



FINAL REPORT

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2009 Survey of The Nature and Extent of Gambling, and Problem Gambling, in the Australian Capital Territory

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1. Executive summary

In 2009, The Australian National University (ANU) was commissioned by the Australian Capital Territory (ACT) Gambling and Racing Commission to conduct a prevalence survey on gambling participation and problems in the ACT. The study was conducted by the Centre for Gambling Research, part of the Research School of Social Sciences (ANU). The interviewing was carried out by an accredited market and social research company using Computer Assisted Telephone Interviewing (CATI). Random digit dialling was used to contact 5,500 ACT residents. They provided detailed information on their gambling participation in the past year. Over 2,000 interviewees were selected to represent the full spectrum of participation and they were interviewed in more detail on gambling activities, expenditure, harms, physical and mental wellbeing, socioeconomic and demographic characteristics, and whether they had ever sought help for gambling problems.

The main objectives of the 2009 Survey were to:

- (i) investigate community gambling participation by product;
- (ii) estimate the prevalence of problem gambling using the Canadian Problem Gambling Index (CPGI);
- (iii) pay particular attention to playing electronic gaming machines and gambling using the internet (where feasible);
- (iv) examine shifts in trends in participation and problems over time (where feasible);
- (v) determine socio-demographic features associated with gambling participation and problems;
- (vi) investigate health and wellbeing across all levels of gambling participation and problems, including non-gamblers;
- (vii) describe help seeking for gambling problems in the general population, both in the last year, and across the lifetime; and
- (viii) identify areas requiring further research, with particular reference to the ACT context.

Most people had gambled in the past 12 months (70%) and about half reported gambling activities other than buying lottery and scratch tickets. A quarter had gambled on three or more activities in the past year. Frequency of gambling, number of activities reported,

amount of money lost, and the duration of gambling sessions were strongly interrelated. Aside from those who only bought lottery or scratch tickets, only a small percentage of gamblers reported a single gambling activity.

Problem gambling was assessed using the Canadian Problem Gambling Index (CPGI). Amongst the adult population, 5.4% reported at least some symptoms on the CPGI. The prevalence of moderate risk (CPGI score of 3+) and problem (CPGI score of 8+) gambling was 1.5% and 0.5% respectively. Amongst all gamblers, 7.9% had at least some symptoms, with 2.9% being classified as moderate risk or problem gamblers.

Nearly a third (30%) of the adult population reported having played EGMs in the past year and 3% played had played 48 times or more often. About 5% of EGM players reported losses of \$5,000 or more in the last 12 months and 7% were identified as moderate risk or problem gamblers. Playing EGMs was the most common activity reported by moderate risk/problem gamblers – over 90% reported playing EGMs in the past 12 months.

About 5% of the adult population used the internet to gamble but only around 1% played casino type games on the internet for money. About 9% of those using the internet to gamble reported losses of \$5,000 or more in the last 12 months and about one in ten were identified as moderate risk or problem gamblers.

Overall participation in gambling, frequent gambling (48 times a year or more) and problem gambling varied across socioeconomic and demographic groups. The characteristics most consistently associated with gambling were sex, age and education, with low qualified young males having the highest rates across gambling measures. Low levels of education stood out as consistently having the strongest association with different gambling measures.

Change over time in gambling participation and problems were investigated by comparing findings from the current survey with a previous ACT prevalence study, completed in 2001. Gambling participation appears to have fallen between 2001 and 2009 with clearer downward trends for playing EGMs and buying scratch tickets. There were more evident declines in the proportion of participants reporting frequent gambling and this was seen across most activities. Different problem gambling measures were used in the 2001 and 2009 Surveys, and so change over time in the prevalence of problem gambling could not be assessed.

Only a small proportion of the adult population reported experiencing harms that they attributed to gambling (1.5% over their lifetime and 0.6% in the past 12 months). Financial difficulties show little association with gambling frequency but were three times more common in moderate risk or problem gamblers than the general population. Smoking and hazardous/harmful alcohol consumption were strongly associated with higher frequency gambling and degree of problem gambling. Self-reported physical and mental health showed little association with gambling but the very small group of problem gamblers (CPGI score of 8+) had very poor mental health.

Very few ACT adults had ever received formal help for gambling problems (0.7%). Some had spoken to friends or family about problems but made no attempt to get help and indicated that they did not want help (0.8%). When asked why they had not looked for help for gambling problems, most people said they did not need help or could beat their problems on their own. However, suicidal thoughts because of gambling were far more frequent amongst those who had sought help for gambling problems compared with those who had not, giving the impression that people only seek help when gambling problems lead to extreme distress.

In 2009, 76% of ACT adult residents disagreed with the statement that gambling does more good than harm and this attitude toward gambling has not shifted significantly since 2001 (78%). The current survey also found that 70% of ACT adults thought that ATMs should not be available in venues with EGMs.

These are initial findings from a large and detailed data set. Subsequent reports will explore these findings in greater depth. Areas identified for future research include:

- (i) more detailed statistical modelling to show how measures of participation, when used in combination, best identify problem gambling;
- (ii) more detailed modelling to characterise sections of the community at greatest risk of high levels of gambling participation and problem gambling;
- (iii) investigating associations of gambling participation and intensity with measures of harm, to establish which aspects of gambling behaviour are most strongly related to health and wellbeing; and
- (iv) better understanding of factors that encourage help-seeking for gambling problems and barriers to receiving help.

2. Introduction -

In 1999, the Australian Productivity Commission undertook the first national prevalence study on gambling participation and problems in Australia (Productivity Commission, 1999). Australian States and Territories have since generated a rapid succession of prevalence studies (summarised in Table 2.1). This period has also seen significant developments in survey methodology and the measurement of problem gambling. Table 2.1 shows that most jurisdictions have shifted from using the South Oaks Gambling Screen (SOGS: Lesieur & Blume, 1987) to the Canadian Problem Gambling Index (CPGI: Ferris & Wynne, 2001a) as the latter has been shown to be a more valid and reliable measure in population health surveys.

Table 2.1: Prevalence of problem gambling in the Australian adult population by jurisdiction, year and problem gambling measure.

<i>Jurisdiction</i>	<i>Year</i>	<i>South Oaks Gambling Screen (SOGS) 5+</i>	<i>Canadian Problem Gambling Index (CPGI) 8+</i>	<i>Jurisdiction</i>	<i>Year</i>	<i>South Oaks Gambling Screen (SOGS) 5+</i>	<i>Canadian Problem Gambling Index (CPGI) 8+</i>
Australia	1999	2.07		NT	1999	1.89	..
NSW	1995	2.58	..	NT	2005	1.07	0.64
NSW	1997	3.10	..	SA	1996	1.24	..
NSW	1999	2.56	..	SA	1999	2.45	..
NSW	2006	..	0.95	SA	2001	1.89	..
NSW	2009	..	0.4	SA	2005	..	0.43
VIC	1996	0.75	..	Tas	1994	0.90	..
VIC	1998	1.50	..	Tas	1996	2.97	..
VIC	1999	2.14	..	Tas	1999	0.44	..
VIC	1999	0.80	..	Tas	2000	0.90	..
VIC	1999	2.00	..	Tas	2005	1.41	0.73
VIC	2003	1.13	0.96	Tas	2007	..	0.52
VIC	2007	..	1.40	QLD	1999	1.88	..
VIC	2008	..	0.70	QLD	2001	..	0.83
ACT	1999	2.06	..	QLD	2003	..	0.55
ACT	2001	1.91	..	QLD	2006	..	0.48
WA	1994	0.56	..	QLD	2009	..	0.37
WA	1999	0.70	..				

Source: (Productivity Commission, 2010: Table 5.2, p 5.18).

Using Australian nomenclature, a person scoring 5 or more on the SOGS is termed a problem gambler. For the CPGI, a person scoring 8 or more is termed a problem gambler.

In 2001, the Australian Institute for Gambling Research undertook the Australian Capital Territory's (ACT) first prevalence survey using the SOGS (McMillen, Tremayne, & Masterman-Smith, 2001), commissioned by the ACT Gambling and Racing Commission (GRC). In 2009, the GRC commissioned the Australian National University (ANU) to conduct the second prevalence survey on gambling participation and problems in the ACT, using the CPGI. This report presents findings from the 2009 Survey.

The terms of reference for the 2009 Survey specified that comparisons would be made over time and across jurisdictions where feasible and meaningful. However, the findings were also intended to provide the GRC with valid baseline measures for comparison with future surveys.

The main objectives of the 2009 Survey were to:

- (i) investigate community gambling participation by product;
- (ii) estimate the prevalence of problem gambling using the CPGI;
- (iii) pay particular attention to playing electronic gaming machines and gambling using the internet (where feasible);
- (iv) examine shifts in trends in participation and problems over time (where feasible);
- (v) determine socio-demographic features associated with gambling participation and problems;
- (vi) investigate health and wellbeing across all levels of gambling participation and problems, including non-gamblers;
- (vii) describe help seeking for gambling problems in the general population, both in the last year, and across the lifetime; and
- (viii) identify areas requiring further research, with particular reference to the ACT context.

The 2009 Survey provided a valuable opportunity to address important emerging research questions. The first important question is how the wellbeing of gamblers varies across the full continuum of gambling participation, from occasional gambling through to frequent regular gambling. Most Australian surveys have focussed on levels of problem gambling but have not reported on the wellbeing of other gamblers or compared their wellbeing with that of non-gamblers. With the 2009 ACT Survey, we are able to report on the possible benefits and/or harms associated with non-problem gambling, which represents the large majority of gambling activity. The second important research question is the extent to which people have

sought help for their gambling, not just those who are classified as having a current gambling problem but for the entire population, covering current, past and episodic problems. Previous Australian prevalence studies have not asked current gamblers and non-gamblers whether they have ever (i) wanted, (ii) tried to get, or (iii) accessed help for gambling problems.

This initial report presents basic tables and figures addressing the main objectives of the survey. Subsequent reports will explore these findings in greater detail.

3. Methods

3.0 Procedure

The procedures for the 2009 Survey were broadly based on gambling prevalence surveys undertaken by the Productivity Commission in 1999 (Productivity Commission, 1999) and in the ACT in 2001 (McMillen, et al., 2001). All data were collected using Computer Assisted Telephone Interviewing (CATI) by an accredited market and social research company. Data collection commenced on the 8th October and was completed on 28th November, and interviews were conducted on weekdays (excluding Mondays and public holidays) and weekends.

3.1 Sample selection

Random digit dialling was used to contact 5,500 ACT residents. Random digit dialling involves the ongoing generation of telephone numbers, and attempts to call randomly selected numbers. The range of numbers dialled incorporated all landline numbers in the ACT, including listed and unlisted numbers.

The sampling method was designed to compensate for non-response amongst young adults, particularly males. Upon establishing contact with a household, the interviewers asked to speak to 'the youngest adult male, aged 18 or over, who lives there'. In contrast, in the 2001 ACT Survey, interviewers asked to speak to the adult resident with the last birthday. In the current survey, it was evident in the first week of data collection that males were being oversampled and so the introductory script was amended. The age distribution did not show a bias towards the younger age groups, so the decision was made to ask to speak to the youngest adult in the household.

If the appropriate person was not available, the interviewer determined an appropriate time to call back. Interviewers also made appointments to call back if it was not a convenient time to undertake the interview. However, 47% of interviews were completed upon first establishing contact with a household.

3.2 Survey design

All 5,500 people initially identified to do the interview were asked whether they had participated in a range of gambling activities in the last 12 months. They were then asked how often they had participated in each undertaken activity (if any), and could answer per week, month or year. This information was used to determine total gambling frequency across all activities, and across all activities except lottery and scratch tickets. A global net expenditure question was also asked of everyone.

Table 3.1: Criteria used to select the subsample undertaking the detailed interview.

SELECTION CRITERIA			SUBSAMPLE
Total gambling frequency, last 12 months	Activities included in total frequency [†]	Total out of pocket expenditure (all activities)	Proportion selected for detailed interview
52 or more	All except lottery and scratch tickets	Any	100%
1-51	All except lottery and scratch tickets	Less than \$2,000	25%
1 or more	People who only buy scratch tickets or play lottery	Less than \$2,000	25%
1 or more	All activities	\$2,000 or more	100%
0	All activities	n/a	50%

[†]At least some lottery or scratch tickets were purchased for themselves.

A subsample was then selected to proceed to a more detailed interview. Probability of selection was determined by people's frequency of gambling and net expenditure as shown in Table 3.1. Table 3.1 shows that everyone who either (i) gambled 52 times a year across all activities except lottery or scratch tickets or (ii) had spent \$2,000 or more in the last 12 months was selected to undertake the detailed interview. One in four people who reported gambling 1-51 times in the last 12 months (and who had spent less than \$2,000 on all

activities) and 50% of non-gamblers were randomly selected to proceed to the more detailed interview. The method of selecting the subsample was designed to oversample people who had lost large amounts on gambling, high frequency gamblers and non-gamblers. Oversampling ensured that these groups would be large enough to undertake analyses and maximised the probability that people with current gambling problems would complete the detailed interview.

3.3 The sample

Table 3.2 shows the number of people interviewed for each of the criteria used to identify the subsample who proceeded to complete the detailed interview. For instance, this table shows that 55 of the people initially interviewed had a total gambling frequency less than 52, but had spent \$2,000 or more in the last 12 months. The proportion and number of people selected to undertake the detailed interview is also described in Table 3.2. Everyone in the above example was selected for the detailed interview.

Table 3.2: Sample size for each of the criteria used to select the subsample undertaking the detailed interview.

SELECTION CRITERIA			ACHIEVED SAMPLE		
Total gambling frequency, last 12 months	Activities included in total frequency [†]	Total out of pocket expenditure (all activities)	Initial sample (n)	Subsample completing detailed interview (n)	Proportion selected for detailed interview
52 or more	All except lottery and scratch tickets	Any	338	337	100%
1-51	All except lottery and scratch tickets	Less than \$2,000	2098	470	25%
1 or more	People who only do scratch tickets or lottery	Less than \$2,000	1263	354	25%
1 or more	All activities	\$2,000 or more	55	55	100%
0	All activities	-	1746	873	50%
<i>Total</i>			<i>5500</i>	<i>2089</i>	-

[†]At least some lottery or scratch tickets were purchased for themselves.

The final age and gender distribution of the achieved sample is shown in Table 3.3. There was a good spread of ages amongst the achieved sample, but when compared with the adult population of the ACT, those under 35 years of age were underrepresented, with a corresponding over representation of older people. The respondent numbers in each of the age and gender cells provided the basis for weighting the sample in order to provide estimates that reflect the age and sex distribution of the ACT population (see section 3.6).

Table 3.3: Proportion of adult men and women in the ACT population and the achieved sample.

Age group	ACT population		Achieved sample†	
	Male n=112,434	Female n=117,960	Male n=2,663	Female n=2,827
18-24	16.3%	16.3%	11.1%	6.5%
25-29	10.5%	10.2%	3.8%	4.5%
30-34	10.2%	10.1%	5.9%	6.4%
35-39	10.0%	9.9%	7.9%	10.7%
40-44	9.7%	9.8%	8.7%	11.3%
45-49	9.5%	9.8%	10.2%	11.0%
50-54	8.8%	9.0%	11.1%	10.5%
55-59	8.0%	7.8%	11.7%	10.9%
60-64	5.5%	5.3%	11.2%	10.5%
65-69	3.7%	3.9%	7.1%	7.0%
70+	7.6%	9.5%	11.3%	10.6%

†Ten respondents (3 males and 7 females) refused to provide their age.

3.4 The questionnaire

The questionnaire used for the 2009 Study was based on the 2001 Survey, to maximise comparability of findings over time. However, there were several notable exceptions. First, everyone who had gambled at least 12 or more times in the last 12 months (on activities other than lottery or scratch tickets), or who reported spending \$2,000 or more (on any activity) was asked about harms they might have experienced from gambling, and given the CPGI. Second, broad screening questions were used to identify people who had ever gambled 12 times or more, or lost \$2,000 or more on gambling in a 12 month period. These individuals were also asked about harms they might have experienced from gambling in their lifetime. Third, everyone was asked if they felt they had ever had a problem with their gambling. Anyone who had ever gambled 12 or more times or lost \$2,000 or more on gambling in a 12 month period, or who was identified as having ever had a problem with their gambling, was asked whether they had ever wanted help, tried to get help or accessed help from a range of services. Help seeking and service use over the last 12 months was also assessed. Fourth,

everyone selected to do the detailed interview was asked socioeconomic questions, and given validated health and wellbeing questions, covering mental health and physical health, alcohol consumption, smoking and social connectedness. The full questionnaire is provided as a separate appendix to this report. However a summary of the measures, and the people who received them, is given in Table 3.3.

Two pilot tests were conducted, covering a total of 130 interviews. These interviews tested the CATI technical procedure and questionnaire. The research team were interviewed during the pilot to ensure that the majority of pathways were tested.

Table 3.3: Summary of questionnaire items.

Measures	Time period		Sample†	People assessed
	Lifetime	Last 12 months		
Gambling frequency, for each activity		X	Full	All
Global net expenditure screen, across all activities		X	Full	All
Questions about specific activities (eg net expenditure and duration of gambling sessions)		X	Subsample	If undertook activity in last 12 months
Self-identification of gambling problems	X	X	Subsample	All
CPGI		X	Subsample	If gambled 12 or more times in the last 12 months across all activities other than lottery or scratch tickets If reported losing \$2,000 or more in the last 12 months on the global net expenditure item or net expenditure summed across all activities
Global net expenditure and gambling frequency, screen across all activities	X		Subsample	All other than above
Harms from gambling	X	X	Subsample	If ever gambled 12 or more times in a 12 month period If ever lost \$2,000 or more in a 12 month period If self-identified as ever having a problem with gambling
Help-seeking and service use	X	X	Subsample	As above
Attitudes to gambling	n/a	n/a	Subsample	All
Health and wellbeing	n/a	n/a	Subsample	All
Socioeconomic and demographic	n/a	n/a	Subsample	All

†Full sample=All 5,500 people initially contacted by interviewers; Subsample=those selected to proceed to the detailed interview.

3.5 Ethics approval

The Australian National University ethics committee (HREC) approved this study (protocol 2009/410).

3.6 Weighting

In order to generalise findings from the sample to the ACT adult population it was important to ensure that the survey sample represented the ACT population as much as possible.

Therefore potential sources of sample bias needed to be identified and addressed. First, only one adult was selected from each household, so the number of adults in the household *not interviewed* needed to be taken into account. Second, the oversampling of non-gamblers, high frequency gamblers and people losing large amounts on gambling needed to be taken into account in all analyses using the subsample who completed the detailed interview.

Third, people who answer the phone and agree to do a survey might differ from those who do not. Simple statistical weights can be used to compensate for the under or over representation of particular people (or characteristics) in a sample. Two weights were estimated and used in this study. The first weight was used on all analyses using the full sample and the second was used on all analyses using the subsample.

Weight 1: the full sample

All 5,500 people who initially agreed to complete the interview were asked the number of adults aged 18 or over who normally live in their household. This information was used to compensate for the probability of an individual being selected in the household. Age and sex were also recorded for everyone. This allowed the analyses to be weighted so that the sample proportionately reflected the age and sex of the adult ACT population (as determined by the 2006 census).

Weight 2: the subsample undertaking the detailed interview

Analyses using data obtained from the subsample were similarly weighted to compensate for the probability of an individual being selected in the household. The weight also addressed the oversampling described above, so that levels of gambling were proportionately represented. Finally, the detailed interview provided information about the characteristics of the subsample, which was not available for the full sample. The subsample weight ensured

that the sample proportionately reflected the marital status, as well as the age and sex, of the ACT adult population. Throughout the report, findings are presented that variously represent (1) the adult population of the ACT (i.e. gamblers and non-gamblers combined), (2) the gambling population (i.e. ever gambled in the past 12 months), and (3) frequent gamblers (i.e. those who said they had gambled on 48 or more occasions, 4 or more times per month, or weekly or more often in the past 12 months). The figures and tables give the **actual** number of participants who were interviewed within any particular group whereas percentages and mean values are the **estimated** values using the weights described above.

3.7 Statistical analyses

Of the 5,500 individuals initially interviewed, 28 had missing data about the frequency of their gambling, on at least one activity. These people were excluded from the analysis because we do not know how often they actually gambled. An additional 10 people from the full sample had missing data for age. These people were also excluded from the analysis. In total we had complete data on gambling frequency across all activities, as well as age and sex, for 5,462 individuals.

Amongst the subsample undertaking the detailed interview, data on gambling frequency were missing for 15 of the 2,089 people interviewed, a further 13 had missing data on age, marital status or education. The former two variables were used in the weight and the last considered pivotal in relation to gambling. The subsample analysis was undertaken using data from the 2,061 individuals with complete information on gambling frequency age, sex, marital status and education.

P-values were used to indicate the statistical significance of findings. P-values less than .05 were considered statistically significant, indicating that there was no more than a 5% probability that any particular finding was due to chance. Expressed another way, there was at least a 95% probability that the findings was *not* due to chance. P-values less than .01 and less than .001 indicate that differences between groups were not due to chance with a greater degree of certainty (99% and 99.9% probability respectively).

4. Gambling participation and intensity

4.0 Gambling participation

There are a number of ways of quantifying gambling participation and intensity. No single approach provides an accurate or comprehensive picture and so the strategy adopted for the 2009 ACT Survey was to collect multiple measures of gambling participation and intensity for each individual who took part in the survey. These measures included: (1) any participation in gambling in the past 12 months; (2) participation in particular types and groups of gambling activity in the past 12 months; (3) how often people gambled (gambling frequency) over the past 12 months; (4) how often people gambled on each reported activity and some groups of activity; (5) the number of types of gambling activity in the past 12 months; (6) the length of typical gambling sessions for each activity reported; and (7) overall expenditure across gambling activities in the past 12 months. This chapter provides an overview of these measures for the ACT adult population.

Table 4.1 shows the proportion of the population who reported gambling in the past year on each type of activity, and also shows the proportion who reported gambling on any activity in the past year. The activities are listed in order from the most common to the least common. Across all activities, 69.8% of the adult population reported gambling in the last year. The most common activity reported was buying lotto or lottery tickets (47.7%) and the large majority of these people had bought tickets for themselves. Nearly a third of people had played Electronic Gaming Machines (EGMs) in the past year (30.2%). A similar number reported buying scratch tickets; these included people who only bought the tickets for others (8.5%), while around a quarter of the population bought tickets for themselves (22.8%). Nearly a quarter of the population reported betting on horse or greyhound races in the past year (24.5%).

Table 4.1: Gambling participation (%) in the adult population in the last 12 months by type of activity, n=5,462.

	% Yes	% No
Played lotto or any other lottery game	47.7	52.3
Themselves	46.1	53.9
Only bought tickets for others	1.6	
Played EGMs	30.2	69.8
Bet on horse or greyhound races	24.5	75.6
Bought instant scratch tickets		
Themselves	22.8	77.2
Only for others	8.5	
Played table games at a casino	8.3	91.7
Played games like cards privately for money at home or any other place	8.1	91.9
Bet on a sporting or special event like football, cricket, tennis, a TV show, or election	7.9	92.1
Played Keno at a club, hotel, casino or other place	5.8	94.2
Played casino type games on the internet		
Played at all	2.6	97.4
Played for money*	1.0	99.0
Played bingo or housie at a club or hall	2.1	97.9
Played any other gambling activity, excluding raffles or sweeps	0.7	99.3
<i>Any activity</i>	<i>69.8</i>	<i>30.2</i>

*Based on subsample data, n=2,059.

Other types of gambling activity were less common and, individually, were reported by fewer than 10% of people. Playing casino table games, playing private games like cards for money, betting on sports and other events, and Keno were each reported by between 5% and 10% of the adult population. The least common activities reported were playing casino type games on the internet, bingo, and ‘other’ activities (mostly ‘two-up’ and very likely played on ANZAC day).

4.1 Total gambling frequency

Figure 4.1 shows the proportions of the population gambling at different frequency levels grouped as (i) non-gambler, (ii) low frequency gambling, (iii) medium frequency gambling, and (iv) high frequency gambling. Frequency has been summed across all the activities listed in Table 4.1. Here, and elsewhere in the report, a non-gambler is defined as someone who reported no gambling activity in the last 12 months. Low frequency gambling is defined as gambling fewer than 12 times in the last 12 months or less than monthly. Medium frequency gambling is defined as 12 to 47 times in the past year, or 1 to 3 times per month. High

frequency gambling includes those who reported gambling on 48 or more occasions, or 4 or more times per month, or weekly or more often. Although high frequency gambling was defined in terms of gambling across all activities in the past year, over 90% of people in this group gambled weekly or more often on an individual activity.

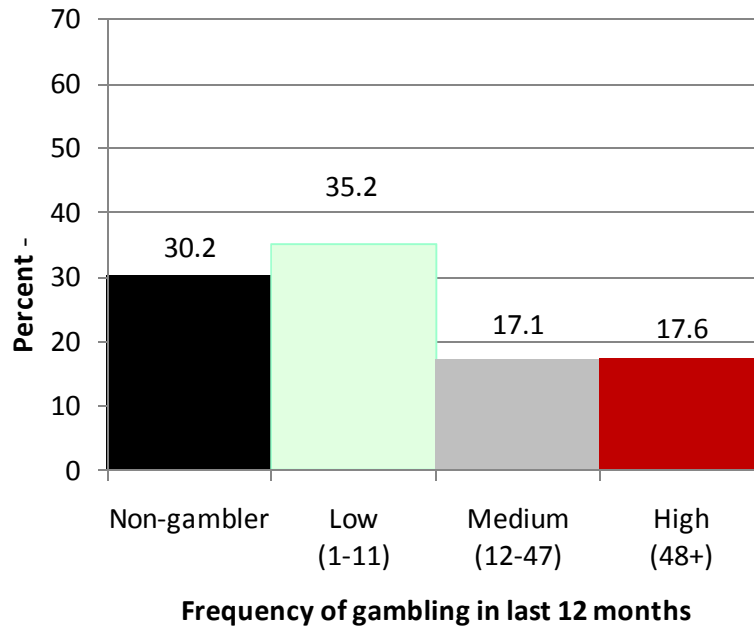


Figure 4.1: Frequency of gambling in the last 12 months on all activities in the last 12 months, n=5,462.

About 1 in 6 of the adult population (17.6%) reported high frequency gambling and a similar proportion (17.1%) reported medium frequency gambling so, together, around one-third of people gambled 12 or more times in the last 12 months. Just over one-third (35.2%) of the population gambled but did so less than 12 times in the last 12 months.

4.2 Frequency of gambling for individual activities

Figure 4.2 shows levels of gambling frequency for individual activities. It breaks down those who reported participating in each activity (as shown in Table 4.1) into low, medium and high frequency groups. Playing Lotto or other lottery games was clearly more frequent than playing other activities, with more than 1 in 10 of the adult population (11.2%) saying they had bought tickets at least 48 times in the last 12 months. Playing EGMs was the only other

activity where more than 2% of the adult population reported high frequency gambling (3.0%). Between 1% and 2% of the adult population reported high frequency gambling for betting on horse or greyhound races (1.8%) and buying instant scratch tickets (1.2%). High frequency gambling on other individual activities was reported by 1% or less of the adult population and most of these other activities were relatively uncommon.

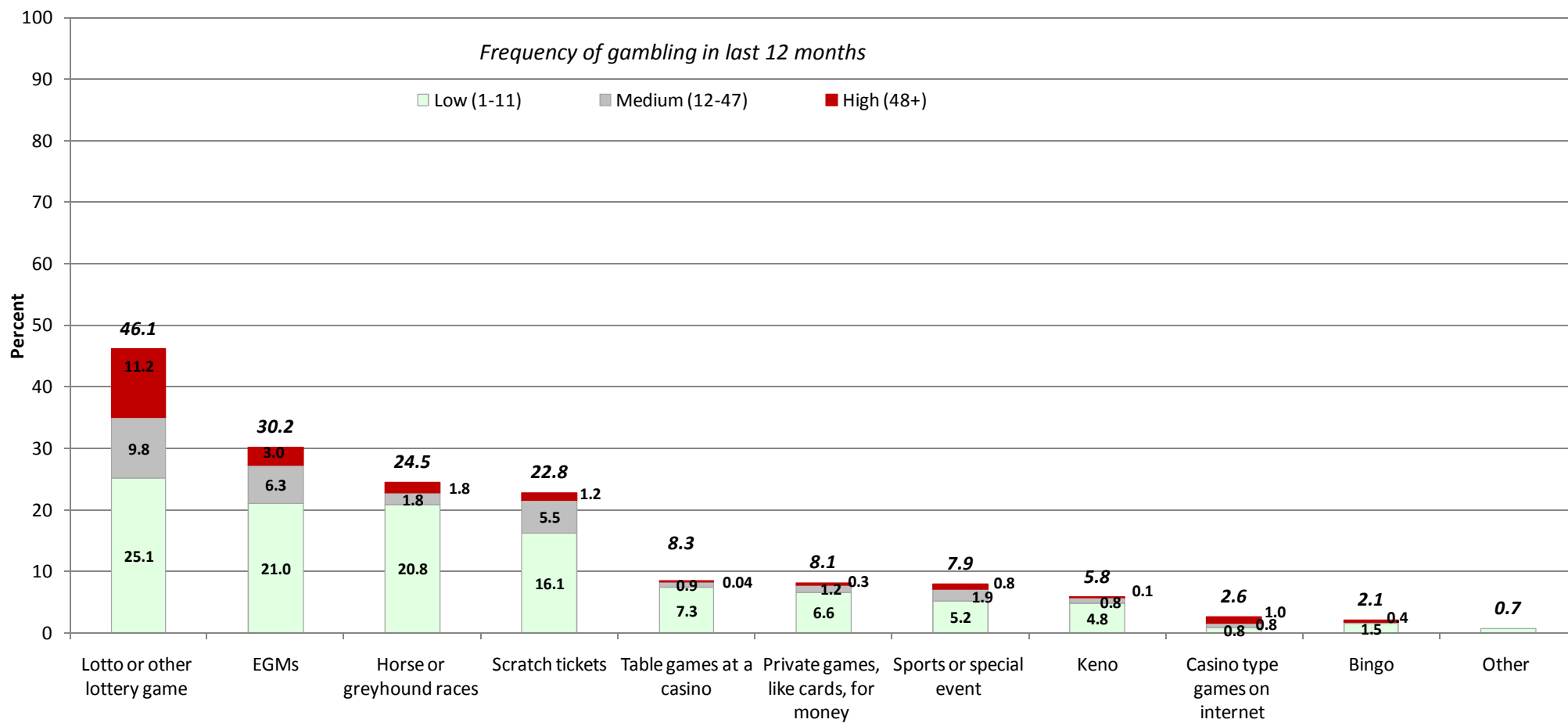


Figure 4.2: Gambling frequency (% of adult population) in last 12 months by type of activity, n=5,462.
 Note: Italics denote total participation.

Figure 4.3 is based only on people who were high frequency gamblers across all activities. It shows how often they gambled on particular activities, using the same categories as Figure 4.2. It is important to note that many people in this high frequency group reported gambling on more than one, and sometimes several activities (see Figure 4.5). The vast majority (85.8% of this group) had bought Lotto or other lottery tickets and, indeed, 63.7% of this group would be classified as high frequency gamblers based solely on this activity. The order of reporting other activities broadly follows how common these activities are in the adult population (see Figure 4.2) although, as expected for a group defined as high frequency, the level of activity is generally greater in Figure 4.3.

Apart from Lotto and other lottery tickets, the other activities where high frequency gambling was reported (based solely on that one activity) were EGMs, betting on horse or greyhound races, scratch tickets, betting on other sports or events, and casino type games on the internet. Less than 5% of high frequency gamblers reported high frequency gambling on any of the other five listed activities.

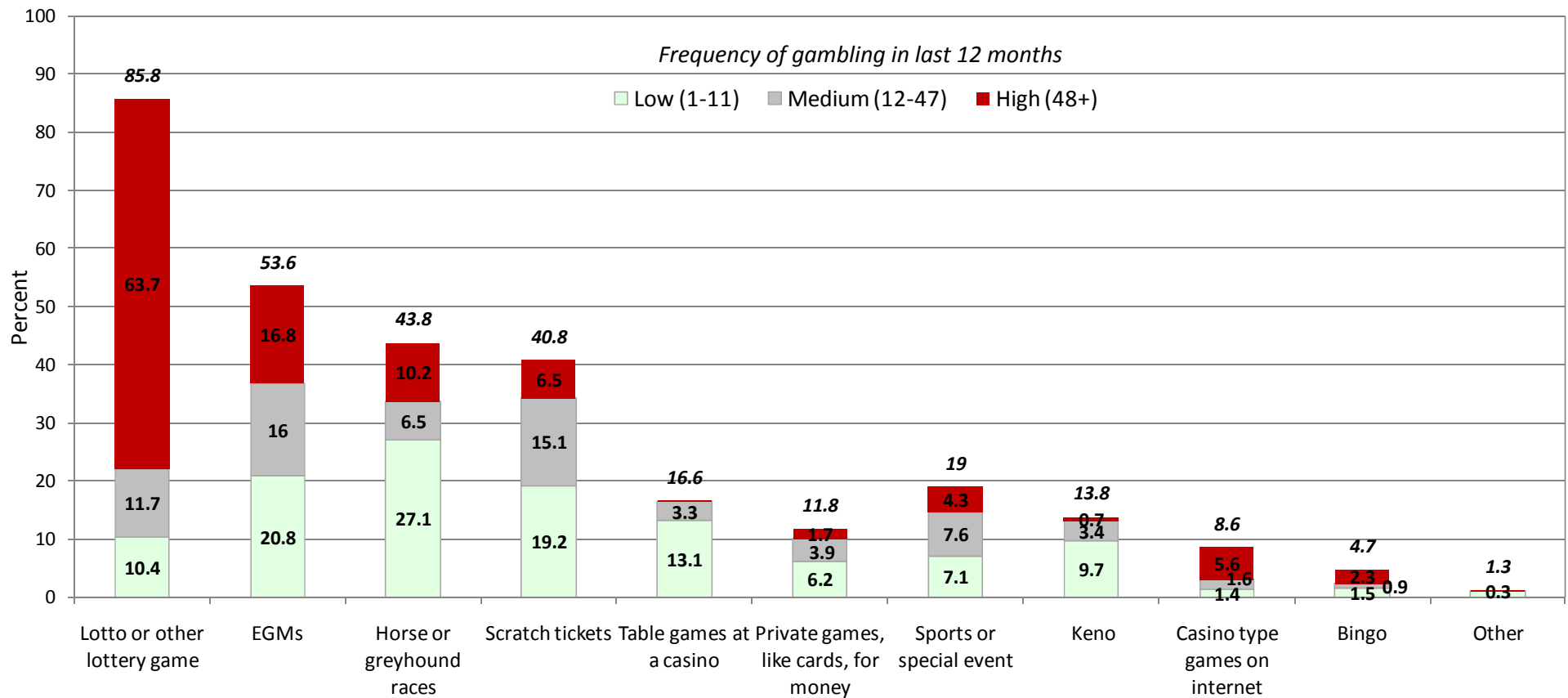


Figure 4.3: Type and frequency of gambling activities undertaken by high frequency gamblers in the last 12 months, n=1,039.

Note: Italics are used to denote total participation amongst high frequency gamblers.

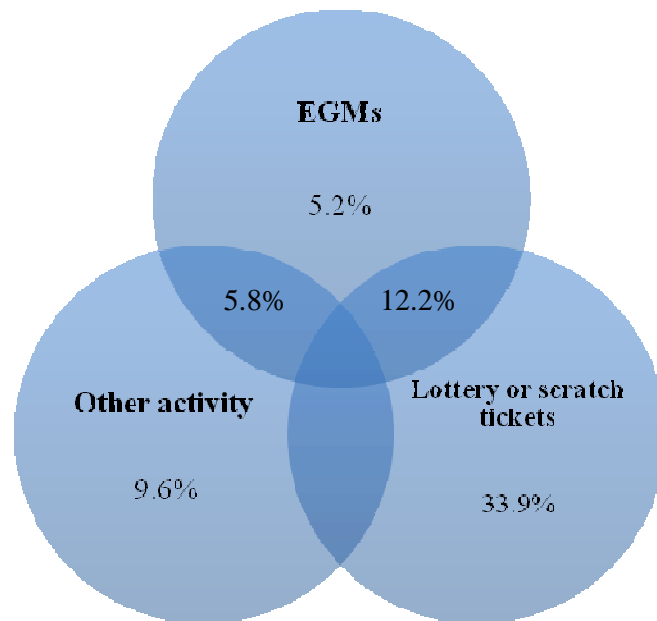
4.3 Number of gambling activities

This section explores the number of activities that gamblers undertake, and the overlap between gambling activities. First, Table 4.3 shows that the majority of people who gambled, did so on more than one activity, and that this varied considerably by type of activity. For instance 57% of people who played lottery or bought scratch tickets gambled on another activity. In contrast, the vast majority of people who gambled on anything other than lottery or scratch tickets, also gambled on other activities. For instance, 87% of people who play EGMs and 91% of people who bet on sports or other special events gambled on at least one other activity. Table 4.3 also shows that the majority of EGM players gambled on activities other than lottery or scratch tickets (56%). Nearly 90% of people who played Keno, casino type games on the internet or table games at a casino, gambled on another activity even when lottery or scratch tickets were excluded.

Table 4.3: Proportion of gamblers playing another activity, by gambling type.

Activity	Another activity	Another activity (not including lottery or scratch tickets)
Lottery or scratch tickets	57%	57%
EGMs	87%	56%
Other activities (total across below)	85%	65%
Horse or greyhound races	86%	58%
Keno	97%	88%
Table games at casino	95%	89%
Bingo	92%	77%
Sports/special events	91%	82%
Casino games on internet	95%	89%
Private games, like cards, for money	90%	79%

In order to further explore the overlap between different types of gambling activities, activities were collapsed into three groups, (i) EGMs, (ii) Lottery or scratch tickets and (iii) Other activities. Figure 4.4 shows the proportion of gamblers reporting these activities and the overlap in participation. Perhaps the most striking feature of this figure is that only a small proportion of gamblers (5.2%) reported gambling on EGMs alone. A much larger proportion of gamblers (33.9%) confined themselves to lottery and/or scratch tickets but this group was still smaller than those who combined these activities with other types of gambling.



Totals: EGMs =40%, Lottery or Scratch tickets=79%, Other activity=49%.

Figure 4.4: Venn diagram showing the prevalence of gambling on pokies, Lottery or scratch tickets, and other activities amongst gamblers.

Figure 4.5 shows the number of gambling activities reported by ACT adults. As reported previously, about 30% of ACT adults were non-gamblers. Almost half of the population reported gambling on just one or two activities (46.0%), 12.5% reported three activities, and 11.5% said they had gambled on four or more activities in the past year. Expressed in another way, the average number of activities undertaken by the adult population in the last 12 months was 1.6.

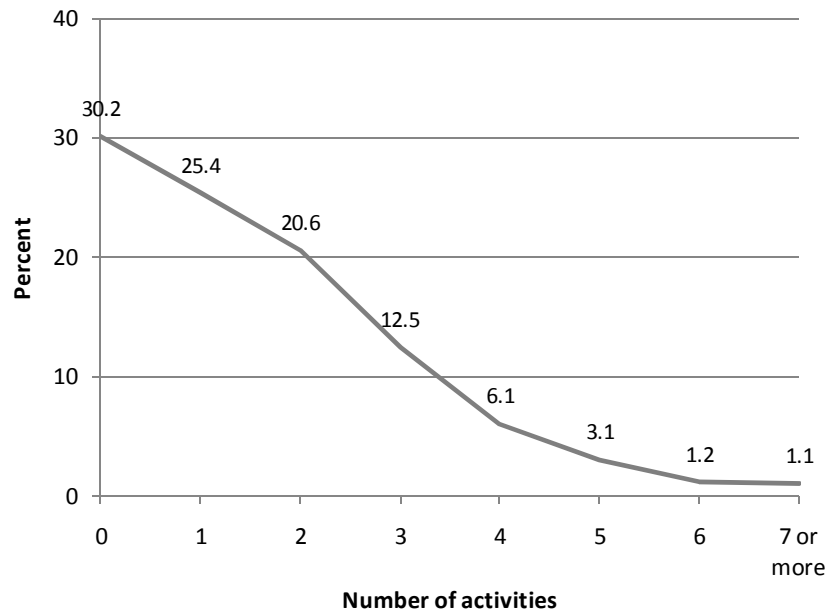


Figure 4.5: Number of gambling activities undertaken in the last 12 months as a proportion of the adult population, n=5,462.

Figure 4.6 shows the number of activities reported by high frequency gamblers (across all activities): almost a quarter (24.3%) said they gambled on three activities and nearly one in three (31.6%) reported four or more activities.

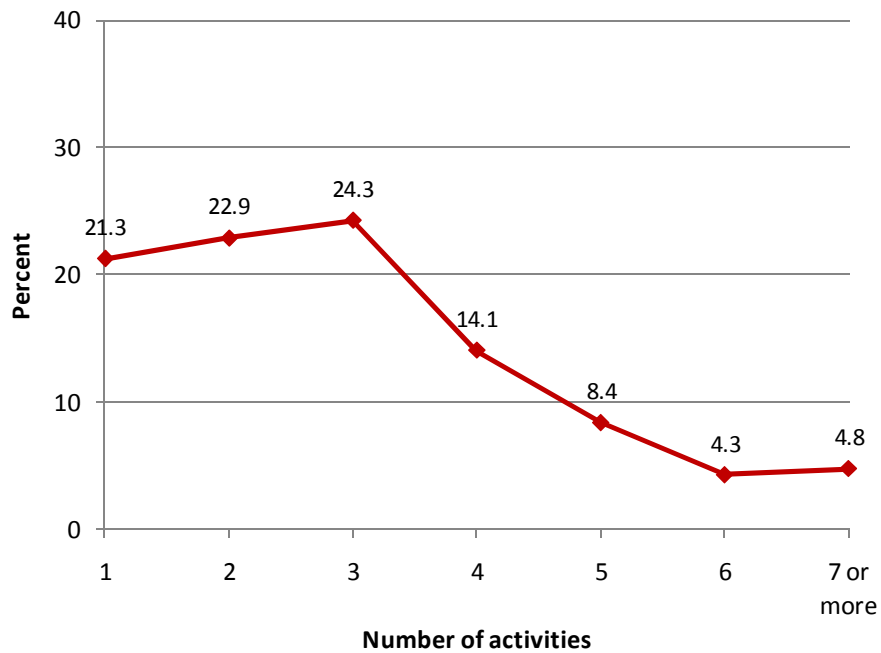


Figure 4.6: Number of gambling activities reported by high frequency gamblers† in the last 12 months, n=1,039.

†High frequency=gambling 48 or more times in the last 12 months, across all activities.

The average number of activities undertaken by high frequency gamblers was 3.0. Low and medium frequency gamblers had intermediate averages (1.7 and 2.8 activities respectively). Overall, these findings indicate the extent to which people who gamble more frequently also gamble on multiple activities.

The considerable overlap between gambling activities means that it is not possible to separate the significance of any single activity from other activities without undertaking complex statistical analyses, and even these would be of questionable interpretation. The only group large enough to examine separately and in detail were people who gambled on lottery or scratch tickets, but who reported no other gambling activity. For some activities, the people who reported participating in that activity and no other were very small in number. For instance, of the full sample (comprising 5462 people), just 8 individuals reported playing Keno and no other form of gambling, and only 10 people who played bingo reported no other form of gambling in the past 12 months.

Figure 4.7 shows frequency of gambling summed across particular combinations of activities. These combinations of activities will be referred to throughout this report, along with total frequency across all activities. Nearly half the population reported gambling on activities other than scratch tickets or lottery, and 6.5% did so at least 48 times in the last year. As already indicated, 30% of the adult population had gambled on EGMs including 3% who were high frequency gamblers. Figure 4.7 also shows that 37% of the adult population gambled on activities other than EGMs, scratch tickets and lottery, including 4% who were high frequency gamblers. These activities included, horse or greyhound racing, table games at a casino, private games (like cards) for money, sports or other special event, Keno, casino type games on the internet, and bingo.

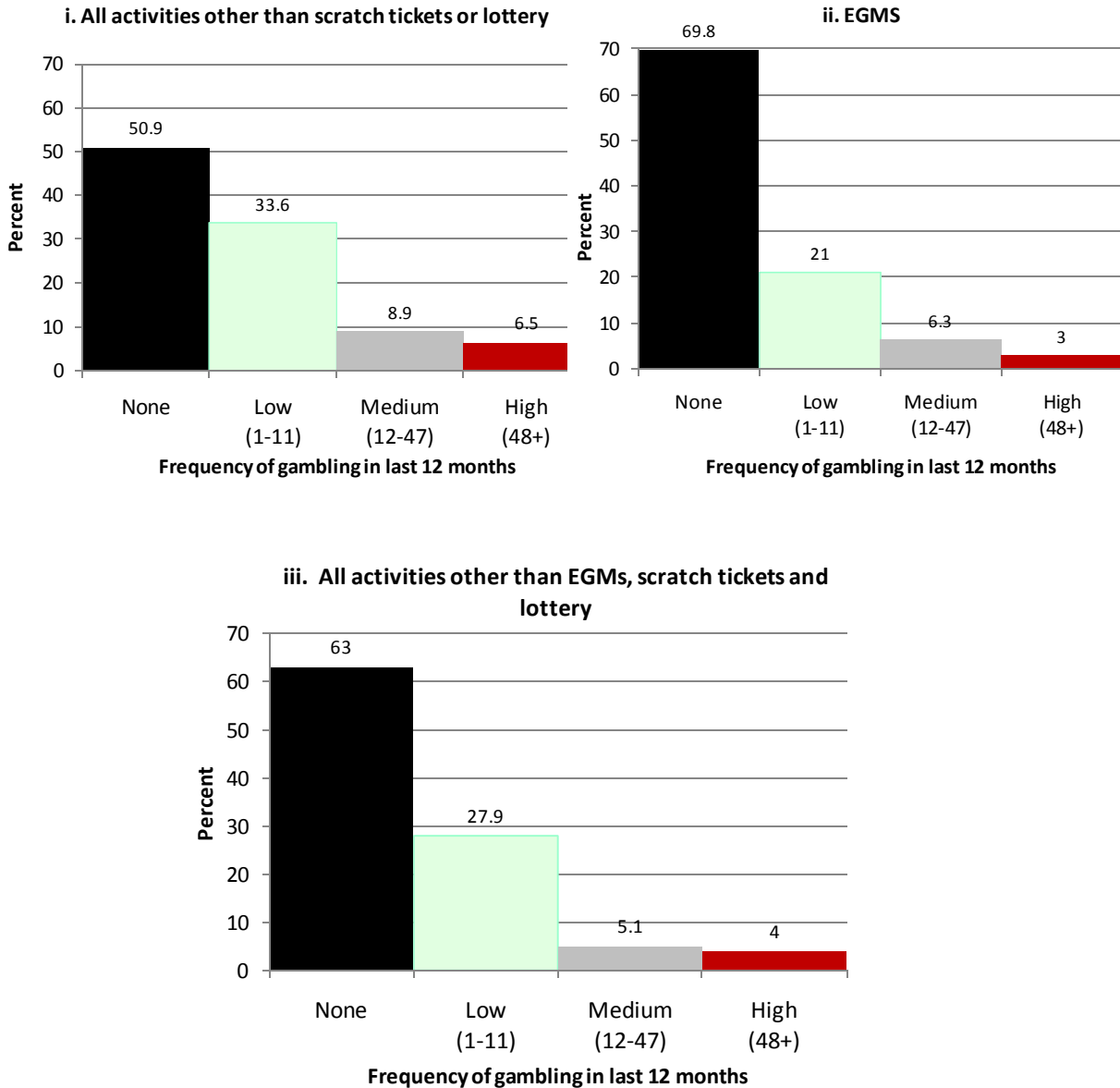


Figure 4.7: Frequency of gambling in the last 12 months on (i) all activities other than scratch tickets or lottery, (ii) EGMS, and (iii) all activities other than EGMS, scratch tickets and lottery, in the adult population, n=5,462.

4.4 Time spent gambling

Another way to consider intensity of gambling participation is in terms of time spent on activities. Table 4.4 shows the duration of gambling sessions for a number of specific activities reported in the past 12 months. For each of these activities, people also reported the typical time they spent gambling per session. The average of these estimates across individuals is shown in the table (in minutes). The longest average session times were seen

for playing private games like cards for money (close to three hours), playing casino type games on the internet (almost two and a half hours), playing bingo (about one and a half hours), and playing table games at a casino (one and a quarter hours). Playing EGMs and Keno had average session times around 45 minutes. Of course, not all individuals have the same typical session time and there is considerable variation around the average across participants.

Table 4.4: Length of gambling sessions amongst people who participate in specific activities.

	n	Mean minutes (95%CI)	% 2 hours or more (95%CI)
EGMs	546	46.8 (41.7-51.9)	11.9 (9.3-15.1)
Keno at a club, hotel, casino or other place	116	45.0 (35.8-54.2)	11.1 (5.8-20.3)
Table games at a casino	123	76.3 (61.4-91.2)	33.4 (24.1-44.2)
Bingo or housie at a club or hall	56	91.8 (66.7-116.9)	48.6 (31.2-66.3)
Casino type games on the internet for money	29	147.9 (80.8-215.0)	65.2 (41.6-83.1)
Private games, like cards, for money	123	182.8 (160.1-205.5)	82.2 (72.2-89.2)

The right-hand column of Table 4.4 shows the proportion of participants for each activity that reported typical session times of two hours or longer. As expected, the majority of those playing private games like cards, or casino type games on the internet, reported long session times (typically more than two hours), as did around a half of the bingo players and a third of the table game players. Over one in ten of the EGM (11.9%) and Keno (11.1%) players also reported typical session times of greater than two hours.

It is possible that some individuals prefer to engage in gambling activities on a more frequent basis and therefore adopt a strategy of limiting the length of sessions (a little and often approach) whereas other individuals participate less often but have longer session times ('binge' gambling). There was a sufficiently large number of EGM players in the study to investigate the length of typical session times for those defined as low, medium and high frequency EGM players. Average reported session times actually increased across these three groups and were about 34 minutes, 63 minutes and 89 minutes respectively. Figure 4.8 compares the high frequency EGM players with the entire group of EGM players, showing the proportions of each across four bands of session time (up to 30 minutes, 31 minutes to 59

minutes, 60 to 119 minutes and 2 hours or more). The high frequency players were twice as likely to have typical session times of at least an hour (68.6% compared with 34.1%) and nearly three times as likely to report session times of at least two hours (33.8% compared with 11.9%). In summary, individuals who play EGMs more often also play them for longer sessions.

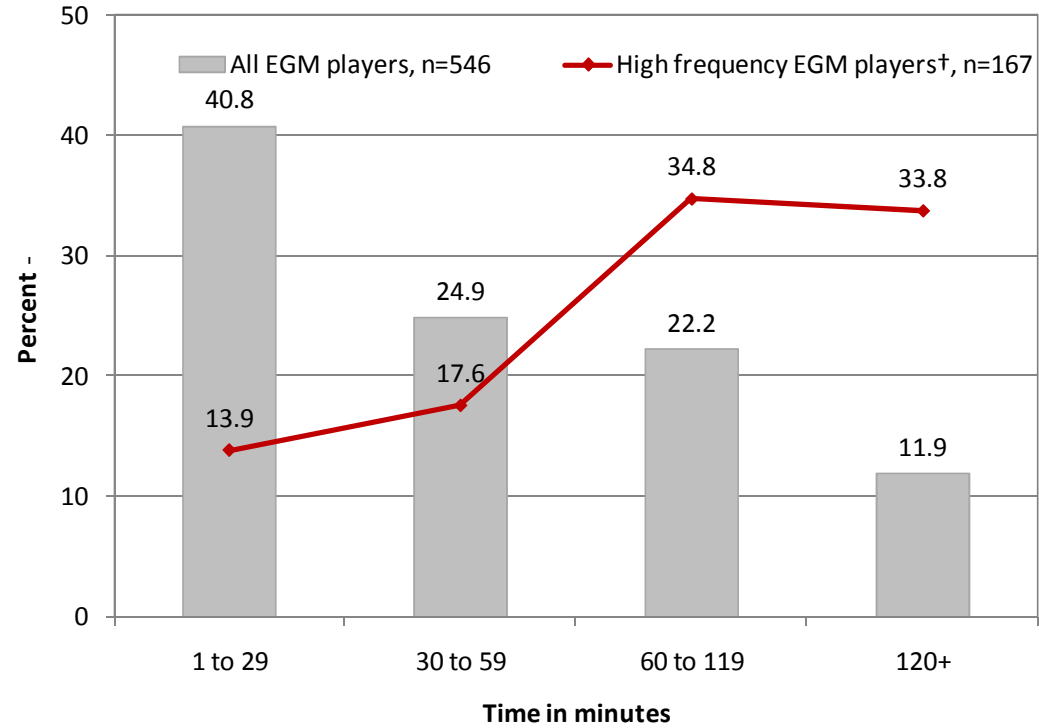


Figure 4.8: Time spent on machines when at a venue amongst all EGM players, and amongst high frequency EGM players.

†High frequency=gambling 48 or more times on EGMs in the last 12 months.

4.5 Net expenditure

Research has found that people tend to under-report how much they have ‘spent’ on gambling for some activities and over-report money spent for others. People need specific instructions about what ‘spending’ means. For each activity listed in the current study, participants were asked, ‘subtracting any winnings, how much money did you spend’ in the last 12 months. They could answer in terms of average amount per week, month, or year and net profits were also recorded. This measure was designed to assess net expenditure. So, if needed, interviewers prompted answers by further asking, ‘How out of pocket were you?’ and ‘Can you give me an approximate amount?’

Figures 4.9 and 4.10 show net expenditure amongst the adult population and amongst high frequency gamblers, across all activities. In the general adult population, 17.3% reported losses of \$520 or more, including 2.6% who lost between \$2,000 and \$4,999 and 3.4% who lost \$5,000 or more. Not surprisingly, net expenditure was greater amongst high frequency gamblers than the adult population. A large majority (74.8%) reported losses of \$520 or more, including 11.7% who lost between \$2,000 and \$4,999 and 17.2% who reported losing \$5,000 or more. Lastly, only small proportions of the adult population and the high frequency gamblers reported that they made a profit from gambling.

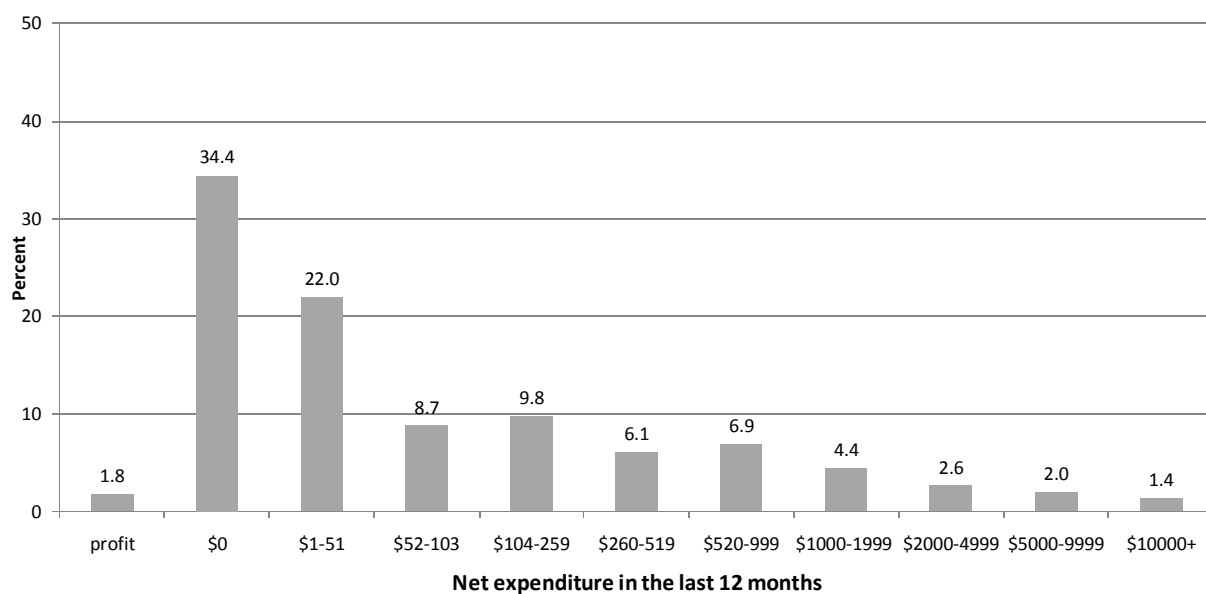


Figure 4.9: Net expenditure on all gambling activities amongst the adult population in the last 12 months, n=2,017.

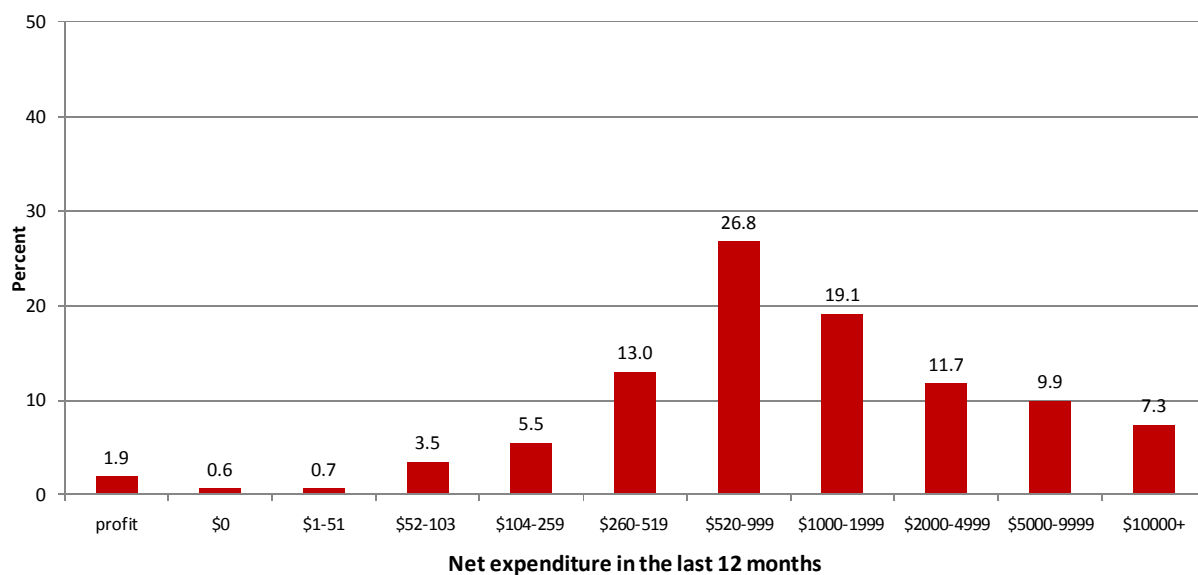


Figure 4.10: Net expenditure on all gambling activities amongst high frequency gamblers[†] in the last 12 months, n=501.

[†]High frequency=gambling 48 or more times in the last 12 months, across all activities.

Net expenditure on EGMs is also shown in a separate figure (Figure 4.11). While nearly half of the EGM players reporting losing \$1-51 in the last year, 4.8% reported losing \$5,000 or more. Figure 4.11 also shows net expenditure amongst high frequency EGM players. Nearly a third (31.7%) of the high frequency EGM players reported losing \$5,000 or more in the last year.

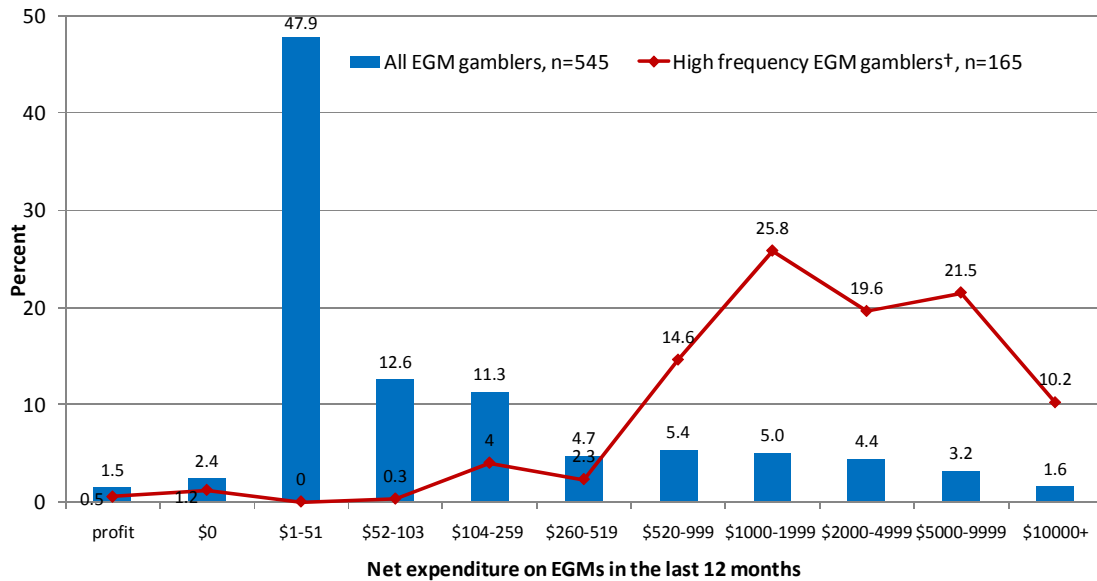


Figure 4.11: Net expenditure on EGMs for all EGM gamblers and for high frequency EGM gamblers† in the last 12 months.

†High frequency=gambling 48 or more times in the last 12 months on EGMs.

4.6 Internet gambling -

A particular focus was given to internet gambling in this report because it has not previously been assessed in the ACT population, and it is not readily measurable using other sources, such as industry data. Gambling using the internet was measured in two ways in this survey. First, everyone who reported gambling in the last 12 months was asked a general question about how often they used the internet to gamble, with no reference to particular activities. Across the adult population, 5.2% said they used the internet to gamble. This was made up of 1.3% who said they often used the internet to gamble, 1.8% who used it sometimes and 2.1% who used it rarely.

The second way of assessing gambling using the internet, was by asking participants who reported particular activities whether they used the internet to place their bets. These activities included (i) horse and greyhound racing, (ii) sporting or other special events and (iii) casino type games (for money). People placing bets using the internet were asked how often they did this, and their net expenditure, for each of the internet activities they reported. Table 4.5 shows the proportion of ACT residents who used the internet to gamble on these three types of activity in the last 12 months. Amongst the adult population, 4.2% reported using the internet to gamble in the last year on these activities. The percentages in the table add up to more than 4.2% (the total is 6.1%) because some individuals said they used the internet for more than one type of betting. The group who used the internet to place bets was fairly evenly spread across those who said they did this weekly or more, those who did it at least monthly (but not weekly), and those that did it less than monthly.

Table 4.5: Proportion of the population reporting gambling on the internet in the last 12 months, on races, sports or other special events or on casino type games for money, n=2,058.

Internet gambling in the last 12 months	Participation	
	% Yes	% No
Casino type games for money	1.0 (0.7-1.6)	99.0 (98.4-99.4)
Bet on horse or greyhound races	2.6 (1.9-3.5)	97.4 (96.5-98.1)
A sporting or special event like football, cricket, tennis, a TV show, or election	2.5 (1.8-3.4)	97.5 (96.6-98.2)
Any of the above	4.2 (3.3-5.3)	95.9 (94.7-97.7)

Net expenditure was summed across the activities listed in Table 4.5. Figure 4.12 shows total net expenditure on internet gambling in the last 12 months, that is how much people who gambled on the internet reported losing when gambling on these activities using the internet.

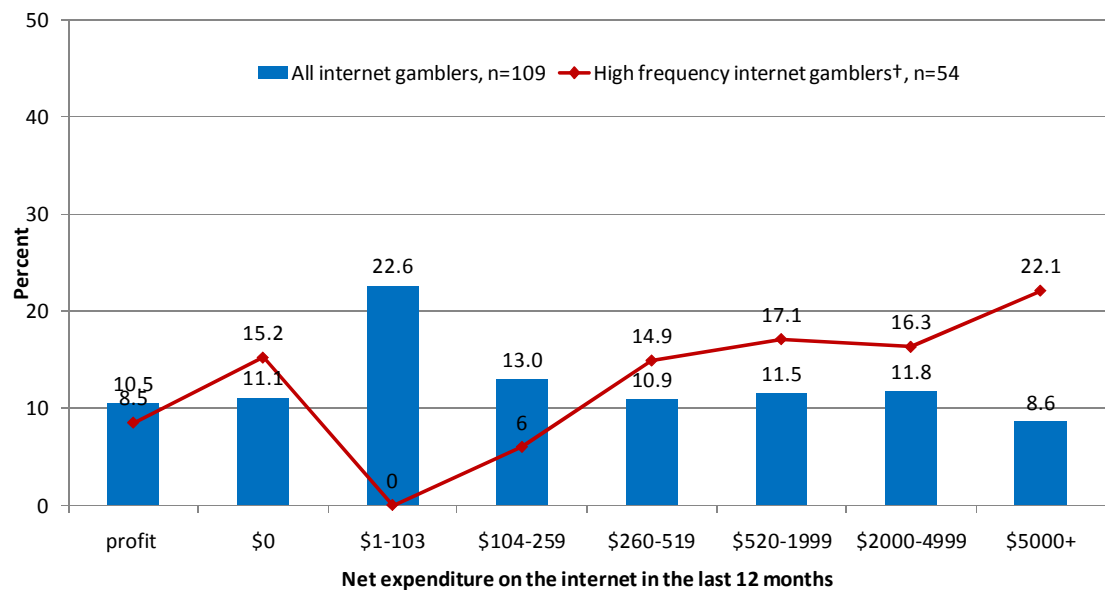


Figure 4.12: Net expenditure across internet activities in the last 12 months.
†High frequency=gambling 48 or more times in the last 12 months, using the internet.

About 20% of internet gamblers reported losing \$2,000 or more in the last 12 months, specifically when gambling using the internet, including 8.6% who lost \$5,000 or more. Figure 4.12 also shows net expenditure when gambling using the internet amongst high frequency internet gamblers. A large proportion (38.4%) of high frequency internet gamblers lost \$2,000 or more in the last 12 months when gambling using the internet, including 22.1% who lost \$5,000 or more.

As mentioned previously, research has found that participants tend to over-report expenditure on some activities and under-report expenditure on others. Therefore, caution should be taken comparing gambling expenditure across activities in the current study. However, it is more reliable to contrast expenditure on an activity amongst different subgroups of people who reported that activity.

4.7 Gambling participation and frequency from 2001 to 2009

Participation in gambling, as reported in the 2009 Survey, was compared with findings from the previous ACT gambling survey, conducted in 2001 (Table 4.6). The first two columns contrast the findings for any reported participation in the past year and the third and fourth columns contrast the figures for those who said they gambled weekly or more often on particular activities and across all activities.

The proportion of the adult population who reported gambling on at least one activity was slightly lower in 2009 (69.8%) than in 2001 (72.9%). Some notable differences for particular activities underlie this decline in overall gambling activity over time. Playing EGMs was reported by a smaller proportion (30.2%) of the ACT population in 2009 than in 2001 (38.1%). Buying scratch tickets was also less prevalent in the 2009 Survey (31.3%) than the 2001 Survey (43.4%). Interestingly, the proportion of the adult population buying scratch tickets, but only for other people, did not seem to differ over time, so the change for overall purchases reflected a difference in buying tickets for oneself.

Participation in Keno, casino table games, and bingo also declined across the two Surveys, but less markedly than EGMs and scratch tickets.

In contrast, playing private games like cards for money was reported *more often* in 2009 (8.1%) than in the earlier survey (5.1%). Although betting on sports and special events appeared more common in 2009 (7.9%), the question used in the recent survey was more comprehensive than the question used in 2001, which only covered sports betting.

The activity showing the largest proportional difference between the two surveys was playing casino type games on the internet. In 2009, this was reported by a reasonably small proportion (2.6%) of the ACT adult population. However, in 2001 only 0.2% of the population reported this gambling activity.

There were more notable changes in high frequency gambling over time, than participation. The right-hand columns of Table 4.6 show the proportion of participants who reported gambling at least 52 times in the last year on specific gambling activities. There was a

decline, often substantial, in the prevalence of high frequency gambling for all activities apart from playing casino type games on the internet (which was very uncommon in 2001) and betting on horse or greyhound races.

Table 4.6: Participation and comparable high frequency gambling (52 times or more during the last year), in the 2001 and 2009 surveys, by gambling type, n=5,462†.

	Participation		52 times or more in the last year	
	2001 %	2009 % (95%CI)	2001 %	2009 % (95%CI)
Played EGMs	38.1	30.2 (28.8-31.7)	14.8	9.8 (8.3-11.5)
Bet on horse or greyhound races	23.3	24.2 (23.2-25.8)	8.4	8.3 (5.9-9.1)
Bought instant scratch tickets	43.4	31.3 (30.0-32.7)		
For themselves	35.9	22.8 (21.6-24.1)	11.2	5.1 (3.9-6.5)
Only for others	7.5	8.5 (7.8-9.4)		
Played lotto or any other lottery game	48.4	47.7 (46.2-49.2)		
For themselves	46.5	46.1 (44.6-47.6)	36.3	24.3 (22.6-26.1)
Only bought tickets for others	1.9	1.6 (1.3-2.0)		
Played Keno at a club, hotel, casino or other place	6.9*	5.8 (5.1-6.6)	6.4*	2.2 (0.9-5.1)
Played table games at a casino	10.0	8.3 (7.4-9.3)	2.8	0.44 (0.1-1.8)
Played bingo or housie at a club or hall	3.2	2.1 (1.7-2.6)	27.1	18.9 (12.7-27.3)
Bet on a sporting or special event like football, cricket, tennis, a TV show, or election	5.9**	7.9 (7.0-8.8)	18.6**	9.7 (6.7-13.8)
Played casino type games on the internet	0.2	2.6 (2.1-3.2)	0	38.2 (28.4-49.2)
Played games like cards privately for money at home or any other place	5.1	8.1 (7.2-9.1)	9.2	3.7 (1.9-7.1)
Played any other gambling activity, excluding raffles or sweeps	0.7	0.7 (0.5-1.0)	28.4	***
All activities	72.9	69.8 (68.5-71.2)	35.8	25.2 (23.7-26.7)

†2009 estimates are weighted for age, sex, marital status and household size; 2001 estimates are weighted for household size.

*In 2001 the Keno question was restricted to ACT club, hotels, or casinos.

**In 2001 only sports betting was assessed.

***Small cell sizes mean estimates either cannot be calculated or should be interpreted with caution.

4.8 Per capita net expenditure from 2001 to 2008 -

Industry information on gambling expenditure is presented in Figures 4.13 and 4.14 to provide a context for the 2009 Survey findings. The data for these figures was provided by the Office of Economic and Statistical Research (2010). Expenditure is the net amount lost or, in other words, the amount wagered less the amount won. These figures consequently represent the gross winnings for the industry for each form of gambling.

Figure 4.13 shows per capita expenditure on all gambling activities amongst adults (aged 18 or over), in the Australian population and in the ACT. This graph shows a well documented increase in per capita gambling expenditure across the 1980's and 1990's in Australia and the ACT. This period coincided with the expansion of EGMs in Victoria, Queensland and South Australia and the introduction of casinos in most States.

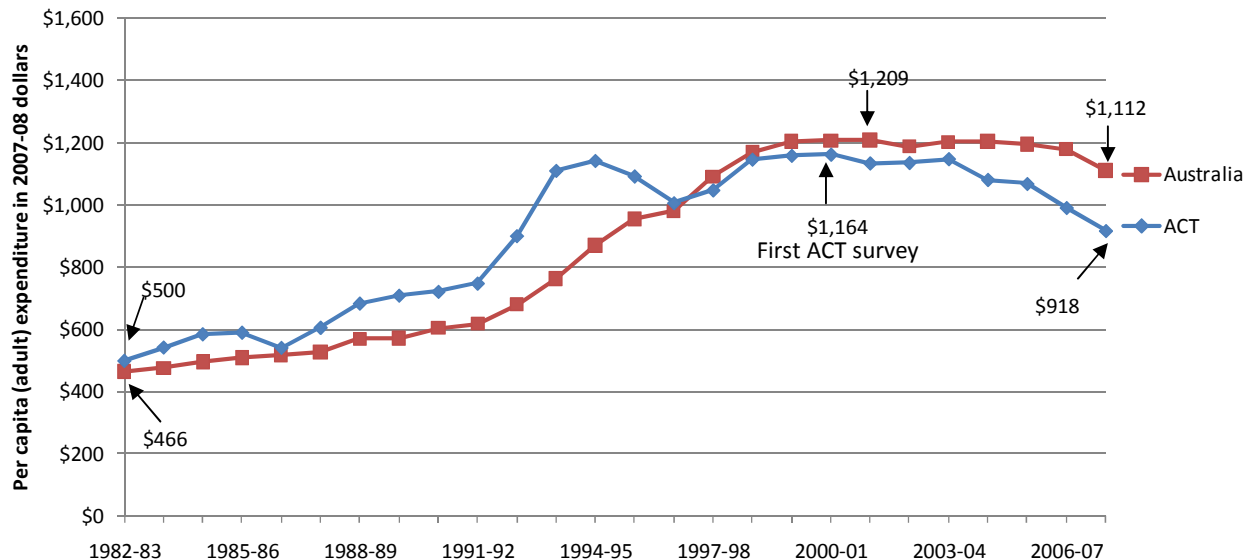


Figure 4.13: Real per capita expenditure on gambling in the ACT and Australian adult populations.

Source: Office of Economic and Statistical Research (2010).

Figure 4.13 also shows that per capita expenditure peaked at turn of the century in both the ACT and the Australian population. This graph clearly shows a decrease in per capita expenditure in the ACT since the time of the first survey undertaken in 2001. Between 2000-01 and 2007-08, per capita gambling expenditure fell by 21%. These figures, representing the average net expenditure on gambling amongst the ACT adult population, corroborate the 2009 Survey's findings of an overall decrease in gambling participation in the ACT from 2001 to 2009.

Figure 4.14 breaks down the total per capita expenditure into different types of gambling activity. Whilst expenditure on some activities has changed relatively little, it is more evident for EGMs (22% reduction), casino gambling (16% reduction), and lotteries (14% reduction).

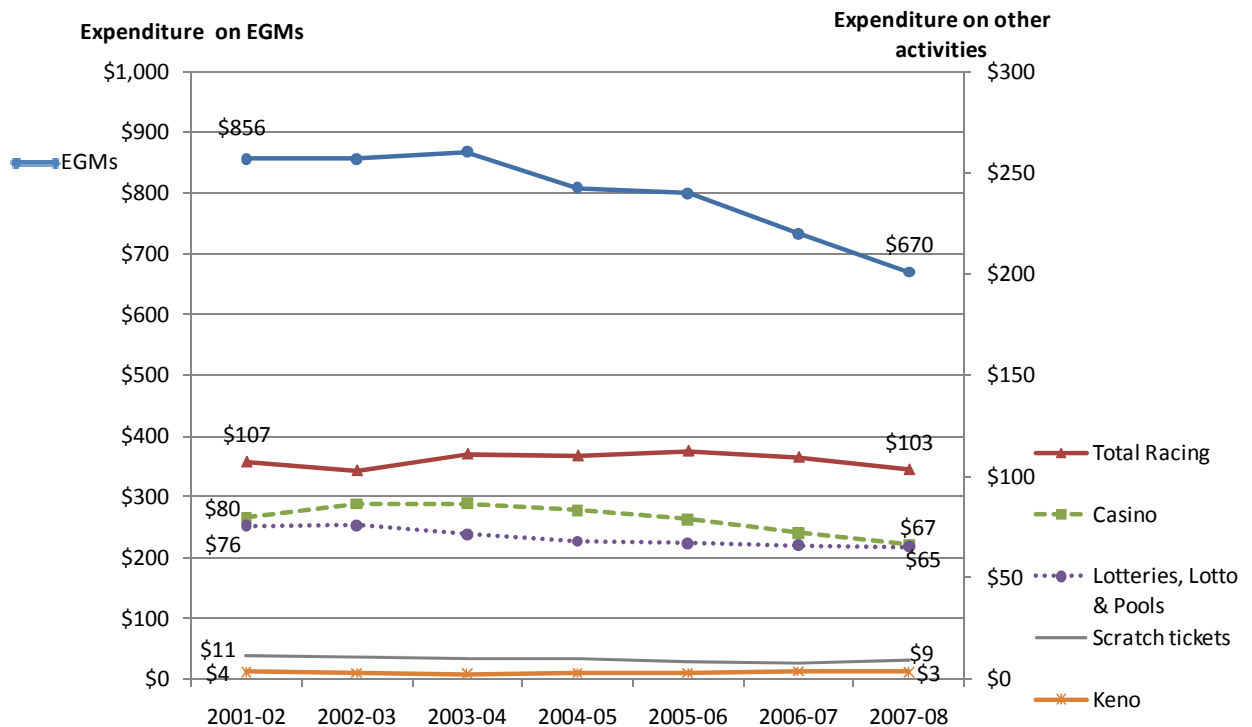


Figure 4.14: Real per capita expenditure by product from 2001-02 to 2007-08 in the ACT (in 2007/08 dollars). Source: Office of Economic and Statistical Research (2010).

4.9 Summary

There are a number of ways of quantifying gambling participation and intensity, and the strategy adopted for the 2009 ACT survey was to collect information that gave several different measures. Gambling is a very common activity for ACT adults with about 70% reporting that they had gambled at some time in the past year. The most common activities were playing lotto, playing EGMs, buying instant scratch tickets and betting on horse or greyhound races.

Amongst the adult population, about a third were non-gamblers, about a third reported gambling less than monthly and the remainder gambled monthly or more often. High frequency gambling (48 times a year or more often) was reported by 17.6% of the ACT adult population and was associated with playing lottery games, playing EGMs, betting on horse or greyhound races and buying instant scratch tickets.

There was considerable overlap in the reporting of gambling activities. Most gamblers reported more than one activity and some activities were rarely reported in isolation. About a quarter of the adult population reported just a single type of gambling activity in the past year and a third reported two or three activities. Over one in ten (11.5%) reported four or more activities. The number of activities people reported was related to the frequency of their gambling; nearly a third of high frequency gamblers (31.6%) reported four or more types of activity in the past year.

The typical duration of gambling sessions varies considerably by type of gambling. The average duration of sessions for people playing private games like cards and casino type games on the internet was 2-3 hours, while casino table games and bingo involved sessions of 1-2 hours. Playing EGMs and Keno had typical session times of around 45 minutes. Duration of sessions varies with the frequency of participation. High frequency EGM players (weekly or more) were three times more likely to report long typical session times (two hours plus).

Industry figures on per capita gambling expenditure in the ACT corroborate the current survey findings, showing an overall decrease in expenditure of 21% between 2000-1 and 2007-8 and a 22% decrease in expenditure on EGMs.

Overall gambling participation in 2009 was similar to an earlier survey in 2001, although the percentages of people playing EGMs and buying instant scratch tickets have fallen. For the large majority of activities (excluding betting on horse or greyhound races and playing casino type games on the internet) the proportion of gamblers who gambled at least 52 times a year on a particular activity was lower, and sometimes substantially lower, in 2009 compared with 2001. Playing casino type games on the internet was more prevalent amongst the adult population in 2009 (2.6%) than 2001 (0.2%), but it is still a comparatively uncommon activity.

5. Problem gambling

5.0 Prevalence of problem gambling in the adult population

Problem gambling has been defined and measured in different ways in different surveys, which can make it difficult to compare across studies carried out in different places or at different times. The main measure used in the 2009 ACT survey was the Canadian Problem Gambling Index (CPGI). Everyone who reported gambling at least once a month across activities other than scratch tickets or lottery tickets, or who had spent \$2,000 or more across all activities in the last 12 months was asked all of the questions in the CPGI (n=494). Complete data were obtained from 493 of these people. Each individual was given a score based on the number of positive responses to the items. These scores are grouped into bands that define 'non-problem gamblers' (0 score), low risk gamblers (1-2), moderate risk gamblers (3-7), and problem gamblers (8+). The ACT Survey also asked individuals whether they had ever felt they had a problem with their gambling and, if so, whether this was currently so, or in the past.

Figure 5.1 shows that 5.3% of the ACT population reported some problem gambling symptoms based on the CPGI, including 1.5% who were moderate risk gamblers and 0.5% who were classified as problem gamblers.

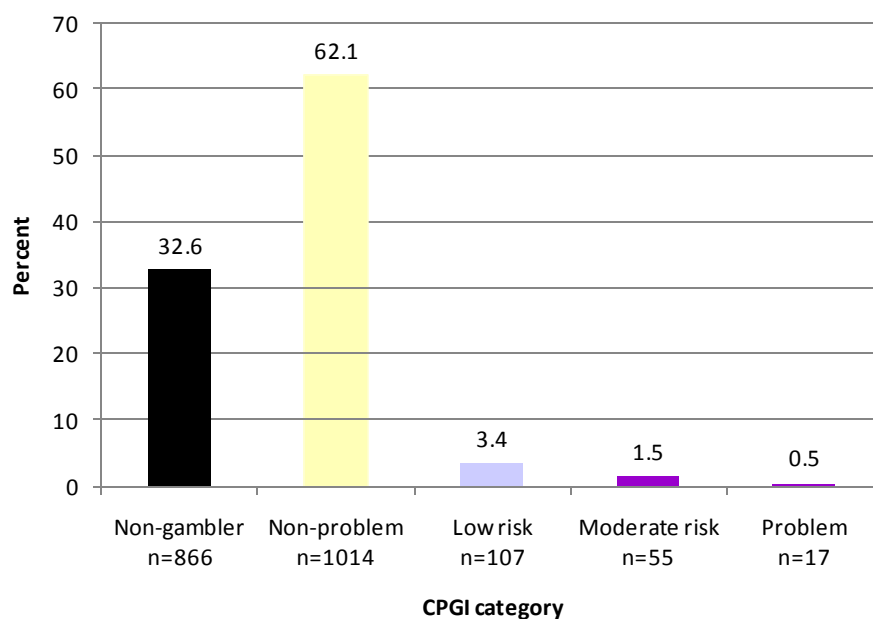


Figure 5.1: Distribution (%) of CPGI categories in the adult population.

5.1 Problem gambling by type of activity

Figure 5.2 shows the proportion of ACT adults classified as low risk, moderate risk and problem gamblers amongst participants undertaking each type of gambling activity. The column totals represent the proportion of participants reporting any symptoms (i.e. a CPGI score of 1 or more). For example, the figure of 15.2% for EGM players is the combination of low risk, moderate risk and problem gamblers. The right hand columns in Figure 5.2 show CPGI categories amongst all gamblers and amongst people who gambled on any activity other than lottery or scratch tickets. Across all activities, 7.9% of gamblers had some symptoms, with 2.2% and 0.7% classified as moderate risk and problem gamblers respectively. Amongst people who gambled on any activity other than lottery or scratch tickets, the proportion of people with problem gambling symptoms was higher (11.9%), with 3.3% and 1.0% classified as moderate risk and problem gamblers respectively.

It is important to keep in mind that many individuals reported more than one activity in the past year and their CPGI score is included for all the activities they reported. It is not possible to attach the problems reported by an individual to just one particular activity.

Looking across activities, playing casino type games on the internet (35.4%) was associated with the highest proportion of participants reporting some level of problem. Four other activities were associated with proportions of problems in the 20%-30% range, specifically playing casino table games, playing private card games for money, betting on sports or other events, and playing Keno. Playing EGMs and betting on horse or greyhound races were associated with proportions of problems in the range of 10-20%.

Moving the focus to moderate risk or problem gambling, these were found in over 10% of participants of bingo (14.1%), playing casino type games on the internet (11.9%), and Keno (11.5%). Four other activities were associated with proportions between 5% and 10%: playing private card games for money, table games at a casino, betting on sports or special events, and playing EGMs.

Estimates for problem gambling alone are based on relatively small numbers and are therefore less reliable. Problem gambling was, in the main, most prevalent amongst people undertaking five activities: bingo, casino type games on the internet, Keno, EGMs and betting on sports and other events.

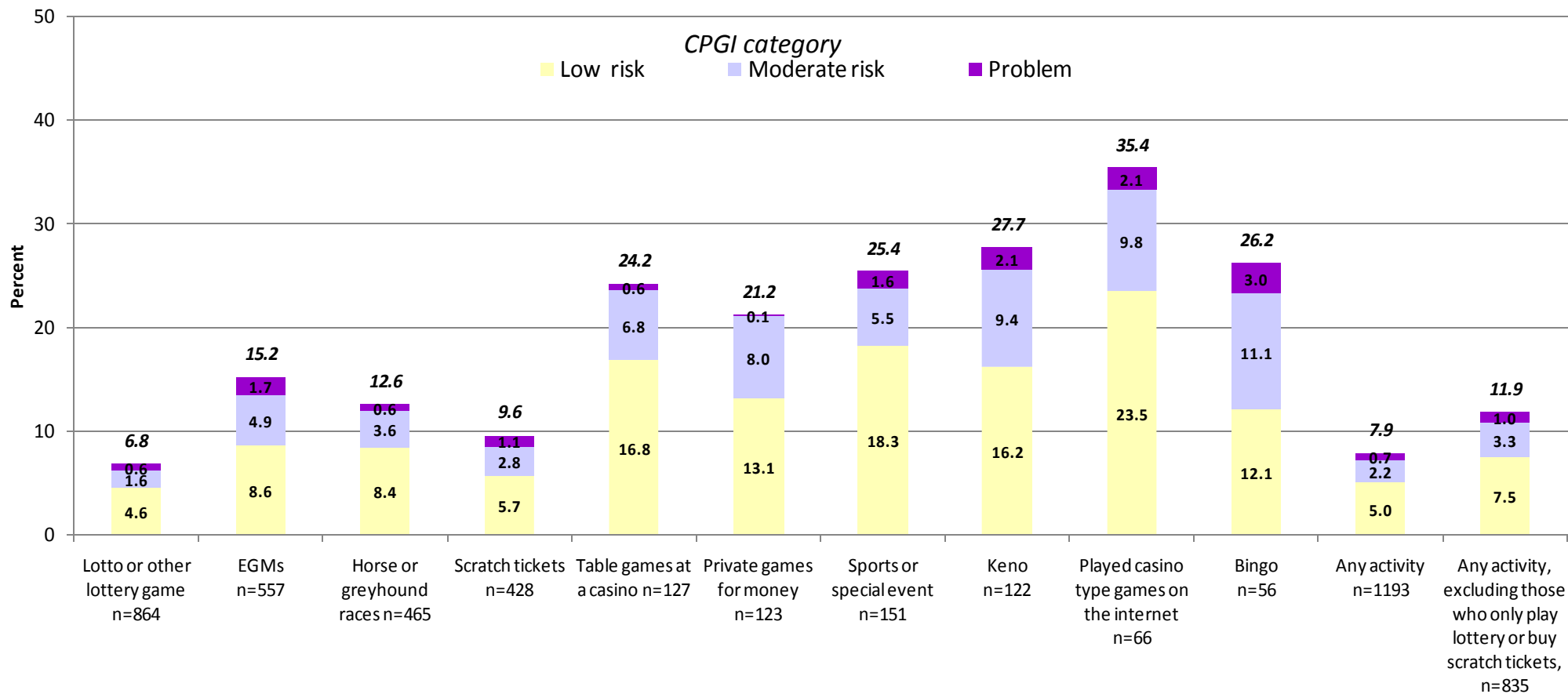


Figure 5.2: CPGI by type of gambling activity in the adult population.
 Note: Italics denote the total reporting any risk on the CPGI.

5.2 Type of activities undertaken by people with gambling problems

The importance of the type of activity for problem gambling is not just a feature of the **proportion** of people reporting problems. The total number of people engaging in the activity also contributes to the extent of problem gambling in the community. This can be illustrated by looking at all the activities reported by moderate risk/problem gambling individuals (Figure 5.3). The difference between the information in this figure and the information presented in Figure 5.2 can be illustrated by focussing on a particular type of gambling activity, such as playing EGMs. In the previous figure (Figure 5.2), 6.6% of EGM players were shown to be either moderate risk or problem gamblers (4.9% plus 1.7%), whereas Figure 5.3 shows that 92.2% of the moderate risk/problem gambling individuals played EGMs in the past year. Playing EGMs is clearly the most common activity reported by this group, although it is striking that eight out of the ten types of activity were reported by at least 25% of moderate risk/problem gamblers, and three of these were around 50% (lottery games, betting on horse or greyhound races and scratch tickets).

Figure 5.3 also shows the type of activities undertaken by people who gamble but not at moderate risk/problem levels. Amongst this group, the most common gambling activities were lottery games. This figure demonstrates that particular activities are much more frequent amongst moderate risk/problem gamblers than other gamblers. For instance, gambling on EGMs, table games at a casino, Keno, private games like cards for money, casino type games on the internet, and bingo were three or more times prevalent amongst moderate risk/problem gamblers than other gamblers.

Finally, it is also clear from Figure 5.3 that the sum of the column percentages for moderate risk/problem gamblers is well over 100% (it is around 400%). This indicates that moderate risk/problem gambling individuals report an average of about four different types of activity. In contrast, the total across columns for other gamblers is around 200% (on average two types of activity). Further information on this is presented later.

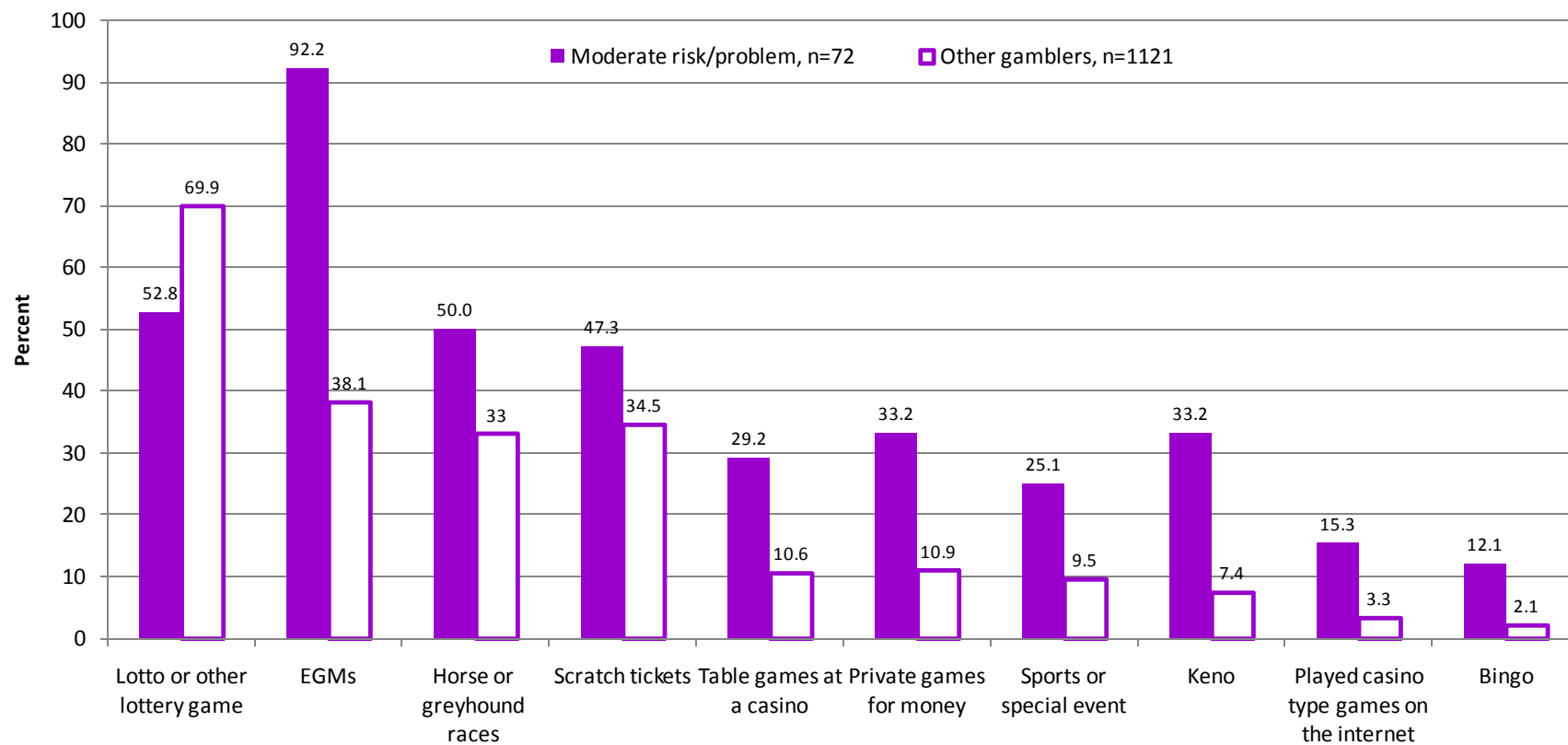


Figure 5.3: Gambling activities undertaken by moderate risk/problem gambling individuals and other gamblers.

5.3 Frequency of gambling and problem gambling

Only the individuals who gambled 12 times a year or more often across all activities (excluding lottery or scratch tickets), or who had a net expenditure on gambling of \$2,000 or more, were asked the CPGI questions and so Figure 5.4 compares CPGI categories only between medium and high frequency gamblers. Based on frequency of participation in all gambling activities (two columns on the left of the figure), over 90% of the medium frequency gamblers reported no problems on the CPGI compared with under 80% of the high frequency gamblers. When the level of problem scores is examined in more detail, the differences between these two groups are found to be more evident moving up the categories of CPGI score. Low risk gambling is about twice as common in the high frequency group, moderate risk gambling is three times as common and problem gambling is ten times more prevalent. The two columns on the right of Figure 5.4 show the same pattern when frequency of gambling is based on activities other than scratch tickets and lottery. The proportions of all levels of problem gambling are higher in the right-hand columns (at least doubled) but the pattern of findings is essentially the same.

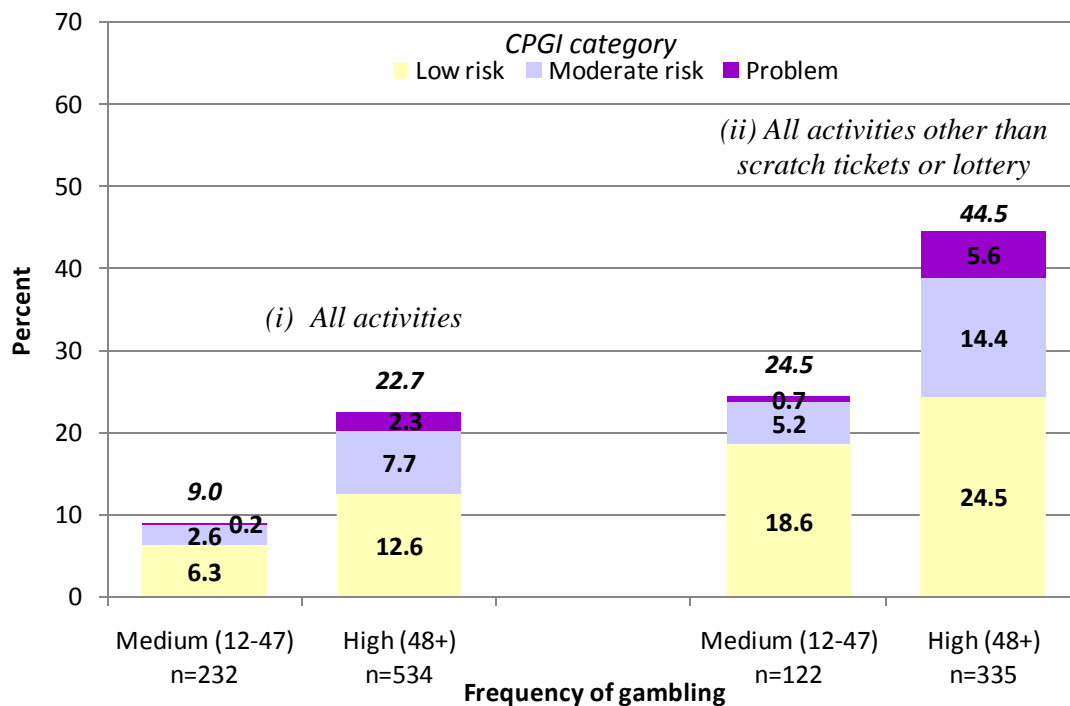


Figure 5.4: CPGI categories amongst medium and high frequency gamblers, across (i) all activities, and (ii) all activities other than scratch tickets or lottery, in the last 12 months.

There was a sufficient number of EGM players in the study to look at the association between frequency of playing EGMs and the prevalence of problem gambling. This is shown in the two columns on the left of Figure 5.5 for the same categories of CPGI score as used previously. Around 70% of medium frequency players were non-problem gamblers compared with just 45% of high frequency players. Low risk problem gambling is about one and a half times more common in the high frequency players (28.3% compared with 19.9%), moderate risk gambling is over twice as common (17.8% compared with 7.6%) and problem gambling is about four times as prevalent (8.9% compared with 2.2%).

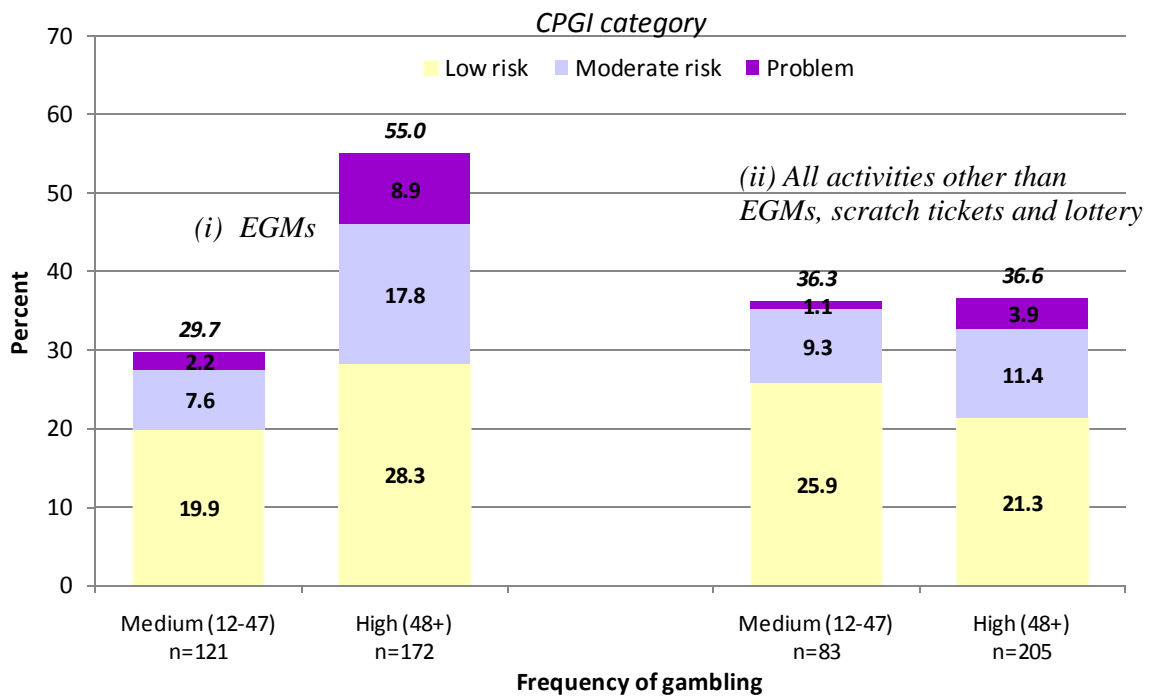


Figure 5.5: CPGI categories amongst (i) medium and high frequency EGM players and (ii) medium and high frequency gamblers on other activities (excluding scratch tickets and lottery) in the last 12 months.

The two columns on the right of Figure 5.5 show comparable findings based on frequency of gambling participation on activities other than EGMs, scratch tickets or lottery. It should be noted (in keeping with findings in Chapter 4) that many individuals will feature in both parts of Figure 5.5 because over half of the people who played EGMs (56%) also reported other gambling activities not counting scratch tickets and lotteries (see Table 4.3). The total proportion across all levels of problem gambling is very similar in the medium and high

frequency gamblers. It is only at the extreme (CPGI = 8+) that a greater proportion of problem gambling is seen amongst the high frequency gamblers.

5.4 Number of gambling activities and problem gambling

The prevalence of problem gambling was associated with the number of types of gambling activity reported in the past year. Again, combining moderate risk and problem gamblers into a single group, Figure 5.6 shows that the prevalence of moderate risk/problem gambling was 8.9% amongst gamblers who reported four or more types of activity in the past year, compared with 2.8% of those reporting two or three activities and just 0.2% of those reporting a single activity.

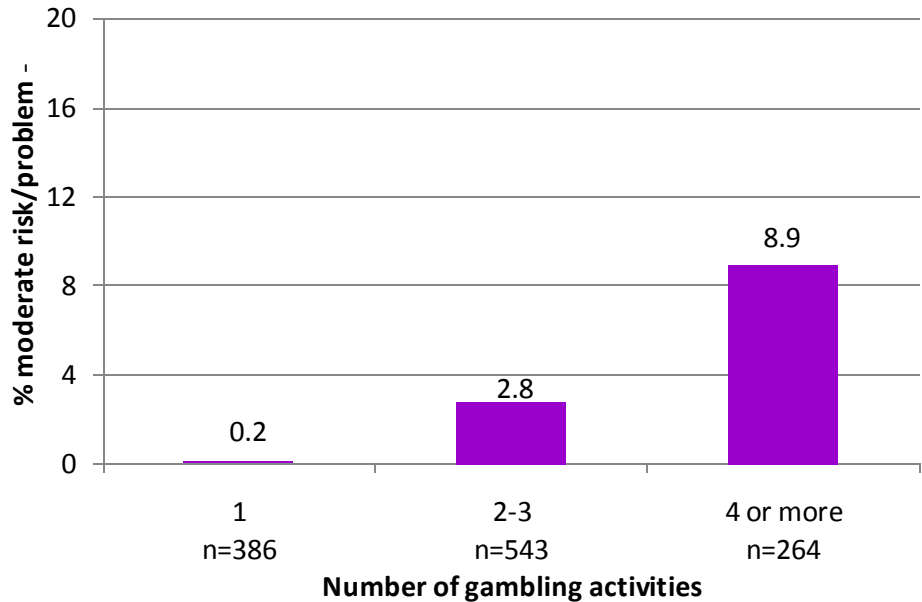


Figure 5.6: Moderate risk/problem gambling by number of gambling activities, amongst the adult population, n=1,193.

From another perspective, on average, moderate risk/problem gamblers reported 3.9 activities, low risk gamblers reported 3.8 activities, and non-problem gamblers reported 2.1 types of activities in the past year.

Number of gambling activities was also related to gambling frequency (see Figure 4.6) and so the association seen in Figure 5.6 could be more to do with gambling frequency than the number of activities. To look at this association more closely, the prevalence of problem gambling was plotted against number of activities reported just for the group identified as

frequent gamblers (Figure 5.7). This shows that the likelihood of being classified as a higher-risk gambler is related to both gambling frequency and number of activities in a cumulative way. The prevalence of moderate risk/problem gambling was 13.6% in those who were high frequency gamblers and reported four or more activities.

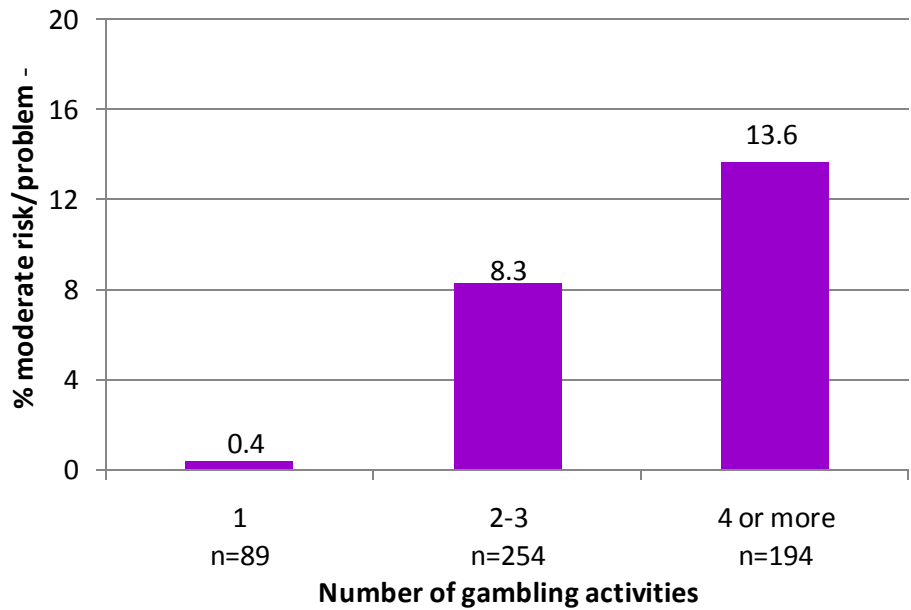


Figure 5.7: Moderate risk/ problem gambling by number of gambling activities, amongst high frequency gamblers, n=534.

5.5 Time spent on EGMs and problem gambling

There was a sufficient number of EGM players in the survey for the relationship between typical EGM session time and problem gambling to be explored (Figure 5.8). Only a small proportion of those who typically played EGMs for less than hour were classified as moderate risk or problem gamblers. Amongst those who typically reported EGM sessions between one and two hours, 11.1% were classified as moderate risk/problem gamblers. For the group reporting typical sessions of two hours or more, the prevalence of moderate risk/problem gamblers was appreciably higher at 26.3%. It should be noted that this was not just a small ‘extreme’ group of players. About a third of EGM players reported session lengths of one hour or more.

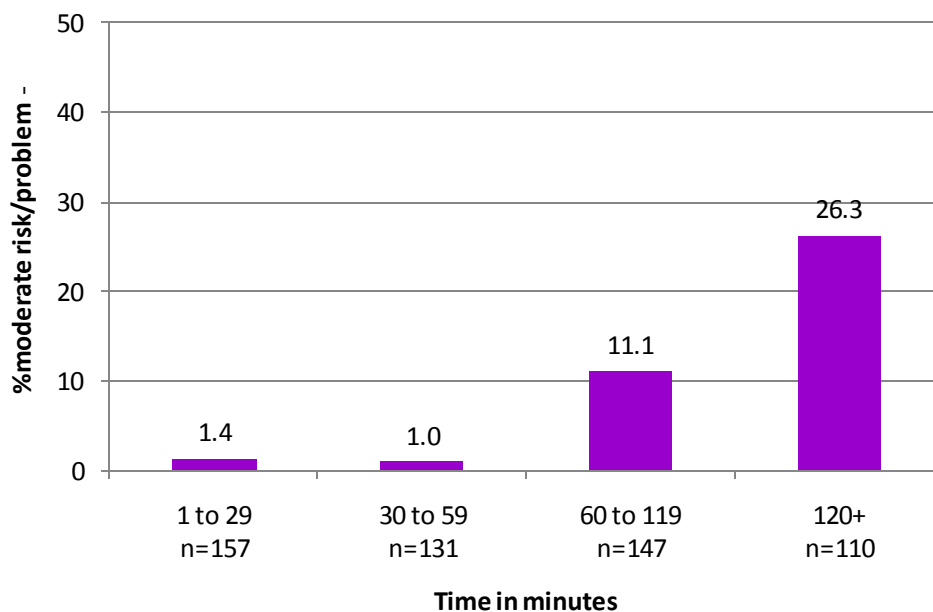


Figure 5.8: Moderate risk/problem gambling by time spent on machines when at a venue amongst all EGM players.

Amongst the 92.2% (n=66) of moderate risk/problem gamblers who played EGMs (see Figure 5.3), 38.8% played for 1 to 2 hours and 48.9% spent 2 hours or more on machines when at a venue. In contrast, a smaller proportion of EGM players who were low or non-risk on the CPGI (n=479) played the machines for 1 to 2 hours (21.3%) and 2 hours or more (9.4%) when at a venue.

5.6 Net expenditure and problem gambling

The prevalence of problem gambling was strongly associated with net annual expenditure (Figure 5.9). Over 30% of those whose expenditure was reported to be \$5,000 or more in the past year were moderate risk/problem gamblers.

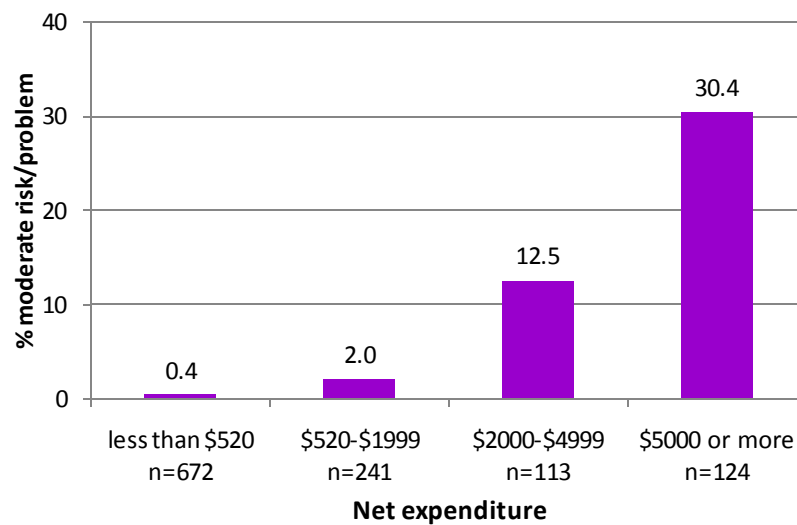


Figure 5.9: Moderate risk/problem gamblers by net gambling expenditure in the last 12 months.

Figure 5.10 shows net annual expenditure amongst non-problem, low risk and moderate risk/problem gamblers. Three quarters of non-problem gamblers lost less than \$520 whereas 58.6% of moderate risk/problem gamblers lost \$5,000 or more in the last 12 months.

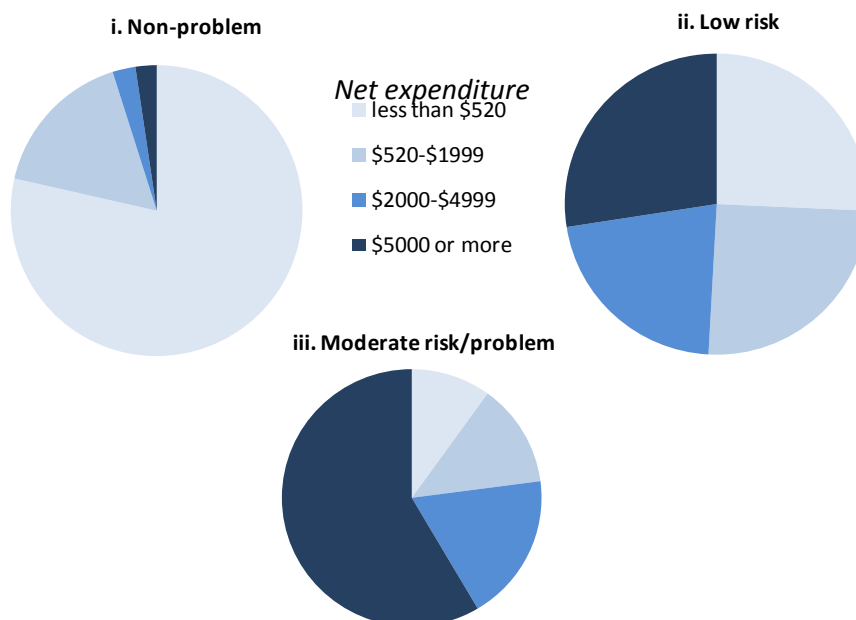


Figure 5.10: Net gambling expenditure in the last 12 months amongst (i) non-problem, (ii) low risk and (iii) moderate risk/problem gamblers.

5.7 Using the internet to gamble and problem gambling -

Figure 5.11 shows that a larger proportion of people using the internet to gamble on (i) horse or greyhound races, (ii) casino type games for money, or (iii) sports/special events reported some problem gambling symptoms compared to other gamblers. About a third of people who used the internet to gamble had some symptoms compared to 6.1% of other gamblers. One in ten people who used the internet to gamble were moderate risk/problem gamblers.

Looking at this association from a different perspective, about a quarter of the moderate risk/problem gamblers (23.3%) had used the internet to gamble on horse/greyhound races, casino type games or sports/special events.

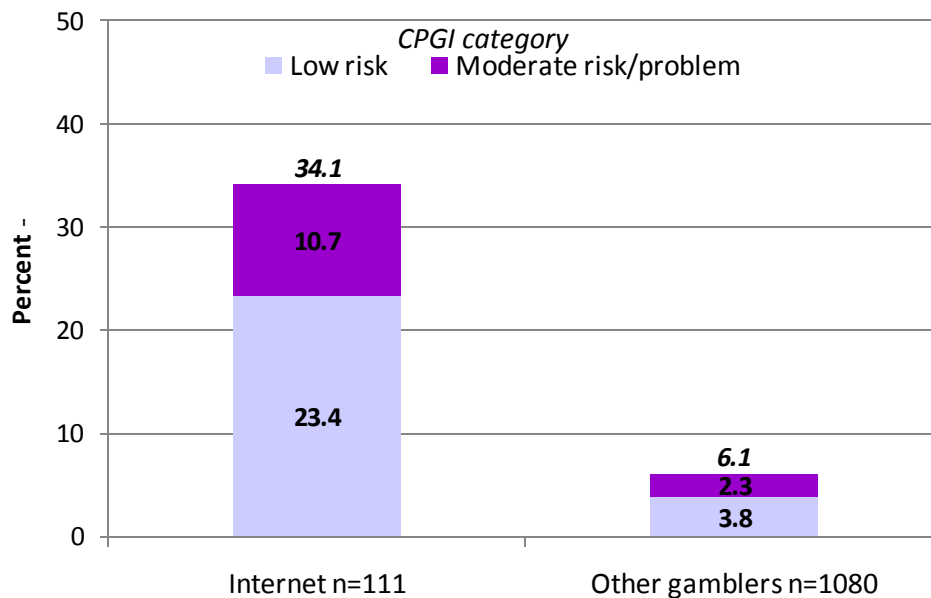


Figure 5.11: Proportion of low and moderate risk/problem gambling amongst people who use the internet to gamble and other gamblers.

Note: Italics denote any risk.

5.8 Self-identified problem gambling and duration of problems

Everyone was asked if they felt they had ever a problem with their gambling and 3.8% (n=123) said they felt this way. This included 1.7% who reported current problems and 2.1% who reported these problems were in the past. Of those who were classified as moderate risk or problem gamblers based on their CPGI scores, a large proportion self-identified as having a current (65.9%) or past (8.7%) problem with gambling.

Figure 5.12 shows the duration of problems reported by individuals who self-identified as having a current or past problem with gambling. Nearly half (47.6%) of those who reported having current problems said they had had problems for five or more years. Nearly a third of people with current problems said they had had problems for less than one year.

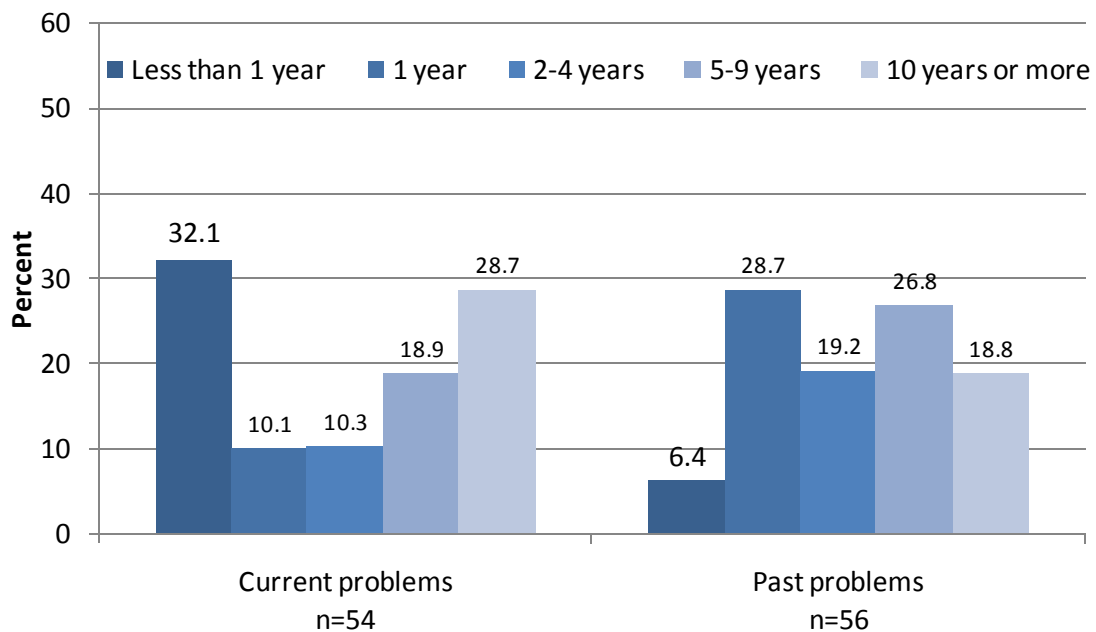


Figure 5.12: Duration of problems amongst people reporting current and past gambling problems.

5.9 Gambling problems and symptoms, 2001 to 2009

Table 5.1 shows the prevalence in 2001 using the SOGS and that found in 2009 using the CPGI. These measures are not comparable and so no inference can be made about change over time in the prevalence of problem gambling. Table 5.1 simply shows that a larger proportion of ACT adults were identified as problem gamblers using the SOGS in 2001 (1.91%), than were identified using the CPGI in 2009 (0.5%). Indeed research has argued that the SOGS over estimates problem gambling, with the SOGS (5+) screen consistently identifying a greater proportion of people than does the CPGI (8+), sometimes to a large degree (Ferris & Wynne, 2001b; Productivity Commission, 2010; Young & Stevens, 2008).

Table 5.1: SOGS scores and CPGI scores in 2001 and 2009 respectively.

Year	Problem gambling measure	Prevalence in the adult population
2001	SOGS score	%
	3+	3.13
	5+ (problem)	1.91
	10+ (extreme)	0.45
2009	CPGI score	%
	1+ (low risk)	5.4
	5+ (moderate risk)	2.0
	8+ (problem)	0.5

However, several of the CPGI items were based on SOGS questions and are therefore broadly comparable. Table 5.2 shows responses to these items in 2001 and 2009. These comparisons could only be made for the groups of regular gamblers (i.e. gambling at least weekly) across the two studies as the SOGS questions were only asked of these people in the 2001 Survey. It is essential to note that any observed differences might be due to the different response options, and sampling and weighting methods used across studies. However, overall, it seems unlikely that there has been an increase in these specific problems between 2001 and 2009.

The SOGS includes an item asking, ‘Do you feel you’ve ever had a problem with your gambling?’ and in 2001 16.5% of regular gamblers self-identified as having a gambling problem when asked this question. In 2009 everyone was also asked this SOGS item unless they had already said that they sometimes, most of the time, or almost always had a problem with gambling in the past 12 months, when completing the CPGI. Combining responses to

the SOGS and CPGI questions, 22.1% of regular gamblers self-identified as having had a problem with their gambling in their lifetime. The proportion of regular gamblers who self-identified as having a gambling problem was somewhat higher in 2009 than in 2001. As for the results reported in Table 5.2, it is essential to note that differences in estimates over time might be due to the different response options, and sampling and weighting methods used across studies.

Table 5.2: Responses (% amongst regular gamblers[†]) to comparable SOGS and CPGI items amongst regular gamblers in 2001 and 2009 respectively.

SOGS items	2001	CPGI items	2009
In the last 12 months have people criticized your gambling or told you that you had a gambling problem regardless of whether or not you thought it was true?	19.9% <i>yes/no</i>	In the past 12 months have people criticized your betting or told you that you had a gambling problem regardless of whether or not you thought it was true?	12.4% <i>sometimes, most of the time, almost always</i>
In the last 12 months have you felt guilty about the way you gamble or what happens when you gamble?	32.5% <i>yes/no</i>	In the past 12 months have you felt guilty about the way you gamble or what happens when you gamble?	24.6% <i>sometimes, most of the time, almost always</i>
In the last 12 months when you gambled how often have you gone back another day to try to win back the money you lost?	7.9% <i>often or always</i>	In the past 12 months when you gambled have you gone back another day to try to win back the money you lost?	3.9% <i>most of the time, almost always</i>

[†]Regular gamblers were defined as gambling 52 times a year or more often across all activities other than lottery or scratch tickets.

5.10 Problem gambling across jurisdictions -

Table 5.3 shows the prevalence of gambling problems by jurisdiction, where surveys have used the CPGI. It remains difficult to compare these rates for numerous reasons (see Productivity Commission report (2010) for a full discussion). In brief, states have used different sampling methods, response options have varied and methods used to weight data have not been consistent. The impact of sampling differences is demonstrated in Table 5.3. The 2009 ACT Survey gave the CPGI to everyone who gambled at least 12 times in the last year, across activities other than lottery or scratch tickets. Other states have used a higher threshold (52 times in the last year) and one state gave the CPGI to all gamblers. The bracketed estimates for the ACT in Table 5.3 show the prevalence rates, had we used the 52+ frequency threshold. The estimates for problem gambling, and especially moderate risk gambling, would have been lower.

Table 5.3: Prevalence of gambling problems amongst the adult population, gamblers and regular gamblers†, by jurisdiction.

Jurisdiction	Share of adults	Year	CPGI 3-7	CPGI 8+	CPGI 3+
General population					
NT	-	2005	1.38	0.64	2.02
SA	-	2005	1.21	0.43	1.65
TAS	-	2007	0.84	0.52	1.35
VIC	-	2008	2.36	0.70	3.06
NSW	-	2009	1.3	0.4	1.7
QLD	-	2009	1.58	0.37	1.96
ACT††	-	2009	1.45 (0.98)	0.45 (0.39)	1.90 (1.37)
Gamblers					
NT	73.0	2005	1.89	0.87	2.77
SA	69.6	2005	1.74	0.62	2.36
TAS	71.6	2007	1.17	0.72	1.89
VIC	73.1	2008	3.23	0.96	4.19
NSW	69.6	2009	1.87	0.57	2.44
QLD	74.7	2009	2.12	0.50	2.62
ACT††	69.8	2009	2.16 (1.45)	0.67 (0.57)	2.83 (2.02)
Regular gamblers†					
NT	-	2005	18.4	8.5	26.9
SA	9.4	2005	10.0	3.8	13.8
TAS	7.5	2007	11.1	6.9	18.0
VIC	4.1	2008	16.8	9.0	25.8
NSW	9.3	2006	19.0	10.2	29.2
QLD	5.6	2009	13.7	5.7	19.4
ACT	6.5	2009	14.4	5.6	20.0
Regular EGM players					
NT	9.1	2005	-	-	-
SA	-	2007	16.2	9.3	25.5
TAS	1.6	2007	7.6	19.3	26.9
VIC	1.6	2008	19.0	16.4	35.4
NSW	5.0	2006	20.9	15.9	36.8
QLD	3.5	2009	16.2	6.8	23.0
ACT	3.0	2009	17.8	8.9	26.7

Jurisdictions other than the ACT: Source Productivity Commission (2010: pp 5.18-5.24), Tables 5.2, 5.4 and 5.5.

For each section of the table, the most recent CPGI prevalence rates are shown for each jurisdiction.

†Regular gamblers were defined as gambling 52 times a year or more often across all activities other than lottery or scratch tickets.

††In the ACT the CPGI was given to people gambling 12 or more times in the last 12 months across all activities except scratch tickets and lottery games. Bracketed text denotes prevalence estimates if only ‘regular gamblers’ had received the CPGI.

5.11 Summary

Problem gambling can be defined and measured in different ways. Using the CPGI, the 2009 survey found that 0.5% of adults were problem gamblers, 1.5% were moderate risk gamblers, 3.4% were low risk and 62.2% were non-problem gamblers. The vast majority of people who gambled (92.1%) reported no symptoms, but 5.0% of gamblers were classified as low risk, 2.2% as moderate risk and 0.7% as problem gamblers. When people who only gambled on scratch tickets or lottery were removed from the analysis the proportion of people with some gambling symptoms increased from 7.9% to 11.9%.

The proportion of problem gambling varies by type of activity. Playing casino type games on the internet (35.4%) was associated with the highest proportion of participants reporting some level of problem. Four other activities were associated with proportions of problems in the 20%-30% range, specifically playing casino table games, playing private card games for money, betting on sports or other events, and playing Keno. Playing EGMs and betting on horse or greyhound races were associated with proportions of problems in the range of 10-20%.

Looking at the association of type of activity and problem gambling from a different perspective, 92.2% of moderate risk/problem gamblers had played EGMs in the past year compared to 38.1% of other gamblers. Playing table games at a casino, Keno, private games like cards for money, casino type games on the internet, and bingo were also considerably more common amongst moderate risk/problem gamblers than other gamblers. At least a quarter of the moderate risk/problem gamblers reported eight out of ten types of activity; about half gambled on lottery games, horse or greyhound races and scratch tickets. These findings reflect the high number of activities (on average about four) reported by the moderate risk problem gambling group. In contrast, six out of ten types of activity were undertaken by 11% or less of gamblers who were not moderate risk/problem gamblers.

Problem gambling was also related to more frequent gambling. Moderate risk gambling was three times as common and problem gambling was ten times more common in high frequency gamblers (weekly or more often) compared with medium frequency gamblers. This association between problem gambling and frequency of gambling was seen for EGM players

specifically but was less evident for frequency based on other gambling activities (even when scratch tickets and lotteries were not counted in the frequency). Overall, these findings support the argument that problem gambling is characterised by more frequent gambling.

The prevalence of problem gambling was also strongly associated with net annual expenditure. Over 30% of those whose expenditure was \$5,000 or more in the past year fell into the moderate risk/problem gambling group.

6. Socioeconomic and demographic characteristics associated with gambling

This chapter explores associations of socioeconomic status and demographic characteristics with gambling. The first two sections focus on gambling frequency, and the latter two sections describe problem gambling. Chi-square tests were used to assess the significance of the associations of socioeconomic status and demographic characteristics with gambling measures. Asterisks denote significant associations for each graph.

6.0 Socioeconomic and demographic characteristics across levels of gambling frequency

Figures 6.1 to 6.9 show how levels of gambling frequency (across all activities) vary across demographic and socioeconomic characteristics. Overall, men gambled more often than did women (Figure 6.1) and this was most clearly shown in the proportions of high frequency gamblers: 23.9% of men compared with 12.9% of women. This is a familiar pattern in gambling surveys.

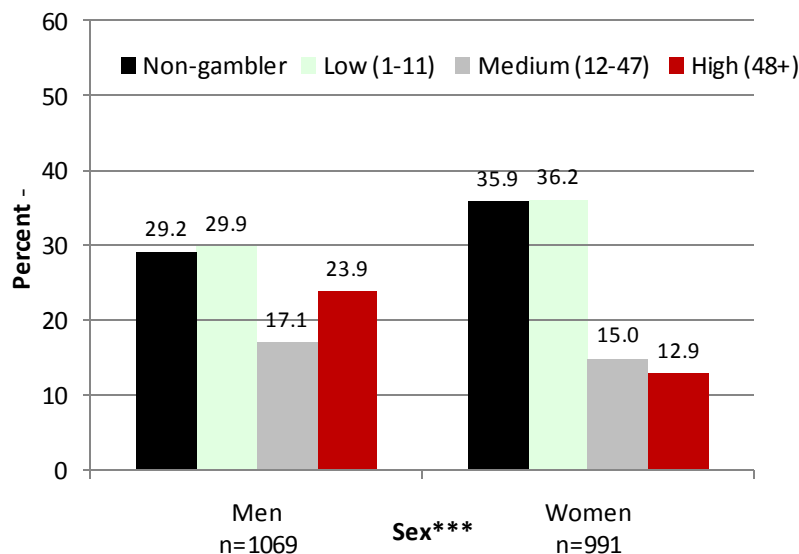


Figure 6.1: Frequency of gambling across all activities by sex in the adult population.

* $p < .05$; ** $p < .01$; *** $p < .001$.

Frequency of gambling differs across age groups (Figure 6.2). The pattern is interesting because both non-gambling and high frequency gambling are more common in progressively older groups. Medium frequency gambling is much the same across age groups and, consequently, low frequency gambling shows a marked decline with age, from 43.8% in the group aged 18-29 years to 24.5% in those aged 60 years and older. It is important to recognise that this pattern could either represent differences between different generations or it could indicate that individuals change their gambling behaviour as they get older. In the latter instance, the oldest age group (60 years or more) would have been more like the youngest group when they were younger themselves. In the former instance, the youngest age group (18 to 29 years) would retain their profile of gambling frequency as they grow older.

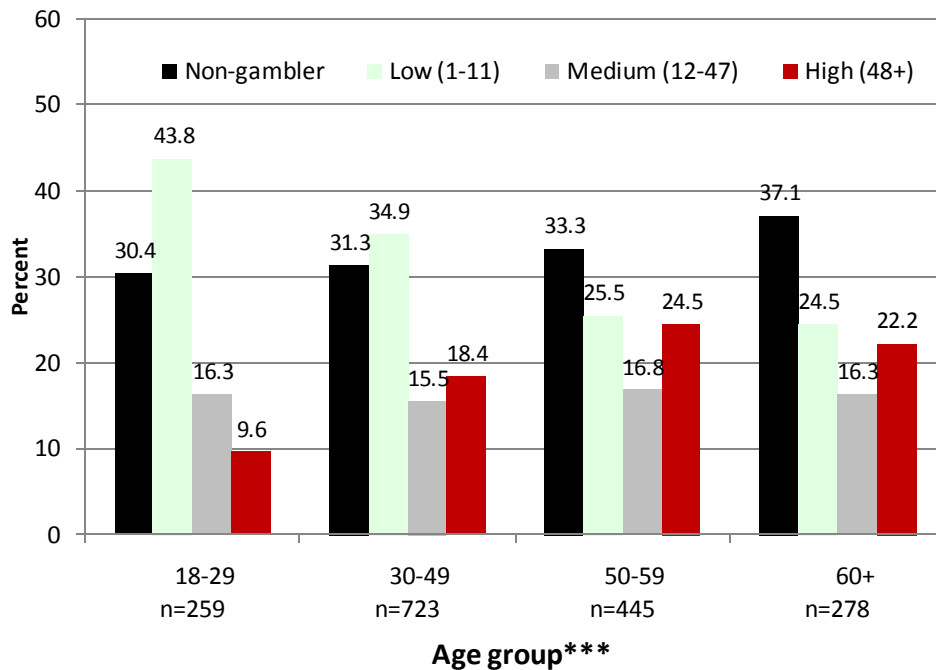


Figure 6.2: Frequency of gambling across all activities by age in the adult population.
 *p<.05; **p<.01; ***p<.001.

People born in Australia reported more frequent gambling than those born elsewhere (Figure 4.6). However, this was mainly seen as a difference in the proportion of non-gamblers (30.6% of Australian-born compared to 41.0% of other individuals) rather than higher frequency levels.

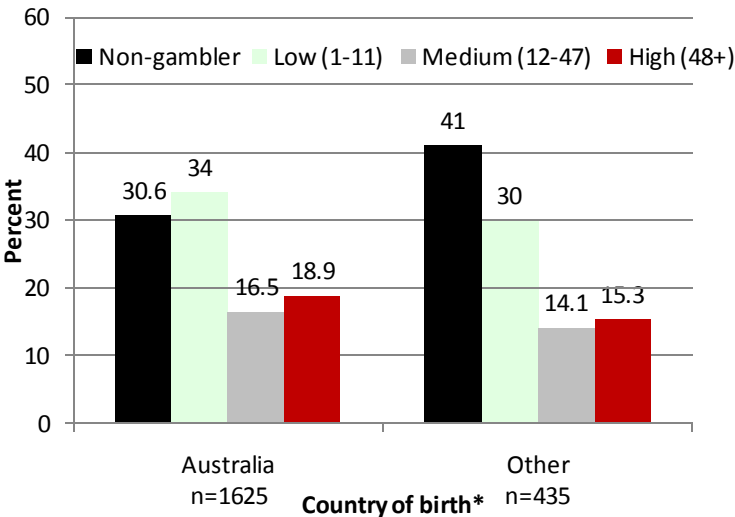


Figure 6.3: Frequency of gambling across all activities by country of birth in the adult population. * $p < .05$; ** $p < .01$; *** $p < .001$.

Gambling frequency showed little variation across marital status, with the notable exception of the widowed group (Figure 6.4) who had a high proportion of non-gamblers (44.8%). However, this group consists of more women than men and contains more older than younger individuals, so this high percentage may simply reflect those other characteristics. Similarly, gambling frequency showed remarkably little variation across household type (Figure 6.5).

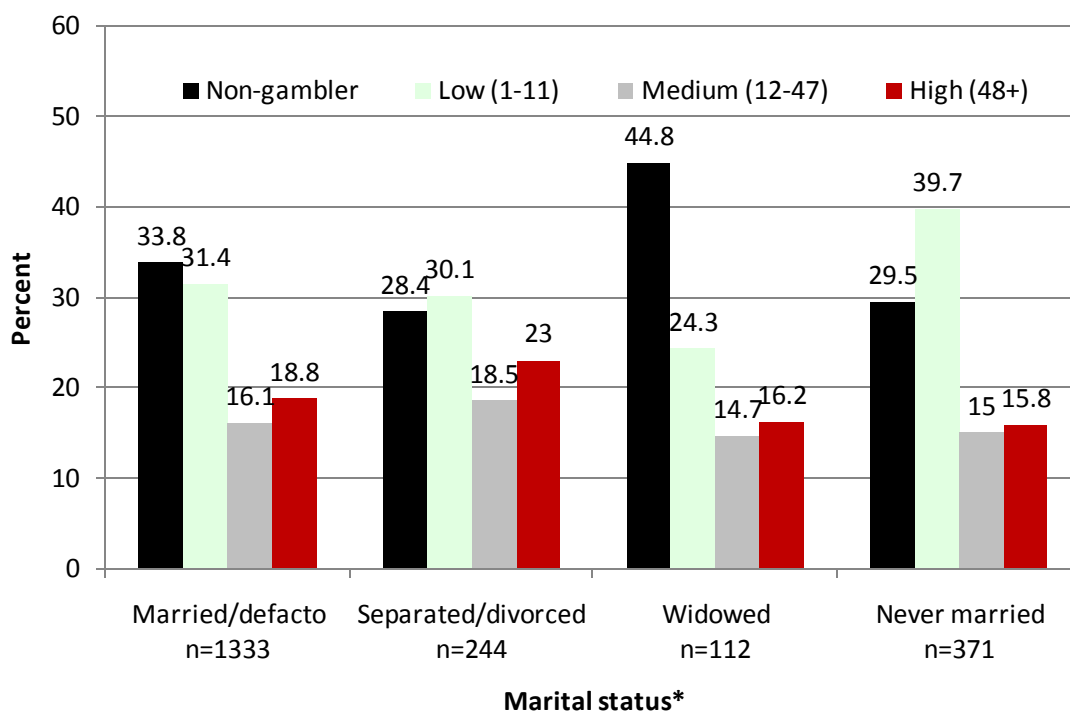


Figure 6.4: Frequency of gambling across all activities by marital status in the adult population. * $p < .05$; ** $p < .01$; *** $p < .001$.

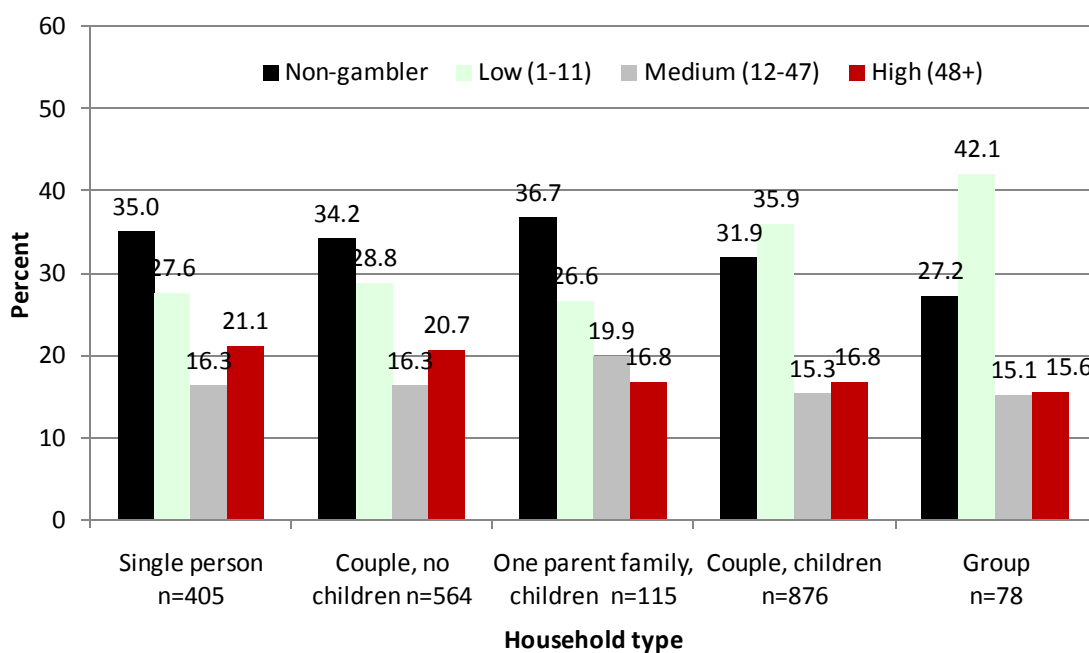


Figure 6.5: Frequency of gambling across all activities by household type in the adult population. * $p < .05$; ** $p < .01$; *** $p < .001$.

Given that gambling involves financial expenditure, it is appropriate to consider whether the extent of gambling is related to employment and income. For employment status (Figure 6.6), people in full-time employment were more likely to report gambling in the past year (only 26.2% were non-gamblers) and the proportion of high frequency gambling (20.5%) was somewhat above that for the general population (17.6%). About two-thirds of students who were not in the paid labour force were non-gamblers; a very high proportion compared to other employment status groups.

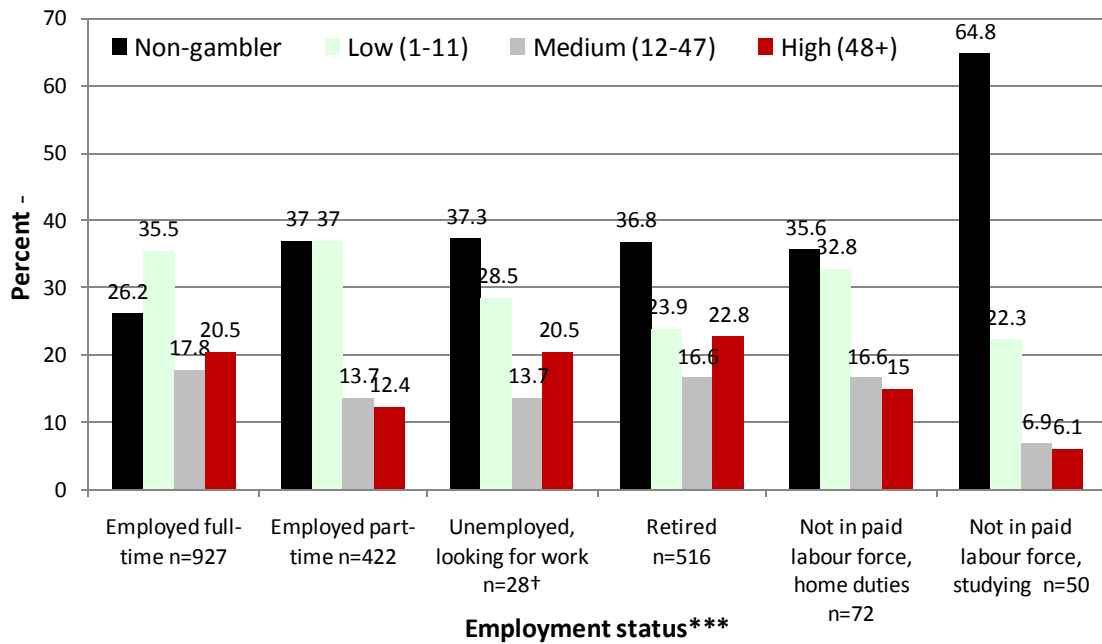


Figure 6.6: Frequency of gambling across all activities by employment status in the adult population. * $p < .05$; ** $p < .01$; *** $p < .001$.

Figure 6.7 shows that those whose main source of personal income was a wage or salary were less likely to be high frequency gamblers and more likely to be low frequency gamblers than either people on government pensions, allowances or benefits, or those whose main source of income was superannuation or annuity. A small group in the population who had no personal income reported comparatively low gambling frequencies.

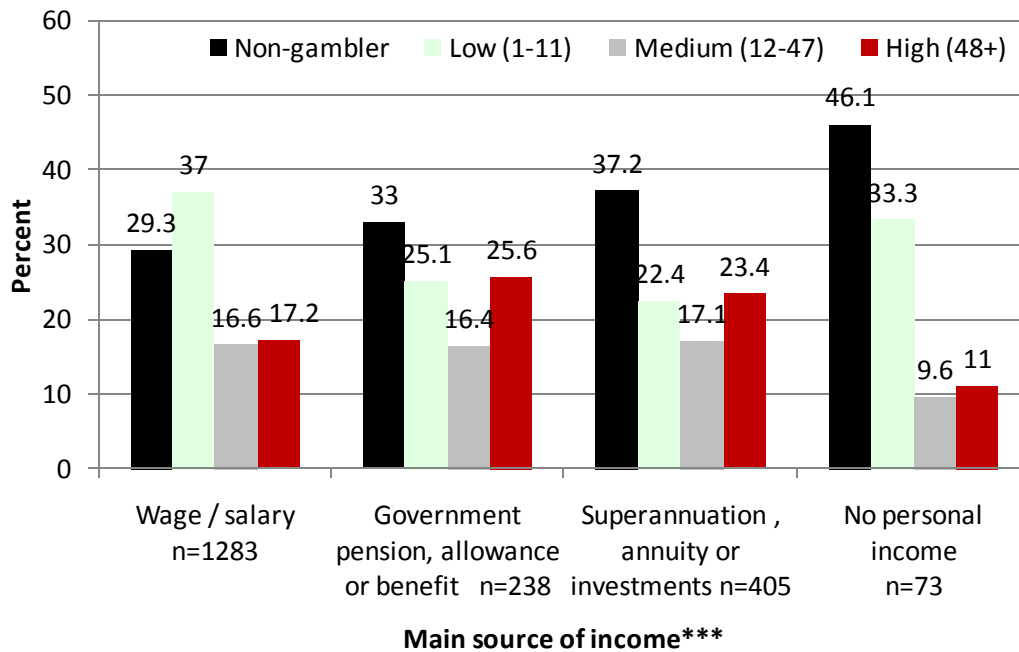


Figure 6.7: Frequency of gambling across all activities by main source of income in the adult population. *p<.05; **p<.01; ***p<.001.

Personal income showed some relationship with gambling frequency but the pattern was not clear cut (Figure 6.8). The proportion of non-gamblers was higher at both ends of the income distribution and, correspondingly, medium and high frequency gambling was more common in the middle of the income distribution. Again, the variation was not striking.

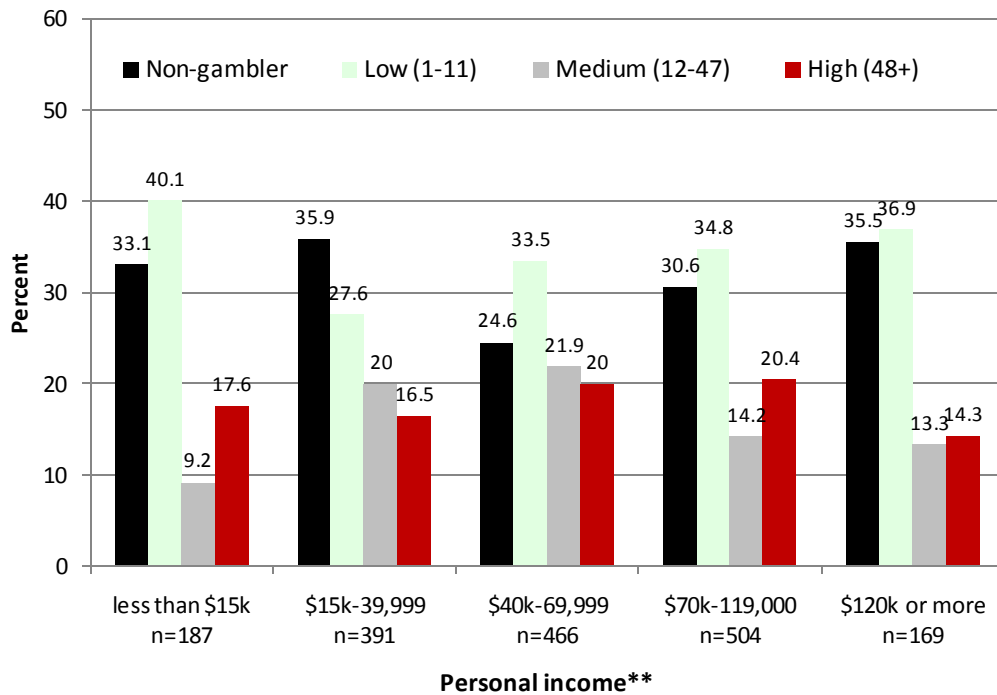


Figure 6.8: Frequency of gambling across all activities by household type in the adult population. * $p < .05$; ** $p < .01$; *** $p < .001$.

The most striking of all the associations with gambling frequency is that seen for level of education (Figure 6.9). The most educated group (higher degree level) showed both the highest proportion of non-gamblers (48.0%) and the lowest proportion of high frequency gambling (8.6%). In contrast, the least educated group (Year 10 equivalent or less) showed the lowest proportion of non-gamblers (19.8%) and the highest proportion of high frequency gambling (32.0%). Other groups were intermediate between the two extremes. More complex data analyses will be needed to determine how gambling frequency relates to education independently of other characteristics (such as age, sex and country of birth) but it is clear that the magnitude of the differences shown here cannot be explained by those other factors.

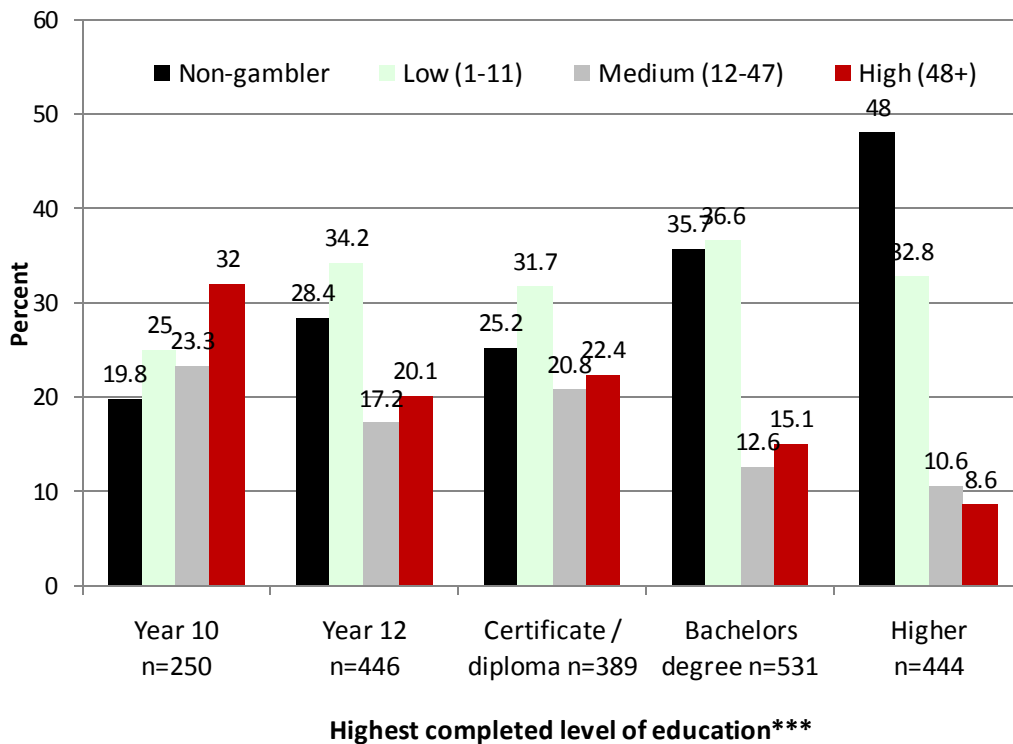


Figure 6.9: Frequency of gambling across all activities by education in the adult population.
* $p < .05$; ** $p < .01$; *** $p < .001$.

6.1 A socioeconomic and demographic profile of high frequency gamblers

Table 6.1 provides an alternative way of looking at characteristics associated with frequency of gambling. This table gives a socioeconomic description of high frequency gamblers, and then compares them with the rest of the adult population. For instance, 63.9% of high frequency gamblers were men, and high frequency gamblers were more likely to be male than the rest of the adult population (45.6%). Similarly, compared to the rest of the adult population, high frequency gamblers were more likely to be in older age groups, less educated, to have their main income derived from pensions, benefits or superannuation, or to be employed full time rather than part time.

Table 6.1: Socioeconomic characteristics of high frequency gamblers compared to the rest of the adult population.

	% High frequency gamblers	% Rest of adult population
Sex***		
Male	63.9	45.6
Female	36.1	54.4
Age***		
18-29	11.8	24.8
30-49	40.1	39.6
50-59	23.0	15.9
60+	25.2	19.8
Country of birth		
Australia	83.6	79.6
Other	16.4	20.4
Highest completed qualification***		
Year 10	18.2	8.7
Year 12	29.0	25.5
Certificate/diploma	22.6	17.4
Bachelors degree	21.1	26.6
Higher	9.2	21.9
Marital status		
Married/defacto	62.9	61.0
Separated/divorced	11.7	8.7
Widowed	3.4	4.0
Never married	22.0	26.3
Household structure		
Single person	16.7	13.9
One parent family, children	5.3	5.9
Couple, children	47.3	52.1
Couple, no children	25.2	21.5
Group	5.5	6.6

<i>Table 6.1 continued</i>	% High frequency gamblers	% Rest of adult population
Main source of income**		
Wage/salary/business	66.1	72.6
Government pension, allowance or benefit	13.7	9.1
Superannuation/annuity/investments	17.5	13.2
No personal income	2.8	5.1
Personal income		
\$less than 15k	13.0	13.9
\$15k-39,999	20.4	23.0
\$40k-69,999	29.1	26.5
\$70k-119,000	30.3	26.9
\$120k or more	7.2	9.8
Employment status**		
Employed full time	55.6	48.3
Employed part time	15.3	24.2
Unemployed, looking for work	2.2	1.9
Not in paid workforce, retired	22.4	17.0
Not in paid workforce, home duties	3.3	4.2
Not in paid workforce, studying	1.3	4.4

*p<.05; **p<.01; ***p<.001.

6.2 Socioeconomic characteristics across levels of gambling problems

Figures 6.10 to 6.18 show levels of problem gambling in different demographic and socioeconomic groups in the adult population. Moderate risk and problem gambling groups have been combined because of the relatively small number in the latter category. Note that the tests of statistical significance (P values) on the figures were obtained from complementary analyses where the non-gamblers and the non-problem gamblers were combined into a single group. These tests therefore reflect differences in the proportions of moderate risk and higher-risk problem gamblers.

Both low risk and moderate risk/problem gambling were more than twice as common in men compared with women; together they represent 7.8% of men and 3.0% of women (Figure 6.10).

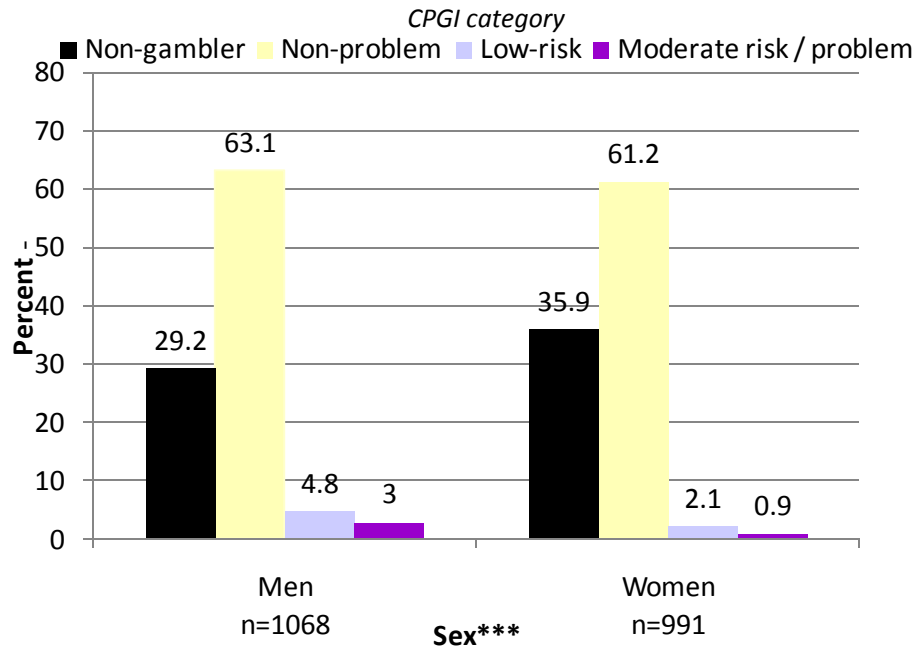


Figure 6.10: Prevalence of problem gambling categories by sex in the adult population.

* $p < .05$; ** $p < .01$; *** $p < .001$.

Problem gambling appeared to be more common in young adults than at older ages, but any differences were not statistically significant (Figure 6.11). Low risk and moderate risk/problem gambling was seen in 5.2% and 2.9% respectively of 18-29 year olds. Low risk gambling was not associated with country of birth but moderate risk/problem gambling was seen in 2.2% of those Australian born compared with 0.8% of those born outside Australia (Figure 6.12).

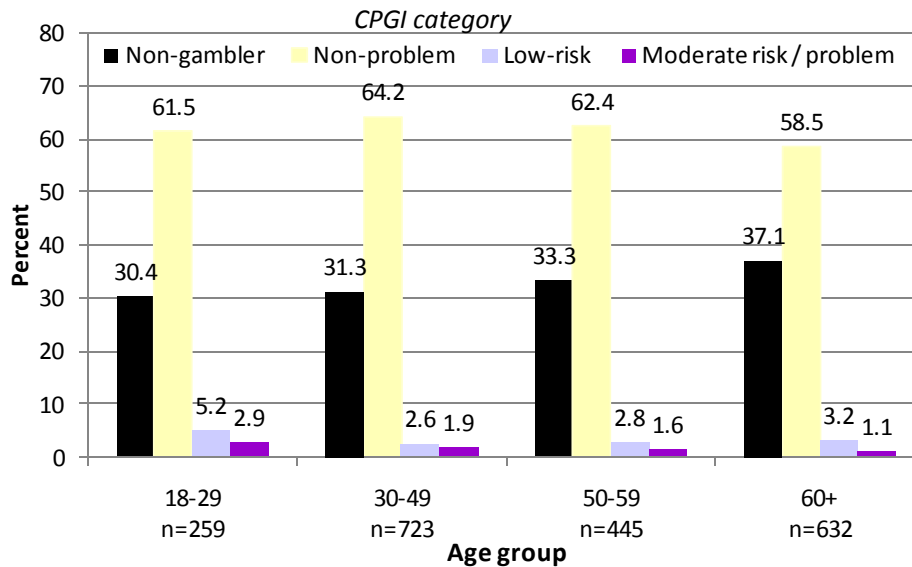


Figure 6.11: Prevalence of problem gambling categories by age group in the adult population.

* $p < .05$; ** $p < .01$; *** $p < .001$.

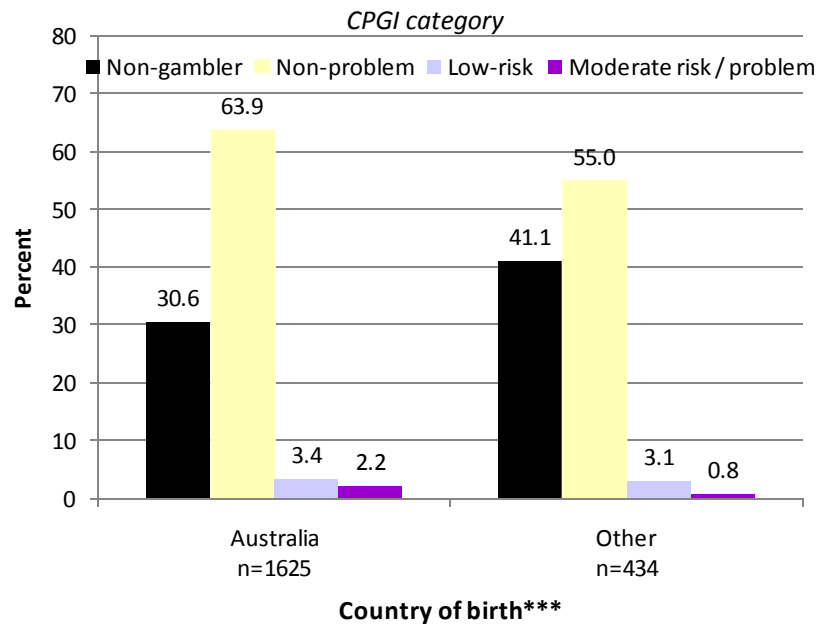


Figure 6.12: Prevalence of problem gambling categories by country of birth in the adult population.
*p<.05; **p<.01; ***p<.001.

For marital status (Figure 6.13) the never married group stood out, showing greater prevalence of both low risk (6.3%) and higher risk gambling (3.6%) than other groups. Further investigation is needed to determine whether this is a reflection of the younger age of the never married.

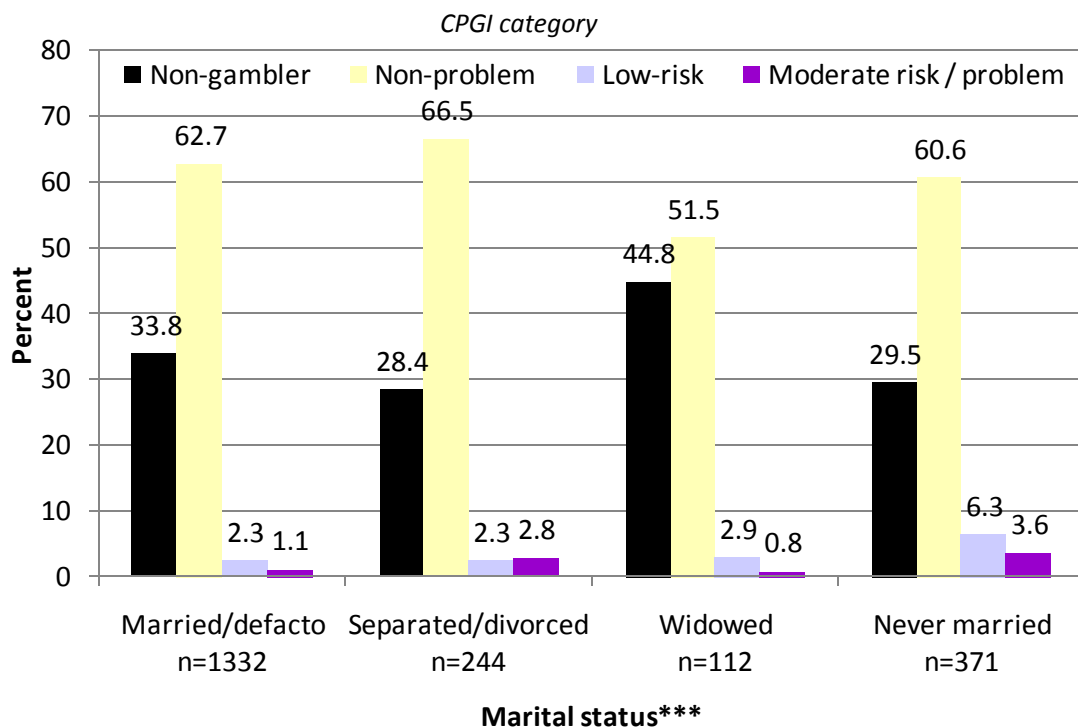


Figure 6.13: Prevalence of problem gambling categories by marital status in the adult population.
*p<.05; **p<.01; ***p<.001.

Figure 6.14 shows problem gambling amongst different types of household structure. This figure shows that group households had a larger proportion of low risk gamblers than other household structures. However, the number of people interviewed from group households was comparatively small, and the overall association between household structure and CPGI categories was not statistically significant.

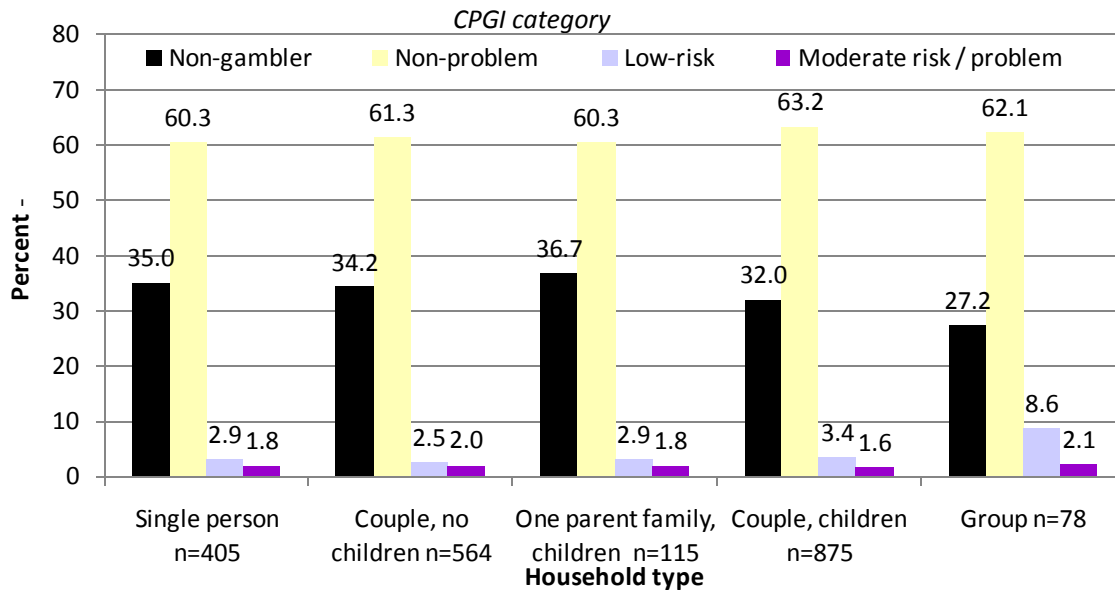


Figure 6.14: Prevalence of problem gambling categories by household type in the adult population. * $p < .05$; ** $p < .01$; *** $p < .001$.

There was little association of employment status, main source of income, or income level with problem gambling (Figure 6.15 to 6.17 respectively). Being unemployed was marginally associated with problem gambling but the numbers in this group were very small.

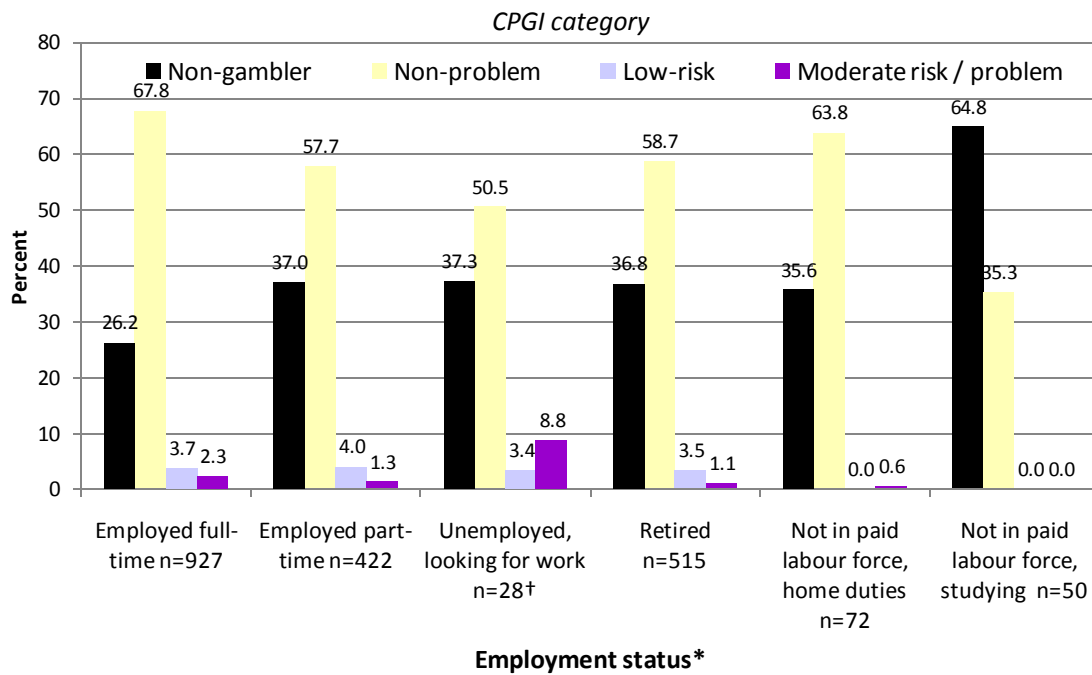


Figure 6.15: Prevalence of problem gambling categories by employment status in the adult population. * $p < .05$; ** $p < .01$; *** $p < .001$.

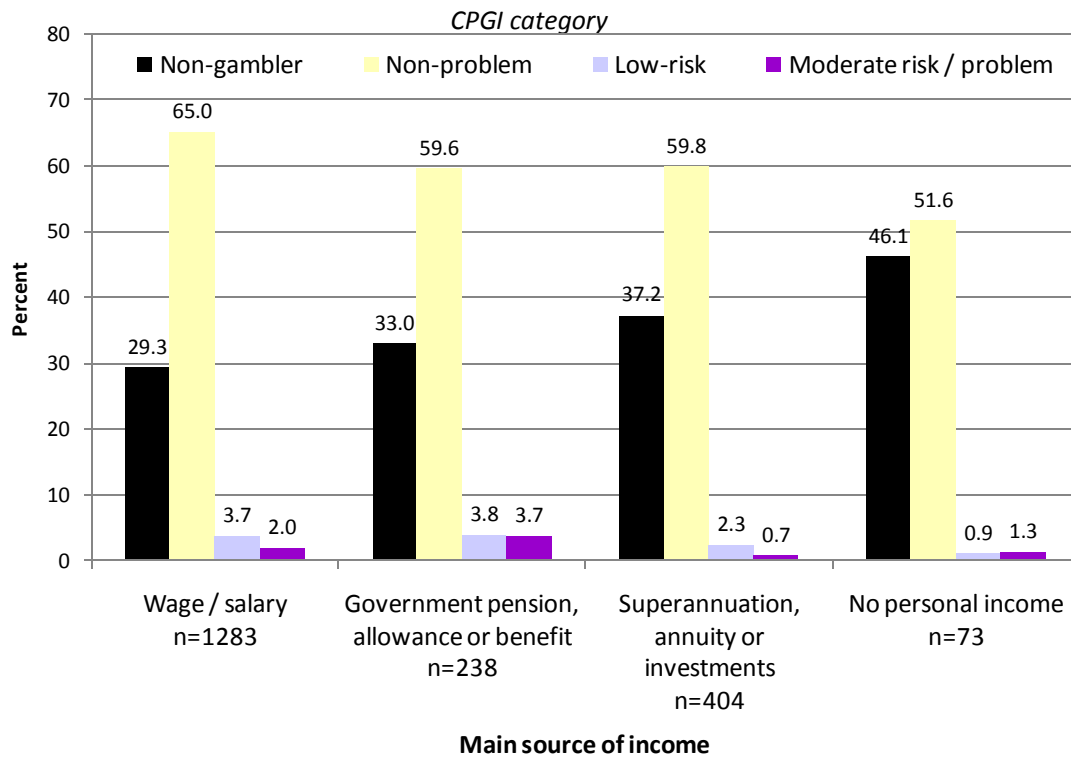


Figure 6.16: Prevalence of problem gambling categories by main source of income status in the adult population. * $p < .05$; ** $p < .01$; *** $p < .001$.

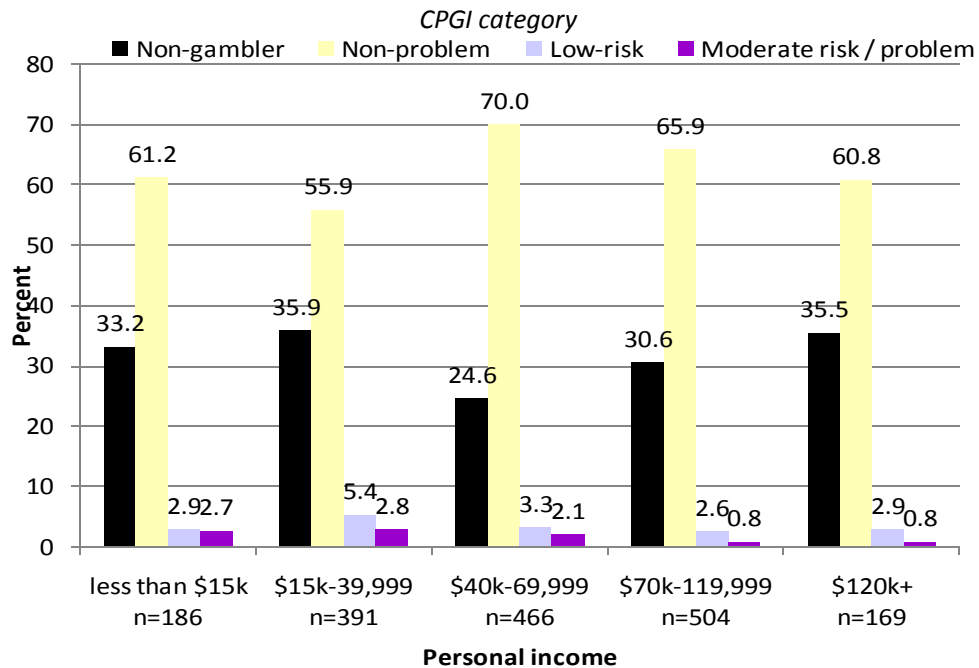


Figure 6.17: Prevalence of problem gambling categories by personal income in the adult population. * $p < .05$; ** $p < .01$; *** $p < .001$

Figure 6.18 shows that low risk and moderate risk/problem gambling were more prevalent in those with lower education than in those with higher-level qualifications. Lower levels of education had a stronger association with problem gambling than any of the other demographic and socio-economic characteristics included in the study.

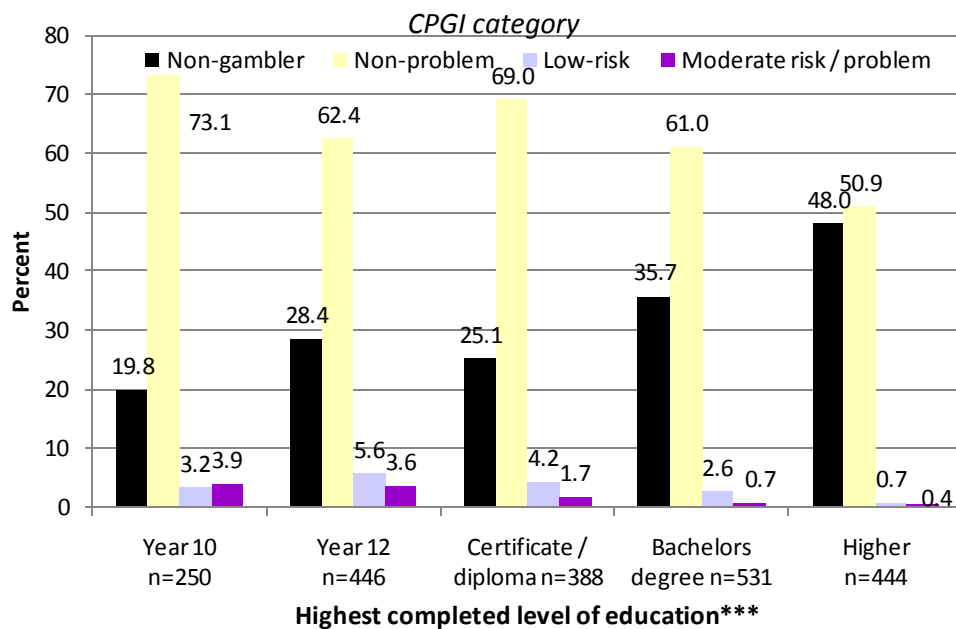


Figure 6.18: Prevalence of problem gambling categories by highest completed level of education in the adult population.

* $p < .05$; ** $p < .01$; *** $p < .001$.

6.3 A socioeconomic and demographic profile of people with gambling problems

Table 6.2 shows an alternative way of looking at characteristics associated with problem gambling. It directly compares the characteristics of the higher-risk group (i.e. moderate risk and problem gamblers combined) with the characteristics of the rest of the adult population. It highlights the factors mentioned above. The moderate risk/problem gambling group were more likely to be male, young, Australian born, less-well educated, never married, and either unemployed or employed full-time.

Table 6.2: Socioeconomic characteristics of moderate risk and problem gamblers.

	% Moderate risk /problem gamblers	% Rest of adult population
Sex***		
Male	76.5	48.4
Female	23.5	51.6
Age***		
18-29	34.3	22.2
30-49	39.5	39.7
50-59	14.1	17.2
60+	12.1	21.0
Country of birth**		
Australia	91.4	80.1
Other	8.7	19.9
Highest completed qualification***		
Year 10	21.4	10.2
Year 12	48.8	25.7
Certificate/diploma	16.0	18.4
Bachelors degree	9.3	25.9
Higher	4.5	19.9
Marital status***		
Married/defacto	36.8	61.8
Separated/divorced	13.6	9.2
Widowed	1.6	3.9
Never married	47.9	25.1
Household Structure		
Single person	14.1	14.4
One parent family, children	11.5	5.7
Couple, children	43.4	51.4
Couple, no children	23.8	22.1
Group	7.2	10.9

<i>Table 6.2 continued</i>	% Moderate risk /problem gamblers	% Rest of adult population
Main source of income		
Wage/salary/business	72.7	71.4
Government pension, allowance or benefit	18.9	9.8
Superannuation, annuity or investments	5.3	14.1
No personal income	3.2	4.7
Personal income		
\$less than 15k	19.7	13.6
\$15k-39,999	33.8	22.3
\$40k-69,999	29.7	26.9
\$70k-119,999	12.8	27.8
\$120k or more	4.0	9.4
Employment status**		
Employed full time	62.8	49.4
Employed part time	16.0	22.8
Unemployed, looking for work	9.2	1.8
Not in paid workforce, retired	10.7	18.1
Not in paid workforce, home duties	1.4	4.1
Not in paid workforce, studying	0	3.9

6.4 Summary

In terms of demographic and socioeconomic factors, high frequency gamblers were more likely to be men, older, less educated, to have their main income derived from pensions, benefits or superannuation, or to be employed full time rather than part time, in comparison with the rest of the adult population.

The moderate risk/problem gambling group were more likely to be male, young, Australian born, less-well educated, never married, and either unemployed or employed full time compared with the rest of the adult population.

7. Social and economic harms associated with gambling

7.0 Harms people attribute to gambling

As in many other state surveys, people were asked to report whether they had experienced a range of harms as a result of their gambling. Seven questionnaire items were used in the 2009 ACT Survey and these referred to both lifetime and past-year experiences. These were, (1) 'has your gambling ever left you with not enough time to look after your family's interests?', (2) 'has your gambling ever led to the break-up of an important relationship in your life', (3) 'has your gambling ever adversely affected how well you perform in your job?', (4) 'have you ever changed or been dismissed from your job as a result of problems related to your gambling', (5) 'have you ever seriously thought about suicide because of your gambling', (6) 'have you ever been in trouble with the police because of activities related to your gambling', and (7) 'have your gambling debts ever caused you to be declared bankrupt'.

These questions were suitable only for people who had gambled more than occasionally, either recently or in the past, and would seem irrelevant to non-gamblers, therefore specific criteria were applied to determine who would be asked these questions. They were asked of everyone who satisfied at least one of the following three criteria: (1) individuals who had ever gambled 12 times in any 12-month period (excluding raffles, lottery and scratch tickets); (2) those who had ever lost \$2,000 or more across all gambling activities in any 12-month period; and (3) those who identified as having a gambling problem in their lifetime. These criteria were met by 614 individuals, representing 23.1% of the ACT adult population.

As in previous studies, endorsement of the harm items was low with 1.5% of the ACT population saying they had experienced one or more of these harms in their lifetime. The low endorsement meant that responses to some items needed to be combined into four gambling-related harm areas, family relationships (questions 1 and 2 listed above), work (questions 3 and 4 above), suicidal ideation (question 5) and employment (questions 6 and 7 above). Table 7.1 shows those who reported these gambling-related harm areas, expressed as a proportion of (i) the total adult population, and (ii) self-identified life-time problem gamblers. While the proportion of the total adult population ever experiencing these harms was very low, the proportion of self-identified life-time problem gamblers was substantial, with 31.7% reporting at least one of the harms. Of the four harm areas, relationship break-up or

neglecting time with family was the most commonly reported (about a quarter of problem gamblers) and adversely affecting employment was the next most common (about one in six problem gamblers). Around 10% of self-identified problem gamblers also reported that they had seriously thought about suicide because of their gambling.

Table 7.1: Harms attributed to gambling in the general population and amongst self-identified lifetime problem gamblers.

Lifetime gambling related harm	% Adult population n=2,060	% Self-identified lifetime problem gamblers n=123
Relationship break up or neglected time with family	1.1	25.4
Adversely affected job	0.7	16.3
Seriously thought about suicide	0.4	10.6
Problems with police or bankruptcy	0.1	2.6
Any of the above	1.5	31.7

Table 7.2 shows the proportion of the sample who reported experiencing these harms in the past year. These are expressed as a percentage of (i) the total adult population, (ii) high frequency gamblers (across different combinations of activities), (iii) moderate risk/problem gamblers based on CPGI score, and (iv) self-identified current problem gamblers. The prevalence of harms amongst the general population was low during the last year. Only a small proportion of high frequency gamblers reported these harms when total frequency across all activities was investigated. The proportion of high frequency EGM players, moderate risk/problem gamblers and self-identified current problem gamblers reporting one or more of these harms in the past year were 6.7%, 28.8% and 26.5%, respectively. For the two problem gambling categories, the most commonly reported harm was relationship break-up or neglecting time with family and the proportion reporting having seriously thought about suicide was around one in ten. For the high frequency EGM players, the most frequently reported harm experienced in the last year was having seriously thought about suicide (4.7%).

Table 7.2: Prevalence of gambling related harms in the last 12 months.

Past year gambling related harm	ADULT POPULATION n=2,060	HIGH FREQUENCY GAMBLERS			PROBLEM GAMBLERS	
		On all activities n=535	On EGMs n=173	On all activities excluding scratch tickets, lottery and EGMs n=205	Moderate risk/problem gamblers n=72	Current self- identified problem gamblers n=65
Relationship break up or neglected family	0.4%	0.9%	1.9%	1.3%	18.4%	15.9%
Adversely affected job	0.2%	0.9%	3.7%	0.8%	7.3%	8.2%
Seriously thought about suicide	0.2%	0.9%	4.7%	0.2%	8.9%	10.1%
Problems with police or bankruptcy	<.1%	0.2%	0.4%	0.5%	1.8%	0.8%
Any of the above	0.6%	2.1%	6.7%	2.6%	28.8%	26.5%

A difficulty in using questions where harm is attributed to gambling is that individuals may be unsure as to how much a particular problem arises from gambling itself and how much other factors may contribute to that problem. Further, the individual concerned may not be best placed to judge the extent of a problem; other family members, for example, may be more appropriate sources when seeking reports of family neglect. For some areas of potential harm (e.g. financial strain and health) questions were asked of all those included in the detailed interview, so that comparisons could be made across the continuum of gambling activity from non-gamblers through to high frequency gamblers and problem gamblers.

7.1 Financial difficulties and gambling

Everyone selected to complete the detailed interview was asked whether they had experienced a range of difficulties because of a shortage of money in the last 12 months. These difficulties included (i) paying bills on time, (ii) paying mortgage or rent on time, (iii) pawning or selling something, (iv) going without meals, (v) being unable to heat or cool your home, (vi) asking for financial help from friends or family, and (vii) asking for help from welfare/community organisations. Amongst the total adult population 10.7% reported at least one of these financial difficulties, and 3.9% reported two or more.

Figure 7.1 shows financial difficulties by gambling frequency on all activities, and on all activities other than lottery and scratch tickets. Frequency of gambling was not significantly associated with financial problems in either of these groups, ie low, medium and high frequency gamblers were no more or less likely to report financial problems than non-gamblers.

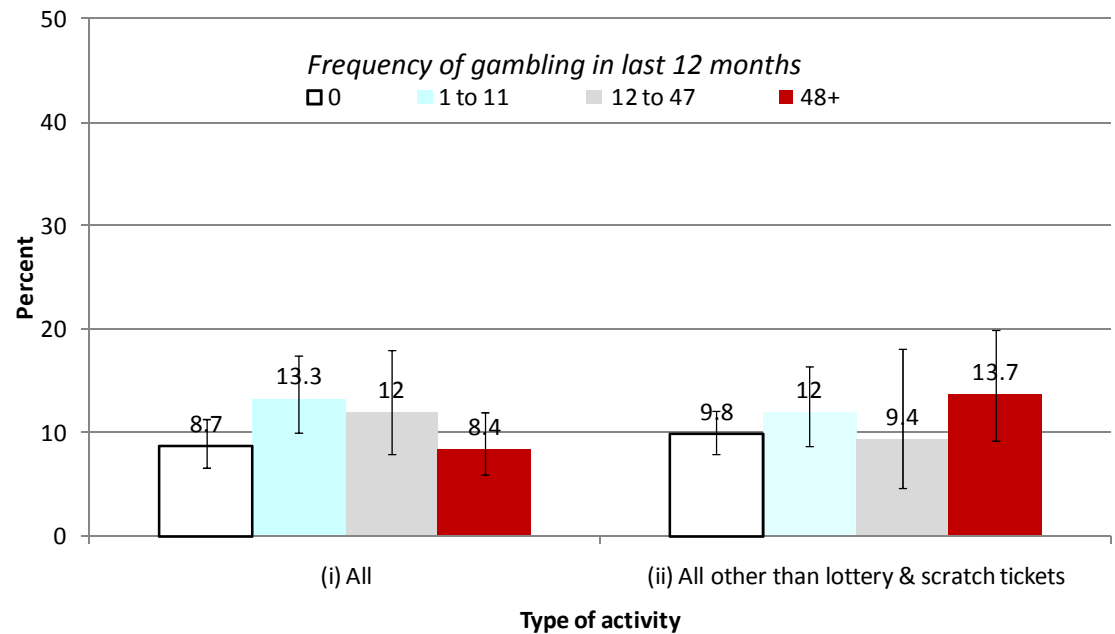


Figure 7.1: Financial difficulties [% (95%CI)] by frequency of gambling on (i) all activities and (ii) all activities other than lottery and scratch tickets in the last 12 months, n=2,060.

Figure 7.2 shows financial difficulties amongst non-gamblers and by CPGI categories. Logistic regression indicated that low risk and non-problem were not significantly different to non-gamblers, but moderate risk/problem gamblers were nearly three times more likely to report financial difficulties than non-gamblers (OR 2.9 [95%CI 1.3-6.6]).

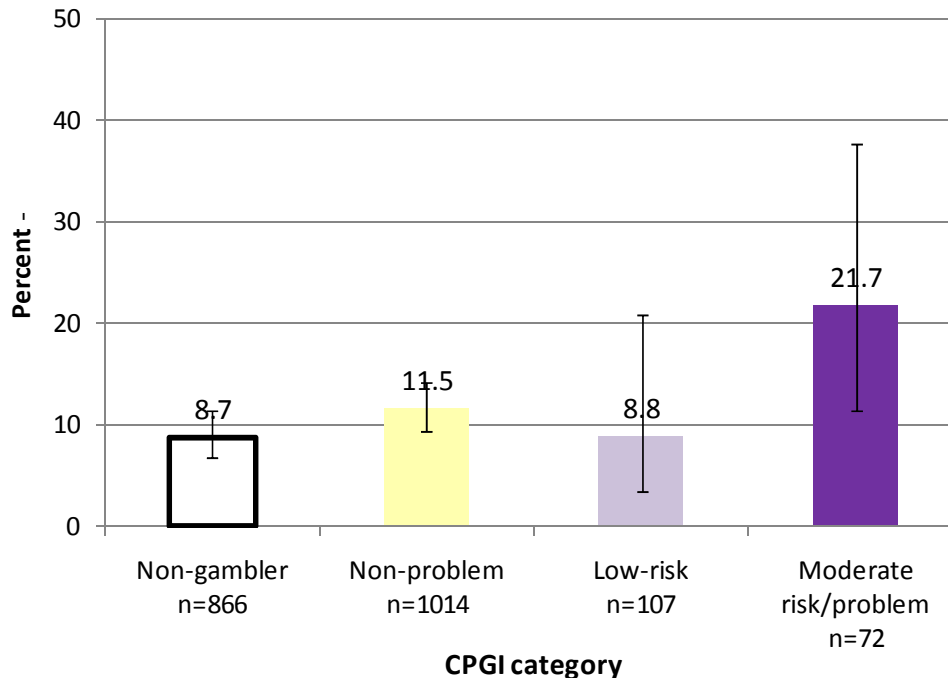


Figure 7.2: Financial difficulties [% (95%CI)] by CPGI categories.

7.2 Health behaviour and gambling

Alcohol and tobacco use were investigated in relation to gambling frequency and problem gambling. As it is known that patterns of drinking and smoking differ substantially between sex and age groups (and this was confirmed in the present survey), these differences have to be taken into account when reporting how health behaviours are associated with gambling. The following findings are therefore adjusted for age and sex differences.

Everyone selected to complete the detailed interview was asked how often they had a drink containing alcohol and how many standard drinks they had on a typical day when drinking. Responses to these questions were combined to estimate typical weekly alcohol consumption and we identified those whose drinking level was considered hazardous or harmful according to the 2001 National Health and Medical Research Council criteria (National Health and Medical Research Council, 2001). For women, hazardous/harmful drinking is defined as 14 or more standard drinks per week. For men, hazardous/harmful drinking is defined as consuming 28 or more standard drinks per week.

In the current study 4.8% of the sample were hazardous/harmful drinkers. Figure 7.3 shows that medium frequency gamblers were nearly twice as likely to drink at hazardous or harmful levels compared to non-gamblers after adjusting for age and sex ($p<.05$). High frequency gamblers (across all activities) were nearly three times more likely to drink at hazardous/harmful levels than non-gamblers after adjusting for age and sex ($p<.001$). High frequency gamblers (on activities other than lottery or scratch tickets) had more than three times the likelihood of hazardous/harmful drinking compared to non-gamblers.

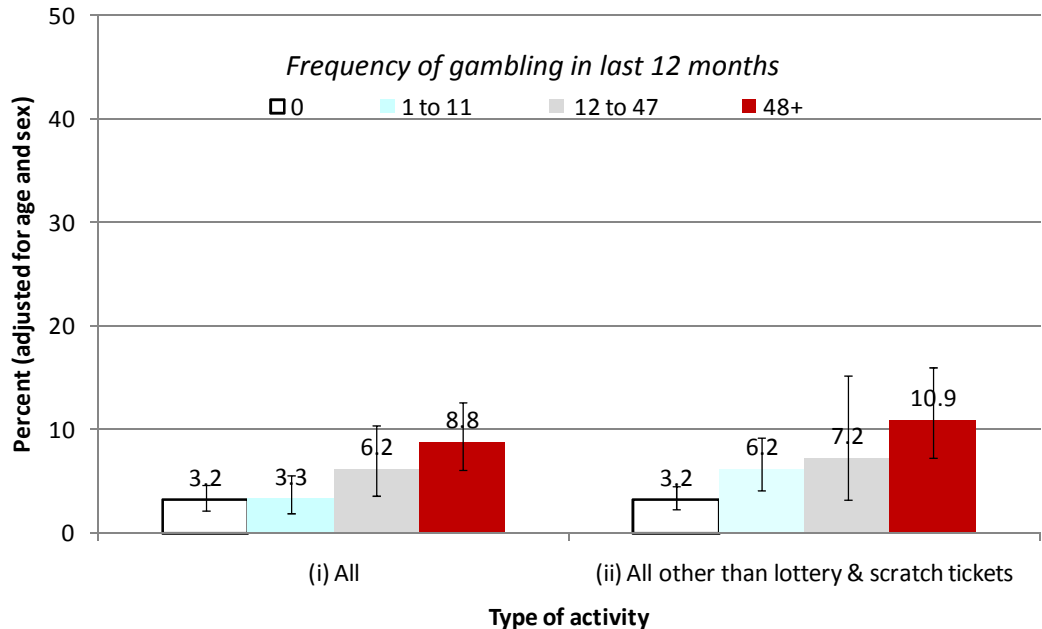


Figure 7.3: Hazardous/harmful alcohol consumption [% (95% CI)] by frequency of gambling on (i) all activities and (ii) all activities other than lottery and scratch tickets, adjusted for age and sex, $n=2,058$.

Hazardous or harmful drinking also differs across problem gambling categories based on CPGI scores. Figure 7.4 shows that low risk gamblers were over three times more likely to report hazardous/harmful drinking compared to non-gamblers and more than twice as likely seen in the non-problem gamblers after adjusting for age and sex. Moderate risk/problem gamblers were over seven times more likely to report hazardous/harmful drinking than non-gamblers and nearly six times more likely to report hazardous/harmful drinking than the non-problem gamblers ($p<.001$).

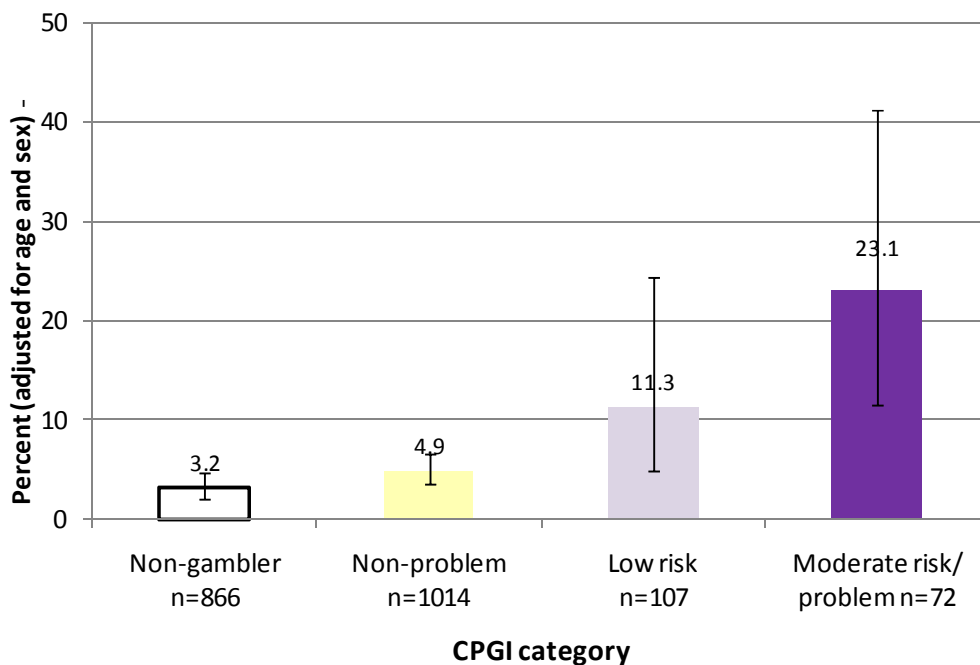


Figure 7.4: Hazardous/harmful alcohol consumption by CPGI category, adjusted for age and sex.

Everyone was asked whether they currently smoked cigarettes and 12.4% of the sample said they did. Figure 7.5 shows that frequency of gambling was strongly associated with smoking. All levels of gambling frequency across all activities had significantly higher rates of smoking compared to the non-gamblers. Nearly one in five (18.4%) high frequency gamblers were current smokers as compared to just 4.6% of non-gamblers after adjusting for age and sex. Figure 7.5 shows a stronger association between frequency of gambling on activities other than lottery or scratch tickets and smoking.

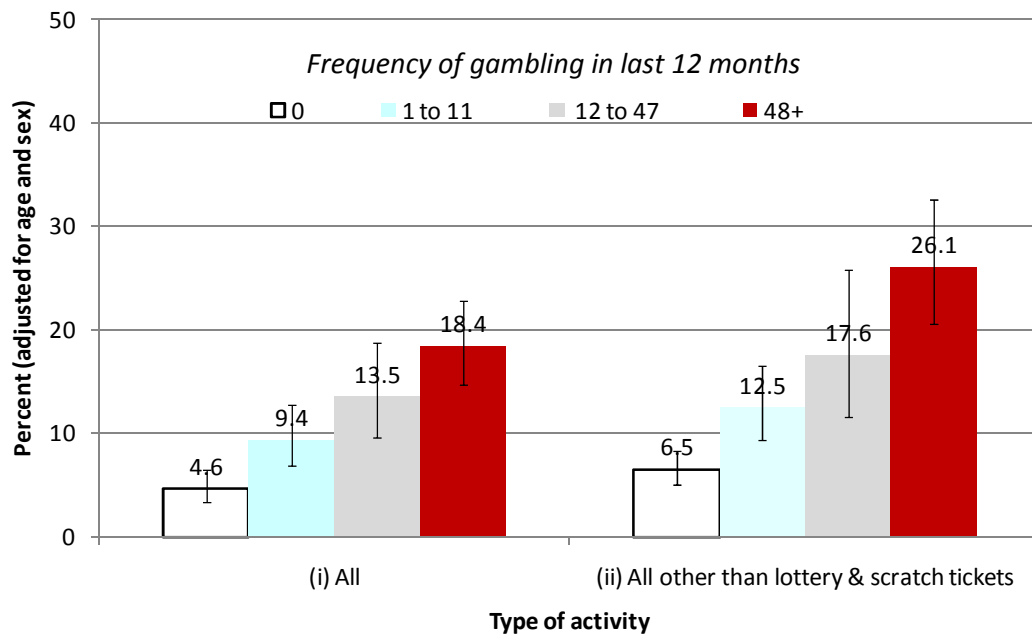


Figure 7.5: Smoking [% (95%CI)] by frequency of gambling on (i) all activities and (ii) all activities other than lottery and scratch tickets on all activities in the last 12 months, adjusted by age and sex, n=2,060.

Figure 7.6 shows that the proportion of smokers also differed substantially across problem gambling categories as defined by CPGI scores. Again, the proportions in the figure are adjusted for age and sex. Low risk problem gamblers were four times as likely to be smokers as non-gamblers. Moderate risk/problem gamblers were about nine times as likely to be smokers compared with non-gamblers and over three times as likely to be smokers compared with non-problem gamblers.

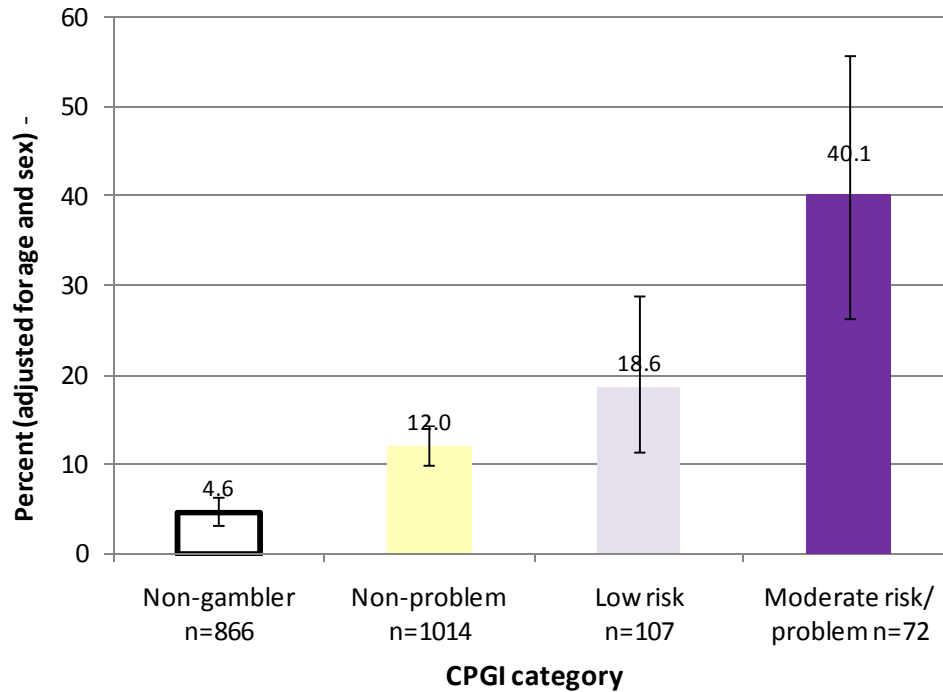


Figure 7.6: Smoking [% (95%CI)] by CPGI category, adjusted for age and sex.

7.3 Physical health and gambling

A global physical health item asked, ‘in general, would you say your health is excellent, very good, good, fair or poor.’ Only a small proportion of ACT adults said they had fair or poor health (8.7%). The proportion of people reporting fair or poor physical health was explored across levels of gambling frequency and then CPGI categories. The following proportions were adjusted for age and sex because physical health differs substantially between sex and age groups and these differences have to be taken into account when reporting how health is associated with gambling.

Frequency of gambling, whether across all activities, or on activities other than lottery or scratch tickets, was not significantly associated with physical health (Figure 7.7). CPGI was also not associated with physical health (Figure 7.8).

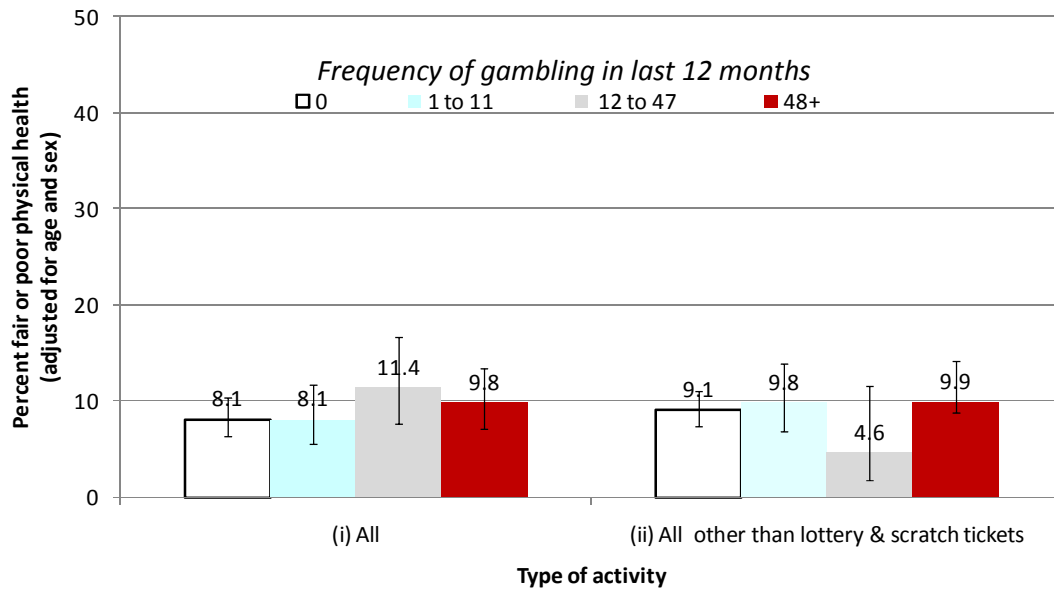


Figure 7.7: Proportion of people (95%CI) reporting fair or poor physical health by frequency of gambling on (i) all activities and (ii) all activities other than lottery and scratch tickets on in the last 12 months, adjusted for age and sex, n=2,057.

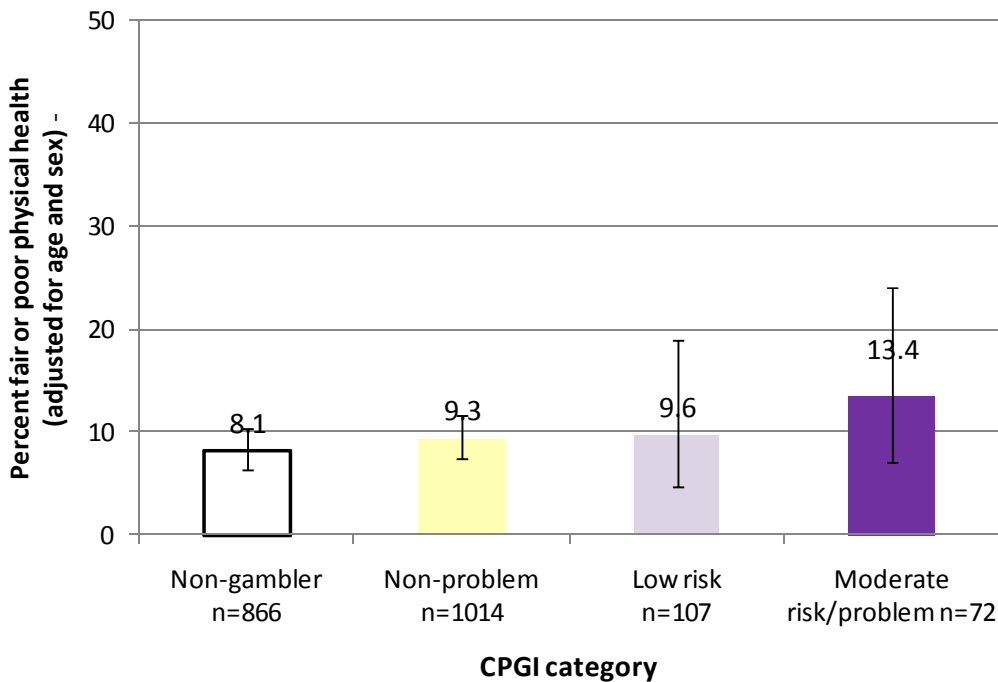


Figure 7.8: Proportion of people (95%CI) reporting fair or poor physical health by CPGI category, adjusted for age and sex.

7.4 Mental health and gambling -

The interview included a five-item measure (MHI-5: Berwick, et al., 1991) that assesses mental health in the last four weeks. These items asked how often people felt (i) nervous, (ii) so sad nothing could cheer them up, (iii) down, (iv) calm and peaceful, and (v) happy. A 5 point response scale was used, ranging from all of the time, to none of the time. We summed across responses, reversing the scores for the last two items, so that a high score reflects poorer mental health (scores ranged from 0 to 20). Those scoring more than 8 on the MHI-5 were identified as having poor mental health, having the highest (12.4%) scores in the sample.

Figure 7.9 shows the percentage of poor mental health (MHI-5 score of 8+) across levels of gambling frequency summed across (i) all activities and (ii) all activities other than lottery and scratch tickets, with adjustment for age and sex. Poor mental health was not significantly associated with gambling frequency on either measure.

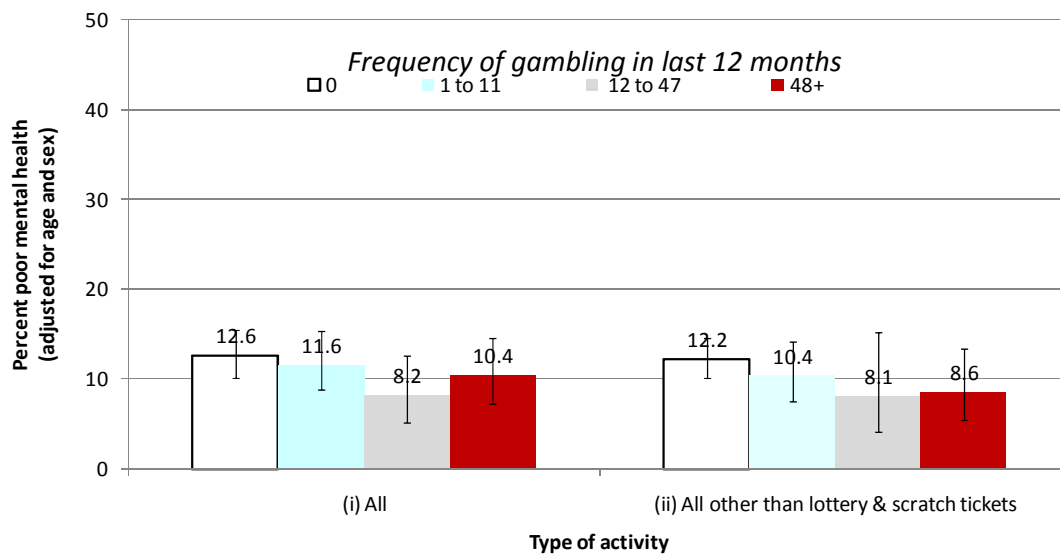


Figure 7.9: Proportion of people with poor (>8) MHI-5 scores (95%CI) by frequency of gambling on (i) all activities and (ii) all activities other than lottery and scratch tickets on in the last 12 months, adjusted for age and sex, n=2,049.

Next we explored mental health across CPGI categories. Preliminary analyses indicated that problem gamblers were significantly different to moderate risk gamblers and so they were

kept as a separate group in the analysis. Figure 7.12 shows that there was no significant difference in poor mental health (MHI-5 score of 8+) across non-gamblers and the lower CPGI categories, but the majority of people with gambling problems had poor scores on the MHI-5, indicating they had high level of distress.

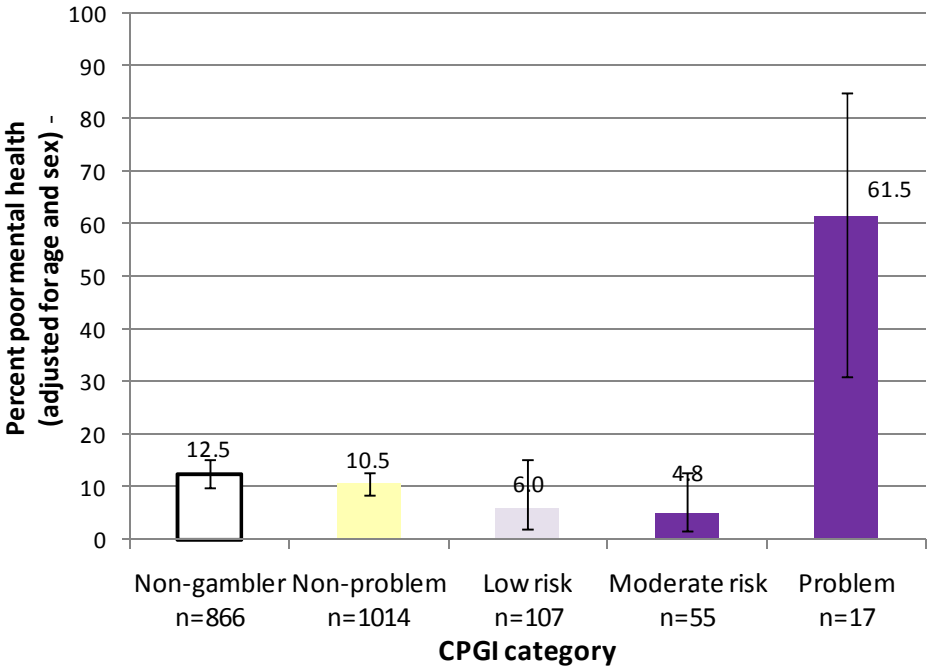


Figure: 7.12: Proportion of people with poor (>8) MHI-5 scores (95%CI) by CPGI categories, adjusted for age and sex.

Note: the difference between the proportion of the problem gamblers with poor mental health was extremely large, consequently this graph was rescaled and visually under represents the strength of the association compared to other graphs.

7.5 Social and economic harms, 2001 to 2009

In the 2001 Survey, the prevalence of harms experienced in the last year was reported amongst regular gamblers and problem gamblers. Current regular gamblers were defined as people gambling 52 times or more on all activities other than lottery or scratch tickets. Fewer items were used in the 2009 Survey, and it is important to note that study design differences will have influenced the prevalence of harms amongst regular gamblers. Table 7.3 shows the proportion of regular gamblers reporting harms in the 2001 and 2009 Surveys. Given that the low endorsement of these items resulted in considerable error around the estimates it is difficult to draw any conclusions about change in the prevalence of these gambling related harms from 2001 to 2009.

Table 7.3 Prevalence of gambling related harms (%) amongst regular gamblers in the last 12 months, 2001 to 2009.†

Past year gambling related harm	2001 %	2009 % (95% CI) n=336
Relationship break up	2.6	***
Neglected family's needs	3.4	1.6 (0.7-3.6)
Adversely affected job	4.2	2.3 (0.7-7.1)
Seriously thought about suicide	1.7	2.3 (0.7-7.2)
Problems with police or bankruptcy	***	***

† 95% confidence intervals were estimated for the 2009 Survey but were not available for the 2001 Survey.

***Small cell sizes and low frequency meant estimates were too unreliable to report.

7.6 Summary

Across the whole adult population, just 1.5% reported one or more serious gambling related harms (either relationship break up or neglected time with family, adversely affecting job, having seriously thought about suicide, or problems with police or bankruptcy). Of these, the most common was having a relationship break up or neglected time with family. Within the group identified as moderate risk/problem gamblers based on CPGI score, 31.7% reported one or more of these harms.

Recent financial difficulties were not significantly related to gambling frequency but were twice as likely to be reported by moderate risk/problem gamblers compared to the general population.

Both smoking and alcohol consumption were strongly related to gambling frequency and problem gambling. For example, medium frequency gamblers were nearly twice as likely to drink at hazardous or harmful levels compared to non-gamblers and high frequency gamblers were nearly three times more likely to drink at hazardous/harmful levels. Almost one quarter of moderate risk/problem gamblers drank at hazardous or harmful levels compared with 3.2% of non-gamblers and 4.9% of non-problem gamblers. The pattern for smoking was even more pronounced, with 40% of moderate risk/problem gamblers reporting smoking compared with 4.6% of non-gamblers.

Self-reported physical health was not associated with gambling frequency or problems. While gambling frequency was not significantly associated with mental health, problem gamblers reported very poor mental health compared to all other levels of gambling, including moderate risk gamblers.

8. Help seeking and service use

8.0 Wanting, trying to get and accessing help

Several questions in the survey asked whether people had ever wanted help for problems related to their gambling and whether they had tried to get help for such problems. As with the information on harms associated with gambling, questions on help-seeking were only asked of those who satisfied at least one of the three criteria of: (1) had ever gambled 12 times in any 12-month period (excluding raffles, lottery and scratch tickets); (2) had ever lost \$2,000 or more across all gambling activities in a 12-month period; and (3) self-identified as having a gambling problem in their lifetime. In total, 614 individuals (23.1% of the adult population) were asked about help-seeking.

Included in these questions were items asking people if they had ever received counselling or help from a range of 13 services, including gambling-specific services (such as Gamblers anonymous and gambling helplines), health services (eg GP/doctor) and community organisations (see the Appendix for a comprehensive list). They were further asked whether they had received any such assistance from any ‘other’ organisation and to specify the source of help. Finally, people were asked whether they had ever talked to friends or family about problems related to their gambling.

Table 8.1 shows lifetime help-seeking behaviour described as a proportion of several groups of interest. These were: (i) the total adult population; (ii) self-identified lifetime problem gamblers; (iii) moderate risk/problem gamblers identified by their CPGI scores; and (iv) a combined group representing all those in either (ii) or (iii). There were 141 individuals in the latter combined group, composed of self-identified problem gamblers and CPGI problem gamblers. They are referred to as ‘lifetime problem gamblers’ in the remainder of the report. A very small proportion of the population had ever wanted or tried to get help, and only 0.7% of the population had ever received help for gambling problems from a service. Slightly more (1.5%) said that they had talked to friends or family about problems with gambling.

Table 8.1: Help seeking amongst the adult population, self-identified lifetime problem gamblers and moderate risk/problem gamblers.

Lifetime help seeking	Adult population n=2,060	A Self-identified lifetime problem gamblers n=123	B Past year problem gamblers (CPGI=Moderate risk/problem) n=72	A+B Lifetime problem gamblers, n=141
Wanted help	1.0%	27.3%	32.8%	24.3%
Tried to get help	1.0%	24.9%	28.1%	22.2%
Accessed one or more services	0.7%	18.9%	21.0%	16.9%
Talked to friends or family	1.5%	39.2%	33.9%	34.8%

Even when the focus is on people with gambling problems, as identified above, only a minority of these groups report that they had received help, tried to get help or wanted help. The most common response in these groups was to talk to friends or family. Individuals could have given many combinations of responses to the questions on help-seeking, so we classified respondents in a hierarchical way, identifying those who had received help from a service, those who tried to get help but did not receive a service, and those who said they wanted help but didn't receive help or try to get help. The remainder were further divided into those who had talked to friends or family and those who replied negatively to all the questions asking about help-seeking. These groups are shown in Table 8.2.

The most common response amongst people with gambling problems (however defined) was to do nothing by way of help-seeking (over 50% across groups). Only around one in five had ever received help for their problem. The remainder (around 25%) represent those who in some way acknowledged their problem but who, for some reason, did not find help or did not seek help or who preferred just to talk to friends and family rather than look for any form of formal help.

Table 8.2: Hierarchical help seeking, amongst the adult population, self-identified lifetime problem gamblers and moderate risk/problem gamblers.

Lifetime help seeking	Adult population n=2,060	A Lifetime problem gamblers (self-identified) n=123	B Past year problem gamblers (CPGI=Moderate risk/problem) n=72	A+B Lifetime problem gamblers, n=141
Accessed one or more services	0.7%	18.9%	21.0%	16.9%
Tried to get help but didn't get it	0.2%	6.0%	7.1%	5.3%
Wanted help but didn't try to get it	0.1%	3.0%	5.9%	2.6%
Talked to family or friends, but didn't want or try to get help, or access a service	0.8%	20.1%	8.1%	17.8%
Did none of the above	98.2%	52.0%	57.9%	57.4%

8.1 Characteristics related to receiving services amongst lifetime problem gamblers

Given that a small minority of lifetime problem gamblers ever receive any formal help, it could be informative to see whether there are systematic differences between those who received services and those who had not. The top half of Table 8.3 reports this across the range of demographic and socioeconomic characteristics assessed in the survey. It should be noted that these comparisons are based on just 141 individuals, so fairly large differences are needed before they show as being statistically significant. There was some indication that people with gambling problems aged in their middle years (30-59 years old) were more likely to have received help than either younger or older groups. Otherwise few demographic and socioeconomic characteristics distinguished those who had received formal help from those who had not.

The bottom half of Table 8.3 reports on a range of other personal characteristics that might account for why some people received help and others did not. There were striking findings relating to the more serious harms related to gambling. For example, it is reassuring that the large majority of people who have felt suicidal because of their problem gambling (85%) have received help but the other side of this association is that only 9% of those who had *not* felt suicidal ever received help. Similar, but less strong, associations were seen for relationship break up, being in trouble with the police or bankruptcy, and people's jobs being adversely affecting by their gambling problems. Overall, the findings in Table 8.3 give a strong impression that people do not receive help for gambling problems unless they are facing extremely serious personal consequences.

Table 8.3 Characteristics associated with receiving services amongst lifetime problem gamblers, n=141.

		Ever received help	
		Yes (16.9%)	No (83.1%)
Sex			
	Male	14.8%	85.2%
	Female	21.3%	78.7%
Age*			
	18-29	4.6%	95.4%
	30-59	22.2%	77.8%
	60+	8.6%	91.4%
Country of birth			
	Australia	18.4%	81.6%
	Other	9.9%	90.1%
Highest completed qualification			
	Year 10	18.2%	81.8%
	Year 12 or certificate/diploma	19.6%	80.4%
	Bachelors degree or higher	10.4%	89.6%
Marital status			
	Ever married/defacto	12.9%	87.1%
	Separated/divorced/widowed	24.4%	75.6%
	Never married	17.7%	82.3%
Seriously thought about suicide because of gambling (ever)***			
	Yes	85.3%	14.7%
	No	8.7%	91.3%
Relationship break up or neglected family because of gambling (ever)***			
	Yes	42.2%	57.8%
	No	8.7%	91.3%
In trouble with police or bankrupt because of gambling (ever)***			
	Yes	64.9%	35.1%
	No	15.5%	84.5%
Gambling adversely affected job (ever)**			
	Yes	74.3%	25.7%
	No	7.2%	92.8%
Mental health Inventory (last 4 weeks)*			
	>6	30.3%	69.7%
	<=6	12.4%	87.6%
General physical health			
	Fair or poor	23.8%	76.2%
	Excellent, very good or good	14.7%	85.3%
Financial problems (last year) (p=.08)			
	Yes	31.0%	69.0%
	No	13.4%	86.6%

*p<.05; **p<.01; ***p<.001.

8.3 Reasons for seeking help

Table 8.4 shows the reasons that people gave themselves for seeking (and receiving) help based on the 31 individuals who had ever received formal help. They most commonly reported they were prompted to seek help by financial problems, feeling depressed/worried and relationship problems.

Table 8.4: Reasons for seeking help amongst those who had ever sought help.

What prompted you to seek help	% of those who had ever sought help, n=31[†]
Financial problems	43.4%
Felt depressed/worried	39.5%
Relationship problems	36.5%
Someone urged you to go	19.7%
Employment problems	1.7%
Legal problems	0%

[†]The column total is greater than 100 because people could endorse more than one reason.

8.4 Reasons for not seeking help

People who self-identified as ever having a gambling problem, but had never received formal help (n=94), were asked why they had not sought help. Structured response options were presented by the interviewers but people were also given the opportunity to describe other reasons why they had not looked for help. The most common responses were that they felt they could beat their problems on their own or that they didn't need help.

Table 8.5: Reasons for not seeking help amongst self-identified lifetime problem gamblers.

Reasons for not seeking help	% of self-identified lifetime problem gamblers who had never sought help n=94
Thought I could beat the problem on my own	48.7%
Didn't need help ^{††}	32.6%
I could afford my losses ^{††}	5.7%
Too embarrassed to see a counsellor	4.9%
Didn't know where to go	2.9%
The kind of help I wanted wasn't available locally	0%

[†] The column total is greater than 100 because people could endorse more than one reason

^{††}These responses were not structured, they were volunteered, and the reported proportions are likely to under represent the true proportion.

8.5 Summary -

The results in this chapter show that receiving help for gambling problems is not only a rare event in the general population but is even uncommon amongst people with gambling problems, with only about one in five ever getting help. Most people with gambling problems replied negatively to all the questions asked about help-seeking and had not even discussed their problems with friends or family. There was little indication that people had tried to get help but could not access services, or that they wanted help in some way but did not know how to go about finding it. When asked directly why they had not looked for help, most said that they felt they could beat their problem on their own or simply said that they did not need help. When gamblers who had received help were compared with those who had not, striking differences were seen in their reporting of serious harms. In particular, feeling suicidal was the most common factor associated with help-seeking for gambling problems.

9. Community attitudes to gambling

In the 2001 and 2009 Surveys everyone proceeding to the detailed interview was asked the extent they agreed with the statement, ‘Overall, gambling does more good than harm for the community’. They were also asked whether they thought ‘the number of poker and other gaming machines should be increased, decreased or stay the same’. Table 9.1 shows responses to these questions in both surveys.

Table 9.1 Community attitudes to gambling in 2001 and 2009, n=2,060

Gambling does more good than harm			The number of EGMs should be increased, decreased, or stay the same		
	2001†	2009		2001†	2009
Strongly agree	2.7%	2.3%	A large increase	0.2%	0.3%
Slightly agree	8.9%	6.8%	A small increase	0.7%	0.2%
Neither agree nor disagree	9.9%	14.0%	Stay the same	38.2%	33.0%
Slightly disagree	22.8%	26.2%	A small decrease	16.5%	17.8%
Strongly disagree	55.1%	50.0%	A large decrease	37.8%	40.0%
Don’t know or can’t say	0.7%	0.7%	Don’t know or can’t say	6.6%	9.2%

†Source: McMillen et al. (2001: p 132, Table 41)

Table 9.1 shows that a large proportion of ACT adults disagree with the statement that gambling does more good than harm in 2009 (76.2%) and 2001 (77.9%). Similarly, a large proportion of the ACT population thought that EGMs should be decreased in 2009 (57.8%) and 2001 (54.3) and across both surveys about a third thought that the number of EGMs should stay the same. Given differences in survey methodology it is difficult to compare these figures directly but they are very similar over time. In 2001, McMillen et al. (2001: p132) remarked that the ACT residents were more disapproving of gambling than the Australian population. The current survey suggests that community attitudes have not shifted dramatically over the past 10 years.

In 2009, people were also asked, ‘In the ACT ATMs are not allowed in gaming machine areas, but they are allowed in the venues. Do you think ATMs should be available in gaming machine venues?’ A much larger proportion (70.3%) responded ‘no’ to this question than ‘yes’ (24.0%), and 5.7% had no opinion.

10. Discussion

10.0 Gambling participation and problems in the ACT

As in other surveys conducted in Australia, the 2009 ACT survey found that a large majority of the adult population (about 70%) had gambled in the past 12 months. The most commonly reported activities were lottery games, playing EGMs, betting on horse or greyhound racing and buying scratch tickets. Around half of the population reported gambling on activities other than lotteries and scratch tickets in the past year. The proportion of high frequency gamblers (i.e. weekly or more often) in the population was 17.6% over all activities and 6.5% when lotteries and scratch tickets were excluded.

Most people reported gambling on more than one activity. There was a substantial group who bought lottery and/or scratch tickets and did not report any other activity (about one third of all gamblers) but also a large number of people who reported multiple activities. About a quarter of the adult population reported having gambled on three or more activities in the past year. For this reason, it is difficult to characterise gamblers by the type of activities they report or to investigate the potential benefits or harms attributable to any particular form of gambling. There were also strong associations between frequency of gambling, the number of activities reported, the amount of money lost on gambling, and (where gambling activities involve distinct “sessions”) the duration of gambling sessions. This means that the concept of intensity of gambling participation is multidimensional and complex. Characterising gambling intensity has not reached the degree of consensus found in comparable research areas, such as the measurement of alcohol consumption or use of other drugs.

The prevalence of problem gambling in the ACT adult population identified by the CPGI (score of 8+) was 0.5%. A further 1.5% was identified as moderate risk/problem gamblers (scores ranging from 3 to 7) and low risk problems (scores of 1 or 2) were found in 3.4% of the adult population. The confidence intervals for problem gambling are too large to make meaningful comparisons with other individual surveys but the ACT figure is in the range reported from recent surveys in other jurisdictions (0.4% - 0.7%; see Table 5.3). When moderate risk and problem gambling are combined (i.e. 1.9%), the prevalence is similar to

that found in previous state and territory surveys using the CPGI measure, which fall in the range of 1.35% to 3.06% (Table 5.2).

10.1 Electronic gaming machines (EGMs) and gambling using the internet

In the 2009 ACT Survey, about 30% of the adult population reported playing EGMs in the past year, including 3% who were high frequency players (i.e. weekly or more) and 6% medium frequency (i.e. monthly or more but not weekly). About a third of all EGM players reported typical session times of an hour or longer; for high frequency players, two-thirds reported typical sessions of an hour or longer. For expenditure on EGMs, around 5% of EGM players in the past year reported losses of \$5,000 or more. Amongst high frequency players, nearly a third reported losing \$5,000 or more. About 7% of all EGM players were moderate risk or problem gamblers and this rose to over a quarter for high frequency players (weekly or more). Playing EGMs is the most commonly reported activity for moderate risk/problem gamblers – over 90% reported playing EGMs in the past year – although it should be noted that most problem gamblers report multiple activities.

Gambling using the internet was not a frequently reported activity (about 5% of the adult population). This included people who played casino type games on the internet for money (1% of the adult population) as well as those who used the internet to place bets on sports betting, races or other special events. While gambling on the internet is reported by a small proportion of the population, it is somewhat larger than estimated by other Australian prevalence studies across all activities. For instance, the 2005 Tasmanian prevalence survey estimated that 3% of the population had gambled on the internet using the same question (Roy Morgan Research, 2006).

About 20% of those who had used the internet to gamble reported losses of \$2,000 or more, including 9% who reported losses of \$5,000 or more. One in ten people who used the internet to gamble were moderate risk or problem gamblers based on CPGI score (3 or more). This is considerably higher than comparable figures for people who play EGMs (6.6%) or bet on horse or greyhound races (4.2%). The Productivity Commission reviewed the very small, but growing, literature dedicated to online gambling. In general, the evidence suggests that people who have gambled online tend to have a higher rate of problem gambling than people who have never gambled online (Productivity Commission, 2010: p15.11).

10.2 Changes in participation and problems over time

Overall participation was only slightly lower in the 2009 survey compared to 2001 (70% compared with 73%). Table 10.1 shows participation across all activities for each jurisdiction since 1999. This Table shows that the ACT Survey findings broadly corroborate a gradual fall in participation evident in most jurisdictions.

Table 10.1: Proportion of the adult population participating in any gambling activity in the last 12 months.

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT
1999	80%	81%	86%	77%	84%	77%	80%	80%
2001			85%					73%
2003		77%						
2003-04			80%					
2005				70%			73%	
2006	69%					85%		
2006-07			75%					
2008		73%						
2008-09	69%		75%					
2009								70%

Source of figures other than 2009 ACT Survey:
Productivity Commission (2010: p2.6), Table 2.2

However, there were more noticeable reductions in playing EGMs and buying scratch tickets between 2001 and 2009. Table 10.2 shows EGM participation since 1999 across all Australian jurisdictions. The 2009 ACT Survey corroborates an overall decline in the proportion of the adult population who use EGMs. While participation has decreased over time, the Productivity Commission noted that real expenditure amongst people who gamble on EGMs has increased since 1999 (Productivity Commission, 2010: p2.21). It was not possible to investigate change in net expenditure amongst EGM players across the 2001 and 2009 ACT Surveys because the questions were asked differently over time.

Table 10.2: Proportion of the adult playing EGMs in the last 12 months.

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT
1999	39%	45%	41%	41%	16%	36%	33%	37%
2001			34%					38%
2003		34%						
2003-04			32%					
2005				30%			27%	
2006	31%					29%		
2006-07			30%					
2008		21%						
2008-09	24%		31%					
2009								30%

Source of figures other than 2009 ACT Survey:
Productivity Commission (2010: p2.22), Table 2.9

Overall, in the 2009 ACT Survey there were more evident declines in those who reported frequent gambling. Other than playing casino type games on the internet and betting on horse or greyhound races, all activities showed a fall (often substantial) in frequent gambling. These changes are mirrored by falls in per capita expenditure on gambling in the ACT as reported by the Office of Economic and Statistical Research (2010).

10.3 Socioeconomic and demographic characteristics associated with gambling and problem gambling

Participation in gambling varied appreciably across different groups in the adult population. Women were more likely to be non-gamblers than men, older adults were more likely to be non-gamblers than younger adults, people born overseas were more likely to be non-gamblers than those born in Australia, and those engaged in full-time education had a very low level of participation. High frequency gamblers (weekly or more often) were more likely to be in older age groups, to be less educated, to have their main income derived from pensions, benefits or superannuation, or to be employed full time rather than part time.

Moderate risk and problem gamblers were more likely to be male, young, Australian born, less-well educated, never married, and either unemployed or employed full-time. Overall, the

characteristics most consistently related to participation and problem gambling were sex, age and education. Education in particular stands out as showing very strong relationships with participation, high frequency gambling and problem gambling.

10.4 Gambling, wellbeing and harms

Very few people reported harms, either in the past year (0.6%) or ever during their lifetime (1.5%), that they attributed to gambling. Financial difficulties (assessed using standard measures) showed little difference across levels of gambling frequency but they were three times more frequent in moderate risk/problem gamblers than non-gamblers. Other measures of wellbeing showed different patterns of association with gambling. Smoking and alcohol consumption both showed strong relationships with frequency of gambling and with categories of problem gambling whereas self-reported physical health showed no significant variation across gambling groups.

Poor mental health also showed little association with gambling frequency but was a feature of the very small group of individuals with gambling problems (CPGI score of 8+). Few Australian prevalence surveys have assessed mental health across levels of gambling. The 2008 Victorian prevalence study is an exception (Department of Justice, 2009). While the mental health of non-gamblers was not reported, this survey found that distress increased across levels of problem gambling, and that 24% of problem gamblers met the criteria for a severe disorder, compared to 1.4% of non-problem gamblers (Department of Justice, 2009).

10.5 Help seeking for gambling problems

As with other Australian jurisdictions (Productivity Commission, 2010), seeking help for gambling problems was found to be very rare in the ACT. Just 0.7% of the adult population had ever accessed services for help with gambling. A further 0.2% had tried to get help but could not get it and 0.1% had wanted help but didn't try to find it. A further 0.8% of the population had talked to family or friends about gambling problems but had made no attempt to get professional help and indicated that they had not wanted such help. Amongst people who self-identified as having had a gambling problem only 19% had ever accessed a service for gambling problems and more than 50% said they had never wanted help, tried to get it or talked to family and friends about their gambling problems. This is the first survey to apply a

hierarchical approach to investigating help-seeking behaviour, and the findings suggest that even though people might recognise they have a problem, a large proportion do nothing about it.

Comparing problem gamblers who had and who had not received services showed little difference in terms of their demographic and socioeconomic characteristics. When asked why they had not looked for help, most said that they did not need help or could beat their problem on their own. However, reports of feeling suicidal were far more common amongst those that had sought help (85%) compared to those who had not (15%), consolidating the impression that people only seek help when gambling problems lead to extreme distress.

10.6 Future research

This initial report has presented basic tables and figures addressing the main objectives of the survey. Subsequent reports will explore these findings in greater detail. The areas identified for future research include the following topics.

- (i) The relationship between the several measures of gambling participation and the experience of problem gambling are complex. More detailed statistical modelling is required to show how the measures of participation, when used in combination, best identify problem gambling. This will take account of type of product, gambling across multiple activities, frequency and time spent on specific activities, and the amount of money spent on gambling. This will provide a more accurate profile of the gambling behaviours that typify problem gamblers.
- (ii) Similarly, more detailed modelling will help characterise which sections of the community (in terms of demographic and socio-economic position) are at greatest risk of high levels of gambling participation and at greatest risk of problem gambling.
- (iii) The associations of gambling participation and intensity with various measures of harm require further exploration to establish which aspects of gambling behaviour are most strongly related to health and wellbeing.

- (iv) A better understanding is needed of the factors that encourage people to seek help for their gambling problems and of the barriers encountered by others who do not seek help. This topic will require additional information to that collected in the prevalence survey.

11. References

- Berwick, D., Murphy, J., Goldman, P., Ware, J., Barsky, A., & Weinstein, M. (1991). Performance of a five-item mental health screening test. *Medical Care*, 29, 169-175.
- Department of Justice (2009). *A study of gambling in Victoria*. Melbourne: Victorian Government.
- Ferris, J., & Wynne, H. (2001a). *The Canadian Problem Gambling Index: Final Report*. Ontario: Canadian Centre on Substance Abuse.
- Ferris, J., & Wynne, H. (2001b). *The Canadian Problem Gambling Index: User Manual*. Ontario: Canadian Centre on Substance Abuse.
- Lesieur, H., & Blume, S. (1987). The South Oaks Gambling Screen (SOGS): A new instrument for the identification of pathological gamblers. *American Journal of Psychiatry*, 144, 1184-1188.
- McMillen, J., Tremayne, K., & Masterman-Smith, H. (2001). *Survey of the Nature and Extent of Gambling and Problem Gambling in the ACT, 2001*. Sydney: Australian Institute for Gambling Research.
- National Health and Medical Research Council (2001). *Australian Alcohol Guidelines: Health Risks and Benefits*. Canberra: NHMRC.
- Office of Economic and Statistical Research (2010). *Australian Gambling Statistics 1980-81 to 2007-08*. Brisbane: Treasury, Queensland Government.
- Productivity Commission (1999). *Australia's Gambling Industries. Final Report* (No 10). Canberra: 1999.
- Productivity Commission (2010). *Gambling* (No. 50). Canberra.
- Roy Morgan Research (2006). *The fourth study into the extent and impact of gambling in Tasmania with particular reference to Problem Gambling*. Hobart: Department of Health and Human Services.
- Young, M., & Stevens, M. (2008). SOGS and CPGI: Parallel comparison on a diverse population. *Journal of Gambling Studies*, 23, 337-356.