with risk factors, protective factors are multidimensional (Hardoon et al., 2002).

2.7 Protective Factors

Hardoon et al., (2002) define protective factors as "independent variables that can have their own direct effects upon behaviour, but can also moderate the relationship between risk factors and behaviour". Protective factors can reduce the probability of engaging in problem behaviours in several ways:

- (a) via direct personal or social controls against its occurrence,
- (b) through involvement in activities that are incompatible with (or alternatives to) problem behaviour or
- (c) by way of commitments to conventional institutions or society (Hardoon et al., 2002).

While there has only been one study designed to specifically investigate the role of protective factors in the development of problem gambling, findings in other research point to the existence of a variety of possible protective factors. In many studies, social support has been identified as a protective factor against the development of problem behaviours such as substance abuse (Kandel & Andrews, 1987; Wills & Cleary, 1997). Social support may operate in a similar manner in relation to gambling. Hardoon et al., (2002) found that perceived social support by peers and family appeared to be a protective factor against the development of gambling problems in young people. Dickson et al., (2003) revealed that family cohesion, when paired with being female and having a sense of school connectedness decreased the probability of an individual developing problem gambling behaviours. Furthermore, family cohesion when

paired with the presence of risk (defined by the presence of trait anxiety, school problems, risk propensity or sibling and friend gambling problems), was found to decrease the probability of an individual becoming a probable pathological gambler (Dickson et al., 2003). School connectedness, one's feelings of being treated fairly, being close to others, feeling like an integral part of the school, also appeared to protect youth from developing gambling problems, with non-gamblers more likely to report having high school connectedness (30.6%) than social gamblers (20.3%), at risk gamblers (15.6%) and probable pathological gamblers (16.7%) (Dickson et al., 2003).

The presence of certain coping styles may mediate the relationship between risk factors and the development of gambling problems. Gupta, Derevensky & Marget (2004) proposed that individuals who approach daily problems and stressors in a more task-orientated manner may be shielded from the development of an addiction. In relation to gambling, Nower, Derevensky & Gupta (2004a) found that for males, non-gamblers were more likely to adopt active, task-oriented strategies for coping with stress and similarly, female non-gamblers engaged in more active coping and planning than social gamblers. In contrast to these results Dickson et al. (2003) found that effective coping skills did not protect youth from the development of health-compromising behavioural outcomes. Further research must be carried out in order to determine the role of coping styles in the development of gambling behaviours.

Leisure and socialising activities may be a protective factor against problem gambling in that it draws young people into an alternate network of other youth and a series of different activities. High socialising with peers could predispose youth to problem gambling through access and boredom, however, it could also act as a protective factor against acquiring gambling differences, through the sense of connectedness that the peer group can bestow on youth (Moore & Ohtsuka, 2000).

Finally, research suggests that an engagement in religion may positively influence gambling behaviours in youth. Hayatabakhsh et al. (2006) found that young adults who attended church were less likely to gamble (34.6%) than those who did not go to church (43%). The moral prohibition of gambling within some religions may explain this relationship, with most Protestant faiths discouraging gambling, whereas Catholicism and Judaism view it as an acceptable activity (Hayatabakhsh et al., 2006). Thus, certain kinds of religious affiliation may serve to decrease gambling behaviours while others, if not facilitating it, condone the activity.

It is evident that not only a number of risk factors are present in the acquisition and maintenance of gambling behaviours, but also a number of protective factors play a role in shaping gambling behaviours in youth. Thus, prevention strategies should focus on both risk prevention and, with specific and relevant contexts, the promotion of protective factors, Dickson et al. (2003).

2.8 Prevention Strategies

Presently, consensus has not been reached as to what constitutes “best practice” for the prevention of problem gambling in adolescents (Derevensky & Gupta, 2004a). In part this is due to the fact that very little empirical research has been conducted to determine the efficacy of prevention strategies for gambling problems (Dickson et al., 2003; Messerlian & Derevensky, 2005). Prevention strategies that exist are theory-based and due to parallels with the characteristics of various substance addictions make use of the literature on adolescent alcohol and substance use to reach their conclusions (Mersserlian & Derevensky, 2005). Two broad forms of prevention approaches are currently utilized: harm reduction and abstinence.

Harm reduction can be defined as “a mental health approach that remains value-neutral and supports strategies that aim to reduce harmful negative consequences incurred through involvement in risky behaviours” (Dickson et al., 2003). There are several reasons why harm reduction strategies are thought to be appropriate for use with young people. Firstly, gambling is regarded as a socially acceptable activity and large numbers of youth are engaged in this activity. As it is sanctioned and enabled by young people’s families and friends, and national mainstream culture, it may be unrealistic to expect youth to stop gambling entirely (Derevensky & Gupta, 2004a). Secondly, when gambling is utilised in a responsible and moderate manner it does not carry the health risks and consequences such as cigarette, alcohol and drug use, thus, abstinence may be less critical than in other high risk behaviours (Dickson et al., 2003). Thirdly, pushes for abstinence may have a reverse effect by inciting adolescent experimentation as a form of rebellion leading to risky gambling behaviour (Dickson et al., 2003).

Education is a harm reduction method that could facilitate informed and moderate gambling in young people (Derevensky & Gupta, 2004a). Skinner et al. (2004) has recommended that young people should be presented with persuasive information on both the harm caused by gambling problems and positive aspects of gambling. The education of youth has several benefits. It has been revealed that help seeking behaviours in young problem gamblers is typically directed firstly to friends, as friends have been found to underestimate or normalise the problem or bail out the problem gambler, education may enable friends to respond in appropriate ways and provide support (Delfabbro et al., 2005; Sullivan, 2005). Further, research indicates that young problem gamblers often do not access treatment services (Delfabbro et al., 2005; Griffiths, 1998; Gupta & Derevensky, 2000), so early intervention strategies involving education may be important to prevent youth from reaching the stage where they need help in the first place. New Zealand High school students have confirmed that they would value knowledge about gambling problems and support the inclusion of this within their education curriculum (Sullivan, 2005).

A controlled study conducted by Lavoie and Ladouceur (2004) sought to evaluate the effectiveness of a video aimed at the modification of erroneous beliefs and attitudes towards gambling among students in grades 5 and 6. It was found that the video-based intervention had a positive effect by increasing knowledge and modifying attitudes toward gambling (Lavoie & Ladouceur, 2004). Their findings confirmed those of Ferland et al. (2002) who explored the

efficacy of a video in a grade 7 and 8 student sample. While these results are encouraging in that they suggest that educational strategies and interventions promote significant gains in knowledge, the ability of such approaches to reduce the risk of problem gambling remains unknown.

The internet has not only been embraced as an avenue for access to gambling activities but also as a medium through which prevention efforts can be distributed. In the last five years a number of Australian and international online sites that target young people have been developed to integrate gambling-related health promotion, as well as harm minimization and prevention strategies. For example, the “School Stuff” web site was developed by the Queensland Government to support the *Queensland Responsible Gambling Strategy*. The interactive website allows young people to complete surveys and activities and access a wide range of information related to the Queensland gambling industry, support services, healthy gambling, problem gambling and the marketing of gambling. It was developed as a part of the Queensland responsible gambling education initiative that aims to provide students with “the information and skills necessary for them to make informed choices that will enhance their wellbeing” (Queensland Government, 2007). Currently, the efficacy of web sites such as these has not been investigated by any empirical studies. Therefore, this project will seek to explore young people’s perceptions and experiences with online forms of gambling education.

What is made clear across a range of studies is that prevention strategies for problem gambling must take into account individual differences (Dickson, Derevensky & Gupta, 2004). Gambling participation is not uniform; rather young peoples’ involvement, similar to that of adults, falls upon a continuum ranging from non-gambling to controlled responsible gambling to uncontrollable gambling participation (Derevensky & Gupta, 2004a; Dickson et al., 2004). A harm reduction approach may be appropriate for use for young gamblers who are at the beginning of the continuum who are capable of making informed choices (Dickson et al., 2004); in this way harm reduction could protect low-risk youth from becoming at-risk (Messerlian et al., 2005). Conversely, individuals with significant gambling problems may be more suited to interventions based on abstinence (Gupta & Derevensky, 2000). Either way, prevention strategies should take into account the varied needs of youth by incorporating both abstinence and harm reduction principles (Derevensky & Gupta, 2004a).

Although inconsistencies in prevention literature exist and there is a lack of empirical data pertaining to the efficacy of certain strategies, it is evident that early intervention plays a critical role in averting problem gambling in youth (Evens & Delfabbro, 2005). A sound knowledge of the factors that render youth vulnerable to the risk of problem gambling and the role protective factors play in gambling is vital to the development of successful prevention strategies (Derevensky & Gupta, 2004a).

2.9 Further Research

Many international and Australian prevalence studies have examined the extent of gambling in young people. These studies have assisted in revealing the extent of youth gambling in particular areas and have fostered an awareness of youth gambling as a contentious issue within the community (Delfabbro et al., 2005). Prevalence studies have represented a vital starting point for a field of research that is still in relative infancy (Delfabbro et al., 2005; Delfabbro & Thrupp, 2003; Shaffer, LaBrie, LaPlante, Nelson & Stanton, 2004).

Broadly, prevalence research has revealed that youth are engaged in gambling behaviours to varying degrees (McClellan et al., 2006). Some young people may gamble in fairly developmental and transient ways, while others participate in gambling behaviours in a more sustained, intense and sometimes destructive fashion (McClellan et al., 2006). Future research must build upon the current foundations of knowledge; specifically, research needs to diverge from solely quantitative methods in order to determine why some youth become problem gamblers and some do not. Qualitative research is one medium through which contextual information can be gained about the development and maintenance of gambling behaviours (Delfabbro et al., 2005; Shaffer et al., 2004).

Qualitative research of this nature needs to tap into the categories of youth that exist. A common misconception about young people who gamble is that they can be categorised into two groups: those who can legally gamble (18-24) and those who cannot (under 18 years). In reality, the classes of youth that exist are very diverse. The Australian Bureau of Statistics (2004) identified several life pathways that may be undertaken by 15 to 24 year olds, for example, some young people attend secondary school and may progress from middle to senior school. On leaving school, a number of young people may undertake higher education such as technical and further education (TAFE) or university while others join the labour force, and some are represented among the unemployed. Youth is also a time when some may undergo the transition to independent living, away from the family unit (ABS, 2004). An Australian qualitative study of note was conducted by Jackson (1999), and while this study explored the relationship between several familial, emotional, social and behavioural variables associated with youth gambling, it was limited in the fact that it only sought to ascertain the perceptions of young unemployed people and those who were attending school. The current study will extend on previous findings by conducting focus groups over a broader cohort of youth including school students, TAFE students, university students, employed youth and unemployed young people.

In summary, qualitative research that complements existing quantitative knowledge is important as it has the potential to inform problem gambling prevention efforts. Research must explore the perceptions, experiences and values held by youth regarding traditional methods of gambling and incorporating new technologies, such as the internet, phone and even media to enable public policy to recognise and address diversity in youth, and the broader social, media and cultural contexts that potentially influence them and ensure that the best support is provided that takes into account individual differences. Young people's reflections during the Second International Think Tank on Youth Gambling revealed that youth perceive the success of any public

health agenda as being partly reliant on their participation and input. The young people proposed that youth are more likely to commit to gambling awareness and prevention programs in which they themselves had input (Messerlian & Derevensky, 2005). Certainly, a step towards youth involvement in the development of public policy would be to listen and record accounts of what they perceive gambling to mean in society and what problems they are experiencing and would like addressed. Currently, there is a paucity of information regarding the socio-cultural factors that influence gambling behaviours in youth. Qualitative research is required to gain a deeper understanding of young gamblers in Queensland.

2.10 Conclusion

It is evident that gambling is an activity deeply entrenched within Australian culture. Many gambling activities occur with positive outcomes for youths and society at large (i.e. enjoyment and participation in a legitimate leisure activity, a fund raising revenue for charity and may facilitate identification and connection with peers). However, for some young people gambling can result in negative consequences (i.e. mental health problems, delinquency, debt and early school drop out). Although the harmful outcomes of gambling can be far-reaching, considering its widespread prevalence and social normalisation, it is unrealistic to expect youths to wholly abstain from this behaviour. As such, it is imperative that the factors contributing to the development of gambling problems be identified and appropriate interventions put in place that can protect against the development of problem gambling and ensure that young people maintain healthy gambling patterns that will persist from youth through to adulthood.

Whilst the Australian government has accepted and utilised gambling related revenues, government funding and strategic planning across a range of community services is required to address the causes and consequences of gambling problems in youth (Hayatbakhsh et al., 2006; Law, 2005; Messerlian & Derevensky, 2005). It is envisaged that this research will add to the existing knowledge base of gambling behaviours in youth by contributing qualitative data regarding the views and experiences of youths from diverse economic, educative, social and cultural backgrounds and the relationship they develop with technology in relation to gambling. The information gathered may serve to inform effective design, implementation and evaluation of prevention policy and early intervention initiatives.

3.0 Methodology

3.1 Stage 1: Ethics Approval Procedures

Ethical approval for the project methodology was sought and obtained from the Behavioural and Social Sciences Ethical Review Committee of the University of Queensland. Ethical conduct was applied throughout the duration of the investigation. Approval to conduct research in Sunshine Coast schools was granted by the Queensland Department of Education, Training and the Arts.

3.2 Stage 2: Literature Review and Analysis

A comprehensive review of gambling related research was carried out. Analysis of this research served to examine and evaluate academic and community knowledge in relation to youth gambling. The result of this literature analysis is presented separately below and was used to inform the development of focus group and interview questions. The sources used to search for relevant literature included library databases such as Proquest, Psycharticles, Psychinfo; the University of the Sunshine Coast's library catalogue and popular media.

Additionally, a comprehensive search and review of gambling related websites was undertaken in order to provide background information to assist with formulating focus group and individual interview questions about internet gambling. The researchers performed searches on the four leading Australian search engines identified by Hitwise (2007). These included Google (Australia), Google (United States), Yahoo and Windows Live Search.

3.3 Stage 3: Data Collection

3.3.1 Approaches to Investigation

This research utilised the focus group method as a means to elicit the attitudes, feelings, experiences and beliefs of young people in relation to gambling. As research pertaining to gambling in young people remains a relatively unexplored domain, particularly in Queensland, focus groups were utilised as a preliminary research tool that could assist in the exploration of hypotheses and identify critical areas for further investigation in Phase 2 of the project (Kreuger, 1988). The use of focus groups served as an ideal way to access a multiplicity of views and emotional processes within a group context (Gibbs, 1997). The group format also enabled respondents to react to each other's contributions, and thus explore gambling topics more deeply (Barker, Pistrang & Elliot, 2002). An inherent disadvantage in the focus group method is that participants may experience peer pressure to remain silent about some views, or to readily agree with more dominant views. In order to reduce the chance of this occurring limits

were placed on the amount of time each participant had to speak (Darlington & Scott, 2002).

An awareness of these issues meant that data collection methods included individual semi-structured interviews. These interviews eliminated the occurrence of peer conformity pressures and allowed for concentrated and uninterrupted focus on the perceptions of one person (Barker et al., 2002; Darlington & Scott, 2002). The use of both focus group and individual interview methods allowed for a deeper understanding of young people's definitions of perceived problems, opinions, feelings, and meanings associated with gambling within both a group and individual context.

3.3.2 Participants

Participants were sampled from the following five demographic categories on the Sunshine Coast: secondary students, university students, TAFE students, employed people and unemployed people. Recruitment was achieved through approaching schools, higher learning institutes, workplaces and community organisations. Organisations from which participants were recruited include state secondary schools, government TAFEs, private tertiary institutions, training and employment agencies, retail stores, media organisations and local council organisations. 40 participant sources were approached, and 16 organisations consented to participation in the study, resulting in a response rate of 40%.

A total of 129 young people participated in the research. The sample ranged in age from 15 to 24 years. The following table details the number of focus groups and individual interviews that were conducted.

Table 2: Focus Groups and Individual Interviews

Demographic Category	Focus Groups Conducted	Interviews Conducted
Secondary students	4	10
University students	0	10
TAFE students	1	10
Employed people	5	10
Unemployed people	2	10

Note. Focus groups were each comprised of up to 16 participants (M=6, SD=3). University students were unable to be sourced for focus group participation due to the lack of student availability during the devoted times. Furthermore, ethical clearance had to be granted and the elected university's process for enabling this to happen is cumbersome and prohibitive. After discussion with Dr Karen Brooks, Jenny Madden and Professor Jake Najman it was decided to exclude university students from our focus group data collection.

Of the 129 participants who agreed to participate in the research, 109 of these completed the Youth Gambling Questionnaire (YGQ) (please see section 3.3.3 for questionnaire details). Survey respondents comprised of 47.7% (n=52)

males and 52.3% (n= 57) of females. The mean age for the sample was 18.63 years (SD=2.13) with 49.5% (n=54) being under the age of 18 years. Participants were requested to identify their main source of income. As shown in Table 3, a majority of participants' main source of income was wages from work, followed by Newstart or Youth Allowance. 54.1% (n=58) of participants indicated that they had enough money for what they needed, 20.2% (n=22) indicated feeling neither good nor bad about their financial status and 24.8% (n=27) indicated that not having enough money caused them problems.

Table 3: Source of income for participants (n =98)

Primary Income Source	n (%)
Work Wages	45 (41.3%)
Newstart or Youth Allowance	26 (23.9%)
Pocket money from home	14 (12.8%)
Gifts of money for birthdays etc	9 (8.30%)
Austudy/Abstudy	4 (3.70%)

Most participants lived with both of their parents 30.0% (n=33), 16.5% (n=18) lived with their mother only, followed closely by 15.6% (n=17) who lived with partners, and the remainder lived in other arrangements (refer to table 4).

Table 4: Participants' living arrangements (n=106)

Living Arrangements	n (%)
Mother and father together	33 (30.0%)
Shared with mother and father	9 (8.30%)
Mother only	18 (16.5%)
Father only	2 (2.80%)
Mother and partner	6 (5.5%)
Father and partner	1 (0.90%)
Other family members	7 (6.40%)
Friends	11 (10.1%)
Partner	17 (15.6%)
Neither family nor friends	1 (0.90%)

The majority of young people 96.3% (n=105) perceived that they had adequate social support from friends and family, with only 3.7% (n=4) reporting a lack of support.

3.3.3 Materials

In keeping with the recommendations of Krueger (1988; 1998b) and Morgan and Krueger (1998), focus group discussion questions were devised to reflect important qualitative principles. Firstly, questions were posed in an open-ended rather than dichotomous manner to allow respondents to address the question from various points-of-view and to reduce the influence of interviewer bias (Krueger, 1988). Secondly, a variety of questions were selected that best captured the intent and essence of the investigation, including four broad topic areas: the social context of recreational gambling and problem gambling, gambling and its relationship to the family and the individual context of gambling. Thirdly, as the target population potentially possessed diverse demographic qualities, questions were constructed in a conversational manner, using clear and concise language that was appropriate for a young audience with varying levels of literacy and comprehension skills. Finally, a protocol was developed in which questions were presented in a focused and sequential manner, allowing movement from general overview questions to specific areas of critical importance (Krueger, 1988). See appendix A for the Focus Group Protocol.

An initial focus group took place for the purpose of pre-testing the questions generated for the study. The objective of the pre-test was to evaluate the logical and sequential order of the questions and determine if the questions were easily understood (Stewart & Shamdasani, 1990). On conclusion of the first focus group participants were provided with an anonymous feedback form and given the opportunity to openly discuss the structure, terminology used and the performance of the moderator (See appendix B for Evaluation Form). The feedback obtained was used to determine if any focus group protocol changes were required.

The Youth Gambling Questionnaire (YGQ) (See appendix C for questionnaire) is a 21-item instrument that was utilised to gather demographic information as well as information about the general gambling attitudes, beliefs and behaviours of focus group and individual interview members. The survey items were adapted from the Adolescent and Gambling Questionnaire developed by Jackson (1999).

Focus group content served as the foundation for the one-to-one interview agenda. A schedule of questions was developed that further explored the socio-cultural and environmental factors identified during focus groups that may contribute to the development and maintenance of and/or protect against gambling behaviours. Topics covered included:

- The social context of gambling.
- Uptake of gambling and current gambling behaviours.
- Perceptions of gambling.

- Factors that may influence gambling behaviours such as peers, family, media and popular culture, cognitions and emotions.
- Perceptions of and experiences with problem gambling.
- Gambling prevention and protection.
- Summary/wrap up.

During the development of the focus group protocol, it was determined that the exploration of personal issues was not appropriate to explore within a group context due to confidentiality concerns. In contrast, the individual interview schedule included questions that explored potentially sensitive topic areas such as family background, problem gambling experiences and underage gambling. In accordance with Mariampolski's (1989) recommendations, the interview protocol commenced with the exploration of relatively 'safe' issues before moving on to more sensitive topics. During the last few minutes of the interview a winding down period allowed for a return to 'safe' topics in order to reach closure of potentially uncomfortable issues (Mariampolski, 1989).

Although a protocol was developed for the interview over the data collection period, questions were repeatedly modified and updated to accommodate any additional information uncovered during the focus groups. Further, the interview format was semi-structured in nature, not followed strictly, but rather used as a guide providing the researchers with the flexibility to spontaneously follow up any new topics interviewees brought forward.

3.3.4 Focus Group Procedure

Subjects from the school student population were recruited through secondary schools in the Sunshine Coast education region. Approval was sought from Education Queensland and school principals to conduct two focus groups within the school with grade eleven and/or grade twelve students. A teacher at each school who was willing to assist was provided with information sheets (see appendix D), consent forms (see appendix E) and letters for parents/guardians (see appendix F). Within these documents students were assured that all research was confidential in nature and the parental/guardian consent forms included an area for the young person to sign.

Focus groups were conducted during a class period with those students who took the information sheets home to their parents and obtained parental consent. During the focus group introduction the facilitator reminded participants of several ethical considerations including:

- The researchers' obligation to maintain confidentiality and also, the importance of confidentiality between participants.
- The confidential and anonymous nature of any recordings taken during the session.
- The participants' right to withdraw at any time during the session without any consequences being incurred.

Focus groups opened with an ice breaker that energised the group and allowed participants to familiarise themselves with the facilitator. The Youth Gambling

Questionnaire was then administered. The focus group discussion lasted for about 50 minutes and was recorded. On conclusion, students were reminded that they could contact the services listed on the information sheet if they had any gambling related questions or concerns that had emerged as a result of the focus group discussion. Students were then invited to participate in further one to one interviews. Dependent on individual preference, these interviews were conducted face to face at the school or over the phone.

The researcher contacted workplaces, community organisations and higher learning institutes and invited them to participate in the focus group research. Several organisations declined outright, either because they did not have members or employees that met the age requirements, or they did not have time to accommodate the research. Those that did agree introduced potential participants to the study via email, posters or allowed the researcher to recruit participants during a lunch-break or meeting time. Potential participants were provided with a brief explanation of the study and were invited to attend a suitable focus group session within the workplace or organisation venue.

At commencement of these sessions, participants were provided with an information sheet and consent form (See appendix D and E). After signing the consent form, they completed the questionnaire. Subjects were then invited to participate in a brief game that served as an ice breaker and 'warm up' activity. Participants were each given two lollies and instructed not to eat them yet. They were informed that the game would involve guessing a predetermined number between one and twenty that had been selected by the facilitator. To take part they had to give back a lolly and if they guessed correctly they would receive three larger chocolates. After completion of the first round, participants were given the chance to play again in exchange for their second lolly. This activity prompted natural and spontaneous conversation between participants about the nature of gambling, thus serving to orient participants to the topic at hand.

The focus group discussion ran for about forty-five minutes. On conclusion, participants were reminded that they could contact the services listed on the information sheet if they had any gambling related questions or concerns that had emerged as a result of the focus group discussion. Subjects were then invited to participate in further one to one interviews. Dependent on individual preference, these interviews were conducted face to face or over the phone.

All focus groups were recorded with a digital recording device. This ensured that an accurate and complete record of the groups was obtained and that note taking was minimal, negating any major disruptions to the flow of the interview.

3.3.5 Individual interview Procedure

This study aimed to recruit ten focus group participants from each of the five demographic categories: secondary students, university students, TAFE students, employed people and unemployed people for individual interviews. At the conclusion of each focus group participants were invited to take part in further individual interviews. A short explanation of the interview purpose and

procedure was given. Participants were informed that interviews could be conducted over the phone or face to face. Where the required number of focus group participants was not willing to participate in interviews, further participants were recruited from relevant organisations.

Interviews that involved participants recruited from focus groups commenced with an overview of the information sheet and consent form that had been previously signed. New participants were required to peruse the information sheet and sign the consent form prior to beginning the interview. Interviews lasted for approximately one hour. During the interview, ideally answers to all questions were obtained, however this was not always possible due to time constraints. The interview protocol did not exhaust the information obtained with spontaneous lines of inquiry being followed up. At the conclusion of the interview, participants were reminded that they could contact the services listed on the information sheet if they had any gambling related questions or concerns that had emerged.

3.3.6 Validity and Reliability

In qualitative research, validity “refers to the trustworthiness of interpretations or conclusions” drawn by the researchers (Lewelyn & Kennedy, 2003). Conversely, reliability “refers to the trustworthiness of observations or data” (Lewelyn & Kennedy, 2003). Triangulation was utilised to support methodological validity, objectivity and credibility (Cavana, Delahaye & Sekaran, 2001). Multiple data gathering strategies were selected, including a literature review, a questionnaire, focus groups and semi-structured interviews. The focus groups’ line of enquiry was structured upon the findings of the literature review. Individual interviews allowed for the elaboration and clarification of the data obtained in the focus groups and questionnaires. Thus, the attainment of information from multiple data sources, multiple methods and various prior theories or interpretations supported the reliability and validity of the research (Golafshani, 2003; Llewelyn & Kennedy, 2003).

Threats to the study’s legitimacy can occur when the focus group methodology enables specific voices and opinions to dominate thus, affecting the data’s validity (Barker, Pistrang & Elliot, 2002). The use of individual interviews attempted to account for this by allowing individuals to speak freely without the influence or pressure of their peers. In effect, this may have served to improve the ‘trustworthiness’ of the data obtained as differing perceptions and views could be openly and privately revealed (Lincoln & Guba, 1985).

However, it is important to note that individual interviews and focus groups alike were nonetheless subject to social desirability effects, respondent deception, exaggeration, fabrication, forgetting and interviewer bias (i.e. it was at the interviewer’s discretion as to what lines of enquiry were followed and when time became limited, which questions to include or exclude (Barker et al., 2002). To minimise the effect of such occurrences credibility checks were put into place. Where analytic auditing was utilised (i.e. two researchers checked the results against the data) along with the verification of results with informants as data collection progressed to provide testimonial validity (Barker et al., 2002).

Further, it was stressed at the beginning of each focus group or interview that answers to questions were entirely subjective and participants were encouraged to voice their opinion with assurances that different views would be treated respectfully by both the researcher and fellow participants.

3.4 Stage 4: Data Analysis

Data Analysis was guided by Glaser & Strauss's (1967) grounded theory in which "a theoretical account of the general features of the topic" was obtained "while simultaneously grounding the account in empirical observations of data" (Martin & Turner, 1986). Data collected was subject to deductive and inductive processes determined by both the research objectives and also multiple readings and interpretations of the raw data (Thomas, 2003; Easterby-Smith, Thorpe & Lowe, 1991). Firstly, every individual interview and focus group recording was transcribed using a uniform format. It was ensured that transcription reproduced reliably the exact words used by interviewee's, including slang words, stutters, repetitions, hesitations and interruptions. To ensure the confidentiality of participants was maintained, any identifying names or locations were removed before transcripts were analysed (Green & Thorogood, 2004).

Secondly, rigorous and systematic reading of the transcripts resulted in the emergence of a series of themes that were coded according to the corresponding segments of interviewee text (Strauss & Corbin, 1990). Upon multiple readings of the raw data, sub-categories were grouped within major themes in light of the initial coding (Glaser & Strauss, 1967). Emergent codes and categories were continually compared against any subsequent data collected and also with concepts suggested by the literature (Glaser & Strauss, 1967). Relationships among emerging categories of data were continually examined (Marshall & Rossman, 1995). Cross-case analysis was utilised to identify similarities and differences across the participant subgroups (i.e. secondary students, university students, TAFE students, employed people and unemployed people) (Barker et al., 2002). The subsequent in-depth analysis provided insights into young people's experiences and perceptions of gambling.

5.0 Focus group pre-test results

The feedback form utilised in the initial focus group (made up of unemployed young people) revealed that significant changes to the focus group delivery, format or questions was not required. It was, however, evident that during a small number of focus groups the Youth Gambling Questionnaire (YGQ) would have to be verbally delivered, due to participant's limited literacy skills. As recommended by Kreuger (1988) the lack of substantive modifications to the focus group questions resulted in the data collected from the initial focus group being incorporated into study analysis and consequently, included within the report findings.

6.0 Findings and Interpretations

The following section explores young people's perceptions and social constructions of gambling, along with the familial, social, environmental, emotional and individual characteristics that were found to influence the uptake and maintenance of gambling behaviors. Both quantitative data, gathered from the Youth Gambling Questionnaire (YGQ) and qualitative data gained from focus groups and individual interviews conducted with 129 participants ranging in age from 15 to 24 will be presented. Themes, meanings and interpretations that emerged from the qualitative data analysis are supported by direct quotes. While every effort was made to uphold the integrity of young people's speech, some quotes were edited in minor ways to improve their readability. All names were altered to protect the identity of participants. The gender of speakers and group from which the participant belonged (i.e. school student, university student, TAFE student, employed, unemployed) will be indicated at the end of each quote. Where an exchange occurs between participants, letters listed in alphabetical order (i.e. A, B, C) will be used to indicate the spokesperson. All interviewer questions are italicised in parentheses and speaker intonation is also italicised.

6.1 Perceptions and Constructions of Gambling Activities

6.1.1 What is Gambling?

The views of the young people involved in this project varied greatly in relation to the types of activities that they considered to be gambling. Many of the young people viewed gambling to be a broad set of activities or choices, involving behaviours beyond the traditional definition of gambling. Any behaviours involving a 'risk' whether, monetary or otherwise were considered to be gambling. For example, activities such as board games, interactive TV quizzes, claw toy machines; important decisions in life and risky actions like 'popping a pill' or crossing a busy intersection were all classed as a 'gamble'. When asked to explain the nature of gambling, typical responses included:

I have never gambled away money, but I have gambled with other things, like my life, where I have gone 'Do I move up to the Sunshine Coast or do I stay with my family?'... So I gambled my life – 'If I do this what will I get out of it, but if I do this...' So moving away from home when I was 16 was pretty much gambling what is going to happen for the rest of my life. So I gambled in that way (unemployed, female).

Gambling's everywhere – but I mean going to a fair and betting money on winning a toy – to play the game at the chance of winning a toy – that's gambling... it's everywhere! Everywhere you go you see gambling (school student, male).

The focus groups and interviews revealed valuable information about the manner in which young people perceived gambling activities. A difference was found between the operational definition of gambling afforded by academic

literature and the views of young people. For many participants gambling was perceived to be a broad set of activities rather than solely the “staking of money or items of value on the outcome of an uncertain event that is determined by chance” (Australian Psychological Society, 1995-1997).

Analysis of the gambling survey conducted in this study revealed that activities in which money could be wagered, such as horse racing and sports betting, lottery tickets, betting via mobile phones and card games were considered to be gambling by a majority of participants. However, a small number of young people did not view these activities to be forms of gambling. The following table presents participants’ perceptions.

Table 5: Participants’ perceptions of activities involving gambling or betting (n =109)

Activity	Perception that activity constitutes gambling	
	Agree n (%)	Disagree n (%)
Poker machines	108 (99.1%)	1 (0.90%)
Racing and sports betting	99 (90.8%)	10 (9.20%)
Internet betting	96 (88.1%)	13 (11.9%)
Lottery tickets (scratch-its, lotto or keno)	88 (80.7%)	21 (19.3%)
Mobile phone betting	82 (75.2%)	27 (24.8%)
Card games	81 (74.3%)	28 (25.7%)
Stock Market	57 (52.3%)	52 (47.7%)

Research has revealed that young people are regularly involved in gambling activities such as scratch-its and lotto despite legal age restrictions (Derevensky & Gupta, 2001; Felsher, Derevensky & Gupta, 2003; Weibe & Falkowski-Ham, 2003). This may account for the fact that young people do not necessarily class these activities as gambling. The focus groups revealed that there were a number of additional factors that influenced young people’s perception of lottery tickets:

If you buy scratchies once a year due to entertainment or something like that, I wouldn’t necessarily say that it’s gambling, to myself. But the others [i.e. pokies, racing and sports betting, mobile phone betting and card games] I think, yeah definitely gambling cause [Sic] you don’t know what you’re betting on (university student, female).

A: I don’t think a lot of people would class that when they go buy a scratchie as gambling because it’s not as big as the pokies (female).

B: Yeah, smaller (male).

A: You go to the pokies, and they have designated rooms you know, to sit there and same with horse racing they have a designated day when everyone gambles. And there's not a big sign that says 'do you know what your kids are eating for dinner' at a newsagents when you go and buy a scratchie (Laughter), when you go to a pokie room that's exactly what they have.

[So what are your feelings or thoughts about the different types of gambling?]

C: Yeah like you say, like you don't think twice about scratchies (male).

A: Yeah, what's two bucks?

C: They're acceptable almost.

A: It's a form of entertainment.

D: Yeah, I think scratchies and lotto it's gambling but it's a bit of a gift too. I often buy a lotto ticket as a gift or a scratchie as a gift. Like you're not going to go "here's \$2 bucks go put it in the poker machine" (female).

C: Yeah.

D: Like so it doesn't seem like it's a really big form of gambling because it's classed as other things.

Like scratchies. I get the ones that are time consuming. Blackjack, pokies and such I do as a social thing with my friends so the social side of it.

[What is it about the time consuming scratchies that you like?]

It would be the same as doing a crossword in a magazine, its just crossword, scratchies and stuff I like doing (unemployed, female).

These quotes illustrate that respondents did not consider lottery tickets or scratch-its to be gambling, primarily because they perceived these activities to involve only small sums of money. For these young people, other forms of gambling represented a higher risk not only due to the chance of losing more money but also because young people felt that they had little or no control over outcomes. Furthermore, lottery/scratch-it activities were observed as irregular activities; they were not considered to be as 'big' (time-consuming/event-orientated) as other activities such as poker machine play, which has designated rooms in venues and is featured in many awareness campaigns. Finally, lottery based activities were also perceived by some respondents as gift items, while certain types of scratch-its were considered to be more like crosswords than a gambling activity.

The reason why some young people rejected the notion that more traditional forms of wagering, such as racing and sports betting, card games and even poker machine play could be classed as gambling was not discussed within the focus groups or interview, thus participant's reasoning remains unidentified. It could be hypothesised that similar to lottery ticket/scratch-it participation these other forms of gambling are such a normal part of young people's daily lives (that is, they are constantly exposed to advertising, parental participation and spend time with family/friends in venues in which gambling is available) that

young people no longer class them as a restricted adult activity or associate such activities with risk.

Implications

The disparity between young people's perception of gambling and that of the operational definition may be of importance when educating young people about gambling. Researchers have called for the implementation of prevention and awareness programs amongst youth, particularly at primary and secondary school levels but also within the wider community through 24-hr counselling hotlines, media promotion of responsible gambling, posters and pamphlets in gaming establishments (Lavoie & Ladouceur, 2004, McPhee & Canham, 2002, Messerlian & Derevensky, 2007; Williams & Connolly, 2006). Education strategies have targeted many informational domains such as statistical gambling knowledge and gambling myths, the risks of gambling, problematic signs of a gambling addiction, the consequences of problem gambling and sources of help. The Australian Government and wider community have long supported the use of education and awareness strategies as a prevention tool. For example, the Productivity Commission (1999) endorsed school based education programs for young people to develop skills for more informed consumption of legalised gambling at later stages of their life. Furthermore, the 2004-2008 National Framework on Problem Gambling developed by the Ministerial Council on Gambling identified the need for public awareness, education and training to promote a greater understanding of gambling products, the potential for harm and the availability of help and support (Department of Families, Housing, Community Services and Indigenous Affairs, n.d.).

Despite at least eleven years of endorsement of school- and community-based education initiatives there is still little academic literature regarding the nature of the materials that should be provided and even less empirical research evaluating the efficacy of existing educational strategies. The current findings suggest that education needs to start at the most basic level – evaluating young people's beliefs about gambling and informing them about what is and what is not a gambling activity. There is a need for young people to recognise that wagering money or betting equates to gambling. Conversely, young people need to recognise that while a number of activities may be recognised as types of 'gambles' one can take in life, 'gambling' is also a separate and specific set of activities that can become addictive. Without young people's recognition of this from the outset, the impact of educational efforts may be reduced.

6.1.2 Gambling and the Australian Culture

Young people in this study were very aware of the long gambling history that could be said to characterise Australia's identity. When questioned as to whether gambling was a part of the Australian culture one participant responded:

Well it sort of is because gambling is taking any sort of risk by wagering something. When Australia was pretty much settled, Australia was

wagering a risk of their food to grow grain and all sorts of things through history, so I think it sort of is part of the Australian culture to gamble (school student, male).

This young man recognised that Australia's current gambling climate is embedded in a history that characterises Australians as a group of battlers willing to seek out new opportunities, with the courage to take risks. Participation in gambling activities was translated to now be part of this tradition of risk-taking and seen to play a role in maintaining the 'Aussie battler spirit'. Young people felt that gambling was intrinsic to current Australian identity. When questioned as to whether gambling was a part of the modern national culture young people typically reported:

I guess so. Gambling may be part of the Australian drinking culture, they go hand in hand sometimes, or people go out to have some fun, have some beers and maybe gamble or go to the casino. I think they go hand in hand sometimes. People get into that groove where they have some fun, like fathers get into a group to go out on Saturday afternoon to gamble with some of their friends, and it just becomes a thing they do, and it keeps going like that (University student, male).

Yes, my pop is a massive horse race fan, my uncles are, my mum would put on a bet - they know the jockeys. My friends, a lot of their boyfriends really love the casino scene, really love going to the RSL and having a go on the pokies so I definitely think that and a lot of their families are like that - the mum, the dad, the grandpa, if they go for a family dinner they will always finish their night off with the pokies, sort of thing, so I definitely think it's a part of our culture from my experience as I said my family, my circle of friend's families. I also think I guess being associated with the culture of Australia is the under-dogs so you know the thrill of backing an underdog or betting on the likely winner, is a part of who we are as well (Employed, female).

The Melbourne Cup is definitely an Australian icon really. It is known globally as a massive horse race. It has always been part of the Australian culture people go down and you put a bet on, since you are 6 or 7 years old your parents will be asking what horse do you want to bet for; you put a couple of dollars on it. It is one occasion that the whole nation basically pays attention to, and wants to be part of the whole experience (school student, male).

[Have you guys grown up thinking that it's Australian to gamble?]

A: Yes (female)

B: I do (male)

C: It's something that you just do. It's very promoted. It's, like, promoted as an Australian, I don't know, it's like the Australian trade mark sort of thing. You know, like, Aussies sit back, drink, have a gamble, play cards (male).

D: We're laid back, and it's pretty much like what we should be doing, (female) (conversation between school students).

It is evident that young people differed in their perception of the place gambling held within the national culture. Some believed gambling was a part of a broader drinking culture, particularly evident when groups of males came together; others viewed gambling as a family activity or as an opportunity to give others a 'fair go' by backing the underdog; others felt that gambling events such as The Melbourne Cup characterised the Australian spirit in the eyes of the rest of the world and was egalitarian in that it brought all Australian's together. Finally, gambling was seen to exemplify the 'laid back' nature of Australian people. The common theme amongst these reports was that Australia has a distinctive gambling culture separate from that of other gambling countries such as, America (defined by Las Vegas style gambling) or the United Kingdom.

These views can be contrasted to a number of young people interviewed who did not view gambling to be intrinsic to the Australian culture; rather they believed it was an activity shared across a number of cultures and could be better defined as a global phenomenon. When questioned as to whether gambling was a part of the national culture, unlike the quotes above they reported:

I never used to think gambling was but I guess it is more readily acceptable, but it is like that everywhere I guess. We are becoming much more Americanised and the Americans are really into the gambling, so many other countries as well. I think it is a world-wide problem actually (TAFE, female).

No. I'd think of alcohol or beer. Beer and BBQ's, I would not think of gambling but I think it is very much going that way we're very much turning into the Los Angeles. Just by how many pokie machines there are in pubs these days. And I know the quantity of patrons has gone up over the years as well so they are just catering for them (employed, male).

I don't think it is necessarily part of the Australian culture it is sort of part of the westernised culture, not necessarily the Australian community. It is just as much in America and other countries like England and stuff. It is not just an Australian thing, it is not exactly part of our culture, when you think of Australian you don't think of the lotto or anything, you think of kangaroos and football and all that sort of stuff (school student, female).

No I reckon it's more American, you see over there they have got huge casinos and like on a lot of movies and stuff it is all casinos, you do get a few here but I reckon, I would say it would be way more over there (school student, male).

The difference in opinions between young people points to the importance of refraining from the use of stereotypes. As the following quote exemplifies individual differences are always present despite cultural norms:

[Is gambling a part of the Australian culture?]

I guess it depends, because it's not part of my culture. It just really depends on just who you are as a person and your tendencies and your personality and how you grow up sort of thing. So yeah, it would depend on those sorts of things (university student, female).

It is evident that micro-levels of cultural representation (an individual's cultural self-representation) did not necessarily share the values and meaning systems of the national cultural identity. Cultural research has mostly focused on a national level, equating a cultural group with a nation-state (Erez & Gati, 2004). However, when considering the findings of this report it is important to keep in mind that individual difference within group, organisational and national levels of culture are the rule rather than the exception.

Another interesting finding within this study was that cultural notions of masculinity and femininity were seen to influence some young people's perceptions of gambling. In the past Australia had a sexually differentiated gambling culture, whereby women were excluded from participating in activities such as drinking and gambling (Lindgren, Youngs, McDonald, Klenow & Schriener, 1987; Walker, 1992). In the present day women have access to a plethora of gambling activities and the traditions of former generations have to some degree lost their meaning (Holstein-Beck, 1995). Despite this, some young people's reports in the current study held gambling to be a typically a male pursuit:

[Is there a difference in the places males and females would be likely to gamble?]

- A: I think more males are likely to bet on sport generally (female).
- B: Yeah, stereotype males go to sport (female).
- C: I agree (male).
- D: I reckon females would be more into the scratchies (male).
- B: Not as tough as you, wouldn't bet as much money (laughing).
- D: I don't see big guys scratching away at scratchies it's actually women and the mums (laughing) (conversation between school students).

[Do you think the way girls, compared to the way boys gamble, is different?]

Yeah, in a way. I think it depends. I think young guys – what's the word – like they gamble more often over their whole life, but might not always be severe. Whereas girls, I think you'd find, like I don't know, to me, like lightly or a few times a year gamble or they just fall in a heap and they're complete gamblers. And like really bad experience like case of gambling (university student, female).

Gambling's an Aussie thing – you go out and have a few drinks with the boys – that's probably very stereotypical you know, but you go out with your mates, have a few drinks, have a punt, have a – you know – a gamble on the football and stuff like that... and it's like a bit of a ... (employed, female)

These quotes illustrate that gambling perceptions are still subject to gender stereotyping and even recognised as so (refer to the former quote by an employed female). For example, males were viewed to be 'tougher', betting on activities such as sports and wagering larger sums of money than females. Females are viewed as weaker and more susceptible to gambling problems ('they just fall in a heap'). Young people's examples were also more likely to describe male participation in gambling activities rather than female, indicating that gambling may still largely be considered a male pursuit.

Implications

With the exception of individual differences, as a whole gambling was typically regarded as a part of the Australian culture. That is, young people viewed Australian society to value 'having a toke'. These findings indicate that for young people in the study, gambling participation can be thought of as a very culturally driven behaviour influenced by both global and national norms. Culture acts to shape core values and norms of its members and these values are shared and transmitted from one generation to another (Eraz & Gati, 2004). The recognition of gambling as a part of Australian culture has led to the normalisation and social acceptance of such activities (Brown & Coventry, 1997). Young people reported that they and their local communities were very accepting of a wide range of gambling activities such as, card games, sports betting, lottery and scratch-its, poker machines and casino table games. Young people believed that their community viewed gambling in a positive light with problems largely being ignored until they become extreme:

Society on the Sunshine Coast I think it pretty much doesn't care about the view of gambling because we have a lot of RSLs, surf clubs all round. We've got a whole range of them, so I think society has pretty much just accepted it, it doesn't really bother anyone because it is quite a big industry and it brings in a lot of money for those places, so society has just accepted it (school student, male).

I think it's encouraged... I think the pub culture in Australia encourages it. It's an activity at the pub. It's very socially acceptable to spend time at the pub. I think it's only vaguely acknowledged that people have problems with it. But then I think that depends on different sorts of gambling as well, like TAB's associated with sort of... I'm stereotyping here... seedy old men – it's not fun and glamorous like dressing up and going and having a punt at the Casino (university student, female).

I think the community thinks it's acceptable. Like, except for when it gets to like dire conditions where, like, families are just probably ripped apart, or people don't have money or they end up on the street or in drugs or stuff – like I think people think of gambling as all right – but like gambling that ends up with people in strife is bad (university student, female).

I think gambling is socially acceptable as a whole. As a community I don't think people see anything wrong with it until they themselves, or a relative, experience big losses or an addiction. But I think until it reaches

that point, I think it's socially acceptable. Like I mean, if me and my mates are there and they say, "oh we're having a few beers" and I'll say, "oh let's go have a poke"—no one bats an eyelid, they just go "Yeah, let's go!" (employed, male).

The theory of reasoned action (Ajzen & Fishbein, 1980) and the theory of planned behaviour (Ajzen, 1985, 1991) provide frameworks for predicting and understanding social behaviour and have been widely used in the study of gambling behaviour (Sheeran & Orbell, 1999). These models propose that the more positive a person's attitude and subjective norms are regarding the behaviour the more likely they will intend to perform the behaviour. Clearly, the perception that gambling is accepted within a young person's community could suggest that intentions to perform gambling activities would be high. The following sections of the report will explore young people's motives for gambling and the factors that influence their patterns of gambling participation.

6.1.3 Gambling Participation

The positive attitudes that the young people in this study held towards gambling were reflected in their reports of participation. Analysis of the gambling survey conducted for this report revealed that young people, both under the age of 18 and over, participated in a wide range of gambling activities both with and without the use of money. Table 6 below sets out findings on the types of gambling activities these specific young people engaged in.

Table 6: Gambling participation rates during the year prior to the survey
(*n* = 109)

Type of Gambling	n (%)
Lottery tickets (including scratch-its, Lotto or Keno)	60 (55.0%)
Poker machines	43 (39.4%)
Horse racing or sports	37 (33.9%)
Card games	30 (27.5%)
Other	14 (12.8%)
Internet gambling	5 (4.60%)
Video Games	4 (3.70%)

Participants who gambled were most likely to participate in gambling activities a few times per year 52.3% (*n*=57), with 15.6% (*n*=17) of participants participating on a monthly basis, 5.5% (*n*=6) participating weekly and 1.8% (*n*=2) daily. Approximately a quarter of the respondents, 22.9% (*n*=25) reported having never gambled.

During the focus groups and interviews a very small number of participants believed that they had experienced problem gambling behaviours or spoke

about gambling patterns that could be indicative of gambling related problems, such as spending more than they could afford; believing one would profit from gambling; borrowing money and regularly placing large bets. Some examples are:

[What have been some of the consequences of gambling?]

Well for me it was spending money I couldn't afford to spend, thinking that I would make more money and didn't. I ended up being short in certain bills. I know it was problem gambling in the past, that's definite and luckily I realised that and I also didn't have a lot of money, so I had to think you know, what to do - what's the best thing to do and I decided to stop gambling cause it just wasn't worth it (unemployed, male).

I can absolutely see how people get addicted to it though... Just because, you know I've touched on it. There were times where I would be inclined to spend more money than I had or borrow money to put it in the pokies. But I remain sort of conscious of that and that was almost sort of a bit scary. Like 'ooh, I don't want that to become a problem' (university student, female).

A: I reckon people know when they're actually doing it that they may have a problem with gambling.

B: So, when I was dropping \$1000 bets on a Blackjack table, I knew it?

A: Oh, all I'm saying, if I was doing it I'd know it! But I'm not you.

B: I didn't know.

A: I *know* you probably didn't but I'm saying I'd know if I was dropping it on there. There's no right or wrong.

B: Problem gambling from the inside and problem gambling from the outside is two different things. To the person sitting at the table, it doesn't look like a problem... it's just a bet (conversation between two employed males).

These quotes indicate that young people had an awareness of difficulties they had experienced with gambling and some even acknowledged that it had been a serious problem for them in the past. The first two quotes illustrate situations in which, at the time, the young people were engaging in problematic gambling they had an awareness of their behaviour, felt appropriate concern and could stop of their own free will. The third quote differs somewhat, in that it indicates that at the time the young man was engaging in problematic gambling he normalised his own behaviour, viewing it simply as placing 'bets' rather than as a behaviour which was causing him problems. These quotes reflect prevalence data that indicates while only a small number of young people experience problem gambling, these young people and their behavioural problems do indeed exist.

6.2 Gambling Motives

6.2.1 Social motivation

As gambling was largely accepted as part of the Australian culture it follows that young people considered gambling to be a good way to socialise with their fellow peers and family. Gambling was reported to enhance social interactions:

When we gamble people listen up, laugh, have fun, you are going to have better conversations, more friendly environment to be in, so it is definitely a good place to socialise (school student, male).

If you sit around playing a card game you are usually talking and socialising. You get to know each other more (school student, male).

The interaction of sporting and card games brings everyone together. The entertainment factor of gambling together makes it a social event (school student, male).

Gambling is a very big opportunity to socialise. With groups like older people that can go on the poker machines, they can put money on the machines as groups. When they go out drinking I have heard a lot of stories about guys - they put money in the pokies, whoever gets money shouts the drinks. Me going next door, that's five of us, sometimes even more, so you just shout these 5 cent pieces and it is a great way to socialise, time consuming, so I believe it has got a great big social factor in it (unemployed, female).

These quotes illustrate that gambling was considered to be an activity that could facilitate positive relationships through conversation, fun and laughter. Gambling not only brought young people together but also provided opportunities for them to become more intimately acquainted with each other and strengthen their ties (for example, by 'shouting' each other drinks with gambling wins).

Other young people believed that gambling was more enjoyable in a social context than when participating alone. The social component of gambling was often cited as providing an atmosphere conducive to enjoyment of the activity:

[Where are you or your peers most likely to gamble?]

Card games at people's houses.

[Are you more likely to gamble in a social environment, versus alone?]

Yeah, definitely. It is a fun thing, it's not that much money, you get a bit of entertainment out of it, whereas if you did it by yourself I would assume that you don't get so much entertainment out of it, and you are probably losing more money (university student, male).

[What about gambling is fun]

Socialising with your friends and that (unemployed, female).

Young people reported that the environments they occupied provided a good fit for gambling and socialising activities. When asked where young people would

be most likely to gamble, environments that allowed for socialising were cited often:

Probably at the pubs and clubs on keno and stuff. I guess it is a social aspect - a place where you can go and chill out and relax and have a few drinks and catch up and stuff, and there is keno there and it is just so easy to go and put money on it, and you don't have to watch it, and you can go and check it a half an hour later, and possibly win something. I don't ever play it any more but that was kind of the idea I guess (TAFE, female).

Pubs and surf clubs are where young people hang out. They are more attractive, the way they promote the clubs attract younger people. When they promote the gambling and stuff, the colours, the brightness, the unique bands, entertainment and stuff like that (School student, male).

Oh, probably at the pub. I think... well it's very social and we all go down and you can watch – especially the football – with the guys – but yeah, you can go down and watch the sport and get a meal. It's all there – like, if the pokies and the TAB wasn't there, you probably wouldn't bet – but because it's all just there and so accessible – they probably just do it (University Student, female).

Hardoon & Derevensky (2001) have asserted that gambling venues are often social spaces for adolescents. Certainly, in the current study venues in which gambling was available provided a match in terms of the environment young people sought for mutual fun, entertainment and social interaction.

Individual differences became apparent regarding the view that gambling provided a good opportunity for socialising. A small number of young people believed gambling could detract from the social experience, for example:

I don't know if it is an opportunity to socialise because you get so fixed on the whole winning thing or the game thing that you are not really actually hanging out with your friends (employed, female).

This young person felt that gambling and particularly the anticipation of winning distracted her from social opportunities rather than enhanced the social experience. Reports such as these were however, the exception. In fact the social component of gambling was so important to participation in such activities that without some degree of social interaction gambling was often viewed as unacceptable or deviant from societal norms:

Well if I am with Scott or the boys I would put some bets on or bet more, that type of thing but if I was by myself I don't think I would. I think I would feel may be like my Nan (laughing). My Nan who is like that - you see the old lady gamblers or cat ladies that seem to have their obsessions, who are living in a dump because all their money goes to that type of thing. I don't think I would be that type of person to do that (employed, female).

I think there's a difference between having a fun game of cards with your friends – like there's a difference between doing that and seriously doing it (employed, female).

The first quote illustrated the view that gambling in isolation was perceived as a socially deviant behaviour. The following quote demonstrates the belief that gambling that is not coupled with some form of socialising behaviour is more 'serious' or harmful.

Given the view that young people held regarding the ability of gambling activities to enhance and compliment social interaction it was not surprising that the opportunity to socialise was cited as one of the chief motivators of gambling behaviour in young people. When questioned as to the reasons that young people gambled typical responses included:

Just the general atmosphere and having a good time is why I gamble, being with mates (school student, male).

Probably how you see a lot of people having fun playing card games, having fun on the pokies, having a drink and socialising with their parents. At the races you see everyone dressed up and they are putting bets on and having bottles of champagne so you look at it and you think "hey that would be fun to try". Just because of the atmosphere that they are creating (school student, female).

Probably associated quite tightly with social environments, so we will go for a social outing, the fact there is a dinner at the surf club, pokies or a day at the races, there is horse racing, come over for some cards and bring a bag of \$1 coins, gold coins so there is that sociable, social attraction (employed, female).

The social aspect of it. Yeah, just doing with your mates and all that (TAFE, male).

To me gambling would seem like a way to socialise with my friends. It would seem a natural thing to do like if they went out and they were all playing blackjack, you would think 'well they are all doing it and they are having fun so may be I should go and try it with them, it would be a bit of fun', or on the pokies, 'oh I will go and join them on the pokies' (school student, female).

[At what age did you start gambling?]

Probably very young! I spent a lot of time in pubs. I had older friends and I looked a lot older than I was and I was actually going to Casinos with my big sister and stuff when I was sixteen... probably fifteen

[So what drew you to that kind of thing?]

Well, the fun of it... that it was a social activity... my friends and I, like you'd have drinks and you play the pokies and you'd talk to the machine and then you'd talk about it and you'd cheer when you got free games

and ... it was a social activity – a fun social activity (university student, female).

The excitement, family bonding and how my family has an interest in it. Just normal things that I do and everyone does (school student, female).

In my situation, it's something like a family bonding thing – we all gamble together – we all sit around Friday afternoon and do it together. Like, I guess it doesn't give you an excuse, but it's... that's the reasoning behind why we do footy tipping at home (employed, female).

Similar to reports in previous studies (Australian Council of Social Service, 1997; Sheeran & Orbell, 1999; Wood & Griffiths, 2002) the social aspect of gambling was very attractive to young people. The reasons for gambling cited above included the opportunity to have fun with others and connect with peers and family members. As Wood & Griffiths (2002) have found, gambling was seen to play a role in establishing a communal identity, sense of shared experience and belonging to family or peer group (Wood & Griffiths, 2002).

6.2.2 Boredom and Excitement

Theorists have proposed that gambling behaviour is connected to arousal deficits or the desire to experience stimulation (Jacobs, 1986; McCormick, 1987). Research has supported these notions revealing that among the most frequently cited motives for gambling are excitement and a desire to escape boredom (Neighbors, Lostutter, Cronce, Larimer, 2002). Similarly, this study revealed that the participants engaged in gambling behaviours due to boredom and the desire to experience excitement. When questioned as to when young people would be most likely to gamble, boredom was frequently given as a reason:

When I'm bored. Absolutely bored! I just want something to do... so just grab a scratchie and scratch away! (TAFE, male)

[Would you ever choose to gamble out of boredom?]

Yeah, yeah, always. If I'm real bored, that's what I'll do. I'll jump on the internet and play on the internet or go to the pub and just go sit there and I don't know... bet on the dogs or something (unemployed, male).

Clearly, young people in this study utilised gambling as a means of stimulation to relieve boredom. Previous research has revealed that the leisure time, particularly unstructured free time, may be linked to boredom, which can result in a desire to gamble (or alternatively, engage in other risk behaviours) (Moore & Ohtsuka, 2000). In this study it was revealed that gambling as a means of alleviating boredom was frequently engaged in during unstructured leisure time:

[Would you ever choose to gamble out of boredom?]

Yeah, definitely I think I already have. Just one of those exciting sort of things, you know, bit of excitement. Basically just nothing to do of a Sunday afternoon, mates ring you up and say 'what are you doing, come

up the pub', nothing doing so we go up the pub, throw twenty bucks in the pokies, it keeps you occupied (employed, male).

[What most makes you all gamble?]

A: Boredness (male).

B: Nothing to do on the Sunshine Coast – and that's true – you can say like go to the beach but it's winter (female).

C: Yeah, and like at night time and stuff - if you don't have any money to go out and you just have your mates over and stuff cause you're bored and then you end up just playing poker or something cause there's nothing else to do – unless you have money then there's nothing else to do. And like with poker at home, with the chips, you don't need money (male, Conversation amongst school students).

These quotes illustrate that gambling was an activity that could not only keep young people occupied but also produce excitement. Important to note was school students' perception that in the Sunshine Coast area free/affordable recreational activities during the winter or in the evening were not available for young people. Whether this is an accurate perception is not of importance, rather it indicates that regardless of what is presently being offered to young people, they believe that they do not have accessible and enjoyable entertainment options that they can select in order to self-manage and structure their leisure time. As a result, they partake in gambling activities, not because it is considered to be the most appealing activity but because there is a perceived lack of alternatives.

The practice of private gambling to alleviate boredom in and of itself, seems relatively harmless (i.e. the school students were in a home environment and thus there was potential for supervision and money was not involved in their play) however, theory and research have long suggested that activities selected during unstructured leisure time can shape developmental growth (Larson, 2001). For example, Piaget (1962) proposed that play was an arena for experimentation and for the adaptation of mental schemas (such as, concepts and strategies). Research has further substantiated play's relationships to young people's cognitive, linguistic, social and emotional development (Fisher, 1992). Social interaction can be thought of as a form of play and is viewed by theorists as a means of exploration and development of emotional, interpersonal, and moral schemas (Larson, 2001). Thus, young people's developmental growth is in part based on the activities they select to occupy their time and center their interaction upon. The current findings indicate that by utilising gambling as an unstructured leisure activity with friends, young people may be learning mental schemas and social and emotional skills through participation in this activity. The question remains as to how these gains may translate into future behaviour.

Certainly, some of the participants quoted above indicated that due to their participation in such activities they felt inclined to try 'real' gambling in the future. For example:

[When you guys play poker do you ever think, 'oh I'm getting better at this, I'd like to try it for real one day'?]

A: Sometimes (male).

B: No (laughing) (male).

A: Just like, I'd have a limit. I wouldn't go just like all out and stuff, I wouldn't keep like getting money and putting more in (Conversation amongst school students).

It is evident that further research is required to explore the impact that gambling, as a free-time leisure activity, may have on adult intentions, cognitions, beliefs/values and behaviours.

The findings of the current study also revealed that gambling was attractive not only during leisure time but also during unstructured periods in a young person's day, and during which they were likely to experience boredom. The young people in this study explained that gambling was an activity that could occupy their time while they were waiting for another activity or event to occur:

[Do you enjoy gambling?]

Playing the game is fun when you know there is something you could win but at the same time you know you could lose it all so it is not like "yes I want to go out and gamble", it is just like I will just do this because there is nothing else to do.

[What makes you want to gamble?]

Boredom, when I have got nothing else to do it is the only thing I can do because my teacher always has a pack of cards so I like having a fun game between friends. Overall if I'm bored and I'm in home group and I've got nothing else to do that's what I would do if we are not talking (school student, male).

I would never go somewhere especially to gamble if I was bored, but if I was at a venue that I might have had a bit of time that I was... just down time and I was a bit bored, I might do it, but I would never actually purposely go there (employed, female).

For some young people, raised in a western society, it is natural to seek constant and immediate stimulation, even during limited periods of down time, rather than face the experience of being left with their own internal processes such as thoughts and feelings (Grose, 2005; Huntley, 2006). From literature examining youth culture (Grose, 2005; Huntley, 2006) it could be argued that for many young people to sit with themselves without external stimulation is certainly not valued, and often associated with the experience of boredom. As such, gambling activities involving card games, scratch-its or poker machines, which can be completed in relatively short periods of time or in increments and involve little cognitive demand provide a perfect match for the requirements of immediate and temporal stimulation. This was reported particularly often by unemployed young people:

[Would you ever choose to gamble out of boredom?]

Yeah, I think so. Like I was saying, just the scratchies. You can get the bigger sort of ones that take up a bit more time. Like when I didn't have my licence, I was waiting for the bus, sort of get a magazine or you know, might buy a scratchie – pass a bit of the time, so yeah, if I've been bored, yeah (unemployed, female).

[Do you enjoy gambling?]

I enjoy scratching a scratchie or something here and there. I guess I'd have to say yes.

[So what about it do you like?]

Just when I'm scratching a scratchie it takes the boredom out me some days and whatnot. Gives me something to do (unemployed, male).

When I normally gamble, I normally do it when I'm bored. But yeah, probably just keep me occupied for a half hour or so. I get bored real easy 'cause I don't have a job at the moment, but yeah I haven't done it for quite a while... If I had a scratchie or whatnot around yeah I probably would scratch it, but yeah, other than that nothing really (unemployed, male).

Moore and Ohtsuka (2000) have proposed that involvement in work or educational activities can constrain the opportunities for deviant or risk-taking behaviours. As gambling can be considered to be a form of risk taking, the current study seems to indicate unemployed young people may be particularly vulnerable to gambling due to the experience of boredom.

It is evident that young people in this study sought out gambling activities in an effort to create levels of stimulation that would reduce feelings of boredom. As alluded to by an employed male previously in this section, one sensation that gambling can potentially provide is excitement. In fact, regardless of feelings of boredom this study revealed that the prospect of experiencing excitement motivated many of the young people to gamble:

Probably motivates me to start gambling is to hype up the night or more excitement, compared to what makes me to continue is to continue winning... So probably the excitement of having a go, compared to I would then be motivated by winning (employed, female).

[In the future, which types of gambling would you be willing to play?]

Scratchies, keno, not really horse betting or anything like that, just small amounts of money.

[And why do you think you are likely to participate in those?]

Just purely because I don't have the drive to profit from something like that. It is just if I do it, it is just to experience the thrill.

[Can you tell me a bit about the thrill?]

It is just the chance and luck, it is not so much about winning back a game, or the amount of money, it is not about the money side it is about the chance of actually winning, not so much what you do win.

These quotes illustrate that young people experienced a thrill or feelings of excitement when gambling. Behavioural theorists have asserted that such feelings, experienced by gamblers reinforce gambling behaviour (Dickerson & Adcock, 1987). In contrast, more purposive theories have proposed that the arousal triggered by gambling functions to overcome boredom (Brown, 1996). The common element in both of these theories is that gambling in and of itself can be considered emotionally and physiologically rewarding. Ladouceur & Walker (1998) have explained that both of these perspectives identify the principal reward for participation in gambling not to be monetary gain but rather, the excitement and amusement one can experience. In essence the product a gambler buys is the excitement gambling can produce rather than the potential material gain (Ladouceur & Walker, 1998). While these theories possess face validity, they would imply that the excitement gamblers experience has no correlation with winning (Ladouceur & Walker, 1998). This deduction appears to be at odds with the accounts of many young people participating in this current study, whose descriptions of gambling as a mood enhancer were strongly tied to experiences of winning. For example:

[So what makes you want to gamble?]

The thrill of knowing I could earn some quick money (school student, male).

[What about gambling do you enjoy?]

Just doing it. Scratching the scratchie, and the anticipation of waiting to see if you I win... Each time you scratch like “oh have I won”, it is just exciting (university student, female).

[Does gambling involve excitement or a buzz when you participate?]

Yes, it does have. It has a certain amount of excitement and you do get a bit of a buzz if you win, but if you lose there is no excitement, between the game when you are losing. I will use the example of the card game, if I win a hand, I am like “yes” and I am like “everyone give me your 5 cent pieces”, but if I lose and I have to pay my 5 cent pieces to everyone I am like “oh” and I start to feel annoyed and bored, “I am losing, this is a stupid game”. As soon as I win again I am like “cool, let’s keep playing”, so it has got a lot of emotions in it (unemployed, female).

[Are there any positive consequences of gambling?]

A: Winning. Getting money, but like it’s not going to happen, it’s one in a million! You’re more likely to only go in and lose money than win money (male).

B: But it makes you sort of feel better when you do win a bit. Even if it’s \$2.00 – like I’ve still won on a scratchie! Like it gives your life a bit of a high, like some would call it. But then it isn’t too much of a high because like, it’s just the thrill of like scratching to find out if you’ve got like \$1.00 or \$2.00 or something (female).

A: That’s pretty much it – the thrill of scratching it (conversation between TAFE students).

These quotes indicate that while young people did report feelings of excitement, thrills, buzzes and highs as a result of gambling these responses were most often associated with winning. Ladouceur and Walker (1998) have proposed that if excitement accompanies winning or the thought of winning and not other events within the gambling cycle then it is impossible to know whether it is the winning or excitement that maintains the gambling behaviour. It seems that in this study it is not possible to conclude whether changes in arousal levels or the desire to win was motivating young people's gambling behaviour. It can, however, be concluded that young people do in fact experience mood enhancement when participating in gambling activities.

Implications

In summary, gambling was utilised by young people to both reduce feelings of boredom and induce feelings of excitement. Some young people believed that engagement in activities that gave meaning to one's life or produced feelings of passion and interest had the propensity to protect young people from engaging in gambling behaviours. One young woman, after revealing she had engaged in excessive gambling behaviours in the past, explained how and why this had changed:

[What's changed for you in terms of your gambling? Is it just the money that we were talking about or is it something more?]

Well, yeah the money and I think growing up and like having your own money and like also I think boredom and the lack of a real excitement in your life makes you gamble. Like not necessarily depression per say, but that – like almost a lack of a full life, I guess, what *you* value as excitement. That if life seems a bit hard, or life seems a bit boring – if you don't have anything that truly distracts you and thrills you more than -
[So what do you have now that's different?]

Oh my study.

[So having that as could you say, a passion or a thrill, kind of takes away the need for getting it through other avenues?]

Yeah, like the cheap thrills of pokies or scratchies – like I think I still enjoy them but I guess there used to be kind of that sense that there really was going to be something good come out of it and something exciting and something thrilling when – and I guess that maybe that's even a bigger difference than the money and the growing up is that I'm consumed by a very different world. Like I get *much* more from my study and from teaching at Uni and being respected by my peers there and *love* my study so much and I'm so consumed by that – it takes up so much of my life that I'm not really looking for *cheap* thrills. I wouldn't have time for cheap thrills or energy for them (laughing). Like there's something more *real* in my life.

This young woman's quote illustrates that although she still enjoyed the thrill that accompanies gambling, her involvement in other important and fulfilling

activities replaced the meaning that gambling used to have in her life. In this way, healthy and constructive activities young people are involved in that are valued and represent avenues for excitement, passion or life purpose could serve as protective factors for gambling. Further, the role that boredom and excitement plays in motivating gambling behaviour may be an important factor to consider in the treatment of problem gambling in young people. That is, if young people are in fact utilising gambling to find meaning in their lives and to provide stimulation, successful abstinence from that behaviour would need to be supported by the presence of some other activity that could replace the benefits that gambling engagement was providing.

6.2.3 The Desire and Experience of Winning

Previous studies have found that the chance of winning money appears to be a primary motivator for participation in gambling activities, particularly in the initial decision to gamble (Wood & Griffiths, 2002). Similarly, young people participating in this study reported that the opportunity to win money was a factor that influenced their desire to first try gambling activities:

I suppose what made me start gambling was, I had never done it before and it was something new and the mates were winning money from it so it looked good at the time, so that was why I started I suppose (employed, male).

It appears that after seeing his peers win money through gambling, this young man perceived gambling to be a worthwhile activity and sought to experience a win himself. Whilst the opportunity to win played an important role in his uptake of gambling activities it is clear that this was one of several influencing factors. The prospect of experiencing something new and quite probably an unrecognised desire for belonging or peer approval could have also played a role.

The desire to win money initiated gambling behaviour in a minority of young people participating in this study with most young people reporting that the social opportunities surrounding gambling played a much larger role in influencing the first uptake of these activities, such as poker machines, card games, sports betting and casino table games. More frequent were reports regarding the role a desire to win could play in prompting gambling behaviour after the initial uptake had already occurred. A considerable number of young people cited that dreams, urges and desires centered on winning, provoked them to try their luck at gambling games. For example:

[What most makes you gamble?]

A: Maybe the chance of winning.

B: The want for more.

C: The amount of money you've got and the potential to win.

B: It's that little dream you've got in your head that keeps you playing and you go, 'one day, one day. What if, what if... it just came up... if I won thirty grand – it'll just affect my life!' You know, those sort of things just plays in everyone's head I reckon – you know, everyone's at least had those thoughts... and all you think of is, 'it could be me – and it's got to be somebody – it just could be me!' (conversation between employed males).

[*Why do you gamble?*]

In the end, really, a chance I could come out with more money. Money, money, money, everything is about money. If I was going to stick lotto on, or throw money in the pokies, besides thinking about entertainment, I would be thinking I could end up with more money, and we could all do with more of that (employed, female).

I just had this urge – pretty much I just wanted – everyone else is dipping out and I'm going to win you know. That's what it was like – it was like okay, I'm going to hone in and get this number (employed, male).

The views above may mirror the fact that young people have grown up in a society that promotes wealth and consumerism (Howe & Strauss, 2000; Huntey, 2006). To be wealthy is seen as a desirable state and, like adults, young people dream and fantasise about winning and the changes it would bring to their lives. Gambling advertisements featuring the purchase of large houses and luxury cars play on these desires and fantasies. While cognitive theories of gambling support the notion that the acquisition of wealth is the fundamental motivation for gambling behaviour, other theories do not regard this as true (Ladouceur & Walker, 1998). Similarly, the results of this study suggest that monetary gain is not a sole motivator for gambling behaviours. Winning in and of itself (without monetary gain) was seen to motivate young people to gamble, which is exemplified by the employed male's urge to guess the correct number after all others had failed. This could be explained by social theory, whereby peer approval, admiration or acceptance can be gained by a gambling win (Dowling et al., 2005; Haroon & Derevensky, 2001, Moore & Ohtsuka, 1997). Furthermore, one participant quoted above cites entertainment as an additional factor that prompts his gambling behaviour. Behavioural theorists would explain that amusement and excitement serve to reinforce the gambling behaviour (Dickerson & Adcock, 1987). Thus, it can be concluded that while winning was an important factor of influence, in many instances it did not act in isolation to encourage gambling behaviours and should not be assumed as the sole or fundamental motivator for gambling behaviours.

In addition to the desire to win playing a role in influencing gambling behaviour, the actual experience of an early win was also found to have an impact on future gambling involvement. Much research has focused on this phenomenon (Delfabbro, 2005; Hayatabakhsh et al, 2006) and the current study supports previous findings. One participant explained how her experiences of winning differed to her friend's experience and thus, influenced their behaviours in a contrasting manner:

Motivation to continue gambling – definitely the winning! Like I've played the pokies once – the first time I played it I lost and I didn't play it for years! Whereas a friend of mine who's 19, and obviously started when he was 18 – won on his first go and has continued loving the pokies! It's that whole factor of whether you have a good time the first time I think, and you win – whether you're more likely to continue doing it (university student, female).

This young woman possessed remarkable insight into the processes operating to influence both herself and her fellow peer. She differentiated between the consequences of early losses and early wins, attributing her friend's ongoing participation in poker machine play to the fact that he had an initial winning experience. This view was mirrored by several other young people. One considered the experience of winning to be a prime motivator in her own and others gambling behaviours:

If you have never won a bet I don't think you would continue. I think if you just tried and tried and you just felt that you had bad luck, then you wouldn't really continue with it, but because we seem to win a fair bit we continue (employed, female).

For this young woman, the fact that she did not experience continual losses was interpreted as a sign that she not have 'bad luck' and thus, prompted her to continue gambling over time. Conversely others reported that while winning triggered a desire for further gambling in the short term, this effect was not maintained over a long period. For example, this young man reported the following:

I remember a big win, the \$2,000 we won on Keno. It doesn't affect me now... When we won it may be like a while after that it did, it made us want to bet on Keno more, but now that it has been so long we don't play Keno any more, so it doesn't. In the long run it hasn't affected us but in the short time afterwards it did (employed, male).

The experiences of young people could be explained by operant theory (Skinner 1953, 1974). That is, periodic instances of winning provide positive reinforcement of gambling behaviour because the variable-ratio reinforcement schedule strongly maintains behaviour that in most cases is difficult to extinguish (Ferster & Skinner, 1957). However, individual differences were ever present in this group of young people, with the young man above an exception to usual steady response pattern that maintains the gambling behaviour and resists change.

As a whole, the data suggests that winning (with or without monetary gain) was an important factor that motivated either young people's initial uptake of gambling behaviour or their uptake of gambling activities over time.

6.3 Influences on Gambling Behaviour

6.3.1 The Experience of Winning and Erroneous Cognitions

The experience of winning

As discussed previously, the desire to win and the experience of winning motivated many young people in this study to continually return to gambling activities over time. In addition to this, young people reported that winning maintained their gambling behaviours during specific instances of participation, thus influencing the length of time or money they invested in a particular gambling activity. For example, the following participants reported that a win influenced their decision to place more bets on the game in which they were currently participating:

If there's something big, like a big horse race or big football game or something on, that might motivate me to put a bet on, and then if I win that bet and I'm down at the pub, then 'cause I've won a bit of money I might decide, that might motivate me to keep trying to win more (TAFE, male).

What motivates me to continue to gamble is – if I do win – like if I do win a little bit on the pokies I might put another \$5 in or something like that (university student, female).

Behaviour theory would attribute such conduct to reinforcement cycles. While these processes may have been occurring, it seems that young people also possess erroneous beliefs about winning and the influence they personally had over a win. Perceived control is a common misconception whereby people over-estimate their ability to influence gambling outcomes (Langer, 1975; Langer & Roth, 1975). After experiencing a win, some young people in this study overestimated their future chances of winning. This was not necessarily claimed on the basis of having some sort of extraordinary skill or knowledge about gambling, as is often the case with problem gamblers (Langer, 1975), but rather a general belief that as they had experienced a win they must have some personal characteristic that will ensure another. The following quotes reflect this notion:

Oh, it would have been so easy to just, like, keep putting more and more on the horses because... three in a row I was winning – and having that in your head like... it's easy enough to win and then you just think you can do it again which is – I don't think I could become like a gambler but I can see how people do – like you win once and you think it can happen again (School student, female).

Well, if you get the perception that you're always going to win, you're always going to put in more. I know people who have had that experience and they've won a large amount and they've just put it all back in – and lost it all... to try and win more. (employed, male)

I've had a friend who won \$1000 one night and then the next night he won \$500 so he got it in his head that he would always win – or he

couldn't lose and so he like wasted heaps of his pay on it (school student, female).

These quotes demonstrate that after a win or a series of wins, some young people no longer solely attributed the wins to chance, rather they perceived themselves to have a greater degree of control over the outcome than is probably the case or they simply failed to utilise their understanding about the law of independence of events (Gupta & Derevensky, 2001). In some cases beliefs such as these contributed to participants' decisions to keep gambling.

While the above findings are concerning, it must be kept in mind that young people did possess a good degree of insight into their behaviour and an awareness of the potential effect a winning experience had on them. For example:

Thinking that if you've won that amount, you could win twice that amount or three times that amount or always wanting more, that's why I don't think it's any good. That's what I really kind of try to drill into myself, I know when to stop, I know my limitations. I never try and go sort of over my head (employed, male).

I do want to have another go if I win, but then I've got my maximum limit to put in so if I've put my maximum then I know I won't but say I put in \$5.00 and I win – then I'm like "oooh.... another \$5.00!" (TAFE, female).

These young people not only understood that winning triggered their desire to gamble more but were also willing to make a conscious decision to stop gambling or alternatively, had a budget that they were committed to maintain. Another interesting observation is the terminology used by the employed male when he speaks about never going over his head. Given that such terminology is used in the Queensland Government Responsible Community Awareness Campaign it could be deduced that young people are taking onboard such messages and further, relating them to their own behaviour.

Similar to the influence of a gambling win, the experience of losing also served to encourage further gambling behaviours for some young people. One female reported that rather than admitting defeat after a loss she perceived that she was nearing a win:

When you lose you are like 'oh I don't like gambling.'

[Why do you think you gamble again after losing and thinking it is no good?]

Because sometimes you get really close to actually winning and you are like '...oh I could have done that, I have just got to change this bit.' You just keep doing it and doing it thinking 'oh I could do this I have just got to do this thing different' (unemployed, female).

This line of reasoning is known as the near miss phenomena (Derevensky & Gupta, 2001). A near miss acts as an intermediate reinforcer producing some of the excitement of a win or alternatively, frustration and thus, prompts the

gambler to play again in pursuit of their near win (Parke & Griffiths, 2001). Furthermore, young people reported that losing could trigger the desire to gamble again simply because they wanted their experience to end in a positive way:

Losing makes you want to try again because you want to go out on a high note, so you will just keep trying to win (school student, male).

Erroneous Cognitions

Considering the fact that winning was very appealing to young people and motivated many to either start gambling or continue in the pursuit of further gains, it would be reasonable to hypothesise that young people may overestimate their chances of winning. Whilst this has been found to be the case in other research (Delfabbro et al., 2005) the current study revealed that very few participants overestimated the chances of winning on gambling games. There were however, exceptions as exemplified below:

You don't always lose money but it's like 50/50 chance, like Keno. (employed, male).

In response to this young man's overestimation of Keno odds, another participant in the focus group stated:

Well, not necessarily 50/50. You've got odds – it's not just win/lose, you've got – obviously they're not going to make something that you've got just as good a chance of winning as a chance of losing (employed, male).

In spite of a small number of exceptions, most young people possess quite accurate knowledge in relation to their actual chances of gaining a gambling win. Although not able to identify the exact odds of gambling activities, young people in this study recognised that their chances of winning were slim:

We had to do probability as a subject at school actually. I just know that the chances of loss are much more likely than your chances of return (university student, female).

[Do you feel that you have a good understanding of odds and probability?]

Probably not a *real* good understanding... Like I know with the pokies that sort of thing – the odds are just way against us of winning (employed, male).

Young people in fact could recognise that a discrepancy existed between their intellectual knowledge/reason and the hope/emotions they possessed about winning. One young man explained this process:

Definitely the logic says you probably won't win but the emotion says you've got a chance (school student, male).

Further to his understanding that the chances of winning were slim, he recognised that his desire to win largely represented a fantasy. This type of insight was not uncommon and exhibits young people's profound ability to self-reflect. Young people's reports suggest that emotion may in fact have a greater influence on their behaviour than reason. Young people participating in this study explained how a desire to win overrode their intellectual knowledge when choosing whether to participate in gambling:

I don't really know how to explain it. There is an idea that the chances are pretty stacked against you, and to win would pretty much be a miracle, but there is always that thought 'what if, it could be you this time, you have to be in it to win it', those sorts of thoughts (TAFE student, female).

Psychologically I know the chances of winning are quite slim but I'd say winning did - it changed it. Because before I started buying those scratchies, when I was too young to buy any I just thought it was all a waste of money 'what's the point?' I knew people around me were winning but I just thought 'it will never happen to me so there's no point me wasting my money on it.' But then of course I won and it puts that little seed in where that next time you go this might be the winning one so it creates that seed of doubt (employed, female).

Reports of this nature indicate that emotions had powerful effects on choice. Anticipated emotions, those the participants expected to feel about outcomes of decisions were seen to influence intentions and actions (Mellers, Schwartz, Ho & Ritov, 1997). In this instance imagined feelings of regret, namely anticipated regret influenced participants' decisions (Mellers, Schwartz & Ritov, 1999). Theorists have proposed that anticipated regret motivates behaviour as it is a pervasive and powerful emotion that people wish to avoid (Sheeran & Orbell, 1999). Previous research has found that anticipated regret influenced expectations about eating junk food, using soft drugs and drinking alcohol (Richard et al., 1996). It has also been found to increase intended lottery play in adults and influence patterns of lottery play in students (Sheeran & Orbell, 1999; Bar-Hillel & Neter, 1996). The presence of anticipated regret can be seen in the quotes above. In the first quote the TAFE student reported experiencing thoughts about the possibility that she could be the winner. The second quote is similar, in that the young woman spoke of a 'seed of doubt' that pushed her towards trying her luck just in case she happened to win. Interestingly, this was initiated by an early winning experience. Both of these participants experienced thoughts of anticipated regret alongside the knowledge that they are unlikely to actually win. This points to the role that emotion and namely, anticipated regret played in facilitating gambling behaviours whereby regret was anticipated if non-participation resulted in missed winnings, despite the presence of reason that suggested the likelihood of winning was actually very slim.

The anticipation of not only negative emotions such as regret, but also that of positive emotions was found to influence young people's intention to gamble.

One young person reported that the anticipation of excitement, surprise and happiness motivated her to continue gambling:

I think you get a bit desperate and you're kind of hoping – like even if you don't believe – you're hoping that you're going to be proven wrong and then that will be terribly exciting. Even if consciously you're thinking 'oh, you know, this is going nowhere fast' what motivates you to keep going – I'm saying this like rhetorically but it's like you think, 'oh I'm going to be proven wrong any second and then that will be terribly exciting and I'll be so surprised and shocked and happy' (university student, female).

Clearly, this participant was not misguided about the likelihood of winning as she did not place much belief (if any) in the hope and even desperation she felt. However, as she expected to feel pleasant emotions when wins occurred, she continued to gamble. Once again decision-making was not a purely cognitive process. Emotions played a large role in the decisions of young people in the study to keep gambling.

Another process through which reason or logic was disregarded was that of cognitive switching, whereby irrational strategies or personal idiosyncratic beliefs were reverted to despite the awareness of objective information. This practice was apparent in the following report:

[Can you affect chance?]

No, we just like to think we can. Like some people, when they go to the pub and there is ladies rubbing the machine and kissing their hand and putting it on numbers and stuff and you just think 'what an idiot', but we will go to one machine and one machine only, so it is really not that different. There is that little bit on your shoulder, or talking in your ear that says it will win (employed person, female).

This finding revealed that young people in this study utilised and evaluated information in ways that ran counter to objective knowledge in an attempt to secure a win. Previous studies have revealed similar patterns for problem gamblers and university students alike (Delfabbro et al., 2005; Williams & Connolly, 2006). The presence of cognitive switching in the current sample demonstrates a further divergence between understanding of the objective odds of gambling and more personal beliefs. The current results provide support for Ladouceur's (2001) proposal that cold/objective knowledge is distinct from hot/personally relevant cognitions and that hot knowledge can override cold knowledge during gambling activities (Derevensky & Gupta, 2001).

Erroneous Beliefs

Whilst the most common reliance on erroneous beliefs occurred despite the existence of conflicting knowledge, some individuals in the sample were found to base their gambling decisions on genuinely mistaken beliefs about the nature of randomness and role of chance. For instance a small number of young people reported that the use of a strategy or system could influence the outcome in games of chance:

Lottery is all about the numbers, you can pick like say 5, 7, 12 and 13 and they could come up, 5, 7 and 12 could come up, or just 5 and 7 because they could be your most popular numbers and you could win like... and 12 and 13 are the high numbers so they could be even luckier (school student, male).

[Do you agree you could win more if you used a certain system or strategy?]

I suppose so I have heard stories of guys playing Keno that much that they actually figure out how to do it and win big money, but I haven't actually met one of these people. I think it is just they must sit there and watch every game and write down every number and just play it that much that they know what's going to come up, and know how the games are going that day, but I don't know how because they are doing it at random so I don't know how that works.

[But you think it may?]

Probably if someone sits there long enough there has got to be some sort of pattern I suppose (unemployed, female).

The first participant reports the existence of 'lucky' numbers in the random game of lottery. The second participant indicates she is somewhat certain that in Keno a pattern of winning numbers can be identified if studied long enough. Interestingly, she gains this knowledge through hearsay and believes it despite the acknowledgement that Keno is a random system. Some participants who did not believe a strategy could bring about a gambling win in games of chance had shaped their beliefs according to their subjective experiences at the time, rather than objective knowledge based on an understanding of the nature of odds and probability:

When I played bingo I used to try and use strategy like marking the papers different, marking the numbers in a different way, you sit in a different way and just sort of hope but it never worked out so I just gave up on that (unemployed, female).

My nana has this system and she always wins on pokies. She will only play like Cashmere machines and she only bets a certain way and she always wins big...

[So do you think her system works]

No because I have tried it and it didn't work for me (university student, female).

Had these young people, by chance experienced a win instead of a loss when experimenting with different strategies, the subsequent beliefs they developed may have supported the use of systems for games of chance, thus encouraging future gambling behaviours.

Other participants in this study believed that positive thoughts, mood, visualisation or lucky charms could facilitate winning at games of chance. For example:

I always like to bring something lucky [to gamble on the pokies] because it gives me like, you know, like law of attraction type thing.

[Can you tell me a bit more about the law of attraction?]

You visualise yourself winning, visualise it, concentrate on it. I've done it, I've been pushing buttons and "the features not going to come up and it's going to come up now". And I'll bloody press that button "it's going to come up now, see I told you, I felt it". And you know, you feel it. It's very intense actually (unemployed, male).

If I am in a bad mood then I won't bet at all, if I do and I am in a bad mood, I just lose all night. I don't know it is just in my head, if I am not in a good mood, or I am not feeling positive I never seem to win. I don't know why, but it is always part of my thinking that it does, and if you think positive that things will happen and vice versa (employed, female).

In the past it has been well established that thinking errors such as superstition were held by gamblers (Oei & Raylu, 2004). In this study this trend was indicated through the utilisation of 'lucky charms'. What is unique about the present results is that young people have taken on a currently popular breed of beliefs/spiritual orientations centring on the laws of attraction, the power of thought and positive thinking. This is apparent in the quotes above, reporting that positive thinking and visualisation can bring about gambling wins. Young people are receiving information about these techniques through several mediums such as new age books, peers and importantly television. *The Secret*, a recent movie screened on free to air television was cited by several young people. One young person mentioned it when explaining what motivates him to gamble:

The Secret pretty much explains it there; it's the power of thought, somebody's thinking 'I'm going to win, I'm going to win' - they are going to win.

[So do you think that kind of thought can influence whether you win or not?]

Yeah, it can because if you're thinking loss you're going to lose, if you're thinking negatively you're going to get bad cards, if you think clear, playing as you were every other day and just having a good time not trying to win completely but just still keeping your eye on the prize and just sitting there and you're like sort of 'yeah, alright yeah', just sort of fold your way through and at the end just jump on them, and it's usually yours (Unemployed, male).

Considering popular self-help materials such as *The Secret* propose ways to use 'powerful laws of thought' specifically to gain insurmountable wealth, it is easy to understand how young people could interpret such information as applicable to situations of monetary gain in gambling. While it is beyond the scope of this project to comment on the validity of such concepts, it is possible that beliefs of this nature when utilised for gambling gain could set up not only unrealistic expectations about the gambling outcomes but also allow for the justification of gambling on higher grounds or spiritual principles.

Another common belief was that of the gambler's fallacy, whereby past events of a random nature were thought to predict future outcomes (O'Conner, Ashenden, Raven et al., 2000). Several participants believed (or reported to have friends who believed) that after many losses a win was ensured, particularly when playing poker machines:

The more losses you have the closer you are to having a win, especially if it is just possibility like chance and luck involved in the game (school student, male).

If you see someone putting a lot of money into the pokies, you think, 'I think eventually it's got to pay out.' You know, if you sit there and keep putting money in and money in and money in, keep turning the turns over – and no one wins on it, *eventually* it's got to win – it's got to pay off. It could only be a small amount but it will eventually – eventually the free spins or something will come up (employed, male).

[Do you agree that after losing many times in row, you're more likely to win?]

Yep. I think that's definitely a common perception. I think I do tend to agree with it, that you do eventually have to come up with a winner (university student, female).

I have a mate who, when he goes to the Casino, he'll look at the roulette and let's say there's 5 or 6 come up with all black, after that point he'll throw a chunk on red – just because he figures the odds have come up that 6 blacks have come up in a row that it's got to come up red sooner or later (employed, male).

These reports indicate that some young people did not have accurate knowledge about the random nature of gambling and were not making sufficiently informed decisions to gamble.

Implications

As a whole the findings of this study related to beliefs about winning and other erroneous cognitions could be interpreted to suggest that young people require more education about gambling odds and probability. However, the findings revealed that even those participants who did display a degree of objective knowledge about gambling were still swayed by their own idiosyncratic beliefs when it came to participation. Several theorists have proposed that the possession of objective knowledge of mathematics and statistics may not protect people from either an interest in gambling or other false perceptions (Delfabbro et al., 2005; Williams & Connolly, 2006). Although, it is clear that some young people in the study would benefit from education about odds and probability due to the lack of general knowledge in this area, our findings too suggest this may not actually influence participation rates in gambling activities. As recommended by Delfabbro (et al., 2005) any formal education about odds and probability, while useful could be even more so when paired with strategies

that promote greater insight into idiosyncratic belief systems and superstitious beliefs. In this way young people can be taught to have greater self-awareness and challenge their own beliefs (Delfabbro et al., 2005). Education should also target young people's critical analysis skills in order to influence the persuasiveness of advertisements and popular texts, such as *The Secret*. Through the provision of tools enabling critical and visual literacy young people can deconstruct and critically interpret popular media that emphasise the notion of 'luck' and promotes belief systems that suggest control over random events.

6.3.2 Family

Active Encouragement

Given the importance placed on social context when participating in gambling activities, it is not surprising that family members were found to influence young people's gambling attitudes and behaviours. In this study active encouragement in a variety of gambling activities was evident for example, parents and extended family members were reported to purchase scratch-its and lotto tickets for young people when requested; they regularly gave scratch-it gifts on special occasions; supplied young people with money to play on poker machines in licensed venues; formed partnerships with young people when choosing lotto numbers, sport teams or horses to bet on or to play scratch-its and they also placed bets on young people's behalf. The following accounts illustrate such behaviour:

Gambling has always been around my family and I have always been aware of it. Around 9 or 10 you would have realised because it was always Gold Lotto on TV and mum would be like "watch out for the numbers because we might win", so that's how you kind of find out what gambling is (school student, female).

[When you were younger did you ever use scratchies or things like that?]
Yeah. Just basically presents, just friends and say my dad would get a scratchie and I would help him scratch it or basically stuff like that.

[What did you think about those sort kind games at that age?]
Well, one thought it was great... But, basically just too young to understand. Thought about the colours and the pictures. Everything was a sort of a bit of a game (employed, male).

When I was young I used to go to the, go to the [Name of place] with my Nan and Poppy and on our way back they would just stop in and check their lotto, but sometimes my Nan would buy me like a raffle ticket or something. And I'm scratching the card and if I won anything I'd give it to my Nan and she'd go get my money for me. That'd be pretty cool, but most time I didn't win anything (school student, male).

I used to go the RSL with my parents and say "can you put a dollar on these keno numbers?" – cause [sic] I couldn't actually put the Keno bet on myself but I'd never sit at a machine cause [sic] if I won I couldn't claim it anyway, but with a Keno thing I'd put a dollar or something on (employed, female).

Given that as the age of initiation to gambling activities decreases, the greater the risk of developing a gambling related problem, the early encouragement of gambling as a form of entertainment found in this study is concerning (Derevensky & Gupta, 2001). These findings were not, however, novel as they mirror the pattern of parental behaviour found in numerous other studies (Derevensky & Gupta, 2001; Ladouceur et al., 1994; Secomb, 2004; Wood & Griffiths, 1998). Young people's accounts in this study suggested that early encouragement to participate in gambling may have had the potential to alter perceptions of gambling. The male quoted above reported that when he was a child participating in scratch-it games, his focus centred on the colours and pictures, thus he likened scratch-it play to a childhood game. The association of gambling activities with childhood games could normalise gambling behaviour in that it is no longer regarded as an exclusively adult activity accompanied by possible monetary loss and further risks but rather, as a harmless and fun game on par with other childhood activities involving colour, pictures and pleasure. Furthermore, in this instance, the gambling activity was also linked to something parents and children engaged in together, therefore imbuing the behaviour with positive associations over and beyond a game.

Likening early gambling behaviour with games was not uncommon in this study. Another young woman likened poker machine play to an arcade game:

When I was little, three or four, we would go to the local pub because we would come from a country background and we knew everyone there, so they would give me \$1, and I would put \$1 on a horse or \$1 in a pokie machine but it was really nothing significant... it just kind of seemed like something fun. You know how you go to little arcades and play games like that, it was just like that, and then if I got a dollar, then may be I could go and get lollies and something (school student, female).

In this instance parental encouragement of gambling behaviour was seen to result in a normalisation of gambling activities which could have the potential to encourage gambling behaviours later in life through the development of cognitions that associate gambling with harmless fun, childhood games and rewards rather than a risky activity.

It is important that patterns of parental influence are considered. As the above quotes indicate the types of gambling games parents encouraged were diverse. While scratch-it and lottery play was frequently reported as being endorsed by parents, poker machine and casino game play also received parental support. For example:

You can get gambling machines on trains travelling to and from cities – runs North and South... So I'd often be, I don't know, 15 with my father and fair enough it's his money and his gambling, but he might ask me you know, "here's \$5, try your luck", I would have been under 15, I would've been 12 maybe. Numerous times (employed, male).

[Have you ever gambled at a licensed venue while under age?]

Yes. I have always looked older than I am so I have never been asked for ID. All through high school or may be 15, grade 10 to 12 more so, when we would be at the pub I would put some money in the pokies while mum was there, because me and my mum have been more like friends than a mother and daughter relationship, and in the Melbourne Cup those sorts of things and if we are sitting there and we would see something to do with our name or an animal name, we would put \$1 on it (employed, female).

Last year I went to the Philippines where my mother came from and my Auntie wanted to take my Mum to a casino, just to have a look around and see what it's like – and Mum's like “oh, do you think that we could bring Sasha because I don't want to leave her by herself at the hotel?” So my Auntie was like, “okay, we'd be able to get her in, security isn't that bad and she looks 21.” So they dressed me up to see if we could actually get in and we got in! They didn't even ask me for ID or anything - I just said, “oh yeah, I'm from Australia, I'm 21.” I was able to play at the pokies, I was able to play at the tables.

[What was that experience like for you?]

It was really scary! – like how easy it was to get in and how easy it would be just to try your luck at any of the pokies or the table... It's a temptation (school student, female).

Clearly, the introduction to poker machines and casino games at an early age, particularly when the introduction is facilitated by parents or laden with positive associations, could set young people up to seek out these types of activities later on in life. The young woman above reports that the realisation of how easy it was for her gain entry into the casino resulted in feelings of temptation. These feelings were, however, coupled with a degree of fear indicating that she must have possessed some kind of awareness about the risky nature of such activities.

To determine the long term impact that parental support of participation in different types of gambling activities may have on young people, the nature of the gambling activity being encouraged must be examined. Inspection of the structural properties of lottery products reveal that their stake-outcome cycle, fixed in time and date over several days or months results in a low addictive potential (Dickerson, 2003; DeFuentes-Merillas, Koeter, Bethlehem, Schippers & VanDenBrink, 2002). In comparison, both scratch-its and poker-machines feature short-payout intervals, low thresholds in terms of accessibility and costs and can result in the near-miss effect in which the occurrence of failures that are close to being successful encourage future play (DeFuentes-Merillas, 2002). Scratch-its are so similar in character to poker machines that they have been referred to as the 'paper fruit machines' or in Australian terms the 'paper poker machines' (Griffiths, 2000). The addictive potential of scratch-its should, however, still be considered moderate in comparison to the potential of poker machines and casino games, which is somewhat higher (DeFuentes-Merillas, 2002). Studies examining the prevalence of scratch-it addiction in young people have revealed results that reflect the moderate rate of addictive potential. Wood & Griffiths (1998) found that 6% of 11-15 year old adolescents

could be diagnosed as pathological gamblers according to DSM-IV-J criteria. Similarly, in a study among 11-16 year old boys, 5% of the total sample met DSM-IV criteria for pathological scratch-card gambling (Griffiths, 2000). In summary, the addictive potential of different types of gambling is still to a large extent under investigation. Research to date suggests that scratch-its, poker machine play and casino games have a moderate to high addictive potential, while lottery play has a lower potential. In relation to the current results, past research suggests that parental encouragement of scratch-it play should not be dismissed as harmless. Rather, the active encouragement of any type of gambling activity whether it be lottery play, scratch-its, poker machines or casino games should be viewed as having the potential to influence future gambling habits, both recreational and problematic. Further research is required to explore the hierarchies of influences and the impact of parental encouragement of a wide range of gambling activities.

Indirect Parental Influence

Social learning theorists have posited that parental influence on the acquirement of behaviours can occur through not only overt encouragement but also through processes of observation and imitation (Bandura, 1977). The influence of familial modelling of gambling behaviour was evident in many young people's accounts of their preferred type of gambling. One young man explains the origins of his fondness for betting on the horses:

[What are you most likely to participate in?]

Probably the horse races. Probably 'cause most of my family love the horses, and I pretty much grew up on a farm as well so that doesn't help (Laugh). But yeah, probably mainly the horse races because my uncle's a reasonably big better in that, and whatnot (unemployed, male).

This young man indicates that overt modeling by his uncle was considered to be a factor in his future uptake of horse racing as a gambling pastime. He also considered his family's fondness for horses and his farm upbringing to have influenced him. Oei & Raylu (2004) have proposed that parental cognitions have an indirect contribution to behaviour such as gambling via offspring's cognitions. The current results demonstrate not only that young people directly imitated gambling behaviour that was modeled to them by immediate and close extended family members, but also that parental values, attitudes and beliefs had a propensity to influence their actual behaviour.

In this study parental tolerance towards underage gambling was seen to provide vicarious reinforcement of young people's gambling behaviour. One school student reported that her parents knew that she gambled at a licensed venue:

Pokies, I played them the other weekend, they are so fun. You just press buttons and work out how to play the next one.

[Did you play at a club?]

Yes. It's not called RSL, but like an RSL kind of.

[Was that with friends, family...]

Friends... I went with my boyfriend, because it is in [name of town] and it is such a small community, everyone knows each other, everyone trusts each other. And nobody takes any notice of us. You can go in there as long as you are not 14.

[So you are 18?]

No but I have a membership card, and you have to be 18 to have a membership card.

[Do your parents know?]

Yes.

[So they are OK?]

Yeah, I was just going in and playing a few games, I have never played before, I don't know how to play pokies, I was just mucking around, don't get it but, just tried it (School student, female).

Research suggests that the likelihood of engaging in problem behaviours, including gambling is influenced by adolescents' perceptions of the social controls against problem behaviour and perceptions of permissive attitudes (Jessor & Jessor, 1973). Given that this young woman perceived her parents to have a very liberal and permissive attitude towards gambling, it is not surprising that she was participating in such activities. While her reports of gambling involvement may seem harmless and experimental, research suggests that this young woman could be at greater risk of developing a gambling problem due to her parents' (and, subsequently, the community's) permissive nature. Emerson, Whelan, Meyers & Murray (2007) have found that a negative relationship exists between parent disapproval and problem gambling status indicating that adolescents who perceive that they will get in trouble for engaging in problem behaviour are less likely to experience gambling problems. Further, Vachon, Vitaro, Wanner & Tremblay (2004) has found that youth who receive inadequate parental disciplinary practices are more likely to experience gambling problems. Thus, parental knowledge of gambling behaviour without objection may not only encourage future recreational gambling behaviour but also indicate a risk for future problematic gambling.

Felsher, Derevensky & Gupta (2003) have proposed that vicarious reinforcement of gambling behaviour can occur when young people learn about the excitement of gambling by watching the reactions of their parents. Evidence of a similar process was found in this study with one young man reporting that the experience of waiting for his parents outside a casino prompted desires to gamble:

My parents went to the pokies and I was actually outside waiting. We went down to the Crown Casino in Melbourne and I didn't go in – I wanted to... It was like an hour and my parents were in there. I wanted to feel the good vibrations and I wanted to do something exciting (unemployed, male).

Simply the experience of waiting in a casino environment triggered this young man's imagination about the 'good vibrations' and 'excitement' his parents were experiencing and thus a desire to try gambling himself arose. In this instance, the young person did not even have to witness the reactions of his parents first

hand, thus it seems that thoughts about parental excitement and witnessing their anticipation may be enough to reinforce gambling behaviour.

Understanding of familial influence

Many young people possessed insight into the social processes that influenced their gambling related beliefs. Many explained that their parents' attitudes and behaviours had a large influence on their own beliefs:

[What factors do you think put people at greater risk of gambling?]

If their parents do it because they have grown up around those kinds of venues and their parents are doing it so they believe that that's normal (employed, female).

I think it's a huge influence. If my parents were to gamble a lot regularly, I think that I might have a different perception of it and think that it's okay and all that. You know, that it's more acceptable to do that. But coming from a family that doesn't gamble much at all – it's definitely – the perceptions that I have, have come from that (University student, female).

[Why do you think you didn't gamble when you visited the internet site, whereas other young people may?]

I suppose just culture and influence and how I've grown up... just the way I've been conditioned. It depends on the lifestyle you grow up with I suppose. I never really grew up around gambling... Mum still does the Lottery I suppose, occasional scratchie. I find that okay. Never looking to pokies or anything but I suppose other families' children who do gamble – if it's played off – if their parents play it off as something like, 'it's harmless, it's fine' then the kids might grow up thinking, 'Okay maybe it isn't such... maybe I can do it'. So sort of depends on just I suppose how you live (unemployed, Male).

These quotes reflect several ideas about familial influence on gambling. The first quote displays an understanding that early recreational experiences in gambling venues can normalise the gambling experience. Academic literature in fact supports this notion, suggesting that gambling venues that accommodate young people may initiate a normalisation process in which gambling is viewed as a fun family activity (Secomb, 2004). The second female, explains that parental modeling of gambling can influence one's perception of appropriate and socially acceptable recreational behaviour. She also considers the magnitude of parental influence to be very substantial. Finally, the last quote indicates that parental values, attitudes and beliefs about gambling can influence young people via a conditioning process. These notions have long been supported by empirical research and reflect the advanced nature of understanding young people held (Oei & Raylu, 2004).

Parent-child communication about gambling

Researchers have long identified the content of communication between parent and child as significant but also as “the most important instrument of socialisation” (Berger & Luckmann, 1967). Public health research has recognised the pivotal role that parent-offspring communication plays in protecting youth from a number of risk behaviours including drug use, alcohol use and decisions regarding tattoos (Cremeens, Usdan, Brock-Martin, Martin & Watkins, 2008; Koch, Roberts, Cannon, Armstrong, & Owen, 2005; Miller-Day, 2008). At present no research known to the authors exists that explores parent-child communication (that is, communication that is purposeful and planned) and its influence on gambling involvement. Thus the current study sought to investigate the types of communication strategies young people reported parents using in attempts to promote awareness about the risks associated with gambling. Many participants reported that while they shared in or at least observed recreational gambling within the family, their parents did not address the risks of gambling with them:

I don't think they've discussed gambling. No, it's just sort of... something I picked up along the way... no-one really sits down in my family and tells you anything. You sort of figure it out for yourself and see how you go (unemployed, female).

[What is your close family's attitude to gambling in general?]

I don't think it is really strong like for or against it, it has never really been an issue for anyone close to us so it is just kind of a foreign subject. If anything it is just seen as an activity, a piece of entertainment (school student, female).

I don't think my parents really see gambling as anything. It's not like they've blocked it out from my life, I know what it is and they know that I know... And like Melbourne Cup Day comes and Dad's like, “all right, pick a horse” and it's nothing. But I don't think they really see it as it's going to be a threat to me, like anything that will harm me or anything so they haven't really talked to me about the risk. Whereas drugs and alcohol and stuff I've got the real like warning like, “this is what it can do to you” (school student, female).

No, no, gambling hasn't really been a topic of conversation.

[Did your parents ever discuss drugs or drinking or smoking?]

Yeah, I guess it's sort of in the same league isn't it, but you don't really talk about it as much – it's scary! Yeah, drugs and drinking... most people, like my parents have definitely spoken to me about that, driving safe as well and my friends - their parents have done the same with them, but I don't think gambling's really come up (unemployed, female).

The first quote suggests that young people who are not educated about the risks may adopt a trial and error approach to gambling experiences. Given the ease with which one can develop idiosyncratic beliefs about winning and gambling odds this ‘see how you go’ approach is not ideal for building a realistic knowledge base about gambling. Furthermore, the reported lack of ‘sit down’ conversations initiated by parents may contribute to risk as research has found

that parent-child discussion about alcohol or other substance use are life moments that young people recall in accurate detail (Miller-Day, 2002). The second quote illustrates that although parents promoted the view that gambling can be an entertaining activity, they did not explain the risks that came along with use. The final two quotes were typical of the young people interviewed in that they indicate that drugs, alcohol and smoking were regular topics of conversation within the family while gambling was largely ignored. As Dane, McPhee, Root and Derevensky (2004) propose this pattern may demonstrate that these participants' parents do not recognise gambling as a risk behaviour that can result in the development of serious problems.

On the other end of the spectrum were those young people who reported that their parents provided them with useful information about gambling. For example:

Certainly did discuss gambling risks. Well from having the pub and that my Dad always said, "this is what happens..." They were always showing us the risks and showing us the outcomes. So yeah, I guess that's where I picked up my need not to gamble (employed, male).

I still haven't been to a casino so my family's made me realise limitations and stuff like that when it comes to gambling. Like just do it in moderation I guess is the best way of putting it.

[How did your family's attitude help you?]

Just by seeing or hearing from them stories and just saying "the casinos are very addictive places to be, like you go from one table to next and might win \$200 on one table and on the next table you might win nothing sort of thing and you might lose \$100 so it's all a game of luck and if you do go there don't spend up big" and you know, with the alcohol there and stuff like that I have just learned to say no I'm not going (university student, male).

These young people indicate that their parents discussed the concept of addiction, the risks involved in gambling, negative outcomes and the likelihood of winning and losing. As a result of the information supplied these young men reported that their desires to gamble were reduced. These results reflect those investigating the effects of parent-child communication regarding the use of drugs and alcohol. For example, Turrisi, Jaccard, Taki, Dunnam, & Grimes (2001) found that college bound children, whose parents had talked to them about alcohol use and how to avoid it, held less positive perceptions of activities regarding drinking and displayed significantly less drinking and drunkenness tendencies.

Other young people in the current study reported that their parents discouraged them from gambling, but without providing balanced information that allowed them to make an independent and educated choice. For example:

My Dad's a bit worried. He came in the other day when I was on the computer and is like, "I hope you're not Internet gambling." I'm like, "No, why would I be?"

[So, was he joking or serious?]

No, he was serious (all of focus group laugh). He's like, "don't bet our money on the internet." I'm like, "okay!"... He's a bit strange (all laugh) (school student, female).

Although there is considerable debate regarding 'best practice' for the prevention of problem gambling in young people, as a whole, literature points to the use of harm reduction strategies to be most appropriate for young people who are at the beginning of the gambling behaviour continuum and capable of making informed choices (Dickson et al., 2004). Thus the expectation from parents for abstinence without an adequate and balanced explanation about both the benefits and risks of gambling may not be realistic within the current environment where gambling is considered by young people to be a legitimate form of entertainment and practiced regularly within peer groups. Further, parental endorsement of abstinence paired with modelling of gambling behaviours was a source of considerable confusion. For example:

[They say] that it is not OK to do unless you are 18 and that it is just a friendly game - friends and family, I think they talked to me about it while playing. I thought it was a bit confusing, that they were saying it is not OK to gamble, but that they were playing at that very moment but we ended up having I think a big laugh about it (school student, male).

Similar to the accounts above, other young people reported that their parents discouraged them from gambling however, what sets the next two quotes apart from the others is that the communication was characterised by judgment and intolerance:

It was taught to us, like that gambling was bad, that people – not that gambling's bad but that almost in the sense that there's *those* sorts of people out there who gamble too much and it's really bad but we're not like that, type of thing... At the time I was being very rebellious... like very rebellious. I was rebelling in a very strong way and so gambling was sort of part and parcel (university student, female).

No gambling wasn't discussed, apart from mum saying you will lose all your money.

[Was it more like a sit down discussion or more of an "I am telling you"?)

Yeah, I'm telling you with a dirty look, sort of thing (employed, male).

The young man above went on to share that he gambled more frequently than his family and that in general, he did not like to listen to the advice they offered:

Mum hates me gambling.

[How did you get that impression?]

Because she tells me all the time.

[Do you think your parent's attitude has influenced your attitude in relation to gambling?]

No. I suppose it is because I am not that close with family members so if they tell me something I am not really listening to them.

[So do you think the way you gamble is different to your parents?]

It would have to be because they have never really gambled before (employed, male).

These quotes indicate that when parental guidance was authoritarian in nature young people felt compelled to behave oppositionally, ignoring the advice/direction provided. Thus, rather than promoting responsible gambling behaviours these experiences had the propensity to incite rebellion.

Within some families, young people were not approached directly about gambling but rather were informed vicariously about the consequences of gambling by overhearing conversations or alternatively, young people arrived at their own conclusions about gambling as a consequence of being involved in discussions about others in the family who had gambled:

[When you were younger did your family ever discuss potential risks associated with gambling?]

No, only what I overheard of my nan and aunty losing a lot and getting in a bit of strife with it, but it wasn't really too many "if you do this, this is what is going to happen" (employed, female).

I don't think we have ever sat down and discussed the risks of gambling. I think one of my second cousins or something might have had a gambling problem a couple of years ago but I don't know, we never talked about it that much (school student, female).

The quotes above featuring terms that characterise relative's gambling use to be a 'problem' or involve 'strife' and 'losing a lot' of money suggest that gambling problems may have been experienced by individuals within these young people's family. Despite this, the young people remained largely uninformed about the risks of gambling, as they were exposed only to passing comments. Given that research indicates the presence of familial gambling problems poses a significant risk for the uptake of problematic adolescent gambling behaviours (Jacobs, 2000; Wood & Griffiths, 1998) this lack of education is concerning as young people who may be particularly vulnerable to the development of problematic gambling behaviours are not receiving necessary education from the family.

Implications

The feedback that participants provided in this study has important implications for future educational and prevention efforts. Given that many young people reported that their parents informed them about issues related to smoking, drinking or drugs, but neglected to educate them regarding gambling behaviours suggests that the potential for gambling use to become problematic is underestimated by parents as compared to that of other risk-taking behaviours. Further, Felsher (2003) has suggested that the active encouragement of gambling by parents results in young people perceiving gambling to be an activity that is not 'risky' or potentially addictive. As such, it has been recommended that prevention efforts should not only be directed at

youth, but also at parents and adults to ensure that they are aware of the gambling-related problems that can be experienced by adolescents (Felsher, 2003).

While providing general information to parents about the existence of gambling problems in youth and potential risk factors is important, this alone is inadequate. Parents must be informed about the manner in which to address gambling issues with their children in order to ensure that the information presented is accepted and understood by the target audience rather than rejected or ignored. Dane et al. (2004) recommends that educational programs about gambling that target parents should include strategies that allow parents to develop relationship skills such as acceptance, support, reasoning, explanation, autonomy granting and parent-adolescent involvement in mutually enjoyable activities.

In a study investigating the relationship between parent-child communication and youth drug involvement it was found that 6% of young people indicated they would not approach parents if they had a question about drugs (Kelly, Comello & Hun, 2002). Thus, it was recommended, that parents should take the initiative in establishing a dialogue about drug use. The lack of enquiry from young people regarding gambling may be even higher given that (1) young people view gambling as a socially acceptable and largely innocuous activity for themselves and their peers and (2) many young people reported that the consequences of gambling are largely hidden within society therefore, curiosity or concern about gambling issues may not be triggered by viewing external cues (that is, young people indicated that in an everyday environment it is easier to identify a 'drunk' as opposed to a 'gambling addict'). Further, Kelly et al. (2002) found that parents frequently failed to talk to their children about drugs for fear of negative reactions or due to beliefs regarding the limited impact they would have. The study found that such fears were unfounded as children often reported that to them, their parents were perceived as a credible source of information about drugs (Kelly et al., 2002). Similar results were revealed in the current study, with most young people reporting their parents as the first port of call if they were to experience gambling problems. For example, when questioned as to whom participants would be most likely to turn to if they needed help with a gambling problem mothers were typically cited:

My mum. She is really sensible. She has a lot of skills that I would love to have those sorts of things. She is really kind. She has got a lot of those counselling skills and those really good skills, those self help books, affirmations around her whole house and I know she would know what to do and wouldn't make me feel stupid or feel crap because I had put myself in that position (employed, female).

Probably my mum and my sister. Probably because they keep me strong and they will help me, and if I don't stop I will probably get a mouthful from them and it is kind of like motivation to stop and they will help me realise what I am doing is bad and it will turn out not for the best (school student, female).

Mum first.

[And why would you turn to your Mum?]

I suppose just close family – you know, close network of friends. It's love and support I suppose (unemployed, male).

Young people reported that the advice and direction provided was valued not only because the family represented a trustworthy source of informational content but also because family, specifically mothers, were perceived as a source of emotional support and as providing motivation for change.

It is evident that the current results support the use of education and prevention efforts that target both young people and their parents. Such efforts should not only focus on the provision of general information to parents about gambling and the risks involved in their children's participation but should also encourage parents to initiate communication and equip parents with strategies to ensure that information is delivered successfully. Five years has lapsed since similar recommendations were made by Felsher (2003) and studies such as the current one continue to find that parents are playing a large and often unwitting role in the encouragement of gambling behaviour, without providing their children with adequate information about the risks involved in engaging in such activities. Despite this, certainly in Australia, moves have not been made to disseminate public education-awareness campaigns that target both parents and young people. It is evident that such prevention efforts are long overdue at both national and international levels.

6.3.3 Peers

Facilitating factors

Adolescence and young adulthood is a highly developmental phase characterised by the exploration of new behaviours, emotions and belief systems. During this time peer relationships are highly valued (Giordano, 2003), thus just as peers learn from their familial relationships, young people may also influence each other in the uptake and maintenance of gambling patterns.

Peer pressure is a specific instance of social influence, which typically produces conformity to a particular way of acting or thinking (Lashbrook, 2000). Several young people in this study raised the notion of peer pressure as a social process that influenced their gambling behaviour. This finding supports that of former research which has revealed peer pressure to be an important factor in a variety of adolescent outcomes, such as educational performance (Hallinan & Williams, 1999); sexual attitudes and behaviour (Biglan, Noell, Ochs, Smolkowski & Metzler, 1995; Crocket, Raffaelli & Shen, 2006; Shah & Zelnick, 1981); delinquency (Aseltine, 1995) and tobacco, drug and alcohol use (Hoffman, Monge, Chou & Balente, 2007; Crocket, Raffaelli & Shen, 2006; Crawford & Novak, 2007). Peer pressure exerts its influence through emotional, cognitive and behavioural mechanisms (Corsaro & Eder, 1995;

Lashbrook, 2000). The current findings suggests that for young people in this study peer pressure operated via negative feelings related to the threat of loss of a young person's social bonds.

Lashbrook (2000) has found that shame, a family of emotions ranging from social discomfort to mild embarrassment, can play a key role in peer influence (Retzinger, 1995). Social bonds are important as they satisfy a powerful need for belonging and constitute a fundamental 'glue' for society (Scheff, 1990; Turner, 1987). When bonds are threatened, emotional responses are triggered, including feelings of shame (Lashbrook, 2000). In the context of gambling, it seems that several young people in this study experienced shame-related feelings when subjected to peer pressure. For example:

Peer pressure, it is so crazy and whatever you say you are not going to do, as soon as you are around influential people, you will do it. You make a lot of sacrifices because your friends are doing it and you had better keep up (employed, female).

They think they are trying to get you involved, but if you don't want to do it they are sitting there saying "come on" you don't want to look like the loner so you just do it to be part of the group (school student, female).

If everyone, like if all the girls got a Keno ticket – if I've got the money, I'd probably grab one as well. I guess it comes down to being social again and just being a part of what they're doing. Like probably if half the group only were doing it, you know, I'd probably – depending on whether or not I wanted to or not at the time – I'd be like oh no. But if everybody's doing it then you'd probably get that feeling I guess – like 'in' with the crowd (university student, female).

While these quotes did not contain overt references to shame they did feature indicators that in previous studies have been found to occur frequently in shame-related contexts (Retzinger, 1995). It seems that for these young people, such feelings centred on a need to 'keep up' and to 'be part of the group' triggered the need to conform to the pressure to gamble in order to ensure social bonds were maintained. Lashbrook (2000) conducted research examining the role that peer pressure played in young people's consumption of alcohol. Similar to the findings in the field of adolescent alcohol use, the current research revealed that fears of disconnection from peers, not only motivated young people to conform to gambling norms but also, was seen to influence young people to encourage their peers to join in gambling activities. For example, in the quote above the student attributes the pressure from her peers to gamble as 'trying to get you involved'. Thus, it seems that concerns about the breakage of social bonds were a motivating factor to both apply peer pressure and succumb to it. Furthermore, it can be deduced from the data that feelings of ridicule (another shame-related emotion) may have caused some young people to yield to peer pressure. One young woman explained that her boyfriend could be influenced by peer pressure in the following way:

An example would be me and Adam at home on Friday night watching footy – Adam might put 2 bets on footy, I might as well, \$10 each may be. But if he went to the boys' house and watched footy, the boys spend about \$50 - \$100 each on footy bets so Adam would be more inclined to come home with less money if he goes with the boys. If he doesn't then the boys are like "you're a pussy of course it will win, it's a sure bet" (Employed, female).

Obviously, such taunts could produce feelings of shame, embarrassment or inadequacy that may prompt a young person to surrender to peer pressure.

Further to the role emotion plays in facilitating the process of peer pressure, a desire for social recognition in the form of peer approval and acceptance by taking risks or displaying courage was also seen to influence gambling behaviour. This was particularly evident amongst male participants. Risk taking was viewed to be an enjoyable experience and associated with being "cool". The following exchange between young males demonstrates this notion:

[What about gambling is fun?]

A: The risk

B: Take a chance, whether your will win or not, just take a chance

C: Taking a chance is fun

B: It's cool (conversation amongst unemployed males).

Risky behaviour has been found to be valued highly by young males (Zuckerman & Kuhlman, 2000). As gambling was considered by some young people to be a form of risky behaviour it follows that by simple participation one could gain peer approval or acceptance for being known as a 'risk taker'. Furthermore, gambling behaviour was found to be characterised by competition and friendly rivalry. When asked whether gambling was a good way to compete with their peers, many young men's responses reflected the spirit of competition that existed amongst them:

[Is gambling a good way to compete with your peers?]

In a way yes, because when people are like "oh yeah I reckon I could beat you at making this much money at poker before you can." There is always a certain degree of rivalry with your peers with gambling and usually you just go there to have a good time (school student, male).

As has been found in other studies (for example, Dowling et al., 2005; Hardoon & Derevensky, 2001; Moore & Ohtsuka, 1997) this quote exemplifies the social recognition that can be gained from competitive gambling behaviour in a group. Boasting, bragging and bravado about gambling triumphs, as seen in the above quote, could result in approval and admiration from their peers (Dowling et al., 2005). Social recognition was not only gained by boasting of one's monetary wins, but also through displays of one's gambling ability and skill. For example:

[Is gambling in a group a good way to compete against your peers?]

If you've got a dude and he's won 20-30 times and I was just like sitting there just admiring this old dude, he's like 60, maybe 70, 80 odd – and

he's getting along and he's like "Yeah sonny, you know how it's done" – and he's smoking his cigar and sipping his port and 'bang', puts down a card and I'm like "Yeah, watch this one man!" And he's like "Oh, good on ya" and you get a pat on the back off an old bloke by winning like that. That's when you know that you're doing something, that's when you know you're having fun. Cause, when someone of that age respects you for that, like to sit through that hand and actually sit through it like and get a pat on the back for it by winning his money, that's good games and s@#t... that's what I like to see.

As the above quote illustrates competition amongst young men could not only produce approval via one-upmanship and but also a sense of camaraderie in which recognition and admiration was gained from those more experienced at gambling.

Whilst behaviour centred on risk-taking and completion was reported more frequently amongst male participants it is important note that risk taking behaviour and competition were not found to be purely male interests. Some females in the sample described feelings of achievement when they experienced success in gambling activities. When these females were asked whether gambling was a good way to compete against their peers, responses included the following:

In a way yes, because I will give you the example of our next door neighbors again. We have a game and then who ever wins, it's like "I'm the champion" and it gets talked about forever, like "yes tonight we are going to play poker and I'm going to beat you this time". Everyone is like fighting against each other to win. I've got a friend who has won the last three games and he just keeps rubbing it in (unemployed, female).

You feel much better when you beat them or win more than the boys, especially since I'm a girl (employed, female).

Female attitudes such as these were, however, an exception, with males predominantly reporting competition in gambling as a means of gaining social recognition. In accounting for the apparent gender differences found in this study it is useful to consult academic literature in the field of sociology which examines the relationship between gender and susceptibility to peer influence. Research generally indicates that peer behaviours are significant predictors of female as well as male outcomes in many risky activities such as sexual behaviour, delinquency, or smoking (Thornberry & Krohn, 1997). However, females at every age, when compared to similarly situated males, are much less likely to become involved in delinquent activity (Giordano, 2003). Similarly, the current findings revealed that boys were more likely to cite a desire to take risks or for rivalry to be an influence upon their gambling behaviours. With males and females just as susceptible to peer influence, in this study the question remains as to why girls are less likely to have a desire to participate in gambling because of the 'risk' or 'competition' factor. Sociologists have proposed that in other studies the large disparity in rates between males and females relates to more pervasive gender-socialisation mechanisms, of which

peer interactions are but a part (Heimer & Decoster, 1999; Hagan et al., 1987, Giordano, 2003).

These gender-socialisation patterns could be seen in young women's accounts of male gambling behaviour. Female participants in this study recognised the influence that approval seeking played in the uptake of gambling activities in their male counterparts. For example:

All young guys my age think they're like pro-bookies – they all just think they can make so much money and stuff and they know all about it but it's sort of like an egotistical, pride thing I think cause they'll be the one who wins money and it looks cool cause they knew something – but they didn't know anything really (laughing) (university student, female).

I think insecurity. Like, boys need to feel like they know something. Like, it's a competitive thing – like they need to justify themselves – acting like they know something or, like, they can win something – like a competitive nature (university student, female).

Boys gamble a whole lot more I guess. I'll say on things like horse races and poker nights and stuff like that... Maybe it's got something to do with the whole testosterone factor, saying and bragging to everyone else that they won so much money on the pokies or at a poker night or something like that (university student, female).

These young women interpreted the excessive competitiveness the young men displayed as an indication of insecurity or ego and pride rather than being "cool" or something to be admired. The impression gained from these young women was that they disapproved or were certainly critical of the males' motives. This may reflect the different values that females place on pursuits such as competition. Certainly, feedback indicated that rivalry amongst peers was not highly valued:

I don't think gambling's a good way to compete. These days people are competitive enough as it is with the different jobs that people get and the different societies and different social status and adding gambling to it – if that's another way for people to pinpoint at each other, I don't think that's right (employed, female).

It is important to keep in mind that while sex-typed behaviours and attitudes were evident amongst young people in this study, generalisations should not be made. As previously identified some females enjoyed the competitive nature of gambling. Furthermore, some males indicated that the competition aspect of gambling was not appealing and further reported that the possibility of gaining peer approval for such pursuits would not influence them. As with most findings in this study individual differences were evident amongst young people, both male and female. However, the current research does warrant further exploration of gender differences in gambling, particularly in relation to the concept of competition and risk taking. Gender differences aside, what can accurately be deduced from this research is that young people in this study did

in fact experience peer pressure to gamble which influenced their behaviours and allowed them to gain social benefits (for example, looking cool) from partaking in gambling activities with their peers.

Thus far, peer influence has been examined in terms of the social pressure exerted to partake in gambling behaviours. Young people's reports seem to indicate that the gambling activities that occurred as a result of these processes were largely recreational and innocuous. However, some young people did report that the social environment masked the fact that they were not only spending money, but that they were also influenced to spend more money than they initially intended. For example:

I was at the races recently and we were there with a big group of friends and everyone's there with their little tickety thingies [sic] and you just scream at the horses and it was just so much fun and it was all hyped up and... we weren't putting much money on but we weren't kind of thinking about it. It didn't seem like it was real money if that makes sense? If you actually thought about it later on and thought, 'wow, I actually put this much money on horses.' But, at the time, it's just like so much fun and you're just getting into it (school student, female).

Probably pokies and Casino stuff because probably just of the mood so that everyone's having... you see everyone – a lot of people having fun and it passes on to you and you have more fun – you know gambling – if you're not careful, you sort of lose yourself to it – you don't realise how much you spend (unemployed, male).

Reports such as these highlight the caution that should be taken in assessing the effect of peer influence on gambling. In this study, while gambling was often participated in within peer groups in a recreational manner, negative consequences were experienced by some young people.

Another concerning finding in this study was that young people may enable their peers in the maintenance of unhealthy gambling patterns. Several employed young people, TAFE and university students were alarmed about the gambling patterns of their peers, however, they were reluctant to mention their concerns, explaining:

Well like those people I was talking about, they thought that gambling was fun, that it was light relief. From the outside it appeared very much like they were having a big problem

[Were you concerned for them at the time?]

Oh yeah, yeah.

[Did you ever try to approach them or anything about your concern?]

No, no. Because I knew that they would get defensive and deny it and me shooting the messenger and none of my business. It's their money when it comes down to the end of the day... they can do with it as they will. Any sort of mentioning it or bringing it up would be just like you were coming down on them in a way that you have no right to (university student, female).

They would never listen and just laugh at me, and wouldn't make it into a serious thing. They are pretty easy going, fun sort of guys and if you said anything to them they would shoot you down fast, or will just laugh and say "on yeah I'll call gamblers anonymous" or something and make a joke out of it (employed, female).

These young people were clearly uncomfortable with the notion of confronting excessive peer gambling behaviour and their silence could be read as enabling the gambling behaviours. Similar to the pathway of influence peer pressure takes, this enabling behaviour could be attributed to shame-related feelings and a fear of being alienated from their significant others if they expressed their concern. This may play a role in facilitating the continuation of problem gambling within friendship groups. It seems that social norms pertaining to the acceptability of gambling may further contribute to the reluctance of young people to raise issues of concern with their peers, participants explained:

If you see someone lose it's like it's their own fault or if you go with your mates, you're like 'oh well you're silly enough to spend fifty bucks on it and lose it, you should know better.' But... it depends, if it's one of your mates that keeps losing money, then you're going to say something to them. But if they're going out and it's not like you're going to stop them from doing it. Whereas like, it's socially acceptable as opposed to, like, smoking or something. You could say, "that's not good for you, you shouldn't do it." But gambling, you're like, 'oh well, you could lose money or whatever' but it's probably *more* socially accepted than what smoking would be I'd say (employed, male).

I think most people think it is pretty acceptable. No-one really seems to look down at people that gamble, if they know they have a problem, they think 'oh they will sort it out by themselves.' Because I have a few friends that have problems and you always think 'should I say something? Oh no, they will work it out by themselves,' but they don't seem to, but everyone just stands aside and just lets it go (TAFE student, female).

Finally, while some young people wished to raise gambling concerns with their peers they were not confident in the skills they possessed to deal with the issue:

With a friend of mine that does gamble a lot it's *really* worrying, especially when they're only 20 – 21, and they're already gambling as much as they are – it's *really* worrying at how they'll end up sort of thing.

[Have you ever tried to approach him about that?]

Definitely. He's just as worried really, when you sit down and talk to him. He has a whole cigarette, alcohol, gambling package problem and he *knows* it, but at the same time, he is a strapper, so he works in the race industry... he has to take the horses to the races so he has no way of getting out of it – it's his whole life sort of thing... I think that's a huge influence but I don't have the skills to talk... to help him much. (university student, female).

This young woman could identify and raise issues of concern with her friend who gambled however, believed that she had little to offer in terms of assistance as she had no knowledge in the area. Clearly, participants were able to identify signs of peer gambling problems however, there is a need to further educate young people about not only the importance of addressing these issues but also how to do so.

In summary, the current study suggests that peers may exert influence over each other in a variety of ways. Peer pressure operates within groups of young people, facilitating gambling activities through the threat that non-participation will result in social exclusion. This threat of disconnection from one's peer group may also facilitate enabling behaviours in which young people are reluctant to confront each other about concerning gambling behaviour or simply, do not have the skills to do so. Further, this study found that social approval in the form of recognition, acceptance and admiration can be gained from participation in gambling activities.

Protective factors

Socialising has been found to be a major motive for gambling behaviour in this study. Further, as was explored in the previous section peer pressure and the opportunity to gain social approval also influences the maintenance of gambling participation within peer groups. It seems however, that for some participants the presence of peers could actually have the opposite effect, decreasing the likelihood that they would engage in gambling activities. One young person believed that gambling with her peers could influence the number of bets she placed as opposed to gambling in solitude:

A lot of the times at social events like that you can cheer your mate's horse on, you don't have to put money on every race. You go "who do you have?" You can say "I'm not going to bet money on this one. I'll sit there and cheer on whoever your friend has just put money on." It's not one that you have to, where as you're by yourself I could- it would be so easy just to sit there and go 'no one really knows I'm just going to keep betting more and more' (employed, female).

This quote illustrates the belief that peers could act as safety nets, guarding against excessive gambling behaviour by sharing and enjoying gambling activities as a group. Further, the anonymity that gambling in isolation provides is removed when gambling alongside peers thus, the amount one wagers is not hidden and one becomes accountable for their behaviour.

Additionally, young people revealed that when in the presence of their peers alternate ways of connecting took precedence over engaging in gambling activities:

I am relatively social so I prefer to be talking to my friends or meeting new people or in a circumstance out clubbing, out dancing rather than sitting on a poker machine. I would prefer to be chatting with people rather than at a TAB (university student, female).

When in the presence of her peers this young woman was presented with opportunities that were more appealing than gambling thus, chose to participate in alternate activities.

Blum & Rinehart (1997) have proposed that the risk of engaging in self-destructive risk taking activities is heightened for young people who are disconnected from leisure-based social networks. In the case of gambling, the protective role that participants in the current study afforded peers was accounted for by the fact that engaging in a group environment ensured gambling was transparent, rather than hidden and also, peers offered opportunities to engage in alternate activities.

Implications

In terms of education the current results indicate that it would be useful to employ broad-based education programs that not only educates young people about gambling but also emphasises social influence. However, before embarking on this pathway it is important to note that research examining the efficacy of substance use prevention programs that target peer influences have provided mixed results (Botvin, Giffin, Diaz, Miller & Ifill-Williams, 1999; de Vries et al., 1994; Peterson, Kealy, Mann, Marek & Sarason, 2000). In all, it seems the programs that are most successful are those that enhance youths' ability to resist passive social pressure, such as modelling (Donaldson, Graham & Hansen, 1994; Donaldson, 1995). Conversely, the programs that seem to be least beneficial emphasise deviant peers, increase perceptions of substance use prevalence or instruct youth's to engage in refusal skills to combat for example, explicit drug offers (Donaldson, Graham & Hansen, 1994; Donaldson 1995; Dishion, McCord & Poulin, 1999). Any educational efforts that are employed to ease the social influence that peers exert over each other's gambling behaviour would need to be assessed closely to ensure that the intended effects do indeed take place.

6.3.4 Problem Gambling

Research centred on social learning theory has not only explored the relationship between young people, their peers and/or their family in relation to recreational gambling but has also examined the effects that exposure to problem gambling can have on a young person's subsequent behaviour. The types of gambling young people were exposed to in this study varied greatly. As proposed by Shaffer & Hall (1996), gambling behaviour exists on a continuum of severity ranging from non-problematic to pathological. Considering the substantial rates of both adult and youth problematic gambling within the community it was not unexpected that young people had come into contact with people who not only participated in recreational gambling but also with people who gambled in a more sustained and detrimental manner. When participants were asked specifically if any of their friends or family had experienced problems as a result of gambling, some provided insightful observations about the nature and consequences of gambling for the people they knew or loved:

Tom put a deposit on a block of land, which was \$1000. Someone else got the land, so he took the \$1000 to a casino and lost it. I see that sort of stuff where people will just go stupid. Tom, our friend is really sneaky, he won't tell anyone how much he has put on, or show anyone his bets, but when he has finished and won he will be like "oh look at this" and will pull out the winning one, but we will see the pile of losing ones, this high. So he seems to go overboard and is really sneaky about it and I don't think that is healthy at all (employed, female).

I've had friends who've been in recovery from a substance addiction, and that's hard enough but I think during their recovery time they've sort of just wished to get on with another high from something, and have turned to gambling in rough times, and lost all the money they had and that was enough to make them relapse in their other addictions (university student, female).

I lost a mate to gambling, he kind of killed himself because he got too far into debt and he didn't want to go any further and put his family into it (unemployed, male).

One of my mother's friends is a really addicted gambler. She would go to the pokies every second day and she would take out loans just so that she could gamble away. I think she won once and then she just went and put it back in the pokies. I think that's a serious problem (unemployed, female).

Young people in the current study clearly possessed quite a comprehensive knowledge about the nature of gambling problems. For example, the participants quoted above recognised that gambling could involve a lack of reasonable judgement, the role deception could play for some gamblers, the similarity between the biological/psychological payoffs for gambling and other substance use ("another high"), the cyclic nature addictions could assume and finally, the detrimental nature of a gambling problem.

Research has long posited that the presence of gambling problems within a young person's familial or peer circle may pose a risk for the uptake of problem gambling (e.g. Govoni et al., 1996; Jacobs, 2000; Wood & Griffiths, 1998). While modelling undoubtedly plays an important role in relation to the development of problem gambling in young people, little attention has been afforded to the protective function that vicarious experiences with problem gambling can provide. Young people in this study frequently reported that experiences of other's problem gambling resulted in negative feelings towards gambling activities and an awareness of the harm it could cause. Several young people gave accounts of the effect familial or peer problem gambling had on them:

I would see how much friends would spend sometimes and think 'oh my God that is a huge amount of money but it is their choice sort of thing', but when it started to affect relationships, my friends and this particular

guy, my perception was that this is dangerous. It is an addiction, people talk about it and hear about it, but yes the perception of the risks was highlighted, if it can happen to this guy, it can happen to anyone (employed, female).

My Dad always goes to the pub, always drinking, always playing pokies... doesn't know when to stop. Comes home with nothing. Definitely it's caused problems between me and him when I was living with him. It would have caused problems with my Mum and my Dad when they were together, but I couldn't probably tell you half the things...
[Do you think seeing that has influenced the way you thought about gambling?]

Definitely. I think it's made me stronger against *not* gambling and having a limitation, knowing that I don't want to be like that (employed, male).

Young people did not have to be intimately acquainted with a problematic gambler for gambling to appear less appealing, simply hearing stories or seeing excessive gamblers in venues also influenced their perceptions:

When all you hear about it at work is gambling and then you hear about how much they've spent – and how much they've won in return... it's a put-off (school student, male).

[Did working in the pubs affect you?]

Definitely. I wouldn't gamble, no way! No way. I think knowing everybody's name in the end, knowing that they would be in there at that time of the afternoon and just knowing that they've got kids. I just think, 'oh my god – if that's your life... they're here all day. They're there all day! If that's their life – that's not how I want mine.' It gets scary when you get it from the wrong end. You see the effects, like the bad effects. It can put you off (employed, female).

These results indicate the importance of acknowledging the limitations of social learning theory (Hira & Monson, 2000). While the behaviour of others, problematic and innocuous does have a large propensity for influence, in reality young people, upon reflection of the negative consequences of gambling can make conscious decisions not to gamble in ways similar to their troubled peers or parents.

6.3.5 Personality

Sensation Seeking – Chasing the Thrill

There was a perception amongst young people that those with a propensity for risk taking were more likely to gamble than others. For example:

I gamble differently from my mum because she puts on less than I do.
[Why do you think you've ended up gambling differently to her?]

Because I am a risk taker more than what she is. She is really careful with her money and strict with her budget and I am a bit more care free (employed, female).

[What types of people gamble?]

More like risk-takers. Like just say back in high school and that, someone would say “oh, bet you can’t do this”, a risk-taker will say “yeah, I’ll take that bet” sort of thing. Sort of like the same with pokies or something – a risk taker will put bigger money in, you know the notes and the other will just put in dollars (employed, male).

These quotes indicate that ‘risk takers’ were considered to not only engage in uncertain behaviours but also to invest more money in gambling activities than others. Research has indicated that the personality trait of sensation seeking has commonly been tied to participation in a number of risky activities including gambling (Castellani & Rugle, 1995; Coventry & Brown, 1993; Wong & Carducci, 1991). Brown (1986) has proposed that individual differences in sensation seeking may influence the drive for arousal and consequently the desire to gamble. Sensation seeking can be thought of as the need for varied, novel and complex sensations and experiences and the willingness to take physical and social risks for such experiences (Zuckerman, 1979). While measures of sensation seeking were not administered in this study, a number of young people reported increased levels of arousal as a result of taking gambling risks:

I actually did play a poker machine when I was 16, lost my \$20. It was more just the thrill and, once I had done that a couple of times, it was over. I was there with my mum, her and her partner were in a pool comp, so they were down the other end, and just wandered up the other end in a little corner and put some money in myself and just played. I don’t know what I was going to do if I won, but it was just the thrill of doing something wrong I guess (employed, female).

A: You see, most people do betting because they wanna take a chance. Chance, gives people a thrill, sort of an adrenalin (male).

[Does gambling give you guys a thrill?]

B: Yeah, everybody wants to take a risk, like everybody takes risks (female).

A: It’s like an adrenalin rush, you don’t wanna stop.

C: Yeah, it’s like teenagers drinking, we’re taking that risk by doing something illegal, and it’s doing something behind your parents backs, you get the thrill of it, and like, lying to your parents and going to a party, and getting a thrill, and your thinking ‘ooh, I’m getting a thrill from it’ (female).

D: Playing the Keno is just like an adrenalin rush. It’s just they way, like you play chicken with your car. You jump out of the way just, close, but that’ll give you an adrenalin rush. You do that with a pokie machine, you try it and try it and try it, that’s adrenalin. You got so much of that so, you keep on going and keep on going (male) (conversation amongst school students).

[Which type of gambling would you be most likely to participate in?]

Probably the tables at casinos.

[Why those?]

Just the atmosphere and the rush of betting with a stranger I guess... Just "I shouldn't be putting this much money on what I have" or the decision making, just the rush of "are you going to up your bet" or on having to, lucky gut feelings, as opposed to 'oh I really shouldn't be doing that' so having to challenge yourself on making a decision, whether to bet with more money or to walk away or hold back because there is a better opportunity over there (employed, female).

These young people were taking social and financial risks in order to experience a thrill or adrenalin rush. For example, social risks were taken by electing to gamble underage with the knowledge that it was 'illegal' or 'wrong'; alternatively financial risks were taken by betting more money than one believed they "should". Whatever the risk the gambling behavior posed, it is clear that sensation seeking was highly related to the gambling behavior in that the desired outcome was a feeling of a thrill or rush. These desires for arousal and subsequent gambling behavior may have been the result of an individual's sensation seeking temperament, however further research is required to determine the accuracy of this assertion.

Impulsivity

During the current study impulsivity, a trait of the sensation-seeking range, was found to play a role in the facilitation of gambling behaviours. Although young people did not explicitly refer to the concept of impulsivity they did frequently raise the notion that those with an 'addictive personality' were more likely to gamble. Interestingly, the way in which young people characterised an addictive personality was very similar to the qualities that Vitaro et al. (1999) proposed to define impulsivity involving (A) excessive sensitivity to potential reward and desire for immediate reinforcement, (B) tendency to respond without forethought about negative consequences, (C) excessive insensitivity to threatened non-reward and (D) deficits in inhibitory control that keep the person responding despite the risk of negative consequences. Some of these elements were featured in young people's explanations about the nature of an addictive personality:

[What's an addictive personality?]

Some people can't step outside of themselves and realise they are getting that attachment to something. I tend to analyse everything I do before I do it, and I can identify when I am doing something that I probably shouldn't be doing. A lot of people, whether it is just general personalities will jump in and do something and get themselves in too deep and not know how to pull themselves out. Just a few friends will bet \$50 a night on the TAB whereas I couldn't do that because I think 'what else could I do with that \$50, what if I lose it? I have got plenty of other things... to pay for,' they just go and do something first. It's all dependent on personality (university student, female).

Just because they have got, like, addictive personalities, and they just go at it and then it feels really good to them and if they keep doing it they get this good feeling (school student, male).

Addictive personality comes up a lot in conversations with my age group, they say “that person will find it hard to do this because they have an addictive personality” and I go “oh OK” so I listen to it and I understand what they are trying to say because some of my friends will just jump in and do something first (university student, female).

Interpretation of these quotes indicates that participants identified features of impulsivity including, the desire to gain rewarding feelings (quality A of Vitaro et al.’s (1999) definition outlined previously); the tendency to jump into activities quickly (quality B) and the propensity to become attached to activities despite negative consequences (quality D). Thus, young people’s portrayal of others with “addictive personalities” could be interpreted as referring to people with a propensity for impulsive behaviour.

There was a general consensus amongst participants that young people with an ‘addictive personality’ were more likely to be heavier gamblers or develop gambling problems. They explained the connection between this type of personality and gambling in the following way:

Well some people have a really addictive nature to begin with, so if they try gambling it’s like they try smoking, drinking, drugs, they are more susceptible to being influenced with it, and “I will just try this one, but I will just try it again and again” and it becomes a habit and then it becomes a problem later down the track (TAFE, female).

[What factors do you think put people at greater risk of gambling?]

Addictive personalities, people that are already addicted to alcohol or drugs might get addicted to gambling, so that is a factor (Employed, female).

The recognition that traits such as impulsivity (or as young people coin it an ‘addictive personality’ or ‘addictive nature’) contribute to the development of problem gambling is in alignment with the DSM-IV-TR classification of problem gambling as an impulse control disorder. It is also interesting that young people compared gambling to smoking, drinking and drugs, as substance use disorders along with gambling are considered to lie within a broader family of diagnoses characterised by impulse control impairments (DSM-IV-TR 2000, Potenza and Hollander, 2002).

Participants viewed the relative ease with which one became addicted to an activity as an attribute that was stable over time, rather than something that could develop or change throughout life. For example:

I think you can just be born with it... my sister’s boyfriend is addicted to a computer game that he plays. He is always on it. Some people are

addicted to TV shows, some people are addicted to sports. I guess you are born with it and it turns into an interest, you just love and enjoy (school student, female).

[Do you think modern technology has influenced the way we gamble?]

It has given us a lot more access to gambling, through phones, computers, other ways, but I don't think you can blame modern technology, it would still be there for everybody whether we had technology or not.

[Why do you think that is?]

There is just that addictive personality in some people – you just never get rid of that (employed, female).

[Why does someone end up with an addictive personality?] I have no idea. I think with me I just know that I am that type of person - I think of everything I do before I do it. I am more likely to not do something that is going to benefit me because I sit here and OK what are the pros and cons about it first of all. I don't know how you can assess who would be more likely to have that addictive personality gene whatever (university student, female).

[Why does your friend gamble that way?]

I guess that environment is quite big in his case because he is always around it – but from the beginning I think he was just... even if he didn't work in the racing industry, I think he would be a bigger gambler than other people... I guess it's just that personality thing again, just that risk-taking and that addiction sort of personality that people do I think have as a trait – some people might not (university student, female).

These quotes reflect respondents' belief that the acquisition of an impulsive nature is either genetic in origin or a personality feature that is either present or not, thus will tend to stay with people over a lifetime. One participant identified such a characteristic within himself:

I started off... gambling at an early age plus I've got a very addictive personality and I don't think they could have done anything to help me.

[When you say you've got an addictive personality what do you mean?]

Basically some people tend to gamble and not be fazed by it, never do it again, and other people tend to try it once and then just be totally addicted to it. Maybe it's genetic (unemployed, male).

Research does in fact support the notion that genetics plays a significant role in the uptake of problem gambling behaviour (Eisen et al., 1998; Ibanez et al., 2003; Slutske et al., 2000). While beliefs that impulsive behaviour had a genetic component were accurate, the perception that such traits could not be altered over an individual's lifetime ('you just never get rid of that' and 'I've got a very addictive personality and I don't think they could have done anything to help me') could facilitate the maintenance of gambling behaviours. Beliefs of this nature could operate as a self-fulfilling prophecy, that is a false impression of a situation evoking behaviour which, in turn, makes these impressions

become true (Merton, 1957). In essence, at risk gamblers and problem gamblers' behaviour could be maintained by their implicit and explicit expectations of the nature of their addiction. Such beliefs may also hamper intervention efforts during which young people could justify their behaviour as a fixed genetic trait or personality characteristic rather than a learnt and alterable behaviour.

Implications

Many educational recommendations have emphasised the importance of fostering an awareness of gambling odds and probability, problematic signs of gambling, consequences of irresponsible gambling and avenues for assistance. Given that a number of young people in this research attributed the development of gambling problems to genetic or personality factors that they believed they did not possess, the presentation of such information may be ineffective as young people are likely to pay limited attention to issues that are regarded as having no relevance to them. Thus, any educational efforts in the future should provide information pertaining to the various ways in which one can develop excessive gambling behaviours (i.e. biopsychosocial factors) with a view to engaging young people in the possibility that this is not a problem that is limited to a small number of pre-disposed individuals, but in fact a far reaching problem that can potentially affect any number of people for varying reasons.

Furthermore, as young people in this study considered the nature of addiction to be linked to personality or determined by genetics, educational efforts aimed towards at-risk or problematic young gamblers should provide information about the nature of addiction, focusing particularly on one's propensity to change problematic behaviours. This could promote a stronger sense of self-determination in young people in which risky behaviours, such as gambling are seen as, not only a product of predetermined biological or personality factors, but also of choices made in the context of social and environmental influences.

6.3.6 Media

This study explored the role that gambling advertisements and media-based awareness/prevention campaigns play in the formation of attitudes and development of gambling behaviours in young people. Given that young people are great consumers of television, cinema and advertising (Australian Communications and Media Authority, 2007) it was not surprising that portrayals of gambling in the media influenced gambling desires and attitudes in a variety of ways.

Promotional Gambling Material

The findings of this study mirrored that of previous research (for example Delfabbro et al., 2005; Derevensky & Gupta, 2001) revealing not only that young people could recall gambling advertisements, but also that their attitudes and desires to gamble were influenced by promotional marketing. Almost all of the participants in this research could recall an advertisement featured on television, billboards or signage in venues/newsagencies that promoted some

form of gambling. Furthermore, many young people were seen to be interacting with these advertisements by spontaneously humming tunes such as, Lotto's 'wouldn't it be nice to win a million' and quoting slogans such as, Instant Scratch-Its television advert 'eeny, meeny, miney, mo.' Numerous studies have found an association between participation in gambling activities and recall in gambling advertising (Amey, 2001, Carlson & Moor, 1998; Clotfelter & Cook, 1989). It is not clear whether this covariance is because gambling advertising influences people to gamble more, or those who gamble are more attracted to such advertising (Binde, 2007). While the current study did not investigate the presence of such a relationship, it was evident that young people not only had a particularly high recall rate for lotto and scratch-it advertisements but also a majority of participants reported either purchasing or being given scratchies and/or participating in or assisting parents in lotto draws. Obviously, this involvement could be attributed to a number of factors such as accessibility of scratch-its and lotto or the social acceptability (Wood & Griffiths, 1998) of underage participation in these activities. However, the parallel between lotto/scratch-it advertisement recall and involvement in such activities may be suggestive of a relationship between the two. Further, research is needed to investigate this notion.

There was consensus amongst the young people involved in the study that advertisements on television and in gambling venues/newsagencies promoting a variety of products portrayed gambling as a glamorous, exciting and fun activity in which money could be made with ease. Typical responses included:

The lottery makes it seem like it can solve all your problems if you win, and scratchies make it seem like fun and exciting - there is a drum roll, and that sort of thing... You see the ads where the new couple have bought their house and they have a mortgage and their parents who win the lottery pay for their mortgage and things like that, or you buy the new house next door in the fancy neighbourhood, or you buy a couple of black Porsches or things like that (TAFE student, female).

I think ads portray gambling as the thing to do. You know, 'why not take a chance, you could be it'. Just in ads, you know, showing people that anyone can win (University student, female).

While consensus existed in regards to the biased content of promotional gambling material, the manner in which the young people interpreted and responded to the advertising was idiosyncratic and individual; with some young people being highly critical of the way gambling was depicted. For example:

I don't think the media has a harsh enough a light on gambling... they portray gambling in a light that it is OK, it is all good, that you are never going to have problems. I think the media could be harsher, definitely... in not making it so glamorous. The casino ads for example, the Jupiter ads, it is all so fun, it has all got beautiful girls, I never walked out with no hot guy I can tell you, it just didn't happen for me. It should be more realistic (employed, female).

They always show the positive things or the good things that could happen, not the things that don't. You can get a car but only one in a million get that, and you don't. You lead up and they show you everything that could happen and you get disappointment when you don't get anything (school student, female).

These findings challenge the view that the positive narratives and imagery of gambling promoted in the media desensitise young people to the possibility of gambling being harmful (Secomb, 2004). As the above quotes illustrate some young people were found to question the validity of gambling advertisements and had a degree of awareness regarding the impact that these advertisements had on their behaviour.

Unlike those who questioned advertising content, some young people felt that their attitudes were influenced in favour of the gambling activity being promoted. Specifically advertising influenced some young people's desire to try gambling activities and prompted thoughts about winning. Typical responses of this kind included:

Well I suppose seeing an ad would put that idea in your head wouldn't it, if you hadn't thought of it for a while and then you see the ad, yeah it would go 'that's a thought I haven't had in a while' (employed, female).

[What makes you want to gamble?]

The ads on TV. Because they show people winning lots of money, so it puts that seed in your head, you could be one of those people, scratch a scratchie and then you've won (employed, female).

Those Lotto ones where you do see the, "wouldn't it be nice to win a million!" of course you stop and think 'well yes it would be!' but it doesn't make me rush out and buy a ticket. But I do admit that does play in your mind when you do walk past a newsagency and they've got all those signs out like "wouldn't it be nice to win a million!" or "\$25,000 Set for Life", you think 'Oh, I might try!' (university student, female).

[Do you think you might be more likely to gamble as a result of seeing something like that?]

Yeah *definitely*, rather than if there was no *visual* image that you could *connect* the two together, I don't think that I would be or people would be as inclined buy them (university student, female).

[How did you first find out about what gambling was?]

I think it was on the TV, the golden casket how you can win a million dollars or have this or have that, and you can have a new flash car or have a house. It is just so easy, it is just a scratch away. Something like that. I thought "oh wow yeah, why not, what's \$1 to win this much" (TAFE, female).

These types of responses were not unique to this study. Previous research with both adults and adolescents has found that people who recall seeing gambling

advertising thought that they would be more likely to gamble directly due to the promotional material they viewed (Derevensky & Gupta, 2001; Felsher, Derevensky & Gupta, 2004). Research has also revealed that young people's attitudes towards gambling activities can develop without direct behavioural experience and among other factors, watching gambling television adverts and programs can contribute to this effect (Wood & Griffiths, 2004). Considering some of the young people thought their attitudes had in fact been influenced in favor of gambling due to the persuasiveness and tone of the advertisements, these specific individuals may have been experiencing the desensitisation effect proposed by Secomb (2004). However, we need to be cautious not to overestimate the effects of advertising on these young people as they did possess awareness about the consequences of watching such advertising (that is, they could identify that their desire to win or interest in the gambling activity had been sparked by the advertisement). This awareness may result in an ability to exercise some degree control over whether or not they acted on their desire.

In summary, while the present results indicate that for some individuals gambling advertising may have influenced gambling attitudes and specifically a desire to gamble this does not imply that young people acted on these desires. Unfortunately, at present research has not explored the effect of advertising on actual gambling behaviour. Research in the related field of alcohol and advertising has failed to provide a basis for comparison as studies examining advertisement's ability to trigger drinking behaviour have provided mixed results (Griffiths, 2005). The aim of the present study was to examine the factors that may effect the development and maintenance of gambling behaviours. The results indicate that gambling advertising may be a facilitating factor for some young people however, due to individual differences it is important generalisations are not made and certainly, further research is warranted.

Gambling Prevention Campaigns

In contrast to promotional gambling material distributed through the media, gambling prevention campaigns have been utilised in an attempt to educate people about the effects of gambling. Similar to health communication campaigns aimed at smoking, alcohol or drugs, the intended outcome of existent gambling campaigns is to bring about changes in attitudes, intentions and behaviours of individuals (Cho & Salmon, 2006).

In Queensland, the government has implemented a Responsible Gambling Community Awareness Campaign as part of the *Queensland Responsible Gambling Strategy* (Queensland Treasury, 2007). This campaign aims to 'increase awareness and education about responsible gambling protective measures and to develop the ability of regular gamblers to engage in responsible gambling habits and behaviours' (Queensland Treasury, 2007). The campaign targets people aged 18 to 34 who gamble regularly. A review of the available material distributed between the campaign's conception in 2005 to the present reveals a consistent focus on adult related issues. For example, pictures often feature middle-aged adults and references related to the effect gambling has on 'the people who need your support.' Clearly, the intended

audience for these materials are adults with a certain degree of personal responsibility. Often the outcomes of health communication campaigns are only assessed within intended audiences (Cho & Slamon, 2006). However, young people are immersed so heavily in media culture, both under the age of 18 and over the age of 18 but without many typical “adult” life or personal responsibilities such as children or a mortgage. Nonetheless, they are also exposed to these adverts and may be thought of as an unintended audience. This study revealed that young people had interpreted the meanings held in the counter advertising campaigns in a way that made sense to their social environment and context. As a result the campaign had several unintended effects on young people including obfuscation, psychological reactance and discounting.

Obfuscation

One of the most common unintended effects of health communication campaigns is the creation of obfuscation; that is, confusion and misunderstanding (Cho & Salmon, 2007). Often messages intended for a subset of the population can produce misunderstanding among members of unintended populations (Cho & Salmon, 2007). In this case, some young people construed the lack of gambling related information aimed at them (in contrast to the vast amount of drug, alcohol and smoking related media) to be indicative of the fact that gambling was not as ‘dangerous’ as other risky behaviours and/or a problem that had more relevance to older cohorts. One school student explained her reasoning for the apparent lack of information about gambling targeted at her age group the following way:

Because it is not as dangerous and because we are not available to a lot of types of gambling and we don't have the finance and we are still under our parents roof so we are being taken care of. So if we do happen to have a little problem with gambling we do have our parents that can take care of us and help us out if something bad happens (school student, female).

This quote reflects the fact that some young people took an absence of information to signify that gambling may not be as dangerous to them as other risk behaviours. Furthermore, due to young people's age, lack of financial independence and parental guidance the impact of irresponsible gambling was interpreted to be less detrimental to them than other cohorts. Another young person interpreted her lack of encounters with gambling related education support of her beliefs about gambling being an adult problem:

I think the media just concentrate on drugs and alcohol a lot more than gambling with younger people. I don't believe gambling is as much of a problem for younger people than the other issues are, gambling is more of a problem for older people (employed, female).

Psychological reactance

Psychologists have long concluded that responses such as denial, resistance and combativeness are predictable reactions created by certain communication strategies (Miller & Rollnick, 1991). When people are told that they “must, should, or cannot” do something, they are likely to become argumentative, deny the accuracy of the charge, and assert their personal freedom. When personal freedom is threatened, the behaviour in question is all the more attractive (Miller & Rollnick, 1991). Attitudes of defiance and a desire to behave in ways that countered anti-gambling messages were evident amongst the young people in this study:

[Would you guys be open to hearing more about gambling?]

As long it's not forced on us. I know a lot of people who, when someone tells them what to do they do the opposite. So I think if the government or advertising agency really crack down on us and kind of point the finger at us then people will be like... “whoa – like that's not cool” – you can rebel from it (school student, female).

[What makes you want to gamble?]

Just the fact I am not allowed to (unemployed, female).

Young people's exposure to existing prevention campaigns coupled with messages from the school or home environment that discourage certain types of gambling behaviours could result in a 'boomerang effect' in which a behavioural response opposite to the one intended is provoked (Wolberg, 2006). Boomerang effects have been evidenced in a number of counter marketing efforts including cigarette smoking and drug and alcohol campaigns (Wechsler et al., 2003; Feingold & Knapp, 1977). In addition to attitudes of defiance and rebellion, the current study revealed that in the case of gambling, counter marketing can incite behaviours simply due to a curiosity to explore the 'forbidden' activity:

It's like a little kid, if you're told you can't do something you're like 'whoa... it must be cool' so we'll try it. So you want to find out what it's like, so you're sort of thinking, maybe it's something that I'll really enjoy (employed, male).

It is evident that for the participants in this study the boomerang effect operated to incite curiosity or rebellion in response to responsible gambling campaigns.

Discounting the Message Source

Many of the young people were highly critical of campaigns on the grounds that the government and service providers promoting responsible gambling were making a profit or income from the funds received. They viewed the campaigns as a blatant public relations effort and felt the conduct of service providers was hypocritical:

It's kind of like a greed thing, like Clubs and Taverns and all that they want to come across as caring about people's welfare and, “No, Don't Gamble Too Much” but I think they do that more to make themselves

look good than the fact that they do care whether or not you lose money (university student, female).

I think they [anti-gambling ads] are good, but having said that, it would be like sticking a child in a room full of chocolates and saying don't eat it. I think they are good and there needs to be more of them but it is no good putting all these "should you be gambling?" signs out there but then making the machines look prettier and putting more machines in the venues. In one sense you are encouraging and then in one sense you are not encouraging (employed, female).

These particular young people clearly expressed their cynicism regarding the motivation behind anti-gambling campaigns based on what they perceived as government hypocrisy, in that for them, it was evident that profit comes before social concern. At worst, this could potentially lead to a complete disregard of any anti-gambling campaigns and the messages therein, and at best, ambivalence.

Concomitantly, it is important to note that for some of the young people, exposure to gambling campaigns produced favourable outcomes. Cited particularly often was the fact that gambling campaigns reinforced awareness about the risks involved in gambling:

In the CBX at Caloundra there is a poster up on the wall at the toilets, and I think there is one at the RSL as well. I think it is a good idea because a lot of people go into the toilets and would see that when they wash their hands and it is a good reminder about the dangers of getting addicted and losing all your money and that sort of stuff. It reinforces what I think mainly (unemployed, female).

I see them ads at the cinemas, every time I go there is this ad from the government, advertising the risks of gambling. It is effective the way they have edited it, the scenario they have of the guy bowling, and the sound and stuff. I already knew the info, but it just refreshes the danger of it (school student, male).

While the current Responsible Gambling Community Awareness Campaign was seen to reinforce some young people's existing beliefs, this research failed to find evidence of the campaigns influence on attitude reform. Young people's feedback suggests that a process of social reproduction was operating in that the campaign did serve to support and possibly strengthen existing social distributions of knowledge, attitudes and behaviours; however, attitude and behaviour reform was not reported as having resulted from viewing the campaign material (Cho & Salmon, 2007). This finding resonates with theory that postulates the use of mass media in creating attitudes is more difficult than reinforcing existing attitudes (Klapper, 1960).

Implications

A review of the study data reveals that young people are exposed to a plethora of media messages about gambling, ranging in content from encouragement to engage in gambling behaviours, to the risks involved and avenues for assistance with gambling difficulties. As a whole, the young people felt that whilst they did come into contact with responsible gambling promotion, these campaigns were not as widespread as those addressing other risky behaviours and were far outweighed by promotional gambling material:

I guess the information is out there if you search for it, but it's not as easy to access as stuff is on alcohol and drugs and stuff like that because it is not anywhere near as widely known as the other stuff is (employed, female).

Definitely I have seen ads, that's where I got the saying "bet with your head, not over it". Yeah like TV. Every time you see the paper there's anti gambling signs but there's always ten percent anti and there's ninety per cent pro gambling (employed, male).

You get mixed messages really, because they do a story on how people lose their house and stuff because of gambling, and then they promote the Melbourne Cup saying how much fun it is, and look at all these people, so you probably get two views from the one show (university student, female).

You see a bit about the lotto winners, just in the paper over the weekend - the guy that has finally claimed the \$23,00000. That is generally what you see about it. You don't see much bad things about gambling in the media, you just see who's won money and how much they have won, so in a way the false sense of, it is just another tick to the pro side of your brain, rather than the con side, and they don't even it out with any cons (employed, female).

The imbalance perceived by young people between gambling promotion versus prevention/awareness may reflect the fact that presently a youth gambling social marketing campaign does not exist. Young people are inundated with information about drugs, alcohol and smoking specifically and this information is disseminated in a way that targets youth. Conversely, gambling information is received through a communication campaign targeting other cohorts. What is evident is that while gambling information may be encountered somewhat less than that of other risky behaviours, regardless of marketing intentions, young people are absorbing this information and at times processing the campaign messages in unintended ways. Given the fact that young people are already confronted with competing and conflicting messages that at times glamorise and normalise gambling and then conversely depict the negative consequences that gambling can result in, it is evident that campaigns specifically targeting awareness in young people would be useful. The feedback gained in this study can be applied to marketing strategies and utilised to inform and develop gambling campaigns targeted at young people. The information young people

revealed indicates that they would benefit from campaigns that feature the following:

1. Information that is relevant to issues currently present in their lives.

Participants in the study alluded to the fact that they found it difficult to relate to the content of some of the gambling campaigns. Typical responses included:

I would take on board ad messages in pubs and clubs even though a lot of the situations they depict in the advertising isn't me personally - I don't have kids at home, I am not paying off a mortgage. They don't reflect me personally, they are just that little bit older age group, but I definitely take them on board and I understand what they are trying to say... I think they are a good message, but they don't really go for the youth market as yet (university student, female).

This feedback revealed that although current campaigns are useful to young people they may be able to better process and retain information that is directly relevant to the ways in which irresponsible gambling can interfere with their lives. Issues that campaigns may centre on could include study, intimate relationships/friendships and material gains such as car ownership or travel.

2. Inadvertent exposure.

Several young people alluded to the fact that they would not intentionally search for gambling related information. This may point to the fact that the success of gambling awareness campaigns to some extent rests on young people being exposed to the information without purposely having to seek it out.

I believe that if gambling information was posted in the right places on the internet, like on 'MySpace' you would read a lot, and a lot of kids and teenagers, and lot of people because everybody my age and older, like even 27, 28 year olds they have all got a my space... it would get to you (unemployed, female).

As with all social marketing campaigns, the information presented will no doubt be competing for attention with countless other products or activities that may capture a young person's interest. Therefore, it is imperative that gambling information is presented with an awareness of young people's milieu, in an interesting and unique manner, through mediums young people access such as, the internet, mobile phones and television. Some young people explained that the attention they afford information depends to an extent on the way in which it is presented:

If the ads were big bright, different colors, or had warning on them like something you were like "wow what does that say" and you read it, but if it was just something simple like "don't use a poker machine" in black writing if someone is using a poker machine you would be like "boring" but I believe if something that was bright, and like something was really

eye catching, or something that was around certain places where you go or where you are going to see it all the time (unemployed, female).

I think it's really exciting watching Motivational Media [this is a program that visits schools educating students about drugs and alcohol] because they have like massive TV... like a big projector and like music and stuff and it really draws you in – like looks interesting and cool to listen to – fun to listen to (school student, female).

3. Content should be presented in a balanced and neutral manner.

Young people in this study appreciated pragmatic and realistic approaches to education. As previously discussed, frustration was evident when participants perceived campaigns to feature unrealistic portrayals of gambling:

I don't reckon the media really portray it at all. Shows like 'Home and Away' and stuff because they do things like gambling problems and it all happens in one week and then the week later they are fine, so I think that is a very inaccurate portrayal (university student, female).

Equal frustration was afforded to portrayals of risk behaviour that condemned activities and vilified those involved. The young people felt particularly targeted in the media as a cause of many problems including road fatalities:

A: When you look at the advertisements about smoking, drinking or drugs they basically focus on young people because they're the ones that are capable. You've got the drink-driving ones, which they say the statistics for young people are more capable of like crashing – or crash-related deaths because of drink driving – and then there's the smoking which, yeah, it doesn't necessarily apply to young people but somehow it still affects them. (female)

B: It's well focused because stats show that it is the young people who are crashing like most... But we're getting sick of the focus being on the young people bla bla bla... (male)

A: Just we get blamed for it (female) (conversation between school students).

As Messerlian & Derevensky (2006) have found caution should be taken to present information to young people in an unbiased and pragmatic manner. When a 'don't do it' approach is taken, young people can react in a manner opposite to the desired outcome. In other words, interest is sparked in the 'forbidden behaviour' or the message is discounted as it is construed as 'blame'. Participants in this study expressed a desire for information that presented the facts, rather than endorsed or denounced gambling:

I guess, you know, sometimes the things you've never tried, you just want to try them because you don't know what will happen. And I think that doesn't have to be the case if you've been informed correctly and you've seen the results on both sides, the good and the bad. I think it helps you to make a better decision for yourself (university student, female).

4. Focus on creating awareness.

While several young people had a balanced and realistic view of gambling and the consequences that could arise from excessive participation in such activities some young people felt that the effects of gambling remained hidden in the community:

It's not as big as recognised problem as drinking and alcohol... like you could walk right out on the street and you'll see someone smoking – chances are they might be under age or something... you won't walk out on the street and see someone gambling... Like when you walk out you see people smoking and all that and how bad it is. You see the bad parts of smoking but you don't really see the bad parts of gambling if you know what I mean (TAFE student, male).

I guess cause you can't make that direct link. You know like, if you're drinking and you're drunk, you know you're so up you know it's bad, it just feels wrong but if you're gambling and you've got a problem, you know like it's not the immediate result (university student, female).

You can't really tell if a person is a real gambler because you don't know what they are like at home if they have got nothing because they have hocked it, but if you are an alcoholic and people can tell that you are (unemployed, female).

Given these insights and the fact that young people are participating in a variety of gambling activities, education strategies, across a range of media, are very important in order to highlight that risks do in fact exist and ensure that they do not remain hidden to young people.

6.3.7 Situational and Structural Influences

A number of situational and structural characteristics of gambling venues and products were found to facilitate gambling behaviour in this study. Similar to the results of numerous other studies (Griffiths, 2005; Jacobs, 2000), easy access to gambling opportunities influenced numerous young people to gamble. One young woman explained how the close proximity to a gambling outlet influenced the frequency with which she participated in gambling activities:

[What is it that attracts you to gambling at the pub?]

I can walk from my house. It is very close to my house, it is only about a 2 minute walk. It is a very casual pub and there is not too many people there and I suppose just because it is local. If the local pub was further away from my house, I would definitely not bet as much as I do now. The pub being so close and within walking distance from my house, makes it much easier for us to go to the pub and put a few bets on before the game of footy etc, especially if we have had a few to drink, then we eliminate the drive. Even though I do not bet a lot of the time, putting a

\$5 bet on and being able to walk there, makes it much easier!!!
(employed person, female).

It is evident that for this participant ease of access to a gambling venue was but one factor of influence. She also reported that she felt comfortable in the casual and uncrowded club. This points to the importance that structural features and the atmosphere of the venue can have on influencing young people to gamble.

Many young people chose to gamble simply because it was on hand at the venue or store they were at, not because it was planned or actively sought out. Young people explained their gambling behaviour at different venues in the following way:

It's not like I plan for it to happen. You know, you just find yourself somewhere and there's pokies bloody everywhere... I just think to myself 'wouldn't mind chucking a couple of bucks in the machines' and it goes from there (unemployed person, male).

Obviously if I'm *at* the races you put money on just 'cause you're there but I'm more likely to put money on the Keno or something if I'm there... Like, if you go to the newsagent to get the paper, you're like 'oh, two bucks – I'll get a scratchie' or I'm at the pub having a few drinks it's like, "oh let's all put some money on the Keno." I think being there... being in that environment stimulates you to want to do it (employed person, male).

It's so easy to do. Like I guess because it is so accessible and it's there all the time and people can just... like if you head down to the RSL or wherever, and you've got pokies there and like everything's – it's just *too* easy almost to do it (university student, female).

I guess I get sucked into scratchies too with the way that they advertise. Cause every time you go and buy a pack of smokes you think, 'Oh, scratchies'. Well if it's right there in your face... you've got money in your hand... you just hand over money and you get \$2.00 change and there's a \$2.00 scratchie there – just ask for the scratchie mate (employed, male).

These quotes were typical in that the young people attributed their gambling behaviour directly to being in an environment that provided such activities, even though gambling was not the purpose of their outing in the first place. It seemed that once inside or within viewing distance to a gambling venue the way products were displayed and promoted attracted young people. One participant explained how the structural features of both the venue and the poker machines unwittingly drew him in:

Sometimes the pokies just drags you in, like when you're going past a cappuccino shop and they've got one of those little cappuccino's sprayers under the desk and they spray it out so when you walk past the

shop you can really smell that cappuccino and you want to go have one and that's what it's like with the pokies.

[Can you explain to me how it feels with the pokies?]

You walk in there and everything's looking really fancy and all of them are calling out to you. You know with the little pictures and things like that. And then there are some that are more attractive than others but again it's in the eye of the beholder and you know, it's sitting there telling you that you are going to win such and such amount - if you read into it and yeah I suppose you get attracted that way (unemployed, male).

This participant likened his attraction to poker machines to the sensory experience of smelling freshly made cappuccinos. In this way, the attraction to the features of gambling can be thought of as a sensory experience in which both visual and audio senses can be stimulated resulting in a desire to participate. As the above respondent mentioned, it seems that the appeal of gambling really is in the eye of the beholder, with young people in this study reporting a variety of facets of gambling venues and products to be alluring. A feature reported particularly often was the appeal of bright lights, colours and noises:

[What is it about the different gambling settings that attracts you guys?]

A: I know the Casino attracts me - flashing lights (female).

B: Yeah, I can't even... if you just walk past the Casino and you get attracted to it (male).

A: I think it is because you go around and there's like the little areas like a little place where you can go and drink and the eating places - and then you see the big Casino and flashing lights and all ding, ding, ding, ding of people winning. Of course, that's going to attract you. We went in there and I think the maximum we put in was twenty I think.

C: They make it look really expensive and classy... and attractive to people (Male) (Conversation between TAFE student).

For me it is like the noise out of the pokie machine attracts more excitement than it does winning. My friends are absolute idiots and like we put money in the machine, and the machine's going ding, ding, ding, and us jumping around like idiots, rather than actually winning any money (university student, female).

These quotes illustrate how the lights, sounds and colours of gambling venues, and particularly poker machines, captured young people's attention and triggered their interest in playing. Moreover, gambling venues such as Casino's with their bright lights, colours and décor are perceived by young people to be a high class and luxurious environment and thus, are desirable places for exploration and entertainment. Further, the music and noises made by poker machines were considered to create an atmosphere of fun that could facilitate dancing, singing or thoughts about winning.

Another important consideration that influenced young people's participation in gambling was the financial outlay required. It was reported that lower cost games were more appealing than those of high cost:

I like pokies. It is the bright colours and the noises. It draws my attention because you think it's \$1 you don't mind throwing \$1 in, but then you kind of go, I'll throw another one in, so sometimes you can get a bit carried away with it (TAFE student, female).

[What makes you gamble?]

It doesn't help that all the gambling things are quite cheap (unemployed, female).

The claw toy machines don't seem so expensive, \$2 here, like you say you go to empty out your wallet and you're like "I've got \$2 there, I don't need this for anything at the moment, If I need more I can go and get more out" and I have just got \$2 in my bag, and here's a machine let's put it in and try to get out a teddy. By the end of it you've searched around your bag and emptied out your whole wallet just to get a teddy for \$8.50 (unemployed, female).

The Productivity Commission (1999) proposed that the initial outlay required to gamble is a dimension of accessibility that may affect the way in which people gamble. Specifically, low outlay games are more accessible to people on lower incomes than high outlay games (Productivity Commission, 1999). It is obvious then that young people who are generally of restricted financial means would find gambling activities that are low cost attractive. However, as the above quotes illustrate, young people in this study fell into the trap of spending more than intended, as the low stakes required for each bet disguised the fact that over time the total amount of money being used was quite substantial.

An interesting finding of this study was that certain features of pokies prompted young people to interact with the machines on a personal level. One young woman explained the way in which she and her friends would play the pokies:

[So what drew you to the pubs and casino?]

Well, the fun of it... that it was a social activity. That it was fun – like my friends and I, like you'd have drinks and you play the pokies and like you'd talk to the machine and then you'd talk about it.

[And what was it about the settings that attracted you to them?]

Well, probably more the pokies themselves, but you know like the features and the gimmicks of the pokies themselves. Like you know the cute little things on the screen and then if you got free games, like we had names for them.... like not their actual names – there are certain pokies that are everywhere, so like, sort of like a little affectionate thing – like, Cleopatra, which was like the Queen of the Nile one – and Bonza which was a major money, sort of outback one. Like those sort of gimmicks, and the tunes – and you could sing, like on the Money Tree one there's a certain tune and we all sing it when we got games. It's probably that more than anything – more than the actual settings – apart

from the fact that I was there. So I think like how the technology – they're conscious of what appeals to people and I'm *sure* the colours and the music and everything that's terribly appealing. That's why I was attracted, that's why they were fun and appealing in the first place (university student, female).

She also went on to explain:

The characters on pokie machines you can actually... feel that you can have affection for (university student, female).

Clearly, gambling products captured both the attention and imagination of young people. The university student describes that she would talk to the machines, give them names, sing pokie tunes and feel affection for the poker machine characters. While she was the only participant to report engaging in such behaviour her reflections demonstrate that the way in which pokies are presented can result in them becoming more than just a momentary piece of entertainment but rather, they may take on a larger meaning in a young person's life. Given that identification with inanimate characters from popular films, television, computers and video games is a familiar part of young people's lives it is not surprising that interaction with the qualities of poker machines is so comfortable. One participant acknowledged the similarities between video games and poker machines:

Pokies is exactly that, it's like watching a video game, and it has music; it has bright colours; things move, and that's what people like about it. It's just that you can sit there and push buttons and that's just what it is, it's a game. Even on normal video games when you are in front of the X-box you are still gambling on it, you have to find your target you have got to predict where your target is, and how to shoot it, kill it, whatever (unemployed, female).

This young woman likened poker machines to video games as they both involve music, bright lights, moving 'things' or characters/objects, interaction in the form of button pushing and a goal or target that the player aims to achieve. Similarly, other modes of entertainment young people access such as television and movies involve inanimate characters that young people identify with and develop relationships with, affording the characters genuine affection. As young people are so familiar with the features and elements of such mediums it is understandable that some young people could find it natural to interact with poker machines in a similar fashion to the way they connect to other popular mediums, for instance playing poker machines as they do video games and talking about their experiences and those of the animated features as they do with popular television programs and movie characters. During the recent Future Trends in Gaming conference in Queensland, plans were canvassed to supply more sophisticated, hi-tech poker machines that would target Generation Y's interests and perform at the level of technology to which they were accustomed (Masters, 2008). Ross Ferrar, of the Australian Gaming Machine Manufacturers Association, supported the plan to introduce new machines featuring Xbox-style graphics, multiplayer terminals and interactive technology

such as self-selected screen colour changes and character choices (Healey, 2008; Masters, 2008). The results of this study suggesting that product features have a substantial influence on young people, may indicate that the introduction of such new games may increase the appeal of poker machine play for some young people. The fact that new, technologically superior machines, which match other digital devices young people are familiar with and interact with on a daily basis also suggests that, as a demographic, they are being deliberately targeted.

As a whole, the participants' responses demonstrated that several product/venue features, as well as dimensions of accessibility, influenced gambling participation, such as the lighting, colours, sound effects and features of the venue and gambling products as well as the initial monetary outlay required. One young person acknowledged the impact that such features could have on participation:

The thing I hate about gambling is that it is so, so, publicised and so enticing, and you go to the newsagent and they're all on the front of the counter, like you have to reach over them to get something from the newsagents and you can't avoid them if you want to buy something from the newsagents. 'Cause they're totally over the counter. Now you go to the surf club and you go up the stairs and the first thing you hear and see is pokie machines singing and whatever, flashing their lights. And if you were trying to stay from that, it's, you know, it would take a lot to just ignore all that (university student, female).

In essence this student's view was representative of many young people in the study, acknowledging the fact that gambling is presented in a way that can make it appear appealing to any one, including young people and may be particularly difficult to resist if someone is tackling a gambling problem.

6.3.8 Money Management

Furnham (1986) has proposed that young people's gambling behaviour reflects their values in respect to saving, investing and spending. Many participants mirrored this proposition by identifying that a lack of money management, budgeting skills or life experience could facilitate gambling behaviours. For example:

I think gambling restrictions should be at least 18 just so people have a chance to understand what they are actually doing. And people don't understand the value of money at least until they are out of school or at least working, and a lot of kids don't work until they get out of school and if they are allowed to gamble before that they don't understand how they are earning that money and how they go out and earn that \$1 and how it affects their life. I think 18 has to be the minimum because then they learn how to go out and not only drink and socialise, but they just get a little bit better understanding of the world and how they are going to manage themselves (university student, female).

[Have you ever had the opportunity to gamble but decided not to?]

Yes, that was when it was the second time that my friends bought the \$5 bet again and I didn't want to do that. I worked and I understand how important money was after working and how fast it disappears, and I didn't do that any more (school student, male).

In my view, one of the main problems or reasons why people gamble is because they want to win or get more than they've got whether its money or whether its possessions or stuff like that so I don't really know whether people are taught how to manage their money better when they are younger because when I was a kid I had an amount, and I still don't know much about how to budget myself and how to look after my money. When money is something that is not an important thing people don't mind throwing it away, but it is learning how to look after your money and keep it safe. I guess that would help I don't know if it would stop gambling, but I think it would help if people actually understand to look after what they have got and not to risk losing everything. That and learning the risks of what it can do to your life and your family would probably have been two things I would like to have known when I was growing up (employed, female).

These participants believed that young people were more likely to gamble if they did not have any experience or knowledge regarding the responsible handling of money such as managing financial obligations like bills and savings or the effort involved in earning a certain amount of money. Further, the quotes identify that education about and experience of budgeting and money management skills, financial obligations and the experience of earning money could protect young people from gambling.

Academic literature has further hypothesised that parental guidance and the provision of an age-appropriate, stable allowance to children, is one pathway through which knowledge about saving, budgeting and other money management skills can be delivered, which could result in reduced desires to take monetary risks and an appreciation of the benefits of delaying expenditures rather than seeking instant gratification (Delfabbro & Thrupp, 2003). Accordingly, one young woman in the current study afforded her friend's gambling behaviour to be a result of his financial reliance on his parents and his lack of fiscal management skills:

It concerns me about Jake, one of my friends because I know how much he does lose and how much he puts on. He lives in this mini house that his parents have built on their land and he pays nothing, no rent or electricity. He gets to have his groceries for free, he doesn't pay his rego, fuel. He doesn't pay for anything. All his money he gets given to him and so it is not really his to... He doesn't have priorities like we do, we've got a big list of bills and a big list of stuff that we've got to buy and stuff to pay for and save for and he doesn't have that responsibility. He hasn't had to live out from home and had to be in debt before. If he lived out of home he would definitely not bet as much (employed, female).

This participant believed that her friend's frequent gambling behaviour was a direct result of the lack of economic education provided by his parents. Delfabbro & Thrupp (2003) conducted a study examining the influence of parental guidance regarding money management strategies. It was hypothesised that gambling would be perceived as less desirable and consequently, participated in less frequently by children who possessed knowledge about money management as compared to those who did not. Results revealed that adolescents were more likely to disagree with the view that they would gamble in the future if their parents had taught them money management strategies (Delfabbro & Thrupp, 2003).

The results of this report point to the need for further studies that explore the relationship between young people's beliefs and values regarding their finances and their gambling behaviour. Participants in this study viewed money management skills or the lack thereof, to play a large role in not only in their desire to gamble but also in the facilitation and maintenance of gambling behaviours. While it is important to consider the influence of parental economic education there are many other pathways through which young people can gain money management skills such as within the school system, through peers and personal experiences (for example, moving out of home and from professional colleagues and outside examples) which may affect gambling behaviour. Thus, money management skills such as budgeting, saving and maintaining finances should be considered an important part of any gambling education or prevention programs for young people.

6.3.9 Alcohol

Alcohol plays an important role in youth culture and is a commonly used substance through-out both adolescence and young adulthood (Beyondblue, 2005; Duhig, Maciejewski, Desai, Krishnan-Sarin & Potenza, 2007). The 2007 National Drug Strategy Household Survey (Australian Institute of Health and Welfare, 2007) found that 30.1% of 12-15 year olds, 75.6% of 16-17 year olds and 89% of 18-19 year olds reported drinking daily, weekly or less than weekly. Alcohol use by both adults and adolescents has long been associated with many risk-taking behaviors including gambling. Derevensky and Gupta (1998) studied 11- to 16-year olds, revealing that adolescent gamblers were more likely to drink alcohol regularly than were non-gamblers. Additionally, it was found that adolescents with pathological gambling patterns were engaged in more regular alcohol drinking and drug use compared to non-pathological gamblers (Derevensky & Gupta, 1998). Initially in this study, investigation regarding the impact of young people's alcohol consumption on gambling was not included within the scope of the project however, young people's spontaneous feedback throughout the focus groups and interviews, made it increasingly evident that regardless of age, alcohol consumption played a large role in participant's gambling habits and was therefore, considered an important area for investigation. Many young people, both male and female, considered the consumption of alcohol to motivate their gambling behaviour:

[What factors do you think put people at greater risk of gambling?]

Alcohol, being drunk or drinking or whatever makes you think you are like the queen and king and can win (TAFE, female).

Probably a bit of alcohol is going to start motivating me to start gambling... I probably wouldn't do it otherwise; I would just keep on walking by.

[And what is different when you have had alcohol?]

Your concentration, you are not always there, your thought pattern is not the same (employed, female).

What normally motivates me to gamble is probably alcohol. That is I keep drinking and if I got the money I probably would keep doing it, but haven't got that far so, I don't know.

[How does the alcohol motivate you?]

I dunno, it just goes to the head and doesn't let you think and whatnot.

[Do you think you're more likely to gamble if you're drinking?]

Yep (unemployed, male).

These young people attributed their gambling to the fact that drinking alcohol altered their ability to concentrate and reason logically about their capabilities. In this way alcohol could prompt gambling behaviour in those that may otherwise not take up the activity.

An even larger number of young people in this study did not believe that alcohol was a direct motivator of their gambling behaviours, however, they did recognise that alcohol influenced the nature of their gambling play. Studies, largely conducted with male cohorts, investigating the influence of alcohol consumption on gambling revealed that alcohol tends to increase the difficulty one experiences in resisting the urge to gamble (Baron & Dickerson, 1999), risk taking (Kyngdon & Dickerson, 1999); impulsivity (Dougherty, Marsh, Moeller, Chokshi & Rosen, 2000; Rigchards, Zhang, Mitchel & de Wit, 1999), gambling over a longer duration (Kyngdon & Dickerson, 1999) and overall financial losses involved in play (Kyngdon & Dickerson, 1999). In this study participant's reports about gambling under the influence of alcohol reflected similar patterns to previous research. Alcohol was seen to increase impulsive behaviour. For example, young people reported:

Alcohol definitely changes your perception on a lot of things but being that they're hand in hand with each other pretty much everywhere you go to gamble there's alcohol so...

[How does it change your perception in relation to gambling?]

Basically when you start getting drunk and your senses start going and you think you start to feel more confident and more like, instead of being held back and being smart and thinking about things, you don't. I don't seem to think as much (Employed, male).

This young man's ability to think about the consequences of his behaviour was hampered by alcohol and thus, when gambling, he was inclined to act on a feeling of confidence rather than think his actions through.

Alcohol consumption while gambling was also seen to increase the desire to take risks:

[Do you think alcohol and gambling go together?]

Oh definitely, when you are drinking you are more likely to take risks and put lots and lots of money in, whereas you might not put that much in if you were sober (University student, female).

As indicated in the above quote, risk taking in gambling was often monetary in nature. That is, alcohol fuelled an increased propensity to take risks which resulted in increased monetary expenditure. Young people reported personal experiences of this nature and also reported witnessing this conduct in their peers:

If our friends are drinking they are more likely to put more money on gambling, put a bigger bet on, lose more, win more that sort of stuff, but for me I don't need to be drunk or drinking, but it is more enjoyable because you are in that more relaxed mode (employed, female).

[Do you think the way you gamble when you drink alcohol is different or the same as when you don't drink alcohol and you bet?]

Different, I don't think you put as much thought into what you do and times that you can easily get sucked into keep putting money into the pokies and things like that.

[Why do you think that is?]

Just 'cause you're drunk I guess. Not really thinking totally straight.

[Can you give me an example of a time that that's happened to you?]

I've been at the casino before where I sort of go in with a limit of how much I want to spend, and then after I've gone through that money I just keep going to the ATM, having a few drinks and usually end up spending more.

[Because of the alcohol?]

Sometimes, not all the time like, I don't think that if I was sober I'd do it, I think I'd stick to my limit, but by the same, I wouldn't go to the casino and not drink (TAFE, male).

These quotes illustrate that the consumption of alcohol during gambling activities resulted in young people placing higher bets, at an increased frequency or breaching their monetary limit and overall incurring a larger financial loss than if they had not been drinking alcohol. Additionally, the notion that alcohol facilitates an enjoyable gambling experience due to feelings of relaxation was raised as was the fact that the consumption of alcohol and specific gambling venues exist in a symbiotic relationship, one facilitating the consumption of and involvement in the other.

For some participants, increased gambling expenditure following alcohol consumption resulted in feelings of regret:

Well I kind of drink heaps and assume that I can bet heaps and I will be winning. So I kind of spent more than I would normally because I had

been drinking... Once I realised how much I wasted, I felt crap. Disappointed with myself that I went stupid with it (TAFE student, female).

[Okay. Do you think alcohol and gambling go together?]

Absolutely! Well, yeah, again it's a pub culture – that you lose enough... that you've stopped worrying about money so much. It happens when you're drinking anyway - that suddenly you've spent \$90 and you have no idea how, even if you haven't been gambling but you become much more lax with money and less worried about what you need to do with it.

[Have you found that has happened for you?]

Oh yeah, yeah. As I say the only times I've played pokies in the last year would have been when I've had a few wines (laugh) and been with friends and it seemed like a good idea and then it seemed like a good idea to put another \$20 bucks in and then... 'oh s@#t, I've spent another \$60 on pokies' and then you feel awful... later... the next morning. You think 'oh why did I do that?' And I know that happens – well that doesn't happen every weekend, I'm talking probably 2 or 3 times in the last year. That's the only time that I've really spent money on pokies, yeah, when you're more relaxed and had a few drinks (University student, female).

These young women reported that alcohol brought about feelings of relaxation and a decreased awareness of their monetary boundaries. Their lax attitude towards spending and subsequent behaviour resulted in negative feelings, such as disappointment after the gambling activity had ceased, but also when reflecting upon their behaviour, and their loss of control, the following day, when they were sober.

Alcohol consumption was also reported to increase the length of time engaged in gambling activities. One young man described this experience:

When I always gamble I always have an alcohol beverage... well if I get absolutely trashed and I won't have any conscious [sic] or I won't have any concept of how much money I'm spending on the pokies and it would be like I'm sitting there for five minutes but I was sitting there for two hours and it's like 'where did all my money go?' If you get to that alcoholic limit you start thinking differently. That sort of becomes a problem. I have experienced it a lot but I haven't experienced it recently, it's been a long time (unemployed, Male).

Further, to spending an extended period of time gambling when intoxicated, this young man reports that alcohol hampered his ability to monitor the time spent gambling. That is, he did not have any awareness that he was occupied by gambling activities for longer than intended nor was he able to monitor the amount of money he spent.

For some young people the fact that both alcohol and gambling were readily available at licensed venues resulted in a natural transition between drinking and participation in gambling activities.

[Do you think alcohol and gambling go together?]

Yep. If you're down the pub gambling's something to do while you're there. They got the screens up everywhere; you just put a few dollars on a horse and see how it goes. I think sort of drinking and sports go together a little bit if you're watching it, so if you're having a bet on the sport you're sort of drinking at the same time.

[So what does alcohol add to the experience?]

I don't think it really adds anything to it, I just find that when I do gamble a lot of the time I am drinking. If I'm down the pub or something like that because it's easy, convenient to put a bet on while you're there (TAFE, male).

However, the use of alcohol during participation in gambling activities was not limited to individuals over the age of 18. A conversation between school students revealed that drinking alcohol in a home environment influenced their gambling behaviour in a manner similar to that of that of participant's who did so in licensed venues:

A: We have nights in and we just drink and play drinking games and bet a bit of money... it's just fun (female).

[Do you think alcohol and gambling go together?]

B: Yeah (all)

[In what way?]

C: You can't control yourself when you're drunk (male).

D: It's funnier (female).

C: Go all in!

A: It's probably the mood or atmosphere you're in.

E: Yeah, I think it makes you feel more confident in yourself as well and it's easier again to get pressured into doing something – like you're obviously not in your normal state of mind once you've had alcohol (female).

A: and that's even more money as well.

F: And they're yeah like just throw it in – some more – and you're like “all right.” (female) (All laugh)

A: You're not focused on the reality of it. It's just fun – it's fun (conversation between school students).

This conversation reveals that when engaged in drinking, school students in this study had difficulties controlling their behaviour, resisting the pressure to gamble, felt an inflated sense of confidence in their abilities and spent an increased amount of money, similar to their older counterparts.

Studies investigating the way in which alcohol consumption may affect gambling behaviours suggest that the influence is greater for men than for women (Desai, Maciejewski, Pantaloni & Potenza, 2006; Hraba & Lee, 1996). One young person in the current study observed a gender difference in the use of alcohol and gambling within her peer group:

[Do you think alcohol and gambling go together?]

Yep, definitely. I know people don't spend nearly as much money as boys do. Cause, like, at a Club, or anything, even like Uni nights and stuff like that at the Tavern nights, the pokie room is just as full – like if not more full than the dance floor. There's all girls on the dance floor and all boys in the pokie room! And like they drink so much but they would never go and have a bet when they were sober – wouldn't go and sit in there and go, "*Oh come on – at lunch time, let's go have a bet...*" hardly. And they always have a beer and a bet. Girls never do that (laugh) (university student, female).

This participant perceived alcohol to influence the gambling habits of her male university peers to a greater extent than of her female peers. However, results of the current study as a whole reveal that both male and female participants reported changes in their gambling behaviour following alcohol intake. Considering the contrasting findings of this study and the fact that previous investigations exploring gender differences in gambling under the influence of alcohol were conducted in adult cohorts (Hraba and Lee, 1996; Desai, Maciejewski, Pantaloni & Potenza, 2006) there is clearly a need for further research to explore the impact of alcohol on gambling in young people, both over the age of 18 and under.

6.4 Gambling Involving Modern Technology

Much literature has focused on the impact that mediums such as the internet, mobile phone and interactive television have had on the nature of gambling participation (Australian Council of Social Services, 1997; Derevensky & Gupta, 2007, GAMCARE, 2005; McMillen & Grabosky, 1998). Young people within this study believed that the advent of such technologies had, to a large degree, altered the way in which people gamble. For example:

I suppose modern technology has changed gambling because now they have got like internet gambling and you can play blackjack and stuff on your mobile phones. I suppose it has influenced a lot because now there are a lot more ways to gamble, like before when there was just the sporting bets and like pokies (unemployed, female).

[Do you think modern technology has influenced gambling?]

Yes I do. Because you can gamble on the internet, the phone, watch gambling on TV. There is a lot more communication, instead of having to go to the races, you can just ring someone up and place your bet and watch it on TV. You can go on the internet and there is always places you can gamble on the internet, it is just everywhere (school student, female).

I would say modern technology has influenced gambling, because nowadays people don't have to leave the house, they can just go on the internet and play card games on the internet, or play internet pokies, and I have been on it, and it is pretty out there and in some ways it is kind of

exciting and in other ways it's not, what are they trying to do are they trying to get people to waste their money (unemployed, female).

You can gamble over the internet so it has made it a lot more accessible to minors, not just to actually do, but to view as well. If your parents go out to the pub or something and you are babysat at home, you are not going to see them throwing money into the poker machines and playing cards or whatever. Whereas now with the internet, it is more likely your kids are going to walk into the room while you are betting on the computer or ask what you are doing, so it is more likely it is going to be more in their face (Employed, female).

Yes, for the simple fact before when you were mentioning there is internet gambling and mobile phone gambling, and every kid these days generally has a mobile phone and the internet, so I guess it is more readily available to them to do these types of things (TAFE, male).

I know a lot of people who phone bet, TV bet and on the internet. I never have but it is so easy to set up an account and get it taken out of your bank. It is so easy to do it, and people don't have to leave, so it is part of that culture of us being so lazy (employed person, female).

Young people in this study believed that modern technologies not only offered new avenues for opportunities to gamble, such as the internet, mobile phone and television but that they also improved the ease of access to gambling services - that is one could gamble from the comfort of their own home. Young people regarded this as exciting but also identified the adverse impact technologies could have could have such as increasing the likelihood of unintended exposure to gambling activities, increasing opportunities for minors to access gambling services and expanding the avenues through which parents could model gambling behavior to their children.

Many community spokespeople have claimed that the gambling industry has deliberately targeted young people by deploying new technologies (Roy, 2006). When participants in this study were questioned as to whom gambling involving modern technology was aimed at, it was revealed that they shared this view:

Youth, younger generations because they have grown up with technology and it's the buzz at the moment (School student, male).

The younger generation because they are more in tune with the new technology that's coming out, and they like to use the new technology so they find it more appealing (TAFE, female).

Definitely teenagers, yes definitely high school students, as they have all just got their mobile phones, they are all starting to get mobile phones, we have got our own jobs and paying for our own credit so have access (school student, male).

I would have to say the under age, the young, the teens. Teens to mid-late twenties, but more teens because they can't get into pubs and so forth to gamble, the TAB, more likely to be asked for ID. Whereas over the internet they can gain access to other people's – parents' credit cards, or other people's credit cards and do it over the internet then. I think it would appeal more to them because when you are under age you want to do everything that adults can do, which would include gambling, and also I think teens don't have that wiseness [sic] to know that once that money's gone, it's gone (employed, female).

These quotes illustrate that gambling through mediums that utilise modern technology were considered to be particularly appealing to youth as young people are familiar with modern technology, find it exciting and interesting, can independently manage their gambling use and expenditure without parental supervision through modern mediums and evade age restrictions.

6.4.1 Internet Gambling

Young people in this study considered gambling services on the internet very easy to access through site links and pop-ups. In fact most young people reported that when browsing the internet, exposure to gambling activities or promotion was difficult to avoid:

On the Internet you can get pop-ups, you know like sort of poker or bingo and stuff. It's that easy to access that website with a pop-up and you're in - on the website. You could just be searching on the Internet and there's a pop-up and you just click on it and you're immediately in it! So, you could be as exposed to that as you would if you just go into a Casino (school student, female).

[Have you ever entered an internet site where gambling was available?]

Yeah, just about every Internet site has some sort of gambling advertising on it, like Hotmail for example. It has you know, like a shoot the duck type thing, or a target practice type thing to *win* something – it's just like a bar at the top or down the side, or wherever. You click on it and it will take you to a gambling site and you fill out your address and details and things.

[Have you ever had gambling pop-ups appear on your computer?]

Yeah. Yeah – a fair bit on the computer actually – it's pretty nasty (unemployed, female).

[Have you ever accessed a Web site where Internet gambling was available?]

I have, but I never... I sort of passed on it. Just sort of thought, 'not my scene, don't want to get into it' and I suppose I couldn't really start my card to do it anyway.

[And how did you come across the site?]

Just, actually just advertising just around – just grabbed your attention – might not be interested but you have to check it out anyway. So just... internet marketing I suppose (unemployed, male).

Very few young people in this study intentionally sought out gambling online, however, nearly all participants encountered it by chance via pop-ups or site links. For some participants pop-ups were of no interest and regarded as a nuisance however, for others links and pop-ups captured their attention and they went on to investigate gambling sites.

While very few young people in this study reported accessing the internet with the specific purpose of gambling participants recognised the ease with which this could be achieved:

[So how does modern technology affect gambling?]

Cause we have all this new- like we're so easily able to go out and try it because it's right there and everyone's got a computer, and like heaps of people have internet, so you just go on there and you can type in something in Google, like 'casino' and it'll come up with, like, about a million websites that, how you can try gambling or all these different types of games and everything (school student, female).

[Do you think it makes it easier for people to gamble under age?]

Yes it does because when you go in the net usually comes up with a site that says 'this site is strictly for over 18', and it asks you a question 'are you over 18?' and most people probably click yes, no matter what age they are. So it has made under age gambling much easier to do.

[So have you gone and seen that site?]

No, but my friend has done (school student, male).

Young people were aware of the ease with which they could locate gambling activities on the internet via search engines such as Google. They were also familiar with current protective measures used to enforce age restrictions on gambling activities and were confident in their ability to evade these procedures. Researchers have proposed that the ease to which young people can avoid restrictive age limits may cause the internet to be a potential risk factor for the development of problem gambling behaviour (Griffiths & Wood, 2000; Griffiths et al., 2005).

Many other features and structural characteristics of the online environment have been proposed by academics to be potential risk factors for the development of problem gambling behaviour. Participants in this study had a very good awareness of the aspects of the internet that could become problematic for themselves or their peers. As Griffiths & Wood (2000) have proposed, young people recognised that the use of electronic cash for online games had the potential to lead to suspensions of judgement:

I think net gambling is not a very good idea because the reason you play blackjack or poker at the casinos because of the atmosphere but when you are playing it online you don't associate it as your money you are losing because you are not actually playing it, because you are just clicking the mouse. It is not really the same (unemployed, female).

[Why isn't online gambling appealing to you?]

The convenience of having like an online betting account for the horse-racing is that you can watch the races on Pay TV and then go the computer and put your bets on from there rather than going to like a smelly pub or whatever. But, it's the same thing... your credit goes back into the account and you could spend it again straight away. Like if you're the type of person who can go to a pub and put some money on and win some money back and go 'right, I'm up fifty bucks – I'm going to stop now.' Whereas if it goes into your account, you're not physically seeing it go or increase (employed, male).

One young person recognised that the internet allowed for desires to be instantly gratified, decreasing opportunities for young people to reflect on their actions:

It is just such a quick process now, it doesn't take that physical amount of time, they can just do it straight away. I know like you say I'm going to do something, if you get up and think about it, or walk around and go somewhere to do it, you question it, in the circumstance now with modern technology people can do just whatever they want (university student, female).

Derevensky & Gupta's (2007) research supports this claim revealing that one reason provided by young people as to why they chose to gamble on the internet was the high speed of play offered. That study also revealed that the anonymity of the online environment was valued by participants (Derevensky & Gupta, 2007). Accordingly, young people in the current research viewed the internet as potentially appealing as excessive gambling behavior could be concealed from others:

Sometimes you go out the Surf Club or something, and there's those people that every single time you're there, they're always sitting on the pokies, and you can see them... Same machine... all the time! Whereas if you're at home, you don't have the social pressure of anyone, because no-one knows you're doing it unless you tell them. It's so much easier – it's right there. You don't have to go out (school student, female).

Despite the features of the online environment that young people recognised as potential risk factors for gambling behaviour and the high rate of exposure to gambling opportunities/beliefs regarding the ease of access, most participants in this study did not regard the internet as an appealing point of access to gambling services. This result typifies that of previous studies (O'Neil, Wetton & Duerrwald, 2003; Delfabbro et al., 2005). Young people in the current research placed strong value the ability of gambling to facilitate relationships. Participants reported that internet gambling was not entertaining as it lacked opportunities for highly valued social contact:

I think internet gambling's just a money maker. It would not be as much fun as the actual real life gambling. It is just you are not interactive, it is just the computer screen, it is not really social (school student, male).

To me, as I said before, gambling can be a form of social or entertainment when you first experience it. It takes everything out of that, the internet I think if you are sitting there by yourself on the computer puts more emphasis on the fact that you are trying to get more or break even with what you are betting. You are not sitting around the pokie machine or the TAB with a couple of friends joking around having a drink, you are sitting there by yourself doing it. I don't think it is healthy, I don't think sitting in front of a computer doing something like that is healthy anyway (university student, female).

I think that I would just like to try the real pokies because it feels a lot cooler than going on the internet and doing it, and it's more socially acceptable to actually go into clubs and do the pokies there than doing it over the internet. Most people don't like sitting on their computer all day, they would rather get out and socialise and by being on the internet gambling you are not really socialising. By socialising I think that is more like the normal thing to do (unemployed person, Female).

Clearly, the social component of gambling that was previously explored in this report as a motivator in the uptake of such activities was not regarded to be present when gambling via the internet. The young people quoted above regarded more traditional forms of gambling that did not involve solitary computer use or the internet to be healthier, more 'socially acceptable', 'cooler' and more 'normal'. In fact, some young people attached a negative stigma to gambling participation via the internet simply due to the lack of social opportunities it offered:

- A: There's a website and you can use a credit card and you can put a collection of money in there. You can make sports bets, you can bet on the weirdest of things cause my partner bet on it and he won a couple a hundred dollars on it and then he could either cash that out or keep betting it. He just bet until he was back to the same amount that he started on and then took that back out. So you know he had a week's worth of entertainment but lost no money out of it but only cause he won in the first place. You can bet on anything, you can bet on like whether Kylie Minogue is going to date (female).
- B: I think you have to have something better in your life to do than sit on a computer – no offence I'm not saying this about your second half - than to sit there and gamble on news events and like that... you must have nothing better to do (female).
- C: It's pathetic (female).
- D: It's senseless that sort of stuff (male).
- C: There's no point to it.
- B: I don't think its character building for people. I think people if they've got nothing better to do, they should sit down and write a note to their nana saying 'Hi how are you' instead of sitting on the internet,

because it's not character building for them, they're getting no social skills out of it, they're not gaining anything, or making any money. That's exactly right – go for a run. Go for a walk (Conversation between employed people).

A: I think gambling's more a social thing... (female)

B: Yeah, that's what I was going to say. Like, I only really gamble if I'm out with friends or something. I wouldn't sit there and entertain myself while I'm at home by myself (female).

C: Yeah, I think that's for more addicted people (female) (conversation between employed people).

It seems that the importance young people place on social interaction and connecting with peers extends to online gambling activities and without this element gambling was not only viewed as less appealing but also as more addictive, 'pathetic' and 'senseless' than other forms of gambling.

Examination of the gambling opportunities provided on the internet reveal that some activities do indeed allow for a degree of social contact. For example, gambling tournaments in games such as poker can involve competition against others located throughout the world. One participant spoke of the appeal of this type of gambling:

My brother... found a poker program we could play online that you could either use money or not use money... and just play all these other people, and the thought of 'this person could be in Hawaii for all I know' was fun, so it was good (school student, male).

Clearly, the social opportunities offered through online activities are expanding as technology advances. Testament to this is online virtual worlds such as *Second Life* that offers young people novel ways of interacting with their peers. Given that social interaction is such an important factor in young people's uptake of gambling activities it would be of benefit to further investigate the appeal of internet gambling options that allow for some degree of social interaction as in the future they may play an increasingly larger role in the facilitation of young people's gambling behaviours.

In addition to the perceived lack of social opportunities, online gambling was also unpopular due to participant's concerns about their financial safety. The internet was considered to be an unreliable medium due to a lack security and the inability to adequately identify site operators:

I don't really like internet gambling at all because of the fact that you pretty much don't know the odds like in a regular casino, the odds are probably not as good that you are going to win, but on-line you don't know what the odds are. The odds could be stacked up so you never win so I strongly dislike internet gambling.

[Are you saying that if you physically go to a casino it could be a safer way to gamble?]

Yes (school student, male).

Online stuff's unreliable because it's easier for the person who's made the website to rig it so that you don't win and rip you off... and take your money (School student, male).

These security concerns, held by a majority of participants evidence the technologically savvy awareness young people possessed that has undoubtedly been brought about through rigorous educational efforts.

In summary, as has been found in previous research the majority of participants in the current study did not consider online gambling to be appealing, nor did they frequently utilise monetary gambling services via the internet. In making conclusions from this data it is important to note that this sample largely consisted of young people who did not report excessive gambling behaviors and thus, could be considered to represent recreational gamblers. Given that many studies have indicated that prevalence rates for probable pathological gambling amongst young gamblers on the internet are high (Derevensky & Gupta, 2007) the current results should not be generalised to populations of problematic gamblers. It may be of benefit for future research to explore the use of online gambling services in a wider sample of young people.

6.4.2 Mobile phones

Young people in the study were aware of the opportunities available to gamble via their mobile phone. Gambling in this manner was often associated with the advertisements featured on commercial television that offered prizes to engage in games of skill (such as trivia) via the mobile phone. Such activities were viewed to be intentionally aimed at a young cohort and considered appealing by some participants:

I think mobile phone gambling is very clever in the fact that they offer pretty neat prizes that youngsters are pretty keen to win - the iPods and that sort of stuff, but the fine print is a little too fine. You see at the bottom of the screen, SMS text in for this gambling prize is five dollars. A lot of people wouldn't even realise that or notice that, so these kids without realising it are betting five dollars to try and win something that they are not likely to win. It is clever in that respect but it is pretty dangerous as well.

[Dangerous in what regard?]

Well, it is just that the kids that are probably texting in to these things aren't 18 and the companies that are running them don't really have any control over who is voting or entering in, or whatever, so the age restrictions there I don't see how they can be restricted or controlled (TAFE, female).

[In the last year have you seen any gambling related advertisements?]

I see those gambling ones at night where you text in on your mobile and stuff, but that's basically it. I wouldn't waste my money. It looks appealing but you just know you are not going to win so it is just not worth doing it.

[How does it look appealing?]

They have got young people, music pumping and stuff and like “oh you can win”, they got the visual stakes of all these prizes coming up and stuff like that (school student, male).

These young people believed that mobile phone gambling held appeal for a number of reasons including the attractive prizes that were offered, the opportunity to avoid the age restrictions placed on other gambling activities and advertisements featuring young people, loud music and exciting visuals were attractive. This appeal however, was overridden by the high costs involved in participation. The fact that the cost of mobile phone gambling was often hidden prompted some young people to participate:

[What do you think about mobile phone betting?]

A: Isn't it those ones where like it takes a number or something and it's like a unique number... and you win like a PlayStation 3 or some crap (male).

B: Yeah, I got fascinated...I've tried it. That was it - I didn't win – I didn't text them back (male).

[What made you want to try it?]

B: Well I thought it was just like my phone credit – like I can't see that going either so I just sent it off (conversation between employed people).

Young people recognised that the hidden costs of gambling via the phone could not only initiate gambling but could also maintain participation for longer than intended:

Just haven't really been bothered to gamble, haven't opened a phone account and I haven't got Foxtel or anything to watch it at home. And I think if I did have a phone account or something I would gamble more just because it is so convenient. I don't like it because it is an easier way. It's not realistic, you are gambling and you are not face to face, and you are not handing over money, and so you keep playing and you then realize how much you have actually spent (TAFE student, male).

As actual cash is not involved through phone gambling phone young people considered it easier to lose track of their spending. In fact some young people reported such experiences:

[What do you think of gambling with your mobile phone?]

A: Waste of credit (female).

B: No one really wants to gamble on their mobile cause they wanna waste their credit on socialising and stuff (female).

C: What about those things that you get [referring to a television commercial], like 'count how many dots are on my shirt and if you know text seven to this, text eight to this' – (female)

B: They're so stupid, they're not real -

C: And then you have to sit there and answer all these questions to get this one little say plasma TV, but you have to go through like, twenty

- questions, at like two dollars to send it and two dollars to receive it.
- B: It's like four dollars.
- D: And then they automatically think you've subscribed to their thing and then they - (male)
- A: And it costs you to get them to stop too.
[So that's not attractive to you?]
- C: It annoys me cause [Sic] I did it once, and I had like a hundred and something dollars credit, and I checked it and I've got like thirty left. Oh, that really ticked me off.
- B: Cause you wanna use it for like social life, like ringing your friends and messaging and you'd rather spend it on that (conversation between school students).

This conversation illustrates that young people who engaged in mobile phone gambling did indeed experience a suspension of judgement as the costs involved were not immediately apparent and subsequently they felt regretful about their behaviour.

Similar to attitudes about online gambling, participants held a number of negative views towards mobile phone gambling. As the above quotes illustrate participation was seen to financially hamper one's ability to fund social endeavours via their phones. Additionally, there was some distrust towards mobile phone gambling in terms of one's chance to win. For example:

I think mobile phone gambling is pretty dodgy as well because you never know if it is going to actually happen like you hardly ever hear of someone winning thousands of dollars off a mobile phone, I reckon it is just a waste of time (school student, male).

Some young people attached a negative stigma towards those who participated in such activities labelling them as 'fat', 'lazy' and 'loners':

[Who do you think gambling involving modern technology is most appealing to?]

I suppose it's like the fat people that can't get their ass off the couch to go to the Casino (laugh). Like, if you are that lazy that you can't just go to a Casino and go have some fun there then f@#k it, don't bother. Like, if you can't get off your ass to go do something and you got to play on your phone, got to be a bit of a loner (unemployed, male).

Of those that had tried mobile phone gambling most reported that they were not satisfied with their experience and did not maintain their involvement however, there was a small number of participants who found gambling via the phone suited their lifestyle:

[Do you think modern technology has influenced gambling?]

Yes. Cause [Sic] you can even gamble on your – as I say, the Internet, your mobile phone, you can ring up on your phone, Foxtel, them sort of things. You can have an account.

[What do you think about things like that?]

Again, for me, we enjoyed it. One of my mates did have it set up on his account and had Foxtel and when we had barbecues and stuff over at his house, the girls were inside talking or whatever and we'd often go in and flick the races on or something and you know, as I said, he had an account so we all sort of chipped in and we could have a couple of bets while we were at his house for a barbecue. So, as I said, technology has definitely helped.

[What about that is appealing to you guys]

The fact is when you start getting – well most of my mates, we're all now in serious relationships and have houses and that sort of thing and we can't afford to go out to the pubs and sit there and drink and waste money. It's obviously a lot cheaper to stay home and do it and this way we can be at home with our partners as such and, obviously, being in the other room and you're still with your mates – gambling and drinking and you're still in the same house or whatever as Sally. You're not getting trouble I suppose (laugh) (employed, male).

It is evident that for this young man a phone account allowed him to gamble in a social environment that was comfortable and convenient for himself and his peers.

As there is minimal research exploring the nature of young people's participation in mobile phone gambling this research provides preliminary information about the perceptions young people hold and their current usage of mobile phones to engage in gambling activities. Despite the appeal of prizes offered via mobile phone gambling most young people did not view such activities to offer enough entertainment for the cost involved and further, were more interested in using their mobile phone credit to communicate with peers. It is important to note however, that the use of electronic credits for gambling play did lead to suspensions in financial judgement, prompting and maintaining gambling behaviours for a small number of young people.

6.4.3 Practice Play

Unlike monetary gambling through modern mediums, practice play via the internet, computer games or mobile phones was regarded quite positively by most young people. It was viewed as easy to access by most participants:

[Have you ever come across practice play gambling on the internet?]

Yes I have but I have not been interested in it because I am not really a game person. I am on the internet for other things.

[How did you come across that?]

It's on the front page of the Yahoo site - Games, gambling everything you could possibly think of is on that front page and you can click on a link and it takes you there.

[Do you think it makes it easier for people to get access?]

Yes, a two year old could do it (unemployed, female).

I don't do it for real on the Internet – like you have the gambling game pop-ups that aren't the real stuff and I like playing that because it's a chance of winning... and I'm pretty good at that... (school student, male).

[Has anyone been on an Internet site where gambling is available?]

A: Yep, yeah (Many responses)

[Can you guys tell me a bit about it?]

B: I was freaking out – you know how you just download it to your computer and you just play poker (male)

[So what do you like about those free practice play games?]

C: They're free! (male)

D: There's no risk of losing your money or possessions – so you can still do it. (male)

B: The only bad thing is that, like sometimes, you have to sign up for it.

A: You give out your details – like your email address – and then you get the millions of emails and stuff that...

C: It's just mucking around because it's just like fake money – so you like bet it all – you put it all on the one – just to see what happens – and then you laugh!

B: It does give you a bit of a thrill.

E: It's like the thrill of it – the rush (female) (conversation between school students).

Even if young people did not participate in practice play most were very aware of how to access it and vicariously encountered gambling games through online site links, pop-ups and promotional emails. Other young people reported access via mobile phones and store purchased computer games.

A number had accessed practice play and it was particularly popular amongst male school students. The popularity present within this group may be due to the fact that online practice play mimics the characteristics of casinos, pubs and clubs. While school students did report the ability to access gambling within licensed venues, this access was difficult to obtain and limited to those with appropriate means (that is, fake identification or parental support of underage gambling within venues). Thus for a majority of school students, the casino, club or pub gambling experience was desirable yet unattainable and particularly attractive for some due to the fact that it was prohibited. The internet represents an ideal environment in which people under the age of 18 can experiment with casino style games in a setting that mimics the features of licensed venues (that is, the internet and computer games provide flashy lights, noises and feature attractive men and women).

Added to this appeal was the perception that practice play was safer than its monetary counterpart as the thrill of gambling could be experienced without financial risk. For example:

I only heard of practice play I haven't been on the sites or anything. I heard just through friends and stuff and at the group interview as well. I heard just how it is a lot more safe than real gambling and its more like

practice so it is all the thrill but there is no loss or profit, which is a good thing I suppose (school student, female).

I haven't really tried real gambling, but yeah playing on the computer is not really harmful because it is just a computer game, it is not really real (school student, male).

There was a general sense amongst many young people that practice play provided a safer option to gamble as compared to gambling activities involving monetary expenditure and thus, the outcomes of practice play were considered less harmful. Other participants recognised that despite the lack of financial risk involved in practice play it presented other hazards such as the encouragement of future gambling behaviours:

With mobile games and on the internet you have all those gambling games that encourage children. I reckon they learn to play the games and when they get out they put their skills into practice (school student, male).

You've been exposed gambling at a young age because it's on the internet now. You play that game Neopets and you're putting that stress on like 'oh well, I have to go out and play blackjack now.' Neopets you've got your little animals and you've gotta take care of them so the game, it'll teach you how to play blackjack... and you have to gamble on games so you can win money, so you can go to the shops and buy food so you can feed your Neopets (school student, female).

If you're playing internet poker without real money and that you just feel more confident as soon as you go and play with real money and you lose, you've just lost everything (unemployed person, male).

It's silly on my mobile phone I have got blackjack and I can't use it to actually gamble, but it is still the same sort of thing even though it is not your money, it is encouraging to go and teach you how to play it, and wanting you to go and actually play the game. Before I went to the casino I did, I really wanted to try and play blackjack because I had played it on my phone (unemployed person, female).

It is evident that practice play was viewed as an activity which could prime young people for future play and even cited by a small number as one of the factors that influenced their future intention to gamble. Academics have accounted for the dangers inherent in use of practice play reporting that participation could act to establish a sense of confidence in player skills, introduce young people to the 'thrill' of gambling and act to desensitize young people to the fact that actual internet gambling involves 'real' cash rather than imaginary credits (Griffiths & Wood, 2000). It is evident that in this study some young people's reports support these notions however, for other participants involvement with online practice play or computer based gambling games resulted in a decreased desire to participate in future monetary gambling. This was due to the fact that young people tired easily of the games, finding them boring after a short period of time. Additionally, they developed a sense of how

quickly money could be lost and some participants perceived the repetitive nature of the games to be 'addictive':

[How did you first find out what gambling was?]

When I played my first Hoyle computer game, there's a casino one and I just sort of figured out a few bits from there and I was 15 when I first played that game... The first thing I went to was the pokie machines and when you start off you get \$5,000 which is credits from the computer and it is just like a computer game so, you keep on going. I found it is really addictive so I don't really do it as much any more because I don't have my computer any more, sort of, haven't put it back on yet, I don't think I will.

[What do you mean by addictive?]

Well most people sit on a pokie machines, they put in \$1, they don't win anything, they put in another \$1, they don't win anything so walk away and go do something else, but when you are sitting there so long, just clicking it, and clicking the mouse that it rolls and rolls and rolls you sort of keep on putting in the money, and once you want to put more in you know you are addicted to it and it is really addictive because you want to win something and you want to win more and more and more.

[Do you think playing that changed your perspective about gambling in any way?]

It changed it a lot because I figured out that with gambling you can't just put on, and it gives you money, some people can do it but people that want more are addicted to it so they keep on wasting their money on it (school student, male).

I will use a poker sort of site and you can play against other people just for chips and stuff on the internet and once you lose all your chips you are out but it is not like real money.... I learned how to play poker... I think I was at a friend's house and they were playing so I was playing... It was alright, we found it a bit boring after a while... (school student, female).

It could be tentatively deduced that the use of practice play can operate to reduce desires to gamble by two means. Firstly, practice play can affect the appeal of gambling games by removing some of the mystery and excitement that surrounds previously unobtainable casino type games. By experimenting with simulated casino games young people become accustomed to them and become easily bored. This is not to say that the appeal and lure of an actual casino environment is lessened however, the novelty of gambling is reduced. Secondly in this study, young people at times recognized the addictive nature of the games they were playing and were surprised at the ease and speed at which their credit was depleted. This created a sense of wariness or caution towards gambling games in general. These findings should not be taken to negate the harmful effects previous literature has attributed to adolescent involvement in practice play. Rather the findings in this study demonstrate that any educational efforts would benefit highly from the inclusion of experiential components in which simulated gambling within a safe and informative environment can be participated in, removing both the 'mystery' and

'excitement' that surrounds gambling while demonstrating the actual odds of winning and losing. The internet may be an ideal medium through which to access such resources. At present *Gambling: Calculating the Risk* (Powerhouse Museum, 2004) is an online educational website that promotes informed gambling choices among teenagers through the use of interactive gambling games. As many school students are already accessing practice play at their own leisure utilising sites such as these as an educative tool could prove very successful in both capturing the attention of young people and demonstrating the risks involved in gambling.

7.0 Conclusion – The Multifaceted Nature of Gambling

Given the varied accounts of gambling experiences and reasons offered by the participants in this specific study for the uptake, maintenance or avoidance of gambling activities, it can be concluded that the facilitating and protective factors for gambling behaviours are multifaceted in nature. Since the factors that contribute to impaired behaviour control are layered, Nower and Blazynski (2001) have proposed that a Pathways Model can be utilised to account for problem gambling behaviour. While the Pathways Model (Nower & Blaszyński, 2001) was developed to explain problem gambling behaviour it can also be utilised as a model to understand recreational gambling behaviour in young people. That is, participants in this study were seen to represent a heterogeneous group for whom a variety of biopsychosocial factors facilitated and maintained gambling behaviour. These factors were seen to include influences such as the family, peer groups, the mass media, popular culture, the general cultural climate within a given community, a young person's level of emotional arousal (that is, boredom and excitement), personal belief systems about winning, chance and luck, past gambling experiences, personality, situational and structural characteristics of gambling venues and products as well as alcohol intake during gambling activities.

As has been found in studies of young people's alcohol use (McIntosh, MacDonald & McKeganey, 2008) the current study revealed that at an individual level a complex mix of mutually reinforcing factors resulted in gambling behaviour. For instance, a young person who was experiencing boredom could be prompted through viewing gambling advertisements, to relieve that boredom by gambling. Easy access to gambling facilities and lowered inhibitions due to alcohol consumption could increase the young person's propensity to act on media driven prompts to gamble. Thus, in this case, choice, opportunity and encouragement influenced behaviour:

It's like at the Casino, if you bored and you're drunk - like, when we went we came down from a show, and we were bored so we went and played the pokies. You're bored so... I just mean at the Casino if you're staying there there's a higher chance of you going to play pokies other than laze around in your room cause [sic] they advertise it like 24/7 on the TV (TAFE student, female).

Just as facilitating factors were found to be multifaceted so were protective factors with some young people attributing safeguards from excessive gambling to a number of influences. For example, one young person revealed that an appreciation of the value of money and witnessing excessive gambling behaviours in the workplace discouraged him from gambling:

I don't think people have seen what I've seen. I have seen a guy go and spend his whole week's wage on one poker machine, that's sad. The amount of money I'm earning at the moment makes you think how precious money actually is (school student, male).

In summary, this study found that at a group level, young people varied greatly in their motives to gamble and the factors that influenced gambling behaviour. Analysis at a micro level revealed that for every individual a number of factors combined to facilitate gambling behaviour. These results exemplify the principles of equifinality, in which 'common end points and final pathways can emerge from diverse beginnings' and multifinality, in that 'individuals who start down the same path can end up going down many different roads over time' (Masten, 2004). Interventions clearly need to address and evaluate a broad range of factors that may influence gambling rather than compartmentalising the target areas for change or education (Barrera & Sandler, 2006). The current research revealed that influences such as familial, individual (cognitive and emotional), peer, cultural, environmental, the media and their joint affects on the course of individual gambling involvement should be considered in the development of gambling prevention and educative efforts that are aimed at targeting a young and diverse cohort.

The transitions into and out of adolescence are viewed as 'hot spots for observing onset or offset of psychopathology, and also periods when changes in vulnerabilities and opportunities may arise and redirect the course of development' (Masten, 2004). Thus, it is of high importance that prevention and education campaigns target people during these influential stages of psychosocial development. Young people were aware of the importance of education at a young age and supportive of efforts to introduce a range of information strategies:

I think I would have liked more information, only because I feel very naïve now. Not that it is a big problem for me but I do feel just a little bit naïve and I don't know about this topic that is eventually probably going to become quite a big issue and I do feel I would like to know a little bit more about it, not to persuade me one way or the other but just so that I know some background stuff on it because I really don't (employed, female).

I don't know whether it is the advertising or whether it is how kids should learn about gambling earlier in life, but they should. It should be taught about how gambling can make an impact on their life before they have kids or before they own a house. There are plenty of other things in their life that they can focus on - getting a car, a licence or moving around meeting new people, possessions that they could have. With gambling it is just you might come out on top but you might not necessarily, just see how you go. I don't know... for me it is just they need to learn about all these problems. All the anti gambling ads now are saying to people you have got these responsibilities in your life, don't let gambling mess with them. I think kids need to be taught before they have those responsibilities, don't let it mess with you from the beginning (university student, female).

These quotes reflect a quality of disappointment at the lack of information provided to young people and highlight these participants's open attitude to learning about gambling regardless of their own gambling attitudes and

experiences. Certainly, those few participants who had come across gambling related information or received formal education about gambling behaviours and outcomes felt that their views regarding the risks of gambling had subsequently altered and their perceptions of the odds and probability of gambling were more accurate:

Of late all I have really seen is negative things on the media... It makes me realise how addictive it really is to see old men and women on poker machines with their retirement money. That money you would think is pretty precious especially as that is their only source of income so I'd say it does portray that big strong message of how addictive it is for sure (university student, male).

I see them [sic] trailers at the cinemas. Every time I go there is this ad from the government, advertising the risks of gambling. It is effective the way they have edited it, the scenario they have of the guy bowling, and the sound and stuff. I already knew it, but it just refreshes the danger of it (school student, male).

We were just spoken to at school about gambling and the different types of gambling and the risks and if you do it in small quantities it is OK but once it becomes a problem the different effects that it can have in your life.

[Do you think your attitude might be a bit different if you hadn't had that information?]

Yes actually, probably because I wouldn't have been as well informed of the different kinds of risks. I think that I could maybe take more of a risk with my money and things like that if I was out and put in a situation with friends (employed, female).

A: Did you do that assignment in Maths B last year? And when you actually look at the odds of what stuff is, we have the *smallest* actual chance of... what did we do – like craps and – (female)

B: and two-up and stuff like that (female)

C: blackjack...and roulette (male)

A: Yeah, and like it was ridiculous how they are able to make it *look*.

B: Yeah, but the way it's presented, it looks like your odds are awesome.

A: It just gave me more of an understanding because I hadn't been in a environment where I really know that much about gambling to begin with so to actually like gain my own understanding then... yeah, it was just good and it shows you (conversation between school students).

As a result of education or awareness campaigns these young people reported that their beliefs were reinforced or that they gained an awareness of the addictive potential of gambling, the life consequences of excessive gambling and that the way gambling is presented can be misleading in terms of the odds and probability of winning. One young person reported that as a result of the information she received at school she took less financial risks when gambling. Clearly, there is a need for education and prevention initiatives in Queensland and beyond, and certainly the young people who participated in this study were

open to gaining such information and recognised the potential long-term benefits of such education. Further, this study indicates that information should be dissemination to not just young people themselves but also their parents, who represent important channels of learning and education for offspring. The data contained in this report may be utilised to inform such efforts that aim to target the dynamic and complex factors that initiate, motivate, influence and maintain young people's attitudes towards gambling and their uptake of various gambling activities.

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Appendix A

Focus Group Protocol

INTRODUCTION

- name tags
- Introduce myself
- Confidentiality
- Set agenda
- Questionnaire administration

TOPIC 1: BROADER SOCIAL CONTEXT

A. What is gambling?

- What types of gambling are you aware of?
- Which of these do you consider to be gambling:
 - Pokies
 - Lottery tickets (eg. Scratchies, lotto tickets, keno)
 - Racing and sports (eg. Football, soccer, horse or dog racing)
 - Card games
 - Video games
 - Mobile phone betting
 - Internet betting
 - Stock Market
- What are your thoughts or feelings about the different types of gambling (that is, is one type better or more socially acceptable than another)?
- Which type would you be least likely to participate in and why?
- Which type would you be most likely to participate in and why?
- What is 'problem gambling'?

B. What are the positive or negative consequences of gambling?

- Do you think gambling is as risky as other activities such as, smoking or drinking?

- Have you come across as much information about gambling as other risky behaviours such as, smoking and drinking?

C. What types of people gamble - gender, age, ethnicity, household status, socioeconomic status, geographic location of residence?

- Which groups of people are more likely to gamble?

D. Where does gambling occur and who would participate in particular settings?

- Is there a difference between the places males and females would gamble?
- Where are you or your peers most likely to gamble? (for example, gambling in a social environment as opposed to gambling on the internet?)
- What is it about the different gambling settings that attracts you or your peers?

E. What are the broad community attitudes to gambling?

- Do you think gambling is a part of the Australian culture and why?
- Is gambling a socially acceptable form of entertainment to you?
- Is gambling an opportunity to socialise with your peers?
- Do alcohol and gambling go together?

F. What factors do you think put people at greater risk of gambling?

G. What factors do you think help protect people from gambling?

H. What factors may motivate someone to seek help for a gambling problem?

I. What factors may prevent someone from seeking help for a gambling problem?

J. Where would you turn to if you or someone close to you wanted help for a gambling problem (for example, a friend, counsellor, GP, telephone

hotline or school staff)?

TOPIC 2 – GAMBLING AND THE FAMILY

A. What is your family's attitude to gambling in general?

B. Do your close family gamble? If so what forms of gambling do they use? How often?

C. What is your family's attitude towards *you* gambling?

D. In what way has your parents/carers attitude influenced your gambling involvement or your attitudes?

- Are your beliefs and attitudes to gambling the same as your families or different and how?
- Have you grown up celebrating the Melbourne Cup Day in your family?
- Are there any other gambling events your family participates in?

E. Did anyone in your family ever discuss potential risks associated with gambling?

TOPIC 3 – YOU AND GAMBLING

A. Overall, thinking about all the issues discussed today what do you think makes you gamble most?

- Does the experience of winning make a difference to your wanting to gamble?
- What factors influence obtaining a win when gambling?

B. Are there any times when you had the opportunity to gamble but decided not to? If so what was going on for you?

- Are there any times when you think it's not ok to gamble?

C. What do you think about the age restrictions placed on gambling activities?

- What age do you think it should be legal to gamble? Why?

D. Do you think you will gamble in the future? Why or Why not?

E. What motivates you to start gambling, as compared to what motivates you to continue gambling?

CONCLUSION

- Thanks.
- Gambling help contacts.
- Reminder about confidentiality.
- Invite to participate in an individual interview.

Appendix B

Focus Group Evaluation Form

Focus Group Evaluation Form

Did you enjoy the Focus Group today?

Did you feel comfortable contributing to the group discussion?

Could we have done anything differently?

Do you feel we asked the right questions?

Did you feel comfortable with the presenter? If not, could you please elaborate.

Is there anything you would like to say about the group session today.

To help us to better understand youth and gambling, we would like to take this one step further and have a personal interview with you. Please remember that all discussions will be completely confidential.

The researcher, Karina Allen, can be contacted Monday-Friday, 9-4.30 pm on 5437-9499.

Thank you for all your help. We really value your contribution!

Appendix C

Youth Gambling Questionnaire

Youth Gambling Questionnaire

Please do not put your name on this survey. Your answers will be regarded as confidential and will only be seen by the members of the Research Team and their associates. Your answers will help us to learn more about young people's attitudes towards gambling.

Part A: These questions are about you. Please read the questions carefully and tick the box that corresponds to the response that best suits you.

1	Are you male or female? Male <input type="checkbox"/> Female <input type="checkbox"/>
2	How old are you? _____ years
3	Do you attend school? Yes <input type="checkbox"/> No <input type="checkbox"/> Do you attend university? Yes <input type="checkbox"/> No <input type="checkbox"/> Do you attend TAFE? Yes <input type="checkbox"/> No <input type="checkbox"/>
4	If so, what year are you in? _____
5	How would you describe your work/money situation? Not working because I am at school <input type="checkbox"/> Employed full-time <input type="checkbox"/> Part-time <input type="checkbox"/> Unemployed seeking work <input type="checkbox"/> Unemployed but not seeking work <input type="checkbox"/> Other (please specify) _____

6	Do you (personally) receive any income from the following? Newstart or Youth Allowance <input type="checkbox"/> Austudy or Abstudy <input type="checkbox"/> Wages from work <input type="checkbox"/> Pocket money from home <input type="checkbox"/> Gifts of money for birthdays etc. <input type="checkbox"/>
7	How do you feel about your money situation in general? I have enough money for what I need <input type="checkbox"/> Overall, neither good nor bad <input type="checkbox"/> Not having enough money causes me problems <input type="checkbox"/>
8	Were you born in Australia? Yes <input type="checkbox"/> No <input type="checkbox"/> If no, where were you born? _____ How many years have you lived in Australia? _____
9	What languages are spoken in your home? _____
10	Do you belong to a religious group? Yes <input type="checkbox"/> No <input type="checkbox"/>
11	If so, which? Atheist <input type="checkbox"/> Protestant <input type="checkbox"/> Catholic <input type="checkbox"/> Anglican <input type="checkbox"/> Judaism <input type="checkbox"/> Pagan <input type="checkbox"/> Buddhism <input type="checkbox"/> Islam <input type="checkbox"/> Hinduism <input type="checkbox"/> Mormon <input type="checkbox"/> Christian <input type="checkbox"/> Other: _____
12	Do you attend a church/religious/spiritual gathering regularly? Yes <input type="checkbox"/> No <input type="checkbox"/>
13	Do you attend other religious activities regularly eg church groups, meditation sessions? Yes <input type="checkbox"/> No <input type="checkbox"/>
14	Do you feel you have a strong social support network (ie friends and family)? Yes <input type="checkbox"/> No <input type="checkbox"/>
15	Who do you live with most of the time?

	Mum only <input type="checkbox"/> shared living with Mum & Dad <input type="checkbox"/> Dad & partner <input type="checkbox"/> Mum & Dad together <input type="checkbox"/> Mum & partner <input type="checkbox"/> Dad only <input type="checkbox"/> Friends <input type="checkbox"/> Partner <input type="checkbox"/> Strangers <input type="checkbox"/> or other family members: _____
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Part B: These questions ask about your attitudes and experiences to do with gambling.

1	Which of these do you consider to be gambling? <input type="checkbox"/> Pokies <input type="checkbox"/> Lottery tickets (eg scratchies, lotto, tickets, keno) <input type="checkbox"/> Racing and sports (eg football, soccer, horse or dog racing) <input type="checkbox"/> Card games <input type="checkbox"/> Video games <input type="checkbox"/> Mobile phone betting <input type="checkbox"/> Internet betting <input type="checkbox"/> Stock market	TICK AS MANY AS YOU LIKE																					
2	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%;"></th> <th style="width: 15%; text-align: center;">Yes</th> <th style="width: 15%; text-align: center;">No</th> </tr> </thead> <tbody> <tr> <td>Gambling (with money or possessions)</td> <td></td> <td></td> </tr> <tr> <td>Is good entertainment</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Is a waste of time</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Is a way to make money</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Makes you feel better</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Is OK as long as you don't overdo it</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </tbody> </table>		Yes	No	Gambling (with money or possessions)			Is good entertainment	<input type="checkbox"/>	<input type="checkbox"/>	Is a waste of time	<input type="checkbox"/>	<input type="checkbox"/>	Is a way to make money	<input type="checkbox"/>	<input type="checkbox"/>	Makes you feel better	<input type="checkbox"/>	<input type="checkbox"/>	Is OK as long as you don't overdo it	<input type="checkbox"/>	<input type="checkbox"/>	
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Lottery ticket (eg scratchies, lotto, keno, other)	<input type="checkbox"/>	<input type="checkbox"/>																					
Racing or sports (eg football, soccer, horse/dog racing, other)	<input type="checkbox"/>	<input type="checkbox"/>																					

	Internet gambling	<input type="checkbox"/>	<input type="checkbox"/>
	Poker machines	<input type="checkbox"/>	<input type="checkbox"/>
	Video games	<input type="checkbox"/>	<input type="checkbox"/>
	Other (please explain) _____		
4	On average, how often do you gamble?		
	Never <input type="checkbox"/> A few times a year <input type="checkbox"/> Once a month <input type="checkbox"/> Once a week <input type="checkbox"/> Daily <input type="checkbox"/>		

5	<p>What influences you most to gamble?</p> <p>Friends <input type="checkbox"/> Family <input type="checkbox"/> Media or advertisement <input type="checkbox"/> Boredom <input type="checkbox"/> It's exciting <input type="checkbox"/></p> <p>To make you feel better <input type="checkbox"/> Because you are skilled at it <input type="checkbox"/></p> <p>Other _____</p>
6	<p>At what age do you think it should be legal to gamble?</p> <p>Under 16 years <input type="checkbox"/></p> <p>16 years <input type="checkbox"/></p> <p>18 years <input type="checkbox"/></p> <p>21 years <input type="checkbox"/></p> <p>Other _____</p>

Appendix D

Participant Information Sheet

Appendix E

Participant Consent Form

Appendix F

Letter to Parent/Guardians

