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THE UNIVERSITY OF
MELBOURNE

AUSTRALIAN
GAMING COUNCIL



Discussion Paper

New Directions: Gambling Education
and Financial Literacy for Young People

June 2007

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New Directions: Financial Literacy and Gambling Education for Young People



THE UNIVERSITY OF
MELBOURNE

School of Social Work

CEO's Message

This is a discussion paper to raise awareness of the emerging importance of gambling education for young people. It was written by the Australian Gaming Council (AGC) with the assistance of Professor Alun Jackson from the University of Melbourne School of Social Work.

I want to thank the members of the Curriculum Sub Committee of the Principals' Association of Victorian Catholic Secondary Schools who were consulted on the directions in the paper and thank also the Director of the Deakin University Centre for Educational Leadership and Renewal who arranged consultation with education leaders from the state system.

In particular, the contribution to the paper through discussion with the Minister's Youth Council in South Australia under the auspices of the Office for Youth and the South Australian Minister for Youth and Minister for Gambling has been invaluable.

The Queensland Policy and Research area of the Research and Community Engagement Division of the Office of Gaming Regulation has responsibility for increasing community knowledge and awareness of the impact of gambling and has developed curriculum modules for responsible gambling programs for use in Queensland schools. This team has given considerable time to the AGC for consultation and testing of ideas.

The AGC has benefited too over the years from the wise counsel of Dr. Clive Allcock the author of the foreword.

Young people the AGC spoke to and continue to consult know a lot about gambling. The research about young people and gambling tells us too that young people are gambling in increasing numbers. Of course they cannot gamble in hotels, clubs and casinos or buy lottery products or gamble for money until they are eighteen. But with the advent of poker games, the interest in sports betting, gambling on the internet and the natural curiosity of young people, gambling behaviours and attitudes are being formed at an early age.

Both Queensland and South Australia have excellent gambling education programs, each quite different from the other. They are well resourced, integrated within the curriculum and with support for teachers. Across Australia however, while there are good policy intentions, responsible gambling programs are generally not well developed. Sound models of responsible gambling education need a whole of government approach with education departments working productively with gambling policy and public health departments and divisions.

Teachers understandably often say that the school curriculum is overcrowded, having to accommodate education about responsible use of alcohol, sex education, using credit and mobile phones wisely and increasingly education about healthy food choices as well as core subjects.

Responsible gambling education certainly needs to be included in the mix. However instead of seeing it as an "add-on" or just another kit which sits on the shelf, we need to make sure that teachers are well supported with resources and professional development. Responsible gambling education must have the flexibility to fit within existing curriculum frameworks, so that modules can be integrated across the spectrum of curriculum offerings, for example, from maths to film and television studies. The Queensland and South Australian programs do this well with increasing numbers of schools showing interest in gambling education programs.

Understanding day to day money management is one of the keys to responsible gambling behaviour. As young people move into independent living and have their own discretionary money they are confronted with a plethora of choice for spending on entertainment, hospitality and leisure activities. From movies and DVDs, to alcohol and gambling when they reach eighteen years of age, restaurants and takeaways, hobbies and the newest mobile phone or technology device, the choice is endless.

Parents, the community, industry and governments need to work together to make sure that young people have basic financial literacy skills to budget, set spending priorities and not get into debt. If young people choose to gamble when they turn eighteen we want to make sure that they do so responsibly and within their means. We want young people to take to gambling venues a good understanding of gambling within the mosaic of hospitality offerings just as we want young people to understand what a standard drink is in their responsible use of alcohol.

The AGC has consulted with the Commonwealth Government's Financial Literacy Foundation to ensure that the AGC's new resources for financial literacy and gambling education are in harmony with broader education initiatives. These resources will fit within the National Consumer and Financial Literacy Framework for schools and will be accessible and engaging enough for young people who have left school early for further education, apprenticeships or to look for employment or who may be just, for awhile, disengaged.

The result will be a range of resources which complement gambling education programs in states and territories and which are designed to assist young people to make wise and informed decisions about their discretionary spending.

With prevalence studies in Australia, including the most recent study released by the NSW Government in May 2007, showing that problem gamblers are significantly more likely to be young adult males aged 18-24 years old, it is timely that gambling education programs and resources are available to young people.

Australian leaders in the gambling and hospitality industry see a clear need for a coherent and balanced national approach to gambling education. This means developing some consistent educational principles between states which communicate the broader social and economic environment in which the industry operates, promote financial literacy and the importance of the responsible use of gambling products.

Through the AGC the industry has a role in the development of gambling education programs in partnership with governments, parents and all who teach and work with young Australians.

Cheryl Vardon
Chief Executive Officer
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Foreword

My late father-in-law, approaching his eighties, remarked how many of his friends had reduced or stopped their gambling with the passage of time. It was not for lack of money, as many were successful businessmen, but more that they had ultimately learned how hard it was to make money gambling as compared to business and now focused on gambling purely for enjoyment or had decided to stop.

It can take a long time to learn the "enjoyment only" message! How much better and less costly if the learning process had started earlier.

In this excellent overview of youth gambling, produced by the Australian Gaming Council (AGC), the reader will see that adolescents gamble in high numbers but the prevalence of problem gambling often reaches a lifetime peak in younger participants.

Starting off with family and peer gambling games (including some illegal underage betting in legal games) and then embracing gambling with some extra passion after reaching the legal age, problems are present for a significant minority. Local research suggests we may be lucky enough (or already our community campaigns are working to some degree) to have a lower level of gambling problems in young people compared with overseas findings. To date young people have shown a preference for lotteries and card games but what of the future? Games are already available for the ubiquitous mobile phone, a device some of my generation have barely learned how to turn on!

Internet gambling is growing rapidly with adults and although we have yet to match the volume of action and problems seen and predicted overseas this may be a future feature. When many schools require laptops for students and internet access is easy, this form of gambling is very likely to "trickle down". The internet is clearly an area of easy entry for X's and Y's and whatever labels are allocated to the next generations.

Sports betting is also a natural attraction for some teenagers. When I was of that age there was only horse racing but now any sporting team, with or without parental enthusiasm, can easily be backed.

The temptations are there. Gambling is an accepted and legitimate activity in our culture and restrictions are few. Where technology is concerned, the determined (and that often includes the youthful!) will often find ways around restrictions that are in place. That they are keen to try is reflected in the report referred to in this publication of Crown Casino turning away 3000 underage young people each month.

Somewhat alarmingly, research cited here from Victoria shows almost 50 per cent of school children thought they could make money gambling. Of course, as a punter I know I could make money today but it is the long haul that matters. An understanding of the odds could be a crucial starting point for really "taking on board" the reality that gambling is entertainment and entertainment must have costs. This message could, and I believe should, be learned earlier and hopefully with lesser costs, than my father-in law's friends required.

In accepting that gambling is a part of our community and as forms of gambling grow, the evidence of ignorance about the facts of gambling is high enough for the need for education to be addressed.

Yet purely understanding the odds may not be the full picture for some. The debate as to cause and effect of problem gambling will continue but the arrow may easily fly in the direction of psychological problems. So reducing the likelihood of problems could reduce distress. Even those troubled for other reasons in life may turn to gambling "to forget".

While it is hard to find clear evidence to predict who may try gambling and perhaps even more importantly, who amongst those adolescents may have problems with gambling, clinical

experience gives some clues. A general spectrum of unsettled behaviour, especially anti-social, a past history of trauma and a family history of problem gambling behaviour are sound pointers. A good understanding of the odds against them may minimise the risk of gambling activities being chosen for such relief and encourages those to seek help in other more appropriate areas.

From observation it appears that some people with gambling problems may know the odds, but believe for their own reasons, that somehow they are exempt and are different, luckier or more skilful than the rest. Education about gambling odds therefore must also teach young people about the risks for the small group who go on to develop problems. Providing information that problem gambling exists and options for help must be an integral part of the education process.

How are we in Australia addressing this task? At present there are some educational programs in a number of states (Victoria, New South Wales and Queensland) but these have yet to be fully evaluated. Dicey Dealings in South Australia has evolved a wide ranging program that does alert students to gambling issues. Probability is covered in the Maths curriculum and the remaining necessary territory is reviewed in other segments of the syllabus.

Of course evaluation can show positive gains in education and has done in the case of Queensland with its gambling education program. Tell people about drugs; quiz them later on their knowledge and you hope they score highly on tests that show they understand the effects and dangers. But does that keep the prevalence of problems down? Only time, community surveys (which are costly), analysis of telephone helpline call numbers and visits to counsellors can show if this all works. Commonsense would say however, that education has to be more likely to assist than no education or information at all.

Focus groups overseas suggest young people are willing to learn and the AGC has led the way by conducting one such group in Australia and more to be carried out. Young people are willing, these groups suggest, to listen to presentations that do not preach but inform. They see education about alcohol and drugs but note the frequent absence of any similar opportunities to learn about gambling. They clearly see that gambling, like alcohol especially, is all around them and see a need to blend gambling education with an understanding of credit card debt and financial management. The recent link with the AGC and the Financial Literacy Foundation could be a springboard for input into this aspect of the education process.

Learning money management skills in gambling is a seriously neglected area. The pressures on gamblers when losing include the concept of "negative recency" where we tend subjectively to expect that what has happened recently will not continue to occur. After seven heads in a row we strongly feel that tails is "due" and this subjective experience often outweighs the realistic objective knowledge that the odds are the same as they have always been.

Behavioural finance work establishes that the pain of a loss is felt twice as strongly as the pleasure of a win or profit. In gambling therefore, there is the tendency to "chase losses" not only to retrieve the capital but to relieve the discomfort of losing. Again a full education is not just the odds but the psychology as well. Parents may help here also but sadly it seems many have the same wrong ideas. Educated children may educate the parents!

Expect to lose, hope to win and have fun when and if you chose to gamble. If you or a friend has a problem with gambling there is help available and many places to receive it.

But surely if we can see the need for a balanced message, it is also imperative for all Australian young people to be exposed to a uniform best practice education approach. With good national research about the games young people play or are likely to play and a national education program that evolves and is reformulated after evaluation such a goal can be more than just a good idea.

Perhaps through the Ministerial Council on Gambling, whose departments seem to provide most of the funding directly or indirectly for problem gambling services, research and

education, such a program can be developed. Once developed the program can be implemented and most importantly, evaluated.

The AGC is willing to play a role in such a venture and this document clearly and concisely sets out the current state of play.

And lastly, education can be a strange beast! Many years ago I was running an addiction unit that reached a major milestone of longevity. We sent out letters to many past customers, some of whom turned up on the birthday. One lady came up to me to thank me and the others for the work we had done that had helped her. I commented that I was pleased she stopped gambling on leaving the unit and was stunned when she said she had gone straight back to gambling on leaving! "Why are you here then?" I asked. She replied that one day some eighteen months later she woke up in the morning after a losing night and suddenly all that we had said made sense!

You just never know when education will kick in.

Dr Clive Allcock
Psychiatrist and gambling Consultant

(Dr Allcock was formerly Chair of the National Association for Gambling Studies, President of the NSW Council on Problem Gambling and Senior Consultant Psychiatrist Cumberland Hospital, NSW)

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Purpose of the Discussion Paper

This discussion paper is a joint effort by the Australian Gaming Council (AGC) and the University of Melbourne School of Social Work Problem Gambling Research Program.

The purpose of the paper is to stimulate discussion about young people and gambling education as a key element in the continuum of public health policies about gambling.

The paper considers existing research about young people and gambling, identifies current gambling education strategies and examines the link between financial literacy and gambling education.¹

Research suggests young people with gambling problems are overly represented as a group compared with adult problem gamblers and are at greater risk of maintaining gambling problems as they get older. These findings indicate that more research needs to be undertaken in Australia in relation to young people and gambling. The paper endeavours to show the current gaps in evidence based research and makes suggestions for further research.

The paper references research work and contributions from a wide variety of sources but does not attempt to provide a full review of the literature existing on youth gambling.

It also highlights the inevitability that young people will be exposed to gambling before the legal age. In particular the increase in on-line gambling means there are more opportunities now for young people to gamble than ever before.

The importance of young people understanding the place of gambling in society and the economy, and what responsible gambling means is emphasised. Gambling education linked with financial literacy is positioned as a key strategy contributing to the prevention of problem gambling.

Young People and Gambling

Adolescence, while generally a period of good health², can also represent a time of experimentation and risk taking. Young people have the propensity to experiment with new behaviours, particularly behaviour regarded as risky³.

Behaviours which can first occur in adolescence such as drug and alcohol use, smoking and unprotected sexual intercourse are risky, not simply due to short term health impacts, but in part because they can establish long-term patterns of behaviour that are unhealthy and may lead to long-term adverse consequences.

The likelihood of young people harming themselves from gambling may be relatively low. A lack of knowledge though about gambling and unhealthy gambling habits formed during adolescence appear to increase the likelihood of developing problematic gambling behaviours later in life⁴. Problem gambling, rather than merely gambling participation, is associated with a range of health and mental health compromising behaviours and conditions in adolescence⁵.

It can be argued that risk-taking is linked to a young person's developmental age and desire for experimentation and independence. Research suggests that, along with other risk-taking behaviours, gambling may provide excitement and can be a healthy part of adolescent development⁶, a rite of passage into adulthood⁷ and a sense of group belonging⁶. However, not all adolescents maintain safe levels of gambling⁸ and this potential for risk may continue into adulthood.

Participation

41 per cent of year 8 students in Victoria had gambled in some form over a 12 month period. One in twelve young people (8 per cent) engaged in three or more types of gambling in a 12 month period⁹.

62 per cent of Australian youth were exposed to gambling before 10 years of age with more than 82 per cent reporting an involvement before they were 13¹⁰.

Between 47.8 per cent and 62.5 per cent of young people in South Australia had gambled¹¹ while 70.4 per cent of young people in the ACT reported gambling over a 12 month period.¹²

Gambling is defined as placing a bet or wager on the outcome of a future event with an unknown outcome. A large proportion (82 per cent) of the Australian adult population takes part in some form of gambling¹³.

Gambling is also a common activity among young people with research in Canada¹⁴, the United States¹⁵, the UK¹⁶ and Australia¹⁷ reporting between 60-99 per cent of young people between the ages of 12 to 20 participating in gambling activities.¹⁸

Youth gambling is not a new phenomenon. Studies of adolescent gambling undertaken across a range of jurisdictions and over a

twenty-year time span show a number of similarities in terms of participation. One of the first prevalence studies of adolescent gambling¹⁹ undertaken in 1980 found that of 164 American high school students, 61 per cent of males and 38 per cent of females had gambled at some point in their lives. One study in England in 1988, reported 89 per cent of adolescents aged 13 and 14 gambled, with the mean ages for the first involvement in gambling being between the ages of 8 and 9²⁰.

Despite the stringent controls on commercial gambling by minors and compliance by gambling establishments, research shows that gambling is the most popular high-risk activity among teenagers compared to alcohol, drugs and cigarette use²¹. Studies indicate young people start to gamble at a young age²². There have been few studies undertaken in Australia of young people and gambling compared with studies conducted internationally.

Gambling is also very much on the radar of adolescents, with one study in South Australia showing that adolescents intend to gamble when they reach 18 years of age trying such activities as lottery games (67.5 per cent), poker machines (61.1 per cent) and bingo/scratchies (60.4 per cent). When asked of their future intentions, 12.9 per cent of adolescents agreed with the statement '*I can't wait to turn 18 so I can go to adult gambling venues*'.¹¹ There is also evidence that adolescents attempt to enter gambling establishments before the legal age, with one report stating that Crown Casino, Melbourne turns away approximately 3,000 people under 18 years of age every month.²⁷

Forms of gambling

Young people under eighteen do not have access to gambling venues but they are still able to participate by asking older siblings and friends to place bets on activities such as sporting events and races on their behalf. Young people can also gamble privately with peers on traditional casino games such as blackjack and poker.¹¹

One Australian study in the ACT¹² found that adolescent gambling is mainly undertaken privately or is parentally sanctioned. This study found ACT teenagers preferred private card games followed by bingo/scratchies, racing and sporting events. There were few instances of underage gambling at commercial establishments. The ACT report considered existing regulatory controls restricting access to gambling venues to be working reasonably well.

Young people also have unrestricted access to computer games which realistically simulate gaming activities such as poker, horse racing and poker machines. Texas Hold'em Poker (Nintendo®), for example, features popular card games such as 5-Card Draw, 7-Card Stud and Blackjack. Promotional material for this game invites players to "challenge (their) card playing skills wirelessly against friends or versus wily computer opponents with advanced artificial intelligence!"

While parents tend to supervise the gambling activities of younger children, the gambling of adolescents is more likely to be unsupervised²⁸.

Similarly, World Championship Poker DS (Nintendo®) invites players who, "can't scare up the cash for a road trip to Reno? Don't despair. World Championship Poker DS puts you in the fast and freewheeling world of high-stakes poker". Features of this software include four three dimensional themed casinos, poker tournaments, a Loan Shark and a Gift Shop with the ability to "customize your character with bling as you rake in more pots!".

The Melbourne Cup Challenge (Playstation®) computer game is a racing, betting and management game which "aims to take horse racing gaming to a whole new level". Through four different modes (Betting Party, Jockey Mode, Season Mode and Simulation Mode) players can experience all elements of racing life, playing as the jockey, punter or owner.

PlayStation® also markets a game promising an "interactive gambling extravaganza" featuring more than 40 "authentic" and "exact replica" multi-line Bally Gaming poker machines. Advertisements invite players to "join the slot (poker machine) club membership and win prizes such as cars, cash and boats". Players can choose to play games such as Krazy Kops, Roaring 20s, Wild Rose and experience, "Real lights, real sounds and authentic machines - this game is to close to the real thing - you'll think you're in Vegas!".

The Productivity Commission's survey of gambling participation provides some indicators of gambling preference by age group.¹³ While this survey did not cover under-age gambling, it showed gambling participation using gaming machines was biased towards 'younger' Australians (18 to 24 year olds) although there was no differential between genders. This national age

More than 90 per cent of junior and senior high school students in New Jersey, United States have reported ever having gambled, with 86 per cent reporting this activity over 12 months and 32 per cent during the past week²³.

Findings in Canada revealed 96.2 per cent of students in years 10-13 had ever gambled, with 90.8 per cent doing so in the last year²⁴. More recent studies have reported lower levels of participation, but still high levels of under-age gambling²⁵.

A Montreal study in Canada found that 80.2 per cent of children and adolescents aged between 12 and 17 years had gambled over a 12 month period with 35.1 per cent indicating that they gambled at least once a week²⁶.

pattern, with some state variations, is also found among keno players and for those betting on races, although this group is slightly more likely to be male. The 18 to 24 age group is also over-represented in casino table game gamblers, who are also more likely to be male; bingo players, who are also more likely to be female; and sports gamblers, who are strongly biased towards males.

With the growth in interactive broadcasting services and wireless telecommunications services there are new opportunities for young people to gamble. New communication technologies have the potential to enable services equivalent to poker machines, casino games, or bookmakers in every Australian home, twenty four hours a day.²⁹ While parents may prevent young people from accessing these internet sites from computers at home, computer-literate young people may still find ways and other means to gamble on computers elsewhere.

In Australia, the *Interactive Gambling Act 2001* (the IGA Act)³⁰ makes it an offence to provide certain interactive gambling services to a customer physically present in Australia. Prohibited interactive gambling content under the IGA Act includes services that are often described as 'online casinos' and usually involve using the Internet to play games of chance, or games of mixed chance and skill. Examples include roulette, poker, craps, online 'pokies' and blackjack. The purpose of the IGA Act is to target the providers of interactive gambling services, not their potential or actual customers. Online wagering (except where wagers are accepted online after a sporting event has started), online lotteries and the online sale of lottery tickets are not prohibited by the IGA.

Although these on-line internet gambling sites are aimed at people of legal age and users sometimes must verify their identity or age, a computer literate young person may still be able to gamble using these sites. The potential for growth in on-line gambling sites is likely to increase over time as technology changes and therefore access to internet gambling sites may be harder to regulate.

The nature of gambling activities, lack of obstacles and availability of opportunities and outright demand for gambling, highlights a degree of inevitability that young people are exposed to gambling before reaching the legal age of 18 in Australia.

Resources

Research has consistently shown that income and family structure (single parent or two parent families) have no bearing on the frequency of gambling or the incidence of problem gambling³¹ in young people. A range of studies³², report that a teenager's own income – rather than family income – was likely to be the most relevant economic variable.

Adolescents have their own sources of money including pocket money and money earned through after-school or weekend employment. Research suggests adolescents can spend considerable sums of money per gambling session and it is not uncommon for parents to provide adolescents with money specifically for gambling³³.

Regular adolescent gamblers are also likely to divert money provided for other purposes, such as school lunches, into funds for gambling³⁴. When money is not provided, adolescents may raise money for gambling by borrowing from others, stealing from either inside or outside the family, or selling either their own or the possessions of others³⁵. Financial literacy and money management skills (to assist with budgeting of discretionary income) must be a priority for adolescents who gamble as well as those who do not.

Attitudes, beliefs and perceptions

Research on gambling has shown that young people hold mistaken views about the amount of skill and luck involved in gambling³⁶. Young people do not have an accurate understanding of the true odds of gambling activities and are more likely than not to over-estimate the probability of winning.¹²

When asked about how skilful they were, adolescent problem gamblers rated themselves as being significantly more skilful when gambling on activities where no such skill was possible (e.g. poker machines, lotteries and roulette). They were also more likely to believe that certain numbers on a six-sided die were harder or easier to obtain.¹²

Young gamblers may believe that they have the requisite knowledge to maximise wins, minimise losses and maximise time bought for their gambling 'investment'³⁷. Some studies report strongly held optimistic beliefs about the chances of winning, particularly by males³⁸. There is a belief that gambling involves both skill and luck³⁹, reflecting an "illusion of control", with some indication that with increasing age,

there is a greater tendency to recognise the luck element rather than skill as relevant in games of chance⁴⁰.

A comparison of attitudes between young people who had never gambled or did so infrequently and those who gambled frequently showed that the latter group rated gambling as more profitable.¹¹

Piaget's theory of cognitive development states that children between the ages of 7 to 11 are limited in the extent of their abilities to solve concrete problems.⁴¹ This would leave children of a younger age less aware of the presence of chance in gambling and more susceptible to the illusion of control when playing⁴².

Studies have indicated that mistaken perceptions are more marked in adolescent problem gamblers, as opposed to their non-gambling counterparts. Problem gamblers rate all forms of gambling as involving significantly more skill than non-problem gamblers¹² and are more optimistic about their chances of winning and making money from gambling.

Research⁴³ also indicates young problem gamblers are more likely to report excitement, challenge, risk and the drive to win money as motivating factors to gamble. Significantly more problem gamblers found their first gambling experience exciting.

Gambling involvement changes as one grows older, with one study⁴⁴ suggesting an increase in both positive attitudes towards gambling and gambling activity with age. Such changes may be associated with cognitive development⁴⁵ or greater access to gambling opportunities⁴⁶.

A study of 7 to 14 year old perceptions of lottery play showed that for the younger children there was a clear perception that lottery ticket choice had little to do with skill, whereas for the older group, there was an erroneous perception that strategy had to be used in lottery ticket selection and that such selection needed skill.⁴⁷ This information about children's knowledge of games of chance is important in framing developmentally appropriate education programs⁴⁸.

There are few studies, however, that directly address the level of knowledge that young people have as a determinant for their gambling behaviour.

Reasons and motivations

Like adults, children and adolescents gamble for many different reasons, with research pointing to a multitude of motivations according to different types of gambling.

Studies have shown adolescents identify 'fun' or 'excitement'⁴⁹, 'enjoyment' and 'making money'⁵⁰ with gambling. One study noted that for adolescents categorised as problem gamblers, it was not money that was important for continuing play, but purely excitement and enjoyment⁵¹. Other reasons adolescents may gamble include peer pressure, to relieve boredom and to relieve feelings of depression⁵².

An additional perspective⁵³ on adolescent gambling links neuro-developmental changes in brain structure and impulsivity to adolescent gambling. In terms of propensity to gamble and gambling uptake, this may explain why some adolescents are uniquely vulnerable to the development of disordered gambling behaviours.

One research project explored motivation in gambling behaviour in very young children by using a game in which the children were able to adjust their play to maximise rewards in the form of money or sweets.⁵⁴ Children given the option to play for tangible rewards played for longer than children playing for no reward and children playing for tangible rewards were able to adjust their play to minimise loss.

Social influences

Parental and peer gambling have been observed to be the most predictive risk factors for young people gambling⁵⁵. Adolescents with a heavier involvement in gambling are more likely to have family who approve of gambling and gambled themselves⁵⁶. This is in line with social learning theory⁵⁷, which states that attitudes, interests and behaviours of family members are socially transmitted to children.¹⁸ This may be particularly relevant to 'benign' forms of gambling such as the lottery, with young people viewing buying a ticket as a socially⁵⁸ and culturally⁵⁹ acceptable activity.

Moreover, much of this type of gambling is undertaken with parental knowledge³⁴ or with parents 'not minding' their children's gambling⁶¹. Parents may well introduce children to this form of gambling with gambling frequently occurring within the home, possibly leading to the assumption by adults that underage gambling is not harmful. Research seems to suggest that children and adolescents feel that, unlike cigarette, drug and alcohol use, gambling behaviour need not be hidden from their families.²²

A Victorian study found close to 50 per cent of school students viewed gambling as a way to make money and three quarters viewed gambling as okay if not overdone.⁶⁰

Young gamblers are also likely to have friends who approve of gambling and gamble themselves⁵⁶. One study⁶² pointed to the possible links between gambling behaviour and a peer group who gamble. In this study amongst adolescents who were categorised as problem gamblers, 81 per cent reported that most of their friends gambled. In contrast, 59 per cent of 'at-risk' adolescent gamblers and 24 per cent of non-problem gamblers indicated that most of their friends gambled.

Problem gambling

Research suggests that adolescent prevalence rates of problem gambling generally range from 4-8 per cent. This is approximately two to four times higher than prevalence rates in the adult population⁶³, with up to 14 per cent of adolescents being described as 'at risk', 'problem' or 'potential problem' gamblers⁶⁴. Rates of problematic gambling among university students have been reported as being between four to eight times higher than for adults⁶⁵.

Studies in South Australia¹¹, Melbourne⁶ and the ACT¹², found rates of problem gambling among young people to be 3.5 per cent, 3 per cent and 3.3 per cent to 4.4 per cent respectively.¹⁸ Comparisons with international studies can be impeded due to methodological differences^{66, 67}, a lack of consistency in defining 'adolescent' and 'youth' and age ranges of the young people involved. Some studies may include under-age young people between the ages of 15 - 18 while others will involve much larger age ranges of 14 -25.

A recent prevalence study in NSW⁶⁸ showed that problem gamblers are more likely to be young adult males (aged 18 - 24) compared with the total NSW adult population (34.2 per cent compared with 4.5 per cent). While this rate is quite high it should be noted that these findings are indicative only due to the small sample size and thus would make it hard to compare with other surveys.

Studies⁶⁹ suggest that adolescents with gambling problems, compared with their counterparts, tend to have started gambling at an early age and have peers who gamble. These studies also suggest adolescent gamblers are more likely to be male, with research indicating young males are more likely to exhibit problem gambling behaviour⁷⁰ at a rate of two⁷¹ to five times that of females⁷². These individuals tend to be greater risk takers, demonstrate poor performance at school, including poor attendance⁷³ and suffer higher rates of depression and lower self-esteem.

Adolescents with gambling problems tend to be more excitable, anxious, extroverted and have difficulty conforming to societal norms. They have poorer coping skills and participate in other risk-taking behaviours such as drug use⁷⁴ and under-age drinking.

These adolescents are also more likely to participate in criminal activities and anti-social or delinquent behaviour and lie to others about their gambling⁷⁵. Young people experience gambling-related harms in terms of missed school, social problems and crime. The more frequently adolescents gamble, the more money they are likely to spend per session.⁷⁶ The overall amount of money spent on gambling has been positively correlated with delinquency⁷⁷.

Further research is required to explore whether problem gambling leads to other harmful behaviours or if individuals with a tendency to gamble beyond their means are drawn to other detrimental behaviours.

Despite evidence that youth problem gambling is a significant issue, adolescents rarely perceive themselves as having a problem. Research teams reporting findings from clinical experiences in the context of adolescent problem gambling treatment programs suggest that this is true. Participating adolescents rarely see themselves as problem or pathological gamblers⁷². Young people may be judging the severity of their gambling based on adult indicators of gambling problems such as debt, relationship breakdowns and job loss, which are not as applicable to most young people⁷⁴.

Evidence also suggests few teachers or parents report adolescent problem gambling. They may be looking for adult signs of problem gambling and miss youth indicators such as delinquent behaviour, loss of social relationships and petty theft.¹⁸

The Productivity Commission identified the under-25 age group as the largest group of problem gamblers. This group of 'younger' problem gamblers was the least represented in counselling in Victoria, with only about one third of the potential numbers in counselling over the years 1999-2000 and 2000-2001.¹³

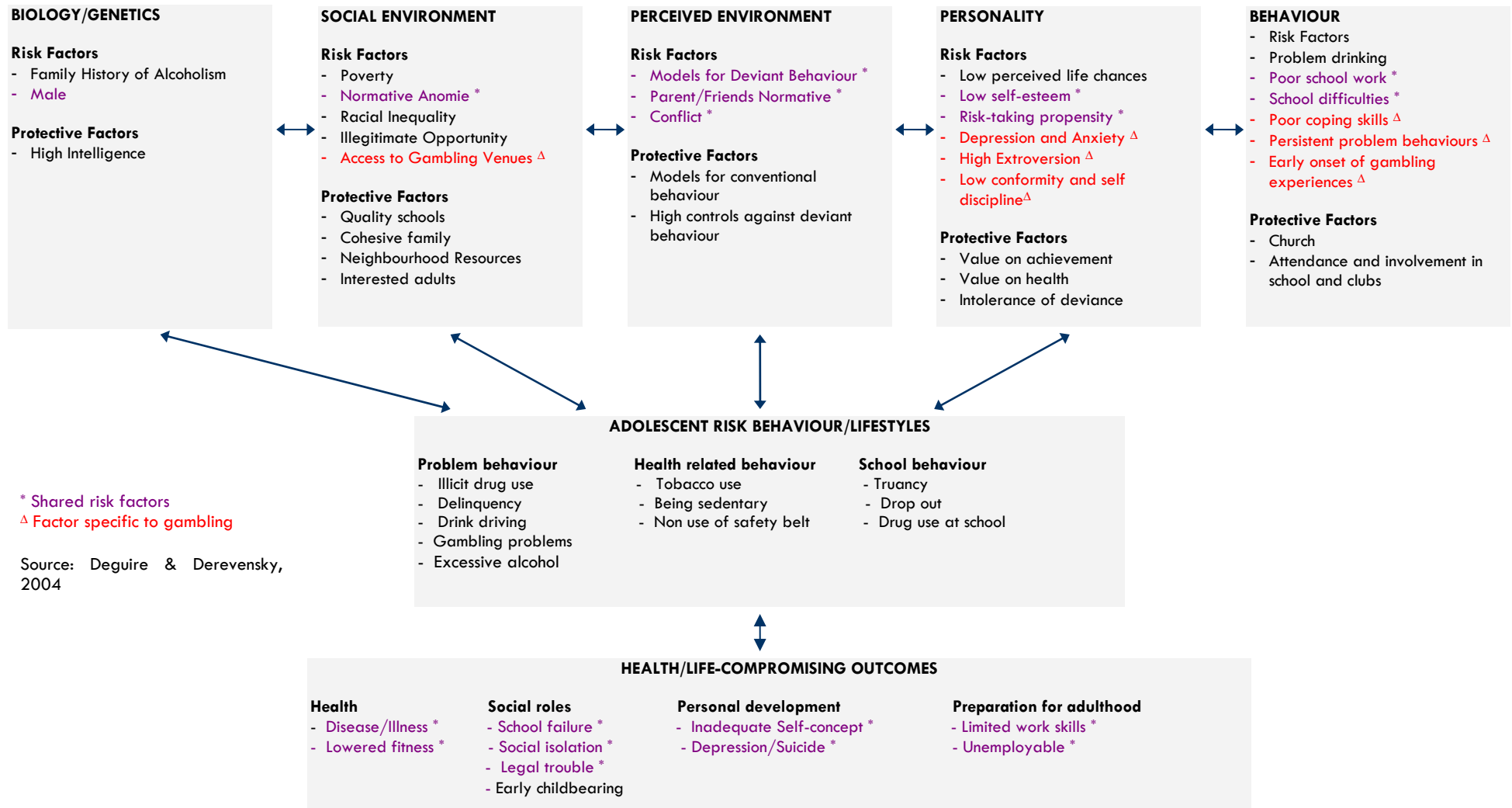
This is consistent with other issues such as drug and alcohol dependence and mental health problems. Adolescents do not readily seek treatment for gambling problems.⁷⁸ Factors⁷⁹ such as fear, denial, parental bailouts and guilt may explain young people's reluctance to seek help while some, or many, may experience natural recovery. There may also be a delay in seeking help such that although the problem may have begun in adolescence, help may not be sought until

adulthood. One study⁸⁰ noted that on average five years elapsed between the experience of the first problem caused by gambling and the first attempt to have treatment.

In one study, students asked to identify from whom they would seek help if they had a gambling problem, reported (in order) their friends, counsellors (including school counsellors), family members then school staff.¹² Non-problem gamblers were more likely to seek help from school staff, suggesting a better relationship with staff than for those who may have gambling problems¹².

Risk and protective factors

The following diagram shows a summary of the multiplicity of factors that contribute to, or are consequential to, adolescent gambling⁸¹.



Gambling Education and Financial Literacy

Gambling education is increasingly viewed by policy-makers as a key measure in promoting responsible gambling and preventing problem gambling. Those responsible for drafting gambling education policies and awareness campaigns need to understand young people's perceptions on gambling and their experiences. Clear and concise information is integral to any educational framework.

Australian Gaming Council - focus group

The AGC recently conducted a gambling focus group in South Australia with young people from school age to their early twenties. The majority of participants in the focus group held the view that gambling is acceptable in society with many saying their parents, older siblings or grandparents involve them in activities such as bingo, betting on horse racing and buying scratchies.

The young people believed there was little information available for young people on gambling and its place as a 'leisure choice'. They felt information is needed for young people so they can make informed choices and decisions about participating in gambling activities.

Many of the participants in the AGC focus group perceived problem gambling to be an adult issue, only affecting young people if an 'adult' lost the family home or there were family problems.

Many felt there was a shortage of general information available to young people on financial literacy and that they were ill-equipped to deal with money and lacked general financial skills, particularly in relation to budgeting. The participants gave many examples of young people getting into financial difficulties with their mobile phone bills because of lack of understanding and inexperience with budgeting and money management.

Those in the focus group believe that mentoring programs and discussions of real life scenarios are useful tools to assist young people with money management skills. They want education to assist them in managing discretionary spending money such that sensible choices are made for purchases in the entertainment and hospitality environment, for example buying food, DVDs, alcohol and gambling when they are eighteen.

Education from teachers and parents at an early age was seen by the focus group participants as being of critical importance.

The AGC will be conducting other focus groups with young people in other states around Australia during 2007.

Social marketing campaigns

While there is research showing adolescent gambling can be a problem, there are very few studies addressing how information can be delivered successfully to adolescents to educate them on the nature of gambling and how to avoid becoming a problem gambler.

A recent social marketing campaign in Canada looked at the types of campaigns and messages that would be useful in terms of a youth gambling social marketing campaign. Focus groups in participating schools in rural and small towns in Ontario and Quebec revealed that knowing the risks and being able to make up their own mind on issues affecting their health was highly valued by adolescents.⁸² Adolescents were keen for campaigns on the risks associated with gambling to present a balanced perspective as they are sensitive to biased or unrealistic messages about the risks of gambling.

The study found that adolescents were receptive to information campaigns with targeted messages geared towards a specific group, for example simple messages with some emotional content or humour worked well for younger audiences as opposed to campaigns with greater emotional appeal featuring real-life stories for older audiences.

The study also found that abstinence-based campaigns with basic facts about gambling would be suitable for non-gamblers, while responsible gambling messages with a greater focus on the risks of excessive gambling and signs of problem gambling are more appropriate for adolescents who gamble.⁸²

Programs and initiatives

The following information represents a non-exhaustive list of current gambling education programs both in Australia and in North America. In addition, Table 1 provides a summary of gambling educational programs in Australia. The nature of the programs varies significantly, from the provision of interactive websites and teacher presentations to school curriculum materials. The focus of these programs also varies, with the majority focusing on problem gambling rather than the broader area of education and informed choice.

Gambling education programs in Australia

Queensland

Responsible gambling modules investigating the social issues associated with problem gambling have been developed for students in primary and secondary schools by the Research and Community Engagement Division of the Queensland Office of Gaming Regulation.

The modules and other resources can be accessed by 'educators, young people and members of the community'⁸³. An accompanying set of Principles and Guidelines is designed to offer advice to schools in relation to incorporating responsible gambling into the school planning and curriculum modules. The responsible gambling modules were published with a number of other curriculum modules in the areas of Health and Physical Education (lower and lower-middle secondary) and Studies of Society and the Environment (middle-upper primary).

A report on the trial of the modules was undertaken by the Lighthouse Project, a short-term professional development program conducted in 2002 to support a group of primary and secondary schools across Queensland in the implementation of the responsible gambling modules. The work undertaken in the Lighthouse Project resulted in the development of a range of professional development resources for teachers.

The report on the trial indicates that among participating schools it was "clear that exploring responsible gambling with this group of participants in their school environments has made an impact" and that "teacher feedback does suggest that the students engaged in deep learning and most achieved the desired learning outcomes".

South Australia - Dickey Dealings

In 2002, a report⁸⁴ focusing on strategies for educating students in South Australian schools about the risks of gambling resulted in an allocation of \$800,000 over four years from the Gamblers Rehabilitation Fund⁸⁵ to develop curriculum for use in South Australian schools.

"Gambling is a feature of our culture and it is unrealistic to expect otherwise. Footy tipping competitions, the annual Cup sweep and raffles are a part of the social fabric of Australia. While most people are not problem gamblers and enjoy these activities responsibly, research has shown that adults who are problem gamblers have usually started in their teenage years. We also know that a much higher rate of problem gambling exists among young people than adults".

Forward to *Dickey Dealings* by the Minister for Gambling

Through the Responsible Gambling Education Strategy at the Department of Education and Children's Services, *Dickey Dealings* was created and trialled to enable the collection of data to build an effective gambling risk education model.

An evaluation of the Dickey Dealings program in South Australia was conducted with 1,500 young people and more than 190 educators across twenty schools in 2006. Initial findings suggest an increased understanding among teachers of the issues associated with youth gambling and better recognition of the signs of problem gambling. Results from pre and post evaluation indicate an increased commitment from teachers regarding the program and a better

understanding of incorporating key learning areas into the curriculum. In addition, not only did students' knowledge of sources of support improve, but students also reported an increased understanding of the chances of winning, odds and the concept of randomness and a decrease in the myths associated with gambling.

Dacey Dealings has been implemented at more than 40 schools in South Australia since 2003⁸⁶. As an example, Ocean View College which was funded in 2005 to educate students about the effects of problem gambling, has incorporated the program into the curriculum in the following areas:

- Health - effects of gambling in health and well being
- English - student analysis of news articles about gambling
- Maths - determining the probability of winning
- Society and environment - studying and the social consequences, the risks involved, and the commercialisation of gambling.

Indications are that Dacey Dealings will be made available to other schools around the state.

Victoria - Know the Odds

Know the Odds Inc (KTO), through the "You Figure It Out - Problem Gambling Today Roadshow" aims to use education to prevent the harmful consequences of problem gambling in the community⁸⁸. The purpose of the kit is to educate students:

- prevent students from becoming problem gamblers; and
- understand problem gambling in others.

Younger children should be a target group for the prevention of excessive gambling and that modification of erroneous beliefs about gambling would affect gambling behaviour⁸⁷.

The kit contains video clips, notes, probability software, class activities, HTML materials and web links. The program teaches students about the nature of gambling rather than how to gamble. The materials are "gambling neutral" and avoid normalising gambling by teaching 'responsible gambling' and encouraging students to make their own decisions. The materials are presented to students in two compressed 45 minute sessions⁸⁸.

The Department of Justice in Victoria is also working on a responsible gambling pilot project Big Deal! in conjunction with Adult Community and Further Education (ACFE) and assistance from the Gambler's Help Service. This project will assist young people disengaged from mainstream schools and will provide responsible gambling curriculum material including student worksheets, a DVD and CD with addition educational activities. It is currently being piloted in a number of areas throughout Victoria in May and June 2007.

The kit has been prepared with funding from the Foundation for Young Australians and the Uniting Church in Australia and the interactive video was compiled by students from the Deakin University School of Multimedia.

New South Wales - Gambling: calculating the risk
Sydney's Powerhouse Museum has an online education program, *Gambling: calculating the risk*⁸⁹, developed with financial assistance from the New South Wales Government from the Casino Community Benefit Fund.

The website provides online activities as well as a set of teacher notes and student activity notes. The program rewards sound mathematical thinking with insights into the probability of winning. The program debunks many of the social myths surrounding gaming, while acknowledging the role gambling plays in society. Gambling is seen by the program as being part of the leisure industry, while encouraging students to make informed decisions on the best use of their leisure and free time and money.⁹⁰

Gambling: calculating the risk provides teachers with an innovative tool to teach mathematics within a real-world context and potentially connects this teaching with other syllabuses (Commerce and Personal Development Health and Physical Education) and into the broader school curriculum covering social skills, money management, seeking help and healthy lifestyles".

Powerhouse Museum's Education Coordinator⁸⁹

Table 1: Overview of gambling education programs in Australia

Name	Dicey Dealings	You Figure It Out - Problem Gambling Today Roadshow	Gambling: Calculating the Risks	Responsible Gambling Teaching Resource Kit
Jurisdiction	South Australia	Victoria	New South Wales	Queensland
Aim	To educate young people about the financial, social and emotional risks of gambling.	To target problem gambling as a health issue and educate students to give them the necessary information to empower them to protect themselves against the harmful effects of problem gambling.	To raise awareness of problem gambling in the community and explain the mathematical principles which underpin gambling.	To develop knowledge, skills and sound values in relation to gambling issues and to provide early intervention and harm minimisation strategies.
Organisation	Department of Education and Children's Services	Know the Odds	Sydney Powerhouse Museum	Research and Community Engagement Division, Queensland Office of Gaming Regulation, Treasury Department
Funding Source	Gamblers Rehabilitation Fund	Foundation for Young Australians and the Uniting Church with assistance from Deakin University School of Multimedia	Casino Community Benefit Fund	Queensland Government
Audience	Middle-school	Secondary schools	<ul style="list-style-type: none"> - Teachers and students in Australian secondary schools (with a special emphasis on NSW curriculum) - Students in colleges and universities studying introductory subjects in statistics, psychology and health studies - Welfare workers and counsellors working in non-government institutions - Agencies supporting the formal education sector such as G Line 	<ul style="list-style-type: none"> - Middle school - Senior school - Materials may be adapted for the Early Phase of Learning - Materials may be adapted for non-school use
Key Features	<ul style="list-style-type: none"> - Provision of an integrated curriculum package including an interactive floor game <i>Don't bet on it</i> and modules from Queensland and Saskatchewan (Canada). - Professional learning program for teachers and student counsellors in relation to education about responsible gambling. - Parental/Community information forums. - Availability for schools to submit grant applications for up to \$10,000 to design innovative local response projects responding to the issue of gambling. - Support for students outlining availability of community services for people living with gambling associated problems. 	<p>Interactive CD-ROM containing probability exercises, A4 notes, and class exercises.</p> <p>The educational content covers:</p> <ul style="list-style-type: none"> - the nature of gambling; - the gambling industry as a service industry; - the underlying mathematics of gambling and true odds and probability; - why it is that gambling is potentially addictive; and - how a person descends into problem gambling. 	Online interactive website	<p>Responsible gambling modules for use by teachers to support students' demonstration of core learning outcomes.</p> <p>These include:</p> <ul style="list-style-type: none"> - Modules for Health and Physical Education, the Arts and Mathematics - Idea sheets for English, Study of Society, Drama and Hospitality Studies - Prepared resources including overheads, radio programs, on-line resources and interactive website

Name	GPack Resource Kit	Problem gambling school curriculum kit	Teaching Kit
Jurisdiction	Victoria	Victoria	Tasmania
Aim	To help young people make informed decisions about gambling. It provides young people with useful and practical information about problem gambling, whether it is their own gambling or that of another person.	Building problem gambling resilience in students.	To explain how gambling works and what the risks are.
Organisation	Youth Action Group of the Council of Gambler's Help Services in Victoria. The Youth Action Group is made up of community educators, problem gambling counsellors and Youth Access Workers.	Victorian Government	Gambling Support Bureau
Funding Source	Community Support Fund	Victorian Government	Community Support Levy
Audience	Youth - kit was distributed to community organisations, youth workers and youth service providers across Victoria.	Primary and secondary students	Year 7 and 8 students
Key Features	Materials relating to: <ul style="list-style-type: none"> - Why do people develop problems with gambling? - How can you tell if gambling is becoming a problem? - When a parent has a gambling problem - - Myths and maths - Money matters - On-line gambling - Gambling in Victoria - What is Gambler's Help? 	TBD - may be newly developed or derived from purchasing pre-existing kits.	

Gambling education programs in North America

*Wanna Bet? Magazine (Minnesota - United States)*⁹¹

This magazine for young people is published quarterly in print and on-line by the North American Training Institute (NATI), a Minnesota-based, not-for-profit organisation that was created in 1988⁹². Among other services, NATI provides teachers, educators and youth service organisations with tools to implement a community-based youth problem gambling prevention program. A range of educator tools is provided on-line.

*Project 21 Nevada Scholarship scheme (Nevada - United States)*⁹³

Under this scheme, an auspice of the Nevada Council on Problem Gambling, students are invited to submit posters, articles, audio or video public service announcements with messages that deter underage gambling. The goal of the program is to disseminate information to students concerning the risks and consequences of underage gambling through student participation.

Entrants must be under the age of 21 and enrolled in the ninth grade or higher in any school in Nevada. Entries that provide the best peer education message receive a \$1,000 scholarship award and the money is provided jointly to the student and a designated institute of higher education within the United States. Funding for the program is provided by the Nevada Council on Problem Gambling.

*YouthBet (Ontario - Canada)*⁹⁴

YouthBet was designed by youth (TeenNet) with the Department of Public Health Sciences in the Faculty of Medicine at the University of Toronto with funding for the program from the Ontario Ministry of Health and Long Term Care. The aim of the program is to:

- promote informed, balanced attitudes and behaviours about youth gambling;
- prevent youth gambling related problems; and
- protect vulnerable and at-risk youth.

A youth working group spent several months designing the look, feel and content for the site to ensure that it would appeal to other young people. The site is designed for those aged 10-19 and contains interactive games and activities relating to gambling.

*Gambling: reducing the risks (Saskatchewan - Canada)*⁹⁵

This problem gambling prevention teaching resource is designed to support middle-level (grades 6-9) health education and is closely tied to the Saskatchewan Health Education Curriculum. The program is based on 'lesson plans (that) require minimum preparation time and ample background information is provided so educators are prepared to lead directed or open-ended discussions.'

*Facing the Odds: The Mathematics of Gambling and Other Risks K-12 Curriculum (Massachusetts - United States)*⁹⁶

This program developed by the Division on Addictions Cambridge Health Alliance (an affiliate of the Harvard Medical School) aims to enhance students' interest in mathematics and provide knowledge and skills to help students think more critically. This curriculum teaches students about randomness and chance as these concepts relate to probability and gambling, the probability of winning the lottery and the use of statistics in the media and everyday life.

The program also assists students to develop critical thinking and number sense skills and to apply these skills to media, advertising and gambling issues. In particular, students learn to make decisions and choices about gambling activities based on mathematical reasoning. Activities include data collection, data analysis, case studies and other research activities on mathematics and gambling.

The program is funded in part by the Harvard Medical School Division on Addictions, the Massachusetts Council on Compulsive Gambling and the Massachusetts Department of Public health and the National Institute on Drug Abuse.

The approach of Harvard in developing the 'Facing the odds' curriculum for teachers reflected a range of research⁹⁷ which suggests that, "health classes that teach the hazards associated with drug use are not effective: students do not diminish their involvement with psychoactive substances as a result of experiencing these classes". Unlike traditional approaches, which usually emphasise the health benefits associated with avoiding addictive behaviours or attach particular values to behaviours (i.e., good versus bad drugs), the Harvard curriculum focuses on science and mathematics, using gambling and the media as the means of presenting these concepts.

YMCA Youth Gambling Program (Toronto - Canada) ⁹⁸

The YMCA Youth Gambling Program is a free service designed to help youth between the ages of eight and twenty four. Funded by the Ontario Government Ministry of Health and Health Promotions, the YMCA program works directly with youth, parents, teachers and other health professionals to provide:

- prevention and education programs to help reduce the potential harm associated with youth gambling and discussion of possible consequences of and decisions relating to gambling;
- community awareness sessions, including presentations to schools and youth organisations;
- information on the costs and benefits of gambling and an exploration of how gambling fits into everyday life including a general understanding of risk assessment and harm reduction strategies;
- skills needed to make informed life decisions around risk-taking behaviour; and
- access to community resources and other local service providers and referrals to gambling treatment services.

The program assists teachers in introducing students to the potential risks associated with gambling and provides information about gambling and the role probability plays in a game of chance. It is aimed at helping students recognise the signs of problem gambling, assisting students in identifying strategies to reduce harm and skills for decision-making.

"It's Your Lucky Day" education program (Manitoba, Canada)

"It's Your Lucky Day", launched in January of 2004, is designed to be a fun and interactive multi-media gambling education and awareness program. The program developed by the Addictions Foundation of Manitoba⁹⁹, for middle year's students (grade 7 and grade 8) is funded by the Manitoba Lotteries Corporation. The program is delivered in the classroom by Addictions Foundation of Manitoba Prevention and Education Consultants. The goals of the program are to provide factual and reliable information to middle year students and to prevent possible harms from gambling. The program is complemented by a website (www.luckyday.ca) that includes information on gambling, community resources and an interactive quiz that students can take to test their knowledge of gambling. The session is approximately 45 to 60 minutes in length.

"It's Your Lucky Day" was originally developed from research¹⁰⁰ which tested the effectiveness of a video designed to correct common misconceptions and increase knowledge about gambling on grade 7 and 8 students. The findings suggested that the combination of lectures and activities through a video (multi-media) presentation was an effective intervention strategy to reduce gambling misconceptions. Evaluation of the program showed an increased understanding of the definition of gambling, a significantly greater ability to identify myths related to gambling (eg. If I try harder at gambling, I will get better and win money) and better understanding of how gambling works ("I know now that electronic gambling doesn't require skill").

Know the Score (Canada and United States) ¹⁰¹

In 2001 the Responsible Gambling Council (Canada) developed an initiative for campuses with input from a number of colleges and universities. *Know the Score* (KTS) is an interactive problem gambling awareness program that engages post-secondary students in a fun and informative way. *Know the Score* dispels some common myths regarding randomness, shares signs of problem gambling, advises students where they can get help with gambling related problems in their local community and suggests ways to limit their risks.

The KTS program runs for one week and is delivered on college and university campuses using a straightforward strategy with information, a trained contingent of students and a highly visible display. Information is made available to all participants. Each semester one student who has the correct answers to the quiz (as part of the program) will receive a \$1,500 scholarship award.

The Responsible Gambling Council with support from the Ministry of Health and Long-Term Care, initiated a thorough evaluation of *Know the Score* with 500 post-secondary students. The evaluators found 84 per cent of the students reported increased understanding of ways to keep gambling safer, 91 per cent retained key messages associated with the program and 22 per cent indicated they had used the information they had learned. This evaluation shows that early success is promising and supports the notion there is merit in future prevention and awareness campaigns.

Since piloting the program in 2002, KTS has been delivered more than 120 times on more than 40 campuses in Canada (throughout Ontario, Manitoba and Nova Scotia) and New York State.

Discussion

The development of comprehensive gambling education programs in Australia is still in the early stages. While several states have good programs and others have good intentions there is no consistent and agreed national approach to program design or implementation.

Results from education programs which have undergone evaluation are promising but there is a need for more critical analysis of the long term effectiveness of these programs.¹⁰² As part of any evaluation, the role of the industry, the community and the government in these programs needs to be assessed as well.

Many of the education programs reviewed focus on problem gambling rather than education and informed choice. While understanding the signs of problem gambling in young people is important together with the impact of adult problem gambling on young people, it is equally critical that there are services available for young people to access if they have problems.

While there may well be a role for school curricula to challenge particular misunderstandings about gambling and to alert young people to the potential harms of excessive gambling, information concerning their effectiveness is either non-existent, very sparse, or yet to be obtained¹¹².

The Victorian Department of Justice has recognised this issue and will shortly be releasing a resource on *Problem Gambling: A Guide for Victorian Schools*. This resource contains a information on services to assist support staff and teachers to recognise signs of problem gambling and counsel appropriately.

Gambling education and financial literacy

Gambling is about money. This raises the question of whether promoting financial literacy is at least contextual and complementary to gambling education programs, and if so, what role might schools play. A broader approach to gambling education, to include financial literacy would reflect an increasing interest among policy-makers in both Australia and overseas.¹⁰³ The general principles of gambling and financial education align and are relevant to a variety of curriculum areas and student learning outcomes.

Financial literacy can be defined as “knowledge, understandings, skills and values in consumer and financial contexts and the related decisions that impact on self, others, the community and the environment”¹⁰⁴.

The first major study of this area at an international level has found that financial literacy is universally low among consumers, particularly individuals at either end of the age profile (18 to 24 year olds and those aged 70 years or older).

The Young People and Problem Gambling Forum was held in Melbourne in 2004, with participants including peak bodies, the Gaming Industry, Victoria Police, Gambler’s Help and others. In relation to youth gambling, schools were seen as the primary point of early intervention, with education in schools nominated as ‘a key strategy to raise young people’s awareness about the potential consequences of gambling. This education could focus on life skills such as managing money, understanding gambling odds and financial responsibility’.¹⁰⁵

Young Australians represent a \$4 billion a year commercial market¹⁰⁶, having unprecedented access to mobile phones and credit cards yet with little understanding of any potentially negative consequences of unwise spending.

With young people having money to spend on gambling as research indicates, it is perhaps opportune that financial literacy programs target young people at an early age to inform their spending habits. There is overwhelming support for educating individuals as early as possible about financial issues, particularly at school and university level. A partnership between the Ministerial Council on

Gambling and the Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA) may allow a consistent approach to gambling education.

Current programs in financial literacy

The Australian Federal Government has also recognised the need for a national focus on financial literacy and established the Financial Literacy Foundation in June 2005. The Foundation works in partnership with government, industry and community organisations to advance and raise awareness of the benefits of financial literacy. One of the key priorities of the Foundation has been to create opportunities for Australians of all ages to learn more about money¹⁰⁷. The Foundation has worked with state and territory education authorities to have financial literacy included in the curriculum.

In November 2005 the *National Consumer and Financial Literacy Framework* was endorsed by the Australian Education Systems Officials Committee (AESOC) with the expectation that it is to be one of the guiding documents in the development of State and Territory curriculum. It is expected that by 2008 all students in Years 3, 5, 7 and 9 will receive financial literacy education in these compulsory years of schooling.

The Australian Securities and Investment Commission (ASIC) undertook some work in 2003 on whether 'money matters' should be taught in schools and the extent of current practice.¹⁰⁸ The costs of financial illiteracy are enormous and ASIC states that this is hard to quantify.

While there are some financial literacy programs in existence these are primarily on-line interactive programs and do not appear to have a substantial school or community implementation base. This discussion paper does not argue that schools should have sole responsibility for developing students' financial literacy, but sees schools as having an important role to play.

The Commonwealth Bank Foundation recently commissioned research into the social and economic impacts of financial literacy in Australia. The research of 5,000 Australians aged between 16 and 65 found that young people aged 16-20 are more likely to be financially unaware and may not have the necessary skills to make informed decisions about the use and management of money. This workshop has been specifically targeted to the 16-25 year old age group and will take participants through a series of modules and activities, learning about Saving, Budgeting, Investing, Managing Debt, Being Entrepreneurial, and Making Informed Financial Decisions'.¹⁰⁹

The Commonwealth Bank provides Foundation Financial Literacy Grants which are open to all secondary schools across Australia to help develop the financial literacy skills of students in Years 7 to 12. The Foundation invites schools to apply for a grant of \$3,500 to develop student programs to create awareness, skill and understanding in financial literacy.

One hundred grants are available Australia-wide and schools are encouraged to apply for a grant regardless of whether they are just beginning to teach financial literacy or have well established programs¹¹⁰.

A further collaborative initiative by the Commonwealth Bank outside schools but also for young people is The Enterprise Network for Young Australians (ENYA), a not-for-profit organisation run by young people, for young people. ENYA, with the support of the Commonwealth Bank Foundation, has developed 'MoneySense Financial Literacy Workshops' in order to raise young peoples' awareness and understanding of financial literacy issues.

Other financial literacy supports available for young people include the *Money Stuff!* Challenge, an initiative developed by the NSW Office of Fair Trading in conjunction with the Department of Education. This program assists young people in preparing for independent living through dealing with consumer responsibility and personal financial management. *Money Stuff!*, includes a video and teacher resources for the subject areas of Commerce, English and Mathematics, sent to all NSW and Victorian high schools.¹¹¹ The Challenge contains four interactive tools 'to help gain the skills and knowledge to successfully buy a car, a mobile phone, rent a house and work smart'.

Another source of help and advice is *The Source* (www.thesource.gov.au), a federal government initiative providing information to young people about a range of matters including money management. There are also other financial programs such as the ASX Share Market game¹¹² which encourages students to learn about a particular part of financial management such as investing.

While this review of current financial literacy programs is not exhaustive it does show that programs exist. A link between programs on gambling education and a broader view of financial literacy and public health programs is however missing.

Research Gaps

As is evident in the discussion to date, there are still many areas of research to be explored in order to expand our knowledge of adolescent gamblers. The effectiveness of prevention and the role of education is still an emerging area for evaluation and research.

There are few studies of young people gambling in Australia and little consistency in definitions and methodologies, making comparisons between studies difficult.¹¹³

The location of surveys tends to focus on school, college or university students, thus omitting and under representing other young people in the workforce as full time employees, or apprentices. One study¹¹³ highlighted the problem of excluding early school leavers from many of these studies, particularly as there is a high correlation between problematic gambling behaviour and other behavioural difficulties manifesting themselves as conduct problems or as school withdrawal. Young people with some of the most severe gambling related problems may therefore not be captured by these surveys if they have been excluded, or exclude themselves from school.

There is a need for future research to characterise in detail the patterns of gambling in young people. Of particular relevance is the frequency of gambling, time and money consumed in gambling and the financial, educational and social consequences of gambling in young people.

An extensive review of research on young people and gambling in the UK suggest that studies such as this are relevant "in order to understand children's and young people's interaction with games of chance, perceptions of winning and losing and the implications of these experiences for future risk taking behaviour."⁴⁸

Evidence shows that the social background of young people is an important determinant of problem gambling. Further work is needed on examining more specific determinants including the influence of friends, other family members, accessibility and the effects of the media on young people gambling.

There is little evidence available on the course of adolescent gambling and the extent to which early gambling, whether a frequent activity or not, rather than problem gambling, leads to gambling problems in adulthood. It is strongly suggested that prospective studies of youth gamblers are necessary in order to adequately understand the mechanisms that translate adolescent gambling behaviours into adult gambling problems. Further investigation is needed to assess the attitudes, beliefs and values of

young people on gambling to determine whether their beliefs are formed through family or surrounding environments or as a consequence of gambling experiences.

Recent studies of adolescent gambling progression show that the natural history of problematic gambling is dynamic and in need of further study to identify prevention and early intervention opportunities presented by the patterns of gambling behaviour¹¹⁴. Research needs to be undertaken on the effectiveness of preventative as well as therapeutic interventions, within the context of evaluating the appropriateness of different settings and treatment models.

Further development of risk and protective factors in public health intervention in areas such as alcohol and drug abuse¹¹⁵, young people's health¹¹⁶ and mental health¹¹⁷ could assist the development of long-term strategies for problem gambling intervention. These could be based on evidence from longitudinal studies about the factors that predict behavioural problems such as substance abuse and delinquency.

Best practice principles for gambling education and financial literacy

There is much to learn from existing gambling and financial education programs which have been implemented and evaluated to date. MCEETYA has identified a number of factors from a literature search of consumer and financial literacy programs in Australia and around the world as being critical to the successful development of education resources or programs. They have recommended establishing a progression of learning over a number of years to build on a variety of learning experiences, rather than a single short course.

There seems to be some value in programs providing practical problem-solving opportunities that enable students to identify with everyday situations¹¹⁹ as young people readily relate and identify with real life scenarios.

MCEETYA's review of best practice in the provision of financial literacy programs considers also that the alignment of resources to curriculum frameworks and student learning outcomes to be essential. Providing professional development support, encouraging teacher networking and involving teachers in developing programs was also deemed critical.

MCEETYA also supports the involvement of parents and young people in program development, piloting and trialing draft resources with both teachers and students providing feed back.

There is a strong case for a co-ordinated approach by all levels of government, the community and industry. Partnership funding from governments and the corporate sector such as that provided by the Commonwealth Bank Foundation for research and program implementation could provide much needed resources.

Recognition that gambling problems develop over time supports the adoption of strategies based on early prevention and intervention, and school education provides an opportunity to achieve this.¹¹⁸

The program, "It's your lucky Day" attributed much of its success to youth input at an early stage of development via focus groups. These groups consisted of 28 students aged 11 to 15 from both rural and urban Manitoba who provided feedback and input into the program and the website.⁹⁹

MCEETYA also viewed the establishment of partnerships with other sectors as being critical to the successful development of an education resource or program related to financial literacy and education. Gambling industry involvement could comprise funding, information and the opportunity to disseminate messages to the young people about responsible gambling education and financial literacy.

Leadership from education departments is a critical factor in successful program implementation.

State initiatives especially in Queensland and South Australia contribute to current best practice but do not discount the further need to explore other models of gambling education programs and financial literacy.

New directions

Research shows that young people from an early age are gambling and that a small number have a problem. Young people who may start gambling earlier in life are more likely to experience problem gambling in adulthood. With a strategic approach, policy and decision makers, the industry and community (including teachers and parents) can make gambling education for young people a priority. Aligned with financial literacy programs, gambling education can ensure that young persons are equipped with the necessary skills to spend wisely from the range of options including gambling available in the entertainment, hospitality and leisure industry.

Endnotes

- ¹ Throughout this discussion paper terms such as adolescents, youth and young people are used. These terms, although not defined, are used throughout the paper as interchangeable terms. The definition of 'young people', that is the age range under consideration, is flexible, with the upper end of the range being twenty five years and the lower end around the senior year of primary schooling. Different definitions are used by different researchers.
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