

REPORT

To

Gambling Research Australia

Gambling and Young People in Australia



Australian Council *for* Educational Research Ltd

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Gambling Research Australia (GRA) is a partnership between the Commonwealth and State and Territory Governments and is responsible for managing and implementing a national research agenda.

Gambling Research Australia commissioned the Australian Council for Educational Research to undertake a national study of young people and their gambling within an Australian context.

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- Queensland: Queensland Treasury
- South Australia: Government of South Australia
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- Victoria: Victorian Government through the Community Support Fund
- Western Australia: Government of Western Australia through the Gaming Community Trust

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ABBREVIATIONS & ACRONYMS

ABS	Australian Bureau of Statistics
ACER	Australian Council for Educational Research
ACMA	Australian Communications Media Authority
ADHD	Attention Deficit Hyperactivity Disorder
ANOVA	Analysis of Variance
ARL	Australian Rugby League
ATSI	Aboriginal or Torres Strait Islander
CAGI	Canadian Adolescent Gambling Inventory
CATI	Computer-Assisted Telephone Interview
CASS-L	Connors Wells Adolescent Self-Report Scale: Long Form
CPGI	Canadian Problem Gambling Index
DSM-IV	Diagnostic and Statistical Manual-Fourth Edition
DSM-IV-J	Diagnostic and Statistical Manual-Fourth Edition-Juvenile
DSM-IV-MR-J	Diagnostic and Statistical Manual-Fourth Edition-Multiple Response-Adapted for Juveniles
EGM	Electronic Gaming Machine
ERG	Expert Reference Group
ERIC	Education Resources Information Center
GA-20	Gamblers Anonymous – Twenty Questions
GRA	Gambling Research Australia
MAGS	Massachusetts Gambling Screen
NAPLAN	National Assessment Program – Literacy and Numeracy
NFL	National Football League
OECD	Organisation for Economic Co-operation and Development
PISA	Programme for International Student Assessment
RSE	Rosenberg Self-Esteem Scale
SOGS	South Oaks Gambling Screen
SOGS-RA	South Oaks Gambling Screen Revised for Adolescents
TAB	Totalisator Agency Board [betting shop]
TAFE	Technical and Further Education [institute]
VGS	Victorian Gambling Screen

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EXECUTIVE SUMMARY

INTRODUCTION

The *Gambling and Young People in Australia* research project was commissioned by the Victorian Department of Justice on behalf of Gambling Research Australia (GRA). The project, a national study of young people and their gambling in the Australian context, was undertaken by the Australian Council for Educational Research (ACER) with assistance from the Wallis Consulting Group.

The purpose of the research was to:

- describe the current gambling behaviour of young people;
- describe the context in which this gambling behaviour occurs, including the presence of other risk-taking behaviours;
- analyse how, and the extent to which, gambling is similar to, or distinct from, other risk-taking behaviours;
- determine at what levels and in what forms young people's gambling becomes problematic or an indicator of future pathology;
- identify and analyse the differences between young people who gamble and become problem gamblers from those who do not develop a problem; and,
- determine possible risk inhibitors and risk enhancers relevant to gambling for young people.

Definition of problem gambling used in this study

“Problem gambling is characterised by difficulties in limiting money and/or time spent on gambling, which leads to adverse consequences for the gambler, others or for the community”¹.

Legality and availability of gambling activities in Australia²

The legal age for gambling in Australia is 18.

The following gambling activities are available in all states/territories of Australia: Lotto/Powerball, football pools, lotteries, instant lotteries (“scratchies”), casino gaming, horse/dog racing, and sports betting. Gaming machines are available in all states/territories, although this access is restricted to hotels and clubs in the ACT, and to casino venues in Western Australia. Numerous gambling activities, from card games to betting, are now available via the internet. Access to these on-line gambling activities is also restricted to those over the age of 18.

¹ *Problem Gambling and Harm: Towards a National Definition* prepared for the National Gambling Research Working Party by the South Australian Centre for Economic Studies together with the Department of Psychology, University of Adelaide, December 2005

² *Source: Office of Economic and Statistical Research – Queensland Treasury, 2010. Australian Gambling Statistics 1982–1983 to 2007–08, 26th edition*

Legalities aside, the availability of gambling services and access to gambling activities are not the same thing. For example, a gambling activity in a casino may be available in Brisbane, the Gold Coast, and Cairns but not easily accessible to people living in other parts of Queensland except when they are on holidays and/or travel specifically to gamble.

Target population

The target study population was young people in Australia aged 10–24 years.

SAMPLE

From within the target population, a national sample was drawn to ensure inclusion of young people in a range of urban, regional and remote locations, including those who were at school, in post-school educational settings, employed and unemployed. The sample also included young people from culturally, linguistically and diverse backgrounds.

The study involved respondents aged 10 (Year 4 in most Australian primary schools) through to 17 (Year 12 at secondary school), as well as a non-school-based sample of young people aged 15 to 24. The age-groups for analysis were 10–14; 15–17; and 18–24.

A school-based sample was recruited by ACER via approaches to a national sample of schools following receipt of permission to conduct research from relevant education jurisdictions. This sample consisted mostly of young people aged 10 to 17.

Table 1: Number of sample schools by level and jurisdiction

State	Participating schools (primary)	Participating schools (secondary)	Participating schools (total)
ACT	1	4	5
NSW	7	12	19
NT	1	1	2
QLD	3	3	6
SA	1	5	6
TAS	7	4	11
VIC	6	3	9
WA	2	5	7
<i>Total</i>	28	37	65

A predominantly non-school-based sample was recruited by the Wallis Consulting Group via random digit dialling (RDD) sampling techniques supplemented by on-line surveys with established panels of young respondents.

Table 2: Achieved responses, non-school-based sample by age and mode of conduct

	Age-group	At school or left school		Total
		At school	Left school	
Telephone	15–17	0	98	98
	18–24	0	1,225	1,225
On-line survey	15–17	473	60	533
	18–24	82	1,549	1,631
<i>Total</i>		555	932	3,487

Table 3: Achieved sample by jurisdiction, age-group, gender, school-base status

State/Territory	Age-group	Female (school)	Male (school)	Female (not at school)	Male (not at school)	Missing	Total
ACT	10–14	23	117	–	–		140
	15–17	57	137	2	3		199
	18–24	4	11	127	107		249
	missing					9	9
<i>ACT Total</i>		<i>84</i>	<i>265</i>	<i>129</i>	<i>110</i>	<i>9</i>	<i>597</i>
NSW	10–14	377	415	–	–		792
	15–17	260	339	21	25		645
	18–24	18	17	356	273		664
	missing					16	16
<i>NSW Total</i>		<i>655</i>	<i>771</i>	<i>377</i>	<i>298</i>	<i>16</i>	<i>2117</i>
NT	10–14	10	14	–	–		24
	15–17	4	10	3	0		17
	18–24	2		33	22		57
<i>NT Total</i>		<i>16</i>	<i>24</i>	<i>36</i>	<i>22</i>		<i>98</i>
QLD	10–14	37	26	–	–		63
	15–17	80	55	18	18		171
	18–24	8	3	279	191		481
<i>QLD Total</i>		<i>125</i>	<i>84</i>	<i>297</i>	<i>209</i>	<i>0</i>	<i>715</i>
SA	10–14	51	33	–	–		84
	15–17	81	69	8	7		165
	18–24	7	5	173	141		326
<i>SA Total</i>		<i>139</i>	<i>107</i>	<i>181</i>	<i>148</i>	<i>0</i>	<i>575</i>
TAS	10–14	122	96	–	–		218
	15–17	34	29	2	0		65
	18–24	7	1	88	72		168
<i>Tas Total</i>		<i>163</i>	<i>126</i>	<i>90</i>	<i>72</i>	<i>0</i>	<i>451</i>
VIC	10–14	55	51	–	–		106
	15–17	94	83	7	15		199
	18–24	15	6	352	257		630
	missing					1	1
<i>VIC Total</i>		<i>164</i>	<i>140</i>	<i>359</i>	<i>272</i>	<i>1</i>	<i>936</i>
WA	10–14	42	48	–	–		90
	15–17	34	24	12	17		87
	18–24	2	1	182	121		306
<i>WA Total</i>		<i>78</i>	<i>73</i>	<i>194</i>	<i>138</i>	<i>0</i>	<i>483</i>
Grand Total		1,424	1,590	1,663	1,269	26	5,972

Note: Totals includes a small number of students who did not provide information on their gender.

The sample design required approximately equal-sized samples from each of the states/territories so that the contribution of the states/territories to the national results reflected respective population sizes. The 10–14 year age-group, for example, included a much smaller sample of participants from Queensland (63 participants) compared with Tasmania (218). Also, a considerable degree of non-response was experienced, particularly in the younger age-groups, and particularly for some states/territories. For the results to be considered representative at the national level, the contribution of the greater number of responses from smaller states or from certain age-groups needed to be reduced; that is, the size of these particular groups had to be brought back in line with the proportion of the actual population they represent. Thus it was necessary to apply weightings for analyses that aggregated data to the national level.

As a result of this process of weighting, the sample size was reduced from an unweighted sample of 5,972 to a weighted sample 5,685 for the purpose of data analysis.

METHOD

Literature review

The first task was to conduct a review of the national and international literature on young people and gambling. The review is not an exhaustive summary of all the youth gambling research published to date, but it draws on this body of knowledge to inform the current project and place it in the context of existing research.

ACER's Cunningham library facilities were used to locate relevant literature (including conference papers) using databases such as PsycINFO, Scopus, Medline, Family and Society, SocIndex, and ERIC. The search strategy used a combination of key words such as gambling, adolescent, youth, risk factors, addiction. In addition, documents from relevant organisations (e.g., GRA) were obtained via the Internet and through personal approach. References within references were searched for additional publications. The focus of the literature review was to summarise current information about youth gambling and to explore issues relevant to the design of the survey that was developed for the current project. Material for the review was drawn mainly from the period 1992 to 2010.

Survey

The review of the literature informed the development of a survey to obtain information about the current gambling behaviour of young people, including the extent and patterns of their gambling, contexts in which they gamble, and reasons for their gambling. Three formats of the survey were developed: on-line, pencil-and-paper, and computer-assisted telephone interview (CATI). The surveys were conducted (in all forms) between August 2009 and May 2010.

Table 4: Characteristics of survey participants

	<i>n</i>	%
Gender		
Male	2,865	50.4
Female	2,820	49.6
Indigenous status		
Indigenous	251	4.4
Non-Indigenous	5,402	95.0
Unknown	32	0.6
Age-group		
10–14 years	1,253	22.0
15–17 years	1,551	27.3
18 years or older	2,881	50.7
School attendance		
At school	2,688	47.3
Not at school	2,997	52.7
Employment (including part-time after school)		
Employed	2,095	36.9
Not employed	3,590	63.1

Note: Unweighted sample is 5,972 as in Table 3; weighted sample is 5,685 as in Table 4.

Adding responses from 300 Indigenous Australians to the sample proved to be a time-consuming component of the project. A combination of strategies resulted in recruiting a weighted sample of 251 Indigenous young people (107 aged 10–14; 64 (15–17); and 80 (18–24).

Focus groups

Focus group discussions were conducted with a small sample of young people. They were designed to probe more deeply into young people’s reasons for gambling, their beliefs about gambling, contexts in which they gamble, and associated risk-taking behaviours. Participants for the focus groups were initially recruited from schools that had completed the survey. With the reluctance of many schools to participate in the focus group portion of the study, an additional two groups were recruited through direct approach even though they had not completed the survey.

A total of nine focus group discussions were conducted with school students aged between 10 and 18 in primary and secondary schools in NSW and Victoria. Each group comprised twelve students at most (refer to Table 5).

The discussions were scheduled to run for approximately 45 minutes. A structured series of questions was used to initiate conversation and these questions were aimed at encouraging students to discuss their own gambling experiences as well as those they were aware of in their families and communities. They were asked about their exposure to gambling and their understanding of gambling habits. Discussion was led by the interviewer, although participants were able to introduce their own ideas as the discussions progressed.

Table 5: Composition of focus groups

	State/Territory	Year levels	No. of students
Focus Group 1	Victoria	5–6	12
Focus Group 2	New South Wales	7	8
Focus Group 3	New South Wales	8	6
Focus Group 4	New South Wales	9	6
Focus Group 5	New South Wales	10	8
Focus Group 6	New South Wales	11	6
Focus Group 7	New South Wales	12	6
Focus Group 8	Victoria	6, 10	3
Focus Group 9	Victoria	12	7
			Total: 62

Data analysis

Descriptive statistics were used to summarise the characteristics of the survey participants (gender, age, Indigenous status, employment status, whether attending school or not), frequency of engagement in a range of gambling activities, extent of engagement in gambling, contexts for gambling (motivation to gamble, company in which they gambled, persons who influenced their gambling behaviour), attitudes (to self and to gambling), engagement in other risky behaviours (e.g., use of substances such as drugs, alcohol and cigarettes), and engagement in delinquent behaviours such as graffiti, stealing, and fighting). Participants were grouped according to demographic variables, including gender, age, and Indigenous status, and descriptions of participation in various gambling activities by groups were undertaken. In addition, responses to the DSM-IV-MR-J gambling items were used to assign respondents to one of four groups (see Table 6), and the responses of these groups were also compared to investigate differences in their responses.

Structural equation modelling was employed for investigating the multivariate relationships between gambling behaviour, self-esteem, attitudes towards gambling and respondents' other characteristics, including demographic information and information about involvement of family and friends in gambling. The models were intended to explore two research questions:

- 1) What are the relationships between contextual variables (gender, age-group, attitudes towards gambling, low self-esteem, family history of gambling, peer involvement in gambling, and involvement of others in gambling), risky behaviours (substance use and delinquent behaviour), and problem gambling behaviour?
- 2) How strongly are the contextual variables and risky behaviours associated with positive attitudes towards gambling and low self-esteem?

The differences in the relationships between respondent characteristics and self-esteem and between respondent characteristics and attitudes towards gambling thus revealed were explored separately for the four gambling groups – non-gamblers, social gamblers, at-risk gamblers and problem gamblers – using the techniques mentioned above.

The focus groups generated qualitative data. These data were analysed to describe behaviours, beliefs, and contexts rather than to develop theory, which is in accordance with the stated purposes of the research as outlined in GRA’s project specification. However, techniques such as those associated with grounded theory were used to assist in making sense of the qualitative data; for example, the techniques of coding, “memo-ing”, and constructing concept maps are traditional grounded-theory tools that were applied to the qualitative data. Iterative processes and co-researcher reliability checks were conducted to enhance the reliability of the qualitative data analysis.

Classification of young people as gamblers

Classifying young people according to gambling status (see Table 6) was based on twelve items aligned with nine diagnostic criteria in DSM-IV-MR-J, with a score of 4 out of 9 locating the young person in the category “problematic”, and 1 to 3 out of 9 “at-risk”.

The majority of young people were classified as social gamblers (56%); nearly one-quarter were non-gamblers (23%); 16% were as-risk gamblers; and 5% were problem gamblers.

Table 6: Classification of young people according to gambling status

Gambling Group	Gambling activities in past 12 months	Number of DSM-IV-MR-J criteria endorsed (out of nine)	% of young people
Non-gambler	None	Not presented	23
Social gambler	Yes	None	56
At-risk gambler	Yes	One to three	16
Problem gambler	Yes	At least four	5

LIMITATIONS OF THE STUDY

The sample

Recruitment of the school-based sample proved difficult due to schools’ resistance to participating in the research. Recruitment of the non-school sample was also problematic mainly due to the lack of easy telephone access via landlines in an era of expansion in mobile-phone-only households.

The survey instrument

Self-report instruments of behaviour are recognised as a source of measurement error. Nevertheless, the questionnaire enabled the researchers to gather a large volume of data from a large number of young people simultaneously and of eliciting specifically focused information that was amenable to statistical analysis.

Focus groups

The survey was administered to young people in all states and territories but focus groups were held in Victoria and NSW only. The research design did not limit the focus groups to two jurisdictions; the case was that the level of interest in participating was minimal in most jurisdictions. This means that no conclusions can be drawn about the other six jurisdictions in relation to issues that vary across the jurisdictions such as advertising of gambling awareness. Nevertheless, young people’s comments from two states, although not necessarily representative of the country, provided the researchers with some bounds for interpretation of the survey results.

FINDINGS

This research study presents a number of findings related to the gambling behaviour of young people in Australia. It pays particular attention to those young people who can be classified as problem gamblers.

Current gambling behaviour of young people

Participation

Overall, 77% of young people have participated in a gambling activity at least once in the 12 months just past.

There were no significant differences in gambling participation in the previous 12 months according to gender or Indigenous status.

There were some differences in gambling participation in the previous 12 months according to age, with 76% of the 10–14 year age-group, 64% of the 15–17 year age-group, and 85% of the 18–24 year age-group having gambled at least once in the past year.

Overall, gambling frequency as reported by young people is not particularly high. Very few young people reported that they participated in gambling activities on a daily or even weekly basis.

Assignment to a gambling category

Figure 1 displays the proportion of young people in this study in each of the four gambling groups, including “non-gamblers”, as described in Table 6 above.

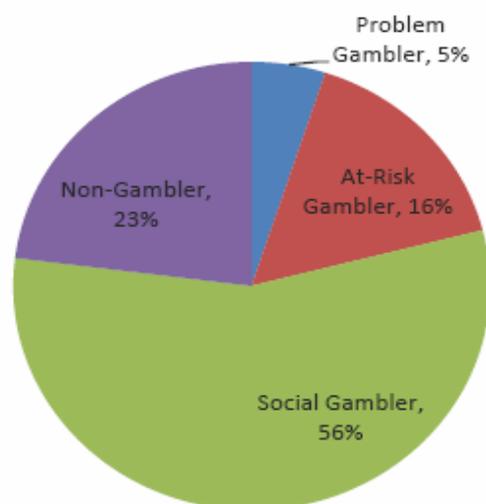


Figure 1: Proportion of young people in each of four gambling categories

Of the 4,383 young people who indicated they had participated in at least one form of gambling activity in the past twelve months, preoccupation with gambling (thinking about and planning gambling activities) was the most commonly endorsed item in the set of 12 questions that young people answered about themselves and gambling, for each of the three age-groups.

Group differences in gambling classification

There were differences according to age-group in terms of the classification of gamblers. Young people in the older age-group were three times more likely to be at-risk gamblers than their younger counterparts. They were also twice as likely as the 15–17-year-olds to be problem gamblers and one and a half times as likely as the 10–14-year-olds. Participants in the youngest age-group were more likely to be social gamblers, whereas those in the middle age-group were most likely to be non-gamblers.

It is possible that the 10–14 year olds were applying specific “childish” interpretations of some of the activities they were asked about. For example, games modelled on bingo, but without any outlay or return of money or goods, are sometimes used as class activities within a larger unit of work (perhaps a unit on a class novel); and a version of two-up, also without any outlay or return of money or goods, has been played in schools on Anzac Day as part of Australian History activities. Being rewarded access to higher and higher levels in arcade-style games, whether on a computer or in a games parlour, might be considered a “prize”. If such activities were indeed being counted in the youngest age-group’s responses, it might help explain the findings that 10–14 year-olds were more likely than 15–17 year-olds to be social gamblers, and that the 15–17 year-olds were more likely than 10–14 year-olds to be non-gamblers.

There was a difference according to gender in the classification of gamblers. Males were more likely to be at-risk or problem gamblers than females, with 5.7% of males being problem gamblers as opposed to 3.2% of females, and 19.1% of the males at-risk gamblers compared with 13.9% of females.

There was also a difference between Indigenous and non-Indigenous young people in terms of the gambling classification. Indigenous young people were 6.4 times more likely to be problem gamblers than non-Indigenous young people. They were also more likely to be at-risk gamblers. (Note: Indigenous young people constituted only 4.4% of the sample.)

Gambling activities

Problem gamblers had a greater involvement than did social and at-risk gamblers in all types of gambling activities (13 types presented). On average, problem gamblers reported participating in eight different gambling activities over the past 12 months, while at-risk gamblers reported five different activities and social gamblers three. Over 50% of problem gamblers were involved in all gambling activities presented with the exception of bingo (46%). After scratch cards (80%), problem gamblers played cards at home (77%), and purchased lottery tickets (74%).

The most common gambling activities among young people overall were purchase of instant prize-tickets or scratch cards, followed by lottery tickets, and playing cards games at home or in the homes of friends or relatives.

Amongst social gamblers, the most common gambling activities were purchase of scratch cards (52%), purchase of lottery tickets (41%), and participation in football tipping or sweeps (40%).

At-risk gamblers were also involved in purchasing scratch cards (66%), and in lotteries (58%). In addition, over fifty percent of young people in this group were also using poker machines (58%) and playing card games at home (56%).

As expected, problem gamblers had a greater involvement than the other two groups of gamblers in all types of gambling activities. For example, 13% of social gamblers and 35% of at-risk gamblers reported playing casino games other than cards whereas 62% of problem gamblers reported doing so.

For Indigenous young people, after the purchase of scratch cards, the second most common activity was card games at home (55%), followed by lottery tickets (48%), and having someone else place a bet on their behalf (46%). For non-Indigenous young people, after the purchase of scratch cards, the second most common activity was lottery tickets (46%), followed by card games at home (42%), and football tipping or sweeps (42%).

Overall, 64% of young people indicated that they had used poker machines, 62% played casino games other than cards, 59% used card games in a casino, and not all of these young people are over 18. In fact, 5% of 10–14 year-olds reported that they had played card games in a casino in the past 12 months and 7.6% of them reported that they had played other games in a casino.

Participation in football tipping or sweeps across all sub-groups was consistently high and notable given the increased community awareness of sports-related gambling, particularly those associated with football (e.g., AFL and NRL). Of particular interest was the frequency with which this form of gambling was taking place with marked prevalence amongst social gamblers for whom weekly or daily participation was higher than for other forms of gambling. Weekly and daily participation was also noticeably higher for this activity than other activities for males, and for the younger age-groups – those aged 10–14 and 15–17 years. Young males in the current study reported greater participation in sports-related betting than did young females.

An inconsistency in results

An inconsistency emerged in results between two questionnaires: In the first instance, 77% of young people indicated that they had gambled in one form or another (thirteen gambling activities presented) over the year just past. Later, when asked a different question about company kept while gambling, a reasonably large percentage of social gamblers (35%) and a smaller percentage of at-risk (8%) and problem gamblers (3%) went on to select the option: “I don’t gamble”. This may be a labelling issue: a young person might say that he or she has bought a lottery ticket in the year past (and therefore be counted in the youth gambling population) while not recognising this activity as gambling, so that when asked “When you gamble, who else is usually with you?” respond with clear conscience that they do not gamble, as according to their personal definition of gambling, they do not. The issue of what is considered gambling for young Australians was explored further in the focus-group discussions.

Contexts for gambling

Company kept

Overall, 30% of young people have gambled with their friends, and 20% with more than one of the following: friend, parent, partner, sibling, relative, or stranger. A further 12% gambled alone. Only 1% reported gambling with a parent present and 1% reported gambling with a sibling. But 35% of problem gamblers have gambled with friends and 25% of them alone, which is more than twice the rate for social and at-risk gamblers.

Influence of others

Only 23% of young people classified as problem gamblers said they did not know any problem gamblers in contrast to the other groups of young people (81% of non-gamblers, 72% of social gamblers, and 53% of at-risk gamblers) who reported that they did not know any problem gamblers. Among those young people classified as problem gamblers, 33% reported having friends who gambled too much and 6% had partners who gambled too much. Only 0.1% of non-gamblers had a partner who, reportedly, gambled too much.

Young people with problem gamblers in their family (mother/step mother, father/step father, brother, sister) are more likely to be at-risk or problem gamblers. Young people who have a peer who is a problem gambler, and young people who know someone else who is a problem gambler are all more likely to be at-risk or problem gamblers than are young people who do not know anyone who gambles too much.

Motivation for gambling

Reasons given by young people for their gambling varied across gambling groups. Overall, the most common reasons were enjoyment (47%) and to win money (42%). These were also the most common reasons given by problem gamblers (56% and 61% respectively). The least common reasons overall were loneliness (2%), to escape from problems (2%), and unhappiness (2%). For the problem gamblers, however, loneliness, escapism and unhappiness reasons were more frequently endorsed among other young people – 13%, 20% and 17%, respectively – although still amongst the least common reasons reported.

Gambling and other risky behaviours

Overall, over the previous six months, 53% of young people had imbibed more than a sip of alcohol, 21% had smoked cigarettes, and 11% had used illegal drugs. Only 5% had been involved in shoplifting or other forms of theft, and only 4% in graffiti or tagging.

Alcohol was the most frequent type of risky behaviour reported in all four groups (non-gamblers and the three gambler groups) with the next most common for all (except non-gamblers) being cigarette smoking. Non-gamblers reported using public transport without a ticket as their second most frequent type of risky behaviour. For the problem gamblers, using public transport without a ticket was third on the list (42%) ahead of using illegal drugs (37%).

What young people said

The young people who participated in the focus group discussions broadly defined gambling as any activity that involved using money in an attempt to acquire more money. The definitions also generally involved the notion that gambling activities were in some way harmful, imprudent or reckless activities with potentially damaging financial outcomes.

There was, however, a set of gambling activities that were not viewed negatively – in fact participants tended to view them as culturally accepted and, in some cases, expected. These activities included activities like the purchase, regular or otherwise, of a lottery ticket, usually by a family member for the whole family; a once-a-year wager on the outcome of the Melbourne Cup; or the purchase of raffle tickets for a charitable event. Furthermore, these activities were not considered to be of a kind that could or would result in problem gambling, in a sense they were considered to be safe gambling activities. This distinction was evident in all of the focus group interviews.

Problem gambling was strongly associated by the young people with other addictive habits like the use of alcohol or drugs. In particular, those interviewed linked their concepts of problem gamblers and gambling with gambling venues that served alcohol – pubs, clubs and casinos, and gambling activities that could be undertaken alone – playing the pokies, betting on the races, and betting on the outcome of other sports. It was also considered to be something that isolated the gambler from others, a lone activity undertaken solely for the potential financial reward. Conversely, “safe” gambling was characterised as something done socially and for entertainment or for reasons other than pure financial gain. These safe gambling activities were the activities that the focus group participants were likely to have been involved in themselves.

Finally, the majority of young people who participated in the discussions did not consider themselves to be gamblers, despite their participation in some gambling activities. Furthermore, they did not consider problem gambling or the effects of problem gambling to be an issue of relevance for them. Other addictive behaviours, like alcohol consumption and drug use, were identified as being of more pressing importance for young people and addictions that were likely to be more common in people of their age. This was also reflected in the lack of awareness amongst those interviewed of advertising for gaming and gambling activities and for services to assist in problem gambling. With the exception of some on-line advertising, young people did not feel that they were amongst the target audience for gambling advertising and they were largely unaware of anti-gambling advertising messages.

DIFFERENCES BETWEEN PROBLEM-GAMBLERS AND OTHERS

For young people in Australia who can be classified as problem gamblers, gambling behaviour is strongly associated with the following:

- a positive attitude to gambling
- low self-esteem
- peer involvement in gambling and substance use
- delinquent behaviour.

In essence, these findings about what distinguishes problem gamblers from others suggest that young people gamble because their mates do, because they are risk-takers, because they do not believe gambling is a bad thing, and because they do not have a healthy sense of self.

Because two of these characteristics – positive attitude to gambling and low self-esteem – are more susceptible to change than are others, the associations between these two characteristics and other contextual variables (e.g., gender) and risky behaviours (e.g., substance use) were investigated.

Important results observed for the relationships with *positive attitudes towards gambling* show that the effects of gender, age-group, family history in gambling, involvement of peers and other relatives, substance use and delinquent behaviours are not similar in the four gambling groups.

- Males have more favourable attitudes towards gambling than do females for the first three groups (non-gamblers, social gamblers, and gamblers who are at risk of developing gambling problems). However, for the fourth group (the problem gamblers), there are no gender differences shown in terms of attitudes towards gambling.
- Older age-groups have less favourable attitudes towards gambling than the younger ones for non-gamblers and social gamblers. However, there are no age-group effects in terms of attitudes to gambling for problem gamblers and gamblers who are at risk of developing gambling problems.
- Family and peer involvement in gambling shows no significant influence on attitudes towards gambling in all four groups.
- Substance use does not show a significant influence on attitudes toward gambling in any of the gambling groups.
- Delinquent behaviours are strongly associated with favourable attitudes towards gambling for social gamblers and problem gamblers, but not for non-gamblers and at-risk gamblers.

Important results observed for the relationships with *low self-esteem* are:

- Females have lower self-esteem than do males in the first three groups (non-gamblers, social gamblers and gamblers who are at risk of developing gambling problems). In the fourth group (problem gamblers), there are no gender differences in terms of self-esteem.
- The older age-groups have higher self-esteem than the younger ones in the first three groups (non-gamblers, social gamblers, and at-risk gamblers). There is no association between self-esteem and age-group for the problem gamblers.
- Family and peer involvement in gambling has no significant effects on the self-esteem of the at-risk gamblers and the problem gamblers.
- Gambling history in immediate family members and involvement in gambling of other relatives is associated with lower self-esteem for the non-gamblers and the social gamblers.

- Substance use is associated with lower self-esteem for non-gamblers, but not with lower self-esteem for social gamblers, at-risk gamblers or problem gamblers.
- Delinquent behaviours are strongly linked to lower self-esteem for non-gamblers and social gamblers, but not for at-risk gamblers and problem gamblers.

RISK INHIBITORS AND RISK ENHANCERS FOR YOUNG GAMBLERS

Not all young people who gamble do so at problematic levels or have a gambling problem. This is indicated by the finding that approximately 77% of young people in the current study have gambled in the year just past, but fewer than one in ten of those have done so at problematic levels.

Factors identified in the research literature that appear to be associated with a greater risk of problem gambling for young people include:

Having

- Low self-esteem
- A positive attitude to gambling
- Parent(s) involved in gambling
- Peers involved in gambling
- Access to gambling services and products

Being

- Male
- Impulsive and lacking in self-discipline
- A participant in other risky behaviours
- In a family that functions at sub-optimal levels.

In the current study, there were indications that low self-esteem, positive attitudes towards gambling, peer involvement in gambling and other risky behaviours, and involvement in delinquent activities were indeed associated with problematic levels of gambling among young people.

Protective factors are those that appear to reduce or even negate the likelihood of young people becoming problem gamblers. It was not easy to isolate protective factors in the study undertaken here because they are not simply the opposite of risk or the absence of a risk factor. Some other factors that might reduce the risk of problem gambling for young people, and which should be investigated further, are social capital and a healthy academic self-concept. Other factors such as media/advertising and mathematical knowledge were not investigated here. The literature does not provide the definitive answer on the influence of media/advertising and mathematical knowledge on a young person's gambling behaviour but does provide the basis for a new set of research questions.

COMMENTS AND CONCLUSIONS

This study is the first national study of gambling behaviour among young people in Australia. The need for such a review is high, given the effects of gambling on the wellbeing of individuals, relationships and society, and the interest of Government in developing an effective interventions framework.

The findings are not unexpected. They are similar to those from smaller studies in Australia and from larger studies in Canada. Nevertheless, the revelation that 5% of Australian youth are problem gamblers calls for a more intense study of the background and psychological characteristics of that particular group.

Analyses undertaken in this research study show that the effects of gender, age-group, family history in gambling, involvement in gambling of peers and other relatives, substance use and delinquent behaviours are not all similar in the four gambling groups. One pattern, however, is striking: While most of these variables have an effect in at least one of the gambling groups, an effect is not observable among the problem gamblers for any of these variables.

For problem gamblers

- There are no gender differences in terms of attitudes towards gambling.
- There are no age-group effects in terms of attitudes towards gambling.
- Family and peer involvement in gambling shows no significant influence on positive attitudes towards gambling.
- Substance use does not show significant influence on positive attitudes towards gambling.
- There are no gender differences in terms of self-esteem.
- There are no significant differences in self-esteem across age-groups.
- Family and peer involvement in gambling have no significant effects on self-esteem.
- Substance use does not show significant influence on self-esteem.
- Delinquent behaviour is not significantly associated with lower self-esteem.

Hence, while low self-esteem and a positive attitude to gambling are associated with problematic levels of gambling among young people, low self-esteem is not age-specific or gender-specific. This is also the case with a positive attitude to gambling.

Although a psychological profile of young problem gamblers is beyond the scope of this study, these findings do suggest that problem gambling among young people may be something other than simply non-problem-gambling taken to the next stage. The influences that most readily present themselves to the mind as being associated with the problem – gender, age, family and peer involvement, substance use and delinquent behaviour – seem to operate differently (if they operate at all) on young problem gamblers than on other young people. It is possible, then, that an intervention that focuses on these influences could have beneficial effects on most young people without having the same effects on young problem gamblers. (There may be other influences that have not been captured in the current research.) Interventions might need to be tailored to take into account the divergence of young problem gamblers from the rest of the young population.

Two of the factors shown to be associated with problem gambling – positive attitude towards gambling and low self-esteem – have the potential for targeted intervention pathways. It is possible to change attitudes to gambling (from positive to negative) and to elevate levels of self-esteem (from low to high). Psychologically valid in its own right because of its more general usefulness would be an intervention program to treat young people who exhibit low self-esteem. Also demanding attention are programs designed to provide young people with strategies for coping with alienation that might prevent them resorting to gambling when/if they are lonely or in search of a “buzz”.

Given the volume of research that nominates a range of factors in the development of problem gambling, it is unlikely that any program that focuses solely on one aspect, be that coping strategies, mathematical understanding, resistance to peer pressure, or managing money, will have a substantial impact on problem gambling amongst our young people.

Findings in a study such as this may be of several kinds – they may bring to light interpretations that have never been considered before; they may tend to confirm a familiar view of an issue; and/or they may tend to discredit a familiar view of an issue. While the first of these kinds may be the most radical, the value of the other two kinds should not be underestimated.

One familiar view of gambling that the current study tends to *discredit* is that gambling is a male problem. While males are more likely than females to be at-risk or problem gamblers, this difference by no means renders the prevalence of female at-risk or problem gamblers negligible: 13.9% of females are at-risk gamblers (compared with 19.1% of males), and 3.2% of females are problem gamblers (compared with 5.7% of males).

Issues for further research

The literature review identified “difficulties with school work” as a possible risk factor. Difficulty with school work was not examined in this study as a potential risk factor for gambling but relationships between difficulties with school work and involvement in gambling could be investigated in future studies, along with relationships between academic self-concept and problem gambling.

Young people’s understanding of what constitutes gambling, their perceptions about gamblers, and their judgments of others (not self) are important aspects of further discussion on devising intervention procedures that might be feasible in reducing levels of youth gambling in Australia. There were indications from this study that young people do not necessarily define gambling in line with the law, and do not see some forms of gambling activity as such. Understanding what young people see as gambling is a crucial step in investigating their involvement in gambling at non-problematic and problematic levels.

Often in research studies the finding of an absence of gender differences is overlooked because it is the presence of gender differences and their interpretations that usually attract attention. However, the finding in this study that there is no gender difference in problem gamblers’ self-esteem or in attitudes towards gambling is a finding of note. Gender neutrality is a notable phenomenon and warrants attention in future research.

The main source of descriptive information in this study was young people's responses to a questionnaire. Given that children as young as 10 years old were surveyed, the limitations of this method (acknowledged earlier), are likely to be more pronounced. An alternative method is worth considering: Referrals from teachers, parents and peers of young people, and young problem gamblers themselves as volunteers, may be useful in successfully deriving a research population for further investigating problem-gambling behaviour in young people in Australia.

The landscape of gambling is radically changing with the introduction of new forms of gambling (e.g., Internet gambling). Thus, there are more opportunities for gambling and so comparisons with the past are not as relevant as they used to be. Also, it could be argued the young people of 2011 think differently and expect different things from life than did the generation before them. A fresh approach to research about gambling is recommended; for example, contacting young people via social networking (Facebook and Twitter), as well as investigating young people's involvement in on-line gambling-like games on social networking sites.