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New Zealanders' Knowledge,

Views and Experience

of Gambling and

Gambling Harm

Results from the 2010

Health and Lifestyles Survey







## Acknowledgements

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## Foreword

Around four out of five New Zealand adults will engage in some sort of gambling or betting activity, at least once a year. Although for most people gambling can be a leisure activity that causes no ill effects, gambling-related harm is a continuing issue in New Zealand, with significant health, social and economic implications. ‘Problem gambling’ can have lifelong consequences for an individual and can also seriously impact a wider group of family and friends. A public health approach requires that harms from gambling are looked at as more than individual problems, but as issues that affect families and communities.

This report presents findings from the *2010 Health and Lifestyles Survey (HLS)*. The biennial survey is one of a suite of monitors that examines changes in gambling behaviour or attitudes of New Zealanders. However, the HLS is the most comprehensive account of public attitudes. Drawing on questions from the *2006/07 Gaming and Betting Activities Survey (GBAS)*, it allows examination, and understanding, of the way public attitudes and behaviours have changed over the 2006/07, 2008, 2010 period.

Since 2007 the Health Sponsorship Council has been contracted by the Ministry of Health to develop and deliver an education and awareness programme to support problem gambling sector efforts to reduce and minimise gambling harm. The GBAS provided an important baseline as well as informing the development of the initial programme approaches. The *Health and Lifestyles Survey* helps monitor some of the HSC and wider sector public health efforts as well as informing the planning and development of further programme and sector activities.

This survey confirms some of the findings of previous research regarding the uneven impact of gambling harms in New Zealand. Specifically, that people of Māori and Pacific ethnicities and those living in more deprived areas are more at risk of gambling problems and of experiencing household harms due to someone’s gambling. Participation in several forms of gambling and in particular on continuous forms of gambling such as electronic gaming machines continues to be linked to a higher risk of gambling problems. The report also continues to indicate that gambling harm affects many people who may not themselves gamble excessively. These findings support the current focus of the HSC’s education and awareness programme towards communities that are at particular risk from gambling harms (at-risk and concerned others) as well as continuing to engage the wider New Zealand population.

There are over 80 items in the HLS that relate to gambling. In consultation with stakeholders and acknowledging previous experience with large datasets, the decision was made not to attempt to combine all possible material concerning gambling in a single report. We wished to improve the timeliness and quality of reporting. As a consequence, *New Zealanders’ Participation in Gambling* is covered separately. This report can, and sometimes should, be read alongside the findings reported here. We have made an effort to note where we have identified important contributions from the participation report or other relevant literature.



With the exception of gambling participation data, this report covers most of the gambling questions from the HLS 2010. It is, therefore, a large document, and some readers will likely be interested in only some sections of the report. The report covers five major themes:

1. People's experience of gambling harm, including their personal risk of harmful gambling, experiences at a household level of problems caused by their own or someone else's gambling and use of gambling help services.
2. Views and knowledge about gambling harm, including opinions on which types of gambling are more harmful or less desirable, ability to describe the signs that someone has a problem with gambling and awareness of potential consequences of gambling problems.
3. Responses to gambling harm, including awareness and use of strategies to avoid gambling too much and to help someone who has a gambling problem, awareness of gambling help services, and participation in conversations about avoiding gambling harm.
4. Addressing gambling harm in the community, including opinions on the use of gambling funds for community purposes, local decisions on gaming machines, people's feelings on who should take responsibility for preventing gambling harm, and people's own involvement in community actions.
5. Advertising about gambling, including awareness of advertising for gambling activities and people's recall of the effect that advertising has had on their own gambling behaviour, and recall of advertising that promotes solutions to gambling harms.

It is important to note that while the findings presented in this report tell a lot of stories about the relationship of people in New Zealand to gambling and its possible harms, they do not tell the whole story. There are other sources of data about gambling in New Zealand, many of which are referenced in this report. There are also many other ways that the 2010 HLS data can be analysed to explore the relationships between different personal characteristics and behaviours and beliefs about gambling.

Academics and sector experts recognise the nature of harm from gambling is difficult to pinpoint with single measures. It is with this recognition that we strive to form a better understanding of harm from gambling through a wide raft of measures and co-ordinate with other sector experts to support their activities. The 2010 HLS data are reported here while the 2012 HLS is being planned and implemented. This should serve to demonstrate our commitment to that wider co-ordinated effort and to underscore the importance of the need to encourage a co-ordinated understanding of the nature of harm from gambling to inform our efforts to reduce it.

It is hoped that this report serves to stimulate questions and encourage debate, inform thinking and serve as a further point for comparison against a changing gambling environment and a greater shared awareness of the issues that these changes bring.

Dr Darren Walton



Director  
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# 1 Introduction

## 1.1 The Health and Lifestyles Survey

The material in this report is drawn from gambling-related questions included in the Health and Lifestyles Survey (HLS). The HLS is a monitor of the health behaviour and attitudes of New Zealand adults aged 15 years and over. The HLS is managed by the Health Sponsorship Council (HSC) and collects information relating to a number of programme areas including Minimising Gambling Harm. The HLS is carried out every two years, with the first HLS carried out in 2008. Prior to the 2008 HLS, the HSC undertook a survey called the Gaming and Betting Activities Survey (GBAS) to benchmark people's opinions, knowledge and behaviour relating to gambling. This survey was carried out from mid-December 2006 to May 2007.

The GBAS included 1,973 adults (aged 15 years and over), while the 2008 and 2010 HLS each included 1,608 and 1,740 adults respectively. Details of the procedures followed to ensure these surveys produced high-quality and robust data can be found in the related methodology reports (Devlin 2010; 2011a). These reports can be accessed at <http://www.hsc.org.nz>.

The 2010 HLS involved face-to-face interviews that took an average of 50 minutes; just over a third of this time (18 minutes) was spent on the gambling-related questions, many of which were included to monitor the behaviours and attitudes measured in the 2006/07 GBAS. The 2008 HLS included a small number of gambling questions. Other sections of the HLS included questions on smoking, eating, drinking and sun safety.

This report presents some descriptive results from the 2010 HLS. It reports people's experiences with gambling harm, knowledge and attitudes about gambling harm and solutions, and awareness of and response to advertising relating to gambling. Where it is possible comparisons are made to data from the GBAS and the 2008 HLS.

## 1.2 Gambling in New Zealand

Gambling activities in New Zealand are classified by the Gambling Act 2003 according to the amount of money spent and the risk of gambling harm associated with each activity. Class 1 represents low-stake, low-risk gambling while Class 4 represents high-risk, high-turnover gambling (currently only non-casino gaming machine gambling), and is subject to strict licensing criteria. Casino operations and New Zealand Lotteries Commission lotteries are treated separately under the Act (DIA 2011a).

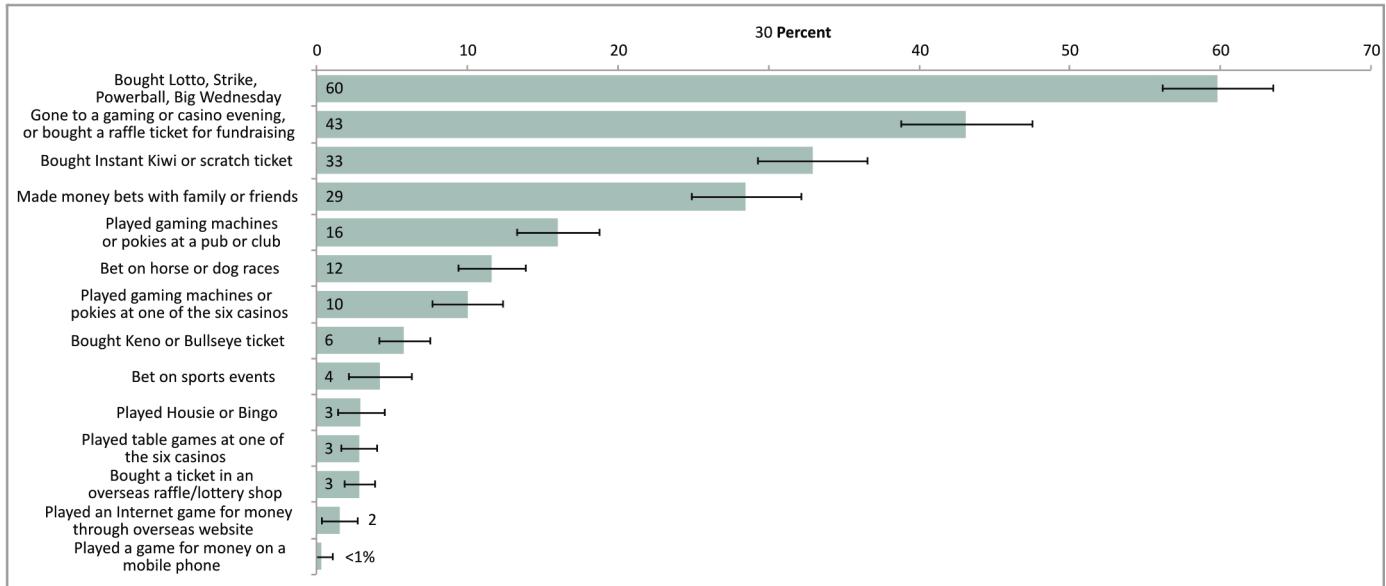
The only organisations that are permitted to conduct remote interactive gambling (such as gambling over the internet) within New Zealand are the New Zealand Racing Board and the New Zealand Lotteries Commission. This is achieved by excluding the activities of the Board and the Commission from the definition of remote interactive gambling. While it is illegal to advertise overseas gambling in New Zealand, it is not illegal to participate in gambling on an overseas-based website or to gamble on overseas competitions and games. More information about gambling regulation in New Zealand can be accessed at the Department of Internal Affairs website: [www.dia.govt.nz](http://www.dia.govt.nz).

Around \$2 billion was spent on New Zealand-based gambling in every year from 2003/04 to 2009/10. The overall expenditure in 2009/10 was lower than in 2008/09 (DIA 2010).

*New Zealanders' Participation in Gambling: Results from the 2010 Health and Lifestyles Survey* includes gambling participation behaviours of New Zealanders (Gray 2011). About four in five New Zealanders participated in some form of gambling activity during the 12 months prior to the 2010 HLS.

Sixty-three percent of New Zealanders bought some form of New Zealand Lotteries product over that time, while sixteen percent had played gaming machines at a pub or club and ten percent played them at casinos (see Figure 1.1). Twelve percent of New Zealanders bet on a horse or dog race over that period.

**Figure 1.1: Gambling Activities Participated in during the previous 12 months, 2010**



Note: multiple responses allowed. Therefore, respondents may be represented in more than one category.

Source: New Zealanders' Participation in Gambling: Results from the 2010 Health and Lifestyles Survey (Gray 2011)

Other publications on the gambling results of the 2010 HLS that complement this report include:

- Technical Report: Casino gambling in New Zealand
  - \* A report on casino gambling in New Zealand of those aged 20+ years. This includes peoples' perceptions and some measures of harm. Some comparisons are made to figures on non-casino gaming machines.
- A Bet on the 'Net - Internet Gambling in New Zealand. Preliminary Findings.
  - \* This provides figures on the proportions of New Zealanders aged 18+ years who bet on New Zealand based TAB and MyLotto and overseas based websites.
- Technical report: Groups at risk of at-risk gambling
  - \* A report on what demographic factors might be overrepresented among low-risk and among moderate-risk/problem gamblers.
- Advertising and promotion of gambling - Health and Lifestyles Survey 2010.
  - \* A fact sheet on people's awareness of gambling advertising and advertising of gambling support services.
- Local communities' concerns about gambling
  - \* A fact sheet on people's awareness of who makes decisions on non-casino gaming machines in their community, how and whether or not they contribute to that process.
- The prevalence of problem gambling in New Zealand as measured by the PGSI: Adjusting prevalence estimates using meta-analysis.
  - \* A journal article drawing on the 2010 HLS and the 2006/07 New Zealand Health Survey to provide a precise estimate of problem gambling prevalence in New Zealand, 0.5%.
- Low-risk, Moderate-risk & Problem gambling in New Zealand (forthcoming at the time of print)
  - \* A fact sheet presenting the 2010 New Zealand prevalence figures and how they compare to the 2006/07 figures. Individual Problem Gambling Severity Index items are also presented.
- Experience of gambling-related harm (forthcoming at the time of print)
  - \* A fact sheet presenting results of some indicators of harm and the gambling modes these are associated with.

## **1.3 HSC's Minimising Gambling Harm programme**

Gambling in New Zealand is regulated by the Gambling Act 2003. One of the specified purposes of the Act is to “prevent and minimise the harm caused by gambling, including problem gambling” (Part 1, Section 3, Gambling Act 2003 No 51). The Ministry of Health is responsible, under the Act, for the development and implementation of an integrated problem gambling strategy focussed on public health. As part of the Ministry’s *Preventing and Minimising Gambling Harm: Six-year strategic plan 2010/11–2015/16* (2010a), the HSC has been contracted to deliver an education and awareness programme to support problem gambling sector activity.

The 2006/07 Gaming and Betting Activities Survey was carried out, prior to the launch of HSC’s education and awareness programme. This survey was designed to benchmark current levels of discussion, debate and involvement, along with people’s current knowledge, understanding and views about gambling and gambling harm. The findings of this survey helped to inform the direction of the first two stages of the education and awareness programme.

The findings of the 2010 HLS, shown in this report, begin to provide an indicator of change since the introduction of HSC education and awareness programme ongoing sector efforts. They have also been used to find out more about the characteristics and opinions of key audiences for the third campaign phase. These include people who are deemed at-risk of gambling harm, those who regularly play the forms of gambling that are more likely to lead to harm from gambling, and significant others.

The HLS will continue to monitor trends in people’s attitudes and behaviours that are relevant to this education and awareness programme and wider sector activities. In 2012, the survey will contain a smaller section of questions relating to gambling, and then in 2014 there will be more gambling questions in the survey so as to provide a fuller comparison with the results shown here from 2010.

## **2 Survey Design and Method**

### **2.1 Questionnaire content**

The 2010 HLS questionnaire is available from the HSC website ([www.hsc.org.nz/researchpublications](http://www.hsc.org.nz/researchpublications)).

The gambling section of the 2010 HLS contained more than 80 questions and was the largest section of the questionnaire. The majority of these gambling questions were sourced from the 2006/07 GBAS and the Department of Internal Affairs' 2005 Gambling Participation and Attitudes Survey to facilitate comparisons with data collected from these earlier surveys.

The questionnaire was pilot tested to assess its length and to ensure that the items were easy to understand and answer.

### **2.2 Data collection**

Interviews were conducted in respondents' homes. Interviewers typed responses directly into laptop computers using Blaise Computer Assisted Personal Interview (CAPI) software. Show cards with predetermined response categories were used to assist respondents where appropriate.

Responses were combined into an electronic database that was used to produce the information in this report.

### **2.3 Sample**

The HLS is a nationwide survey of New Zealand residents aged 15 years and over. Respondents could only be interviewed at their own usual residence. That is, if they were visiting a household that was selected for inclusion in the HLS they could not be interviewed as part of that household. This process ensured that people were not surveyed twice. People in some smaller population groups, for example Māori and Pacific peoples, were over-sampled to reduce error associated with a small sample.

### **2.4 Weighting**

Not all groups of people are represented in surveys as they occur in the population at large; in surveys such as the HLS some groups may participate in lower or higher levels than other groups. To ensure the analysis of the HLS is representative ie, respondents truly represent the New Zealand population in terms of ethnicity, gender and other such characteristics, the data are weighted. The weight can be thought of as the number of people in the population represented by a given survey participant.

Weights:

- a) reflect the chance of selection of each respondent
- b) use external population benchmarks (typically obtained from a population census) to correct for any differences between the demographic make-up (eg, gender, ethnicity and age) of the people who participate and that of the overall population – this improves the precision of the survey estimates and reduces bias that may occur from specific groups not participating.



## 2.4.1 Counts

Where counts have been presented in the tables of this report, or as for example (n=496) in the text these figures are unweighted. This means they:

- cannot (and have not) been used to calculate representative percentages
- are not population representative counts
- are presented to show the number of people in the survey that the estimates have been based on.

## 2.5 Derived variables

A number of derived variables (new measures usually created from a combination of or prioritisation of participant responses) have been created for the 2010 HLS data set. The following variables are referred to in this report.

### 2.5.1 Ethnicity

Ethnicity was calculated using prioritisation in the order of Māori, Pacific peoples, Asian, European/Others. Prioritisation involves each person being allocated to a single ethnic group, based on the ethnicities they report belonging to, in the prioritised order of Māori, Pacific peoples, Asian and European/Other (Ministry of Health 2004). For example, if someone identifies as being Chinese and Māori, under the prioritised ethnic group method, they are classified as Māori for analysis purposes. The way that the ethnicity data is prioritised means that the group of prioritised European/Other effectively refers to non-Māori, non-Pacific, and non-Asian people. Prioritisation is a method outlined in the *Ethnicity Data Protocols for the Health and Disability Sector* as a useful method for grouping people into independent ethnic groups for analysis (Ministry of Health 2004).

### 2.5.2 Gambling type

Gambling types are often classified into two categories, those where winnings can be immediately ‘reinvested’ (for example, gaming machines or pokies) and those where they cannot (for example, lottery tickets). The former are referred to as continuous<sup>1</sup> and the latter non-continuous<sup>2</sup> (Abbott and Volberg 1996). For the HLS analysis, respondents’ participation in gambling activities in these two groups were combined with their frequency of participation to create four mutually exclusive gambling types in the same way they were presented for the 2006/07 Gaming and Betting Activities Survey (National Research Bureau 2007).

These categories are set up so that a respondent is only represented in one of them:

1. Frequent, continuous gamblers: participated at least weekly in at least one continuous<sup>1</sup> form of gambling.
2. Frequent, non-continuous gamblers: participated at least weekly in at least one non-continuous<sup>2</sup> form of gambling.  
If they participated in a continuous form of gambling this was less than once a week.
3. Infrequent gamblers: participated in any gambling activities less than once a week.
4. Non gamblers: did not participate in any gambling activities in the last 12 months.

<sup>1</sup> Continuous forms of gambling include playing electronic gaming (pokie) machines, table games at casinos, mobile phone games for money, betting on sports events, and online activities for money or prizes through an overseas website. Betting on horse races, dog races or sports events and playing housie or bingo are also included as continuous activities in the analyses presented in this report. For these activities money is not re-invested as quickly as it would be for the other continuous forms of gambling.

<sup>2</sup> Non-continuous forms of gambling include lottery games, going to casino fundraising evenings/buying raffle tickets, participating in sweepstakes, making bets with family/friends and other gambling activities.

### **2.5.3 Household composition**

Respondents were asked some questions about the number of people living in their households and the relationships of these people to the respondent. Using this information five different household composition groups were identified:

1. Single person: lives alone.
2. Couple no children: lives with their partner/husband/wife and no others.
3. Family with children: there are children aged 0–16 years living in the household.
4. Family no children: lives with more family than just a partner, and there are no children aged 0–16 years living in the household.
5. ‘Other’ households: lives with friends, flatmates, other combinations that do not fit into the other four categories.

Each respondent has only been included in one of these groups.

As there were only forty respondents in the ‘other’ households classification the error around survey estimates for this group is high and reduces the interpretability of the results. It has been decided not to include this group in the household composition results presented in this report.

### **2.5.4 Neighbourhood socioeconomic deprivation: The New Zealand Index of Socioeconomic Deprivation 2006**

The New Zealand Index of Socioeconomic Deprivation 2006 (NZDep2006) has been linked to the 2010 HLS as a measure of neighbourhood socioeconomic deprivation and a proxy for individual socioeconomic position. The NZDep2006 was created using nine variables<sup>3</sup> from the 2006 Census data, with a decile value calculated for each meshblock, or neighbourhood area (Salmond et al. 2007). In this report these deciles have been grouped, so that deciles 1–3 are referred to as low deprivation, 4–7 as moderate (or mid) deprivation, and 8–10 as high deprivation.

### **2.5.5 Household Equivalised Income**

Respondents were asked to choose an income range that represented their total household income from all sources before tax in the previous 12 months. Household income by itself is not very useful, as a two-person household with a total household income of \$100,000 is likely to be quite different in many characteristics from that of a six-person household with a total household income of \$100,000. To mitigate this, equivalised household income was calculated using the revised Jensen Index (Jensen 1988). The revised Jensen Index is a recognised equivalence index used within New Zealand (Blakely 2002, Ministry of Health 2010b) that takes into account the number of adults, the number of children (younger than 18-years-old) and the ages of the children living in the household.

### **2.5.6 Problem Gambling Severity Index**

In addition to the term ‘problem gambler’, the terms ‘low-risk’ and ‘moderate-risk’ are also used to describe a person’s gambling behaviour.

The Problem Gambling Severity Index (PGSI) contains nine questions that are strong predictors of gambling harm<sup>4</sup> (eg. feeling guilty about gambling, having financial difficulties, betting more than one can afford) (Ferris and Wynne 2001).

<sup>3</sup> The nine variables are: receiving a means-tested benefit, low household income, not owning the home you live in, single-parent family, unemployment, no school qualifications, household overcrowding, no access to a telephone and no access to a car.

<sup>4</sup> The proportions of people who had experienced each of the nine indicators, at least sometimes, in the past 12 months have been presented in a separate publication available on our website: Low-risk, Moderate-risk & Problem gambling in New Zealand (Devlin, 2012a).



Respondents are asked whether in the past 12 months they have experienced these signs of harm caused by gambling and, if so, whether this happened “sometimes, most of the time or almost always”. They are allocated from one point for “sometimes” to three points for “almost always”, and can therefore be allocated up to 27 points. Respondents were then classified into the following categories:

1. non-gamblers (those who did not answer “yes” to any of the questions about participation in gambling in the last 12 months),
2. non-problem gamblers (those who had gambled, but answered “no” to all the PGSI questions about experiencing harm),
3. low-risk gamblers (1 or 2 points on the PGSI),
4. moderate-risk gamblers (3-7 points) and
5. problem gamblers (8 or more points).

For most of the PGSI results presented in this report ‘moderate-risk’ and ‘problem gamblers’ have been combined into one group, as the number of ‘problem gamblers’ in the HLS sample was too small to present descriptive results for this subgroup alone (see Section 2.6 below). This combination has only been presented where we have verified statistically that the ‘moderate-risk’ and ‘problem gambler’ groups do not have a statistically different response pattern to the question/s involved. Where our analysis has shown that there may be a difference between the ‘moderate-risk’ and ‘problem gambler’ groups the results have only been presented for those classified as ‘moderate-risk’ gamblers.

## 2.6 *Differences between sub-groups*

While the comparisons presented in this report can be used to examine associations between certain personal and lifestyle characteristics and responses regarding gambling harm, attitudes and knowledge, the findings do not point to causation.

Differences between sub-groups are noted as “more likely/less likely” after testing for statistical significance – those that are found to be significant or marginally significant are reported as such. While this report cannot cover all differences that may be of interest, the HLS dataset can be made available to others for performing more in-depth analyses (<http://www.hsc.org.nz/dataaccess>).

When the number of respondents in a sub-group is small (ie. less than 30), any difference between this group and others is not commented on, because the results are subject to a very wide margin of error.

## 2.7 *How to read the tables*

The figures presented in tables and graphs in this report may not sum to 100% due to rounding. There are also a number of questions to which respondents could provide multiple responses.

With the exception of the tables showing PGSI measures, responses in the tables are shown as whole numbers (without any decimal places). Because of rounding, percentages between 0 and 0.4 are reported as “0”. When a space on the table is marked with “-”, this means that respondents in that year were not asked, or did not provide any response to, that particular option.

The numbers in the tables about participation should be read as the proportion of the people of a certain demographic group (shown in the top row) who have participated in a certain gambling activity (shown in the leftmost column). The base size for each demographic subgroup (that is, the unweighted number of respondents in that group) is shown at the bottom of each table.

For example, in this excerpt from Table 3.4:

**Table 3.4 Gender, age and ethnic differences in experience of gambling more than intended during previous 12 months (N = 1740)**

Gambled more than Intended?	Gender		Age group (in years)						Total
	Male	Female	15-24	25-34	34-44	45-54	55-64	65+	
	%	%	%	%	%	%	%	%	
Yes	6	6	6	6	8	6	8	7	6
No	94	94	94	94	93	94	92	94	94
All respondents	711	1029	1740	277	425	335	233	273	1740

In order to make a statement about the results in the table, we would first look at the group of interest in the top row (“Of those aged 65 years and over”) then look down the page from this line to the percentage shown (“7%”) on the horizontal line corresponding to the response of interest (“said ‘yes’”) and finally the title of the table, for detail about the question being asked (“when asked whether they had had an experience of gambling more than they had intended in the previous 12 months”).

We can see that of those aged 65 years and over, 7% had had an occasion during the previous 12 months where they had gambled more than intended. We can see that overall, 6% of the people interviewed had had an experience of gambling more than intended during the previous 12 months, that there was no difference between the proportion of males and females who said this had happened to them, and very little difference between people in different age groups.

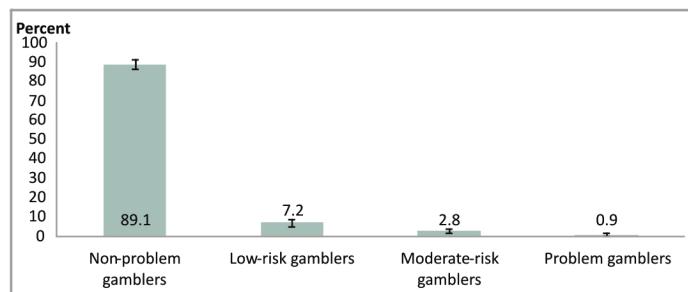


## 3 Household and individual gambling harm

### 3.1 Individual gambling harm

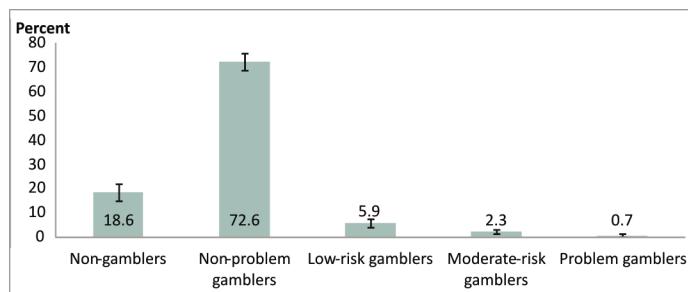
- Figure 3.1 shows that of the people who had gambled at least once during the previous 12 months, most (89.1%) did not report experiencing any of the signs of harmful gambling.
- Around one in 14 (7.2%) people who had gambled were classified as ‘low-risk’ gamblers and one in 36 (2.8%) as ‘moderate-risk’ gamblers. Fewer than one in 100 (0.9%) past-year gamblers met the criteria for ‘problem gambling’.
- These figures do not change when people who have only participated in Lotto, Strike, Powerball or Big Wednesday are excluded (7.6% ‘low-risk’, 3.0% ‘moderate-risk’, and 0.9% ‘problem gambling’).
- Among the whole group of respondents, including those who had not gambled during the previous 12 months, 0.7% met the criteria for ‘problem gambling’ (Figure 3.2). According to the estimated population of people aged 15 years and over in New Zealand at the time the survey was carried out (Statistics New Zealand 2010), this figure represents around 24,000 ‘problem gamblers’.
- More than nine in 10 people did not report any signs of harmful gambling.

**Figure 3.1 Signs of harm for people who had gambled during the previous 12 months (n=1404)**



Note: Figures only include those people who said they had gambled during the past 12 months; hence results are not indicative of total population proportions.

**Figure 3.2 ‘Problem gambling’ risk in the New Zealand population (N=1740)**



All respondents

Table 3.1 to Table 3.3 show the rate of ‘problem gambling’ risk among the overall sample, including those people who had not gambled in the previous 12 months. Although the other tables in the report show whole numbers (no decimal places), one decimal place has been included for the numbers in the tables about PGSI scores. This is because the proportions of people who score highly on the PGSI are very small and rounding up or down to whole numbers masks most differences between sub-groups of people. ‘Moderate-risk’ and ‘problem gamblers’ have been combined into one category because the number of ‘problem gamblers’ was too small to provide figures for this group alone.

When the data were examined by gender, age and ethnicity (Table 3.1), results showed:

- Gender differences in rates of ‘problem gambling’ risk were not significant.
- Younger people aged 15-24 years were the least likely to have gambled at all during the previous 12 months.
- People aged 35 years and over were more likely than those aged 15-24 years to be ‘low-risk’ gamblers.
- There was no significant difference by age among ‘moderate-risk’ or ‘problem gamblers’.
- People of European/other ethnicities were more likely than Pacific and Asian people to have gambled at all during the previous 12 months, but less likely than people of any other ethnicities to be ‘moderate-risk’ or ‘problem gamblers’.
- Māori, Pacific and Asian people were more likely than people of European/other ethnicities to be ‘moderate-risk’ or ‘problem gamblers’.

**Table 3.1 Gender, age and ethnic differences in risk of ‘problem gambling’ (N = 1740)**

Risk of problem gambling behaviour	Gender		Age (in years)					Prioritised ethnicity					Total
	Male	Female	15-24	25-34	35-44	45-54	55-64	65+	Māori	Pacific	Asian	Euro/ Other	
	%	%	%	%	%	%	%	%	%	%	%	%	%
Non-gambler	19.6	17.7	33.0	23.4	15.1	10.4	13.8	14.8	20.4	29.5	38.4	15.4	18.6
Non-problem gamblers	69.9	75.0	61.7	67.9	76.3	78.4	72.3	78.9	61.6	56.9	51.4	77.6	72.6
Low-risk gamblers	7.0	4.9	1.8	5.7	5.7	7.7	10.6	4.8	8.9	8.5	1.7	5.7	5.9
Moderate risk/ Problem gamblers	3.5	2.4	3.4	3.0	2.9	3.6	3.3	1.4	9.1	5.0	8.6	1.3	3.0
All respondents	711	1029	197	277	425	335	233	273	460	301	113	866	1740

When data were examined by household characteristics (Table 3.2), results showed:

- People living in areas of high deprivation were more likely than people living in low deprivation areas to be ‘low-risk’ gamblers.
- People who lived with a partner but no children were more likely than people who lived alone or in a family with children to be ‘non-problem gamblers’ (meaning they had gambled during the previous 12 months but did not report any experiences that might classify them as at risk of gambling problems).
- People whose household equivalised income was medium or high were more likely than people whose household equivalised income was low to be ‘non-problem gamblers’. People whose household equivalised income was low were more likely to say that they had not gambled at all during the previous 12 months.

**Table 3.2 Household and neighbourhood differences in risk of ‘problem gambling’ (N = 1740)**

Risk of problem gambling behaviour	Deprivation			Household composition				Household equivalised income				Total %
	Low (1-3)	Mid (4-7)	High (8-10)	Single person	no children	Family children	Family children	Low	Medium	High	Not stated	
	%	%	%	%	%	%	%	%	%	%	%	
	Non-gambler	21.7	12.1	23.2	18.9	10.2	24.9	22.7	30.8	16.3	9.2	20.4
Non-problem gamblers	73.0	78.5	64.5	70.6	81.5	67.3	67.1	57.5	75.2	83.9	74.0	72.6
Low-risk gamblers	3.8	5.8	8.4	7.3	6.4	4.7	4.7	8.3	4.6	5.1	3.8	5.9
Moderate risk/ Problem gamblers	1.4	3.6	3.9	3.1	1.8	3.1	5.5	3.4	3.8	1.8	1.8	3.0
All respondents	407	557	776	271	419	896	114	435	544	708	53	1740

When the data were analysed by reported gambling behaviour (Table 3.3), results showed:

- As the number of gambling activities participated in increases, so does the risk of ‘problem gambling’. People who had participated in four or more different forms of gambling over the previous 12 months were the most likely to be ‘moderate-risk’ or ‘problem gamblers’.
- As gambling frequency increases, particularly on continuous forms of gambling, people report experiencing more problems. People classified as “frequent continuous gamblers”, that is, those who participated in a continuous gambling activity every week, were more likely than people who participated less frequently in gambling, or whose frequent participation was only on non-continuous forms of gambling, to be problem, ‘moderate-risk’ and ‘low-risk’ gamblers. Thirty percent of the people who participated frequently in continuous forms of gambling were ‘moderate-risk’ or ‘problem gamblers’.

**Table 3.3 Gambling behaviour and risk of ‘problem gambling’ (N = 1740)**

Risk of problem gambling behaviour	Gambling type				Number of activities participated					Total %
	Non- gambler	Infrequent gambler	Non- contin. gambler	Contin. gambler	None	1	2	3	4 or more	
	%	%	%	%	%	%	%	%	%	
	Non-problem gamblers	0.0	92.2	87.9	43.5	1.4*	94.7	90.1	87.8	78.3
Low-risk gamblers	0.0	5.5	8.9	26.5	0.0	3.4	7.5	8.8	12.1	5.9
Moderate risk/Problem gamblers	0.0	2.3	3.2	30.0	0.0	1.8	2.4	3.4	9.6	3.0
All respondents	336	941	352	86	338	452	424	282	244	1740

\* The small proportion of people classified as having participated in no gambling activities, but who were still asked the PGSI questions, are likely to have initially said that they had participated in gambling during the previous 12 months but not reported doing any of the listed types of gambling. This may be due to recall error or to participation in an activity not included as “gambling” in the questionnaire.

### **3.1.1 Discussion: Individual Gambling Harm**

The New Zealand Health Survey, conducted in 2006 and 2007 by the Ministry of Health, found using the PGSI that people aged 35-44 were at significantly greater risk for ‘problem gambling’ (Ministry of Health 2009). In the 2010 HLS it was found that all age groups are at equal risk of moderate and ‘problem gambling’. The 2010 findings do however mirror the NZHS findings that people living in more deprived areas were at greater risk of ‘problem gambling’ than those in less deprived areas, and that people of Māori and Pacific ethnicities were at greater risk of ‘problem gambling’ than people of European and other ethnicities. It is important to note that Māori and Pacific peoples are more highly represented in neighbourhoods of high deprivation.

Further analysis on these 2010 HLS data has shown that risk of gambling problems appears to be associated with smoking status and in some cases the area and household type in which people live. The age group differences for ‘low-risk’ gambling and ethnicity differences for ‘moderate-risk’ and ‘problem gambling’ were also confirmed in this analysis (Devlin 2011b, available at <http://www.hsc.org.nz/researchpublications.html>).

‘Problem gambling’ has previously been strongly linked to participation in several types of gambling activities, and in particular to continuous gambling activities such as electronic gaming machines (pokies) (Ministry of Health 2009). The 2010 HLS findings show a similar association between frequency and type of gambling and risk of ‘problem gambling’ (Devlin & Walton 2012). These results are also reflected in the 2010 HLS PGSI results by gambling mode, 43% (two in five) fortnightly players of non-casino gaming machines (a continuous form of gambling) being classified as ‘moderate-risk’ or ‘problem gamblers’; while less than 6% of fortnightly Lottery ticket buyers were classified as such (Gray 2011). PGSI results for casino gambling have been presented in *Technical Report: Casino gambling in New Zealand* (Devlin, 2012b).

The 2010 HLS results show 0.7% of New Zealanders aged 15 years and over can be classified as ‘problem gamblers’. In the 2006/07 NZHS, for which the sample size was seven times larger than the HLS, 0.43% of the population aged 15 years and over was classified as ‘problem gamblers’. These estimates do not differ significantly, however to combine the precision of the larger sample with the timeliness of the up-to-date sample from the HLS, a meta-analysis of these two estimates was carried out. The results of this analysis indicate that the prevalence of ‘problem gambling’ among New Zealanders aged 15 years and over is 0.5% (Devlin and Walton 2012). This estimate puts the total number of ‘problem gamblers’ in New Zealand at around 17,000, rather than the 24,000 implied by the unadjusted HLS finding.

## **3.2 Personal experience of overdoing gambling in the last 12 months**

All respondents who had reported participating in a gambling activity were asked whether or not during the previous 12 months they had had a day or an outing where at the end of it they looked back and thought to themselves, “I really overdid that, I spent more time or money gambling than I meant to”. The responses in this chapter are presented as proportions of the whole population, not just the group who had gambled in the previous 12 months.

Of all the people surveyed, 6% said that they had had an occasion during the previous 12 months where they had overdone their gambling. Among those who had gambled during the previous 12 months, the proportion who said they had overdone it was 7.3%.

When the data were examined by gender, age and ethnicity, males and females were equally likely to say they had had an occasion where they had overdone their gambling. Māori were significantly more likely than Pacific people and people of European/Other ethnicities to say that they had overdone their gambling during the previous 12 months: around one in seven (15%) said they had overdone it (Table 4.4).

**Table 3.4 Gender, age and ethnic differences in experience of gambling more than intended during previous 12 months (N = 1740)**

Gambled more than Intended?	Gender		Age group (in years)						Prioritised ethnicity				Total
			15-24	25-34	34-44	45-54	55-64	65+	Maori	Pacific	Asian	Euro/Other	
	%	%	%	%	%	%	%	%	%	%	%	%	%
Yes	6	6	2	6	8	6	8	7	15	6	6	5	6
No	94	94	98	94	93	94	92	94	85	94	95	95	94
All respondents	711	1029	197	277	425	335	233	273	460	301	113	866	1740

When the data were examined by household and neighbourhood characteristics, no significant differences in responses were found (Table 3.5).

**Table 3.5 Household and neighbourhood differences in experience of gambling more than intended during previous 12 months (N = 1740)**

Gambled more than intended?	Deprivation			Household composition				Household equivalised income				Total
				Couple	Family	Family		Low	Medium	High	Not stated	
	Low	Mid	High	Single person	no children	with children	no children	Low	Medium	High	Not stated	
	(1-3)	(4-7)	(8-10)	%	%	%	%	%	%	%	%	
Yes	3	8	7	6	6	6	9	6	8	4	2	6
No	97	92	93	94	94	94	91	94	92	96	98	94
All respondents	407	557	776	271	419	896	114	435	544	708	53	1740

When the data were examined by gambling behaviour and ‘problem gambling’ risk (Table 3.6), the results showed:

- Just over half of the people who frequently participated in continuous gambling activities had overdone it during the previous year – significantly higher than the rate among those who gambled less frequently, or only on non-continuous gambling activities.
- The likelihood of having overdone gambling increased as the number of activities participated in increased. One in five people who played four or more gambling activities during the previous year reported having overdone it.
- Only 2% of ‘non-problem gamblers’ reported having overdone their gambling during the previous 12 months, while 40% of ‘low-risk’ gamblers and 58% of ‘moderate-risk’ gamblers reported that they had overdone it.

**Table 3.6 Gambling behaviours and differences in experience of gambling more than intended during previous 12 months (N = 1740)**

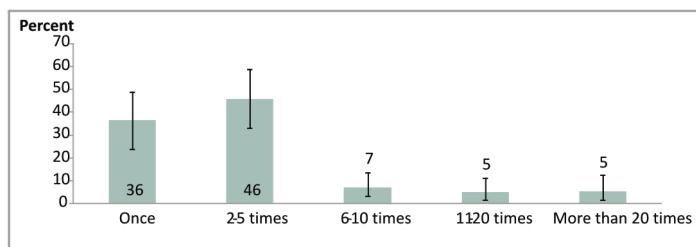
Gambled more than intended?	Gambling type				Number of activities participated					PGSI				Total
	Non- gambl.	Infreq. gambl.	Non- contin.	Contin. gambler	None	1	2	3	4 or more	Non- gambler	Non- problem gambler	Low- risk	Moderate risk	
	%	%	%	%	%	%	%	%	%	%	%	%	%	
Yes	0	5	8	53	0	1	5	10	20	0	2	40	58	6
No	100	95	92	47	100	99	95	90	80	100	98	60	42	94
All responds.	336	941	352	86	338	452	424	282	244	336	1194	133	57	1740

### 3.2.1 Number of times people had overdone their gambling

Those respondents who reported an experience during the previous year where they spent more time or money than they meant to on gambling (felt they had overdone it) were asked how many times this had happened (Figure 3.3).

Among those who had overdone it, around one in three said this had only happened once, and nearly half said it had happened between two and five times. One in 10 said that they had overdone their gambling 11 times or more during the year. Readers should note that due to the small number of respondents to this question (n=149), the confidence intervals for these estimates are wide; this means the proportions should be interpreted with caution.

**Figure 3.3 Reported frequency of gambling more than intended during the previous 12 months (n = 149)**



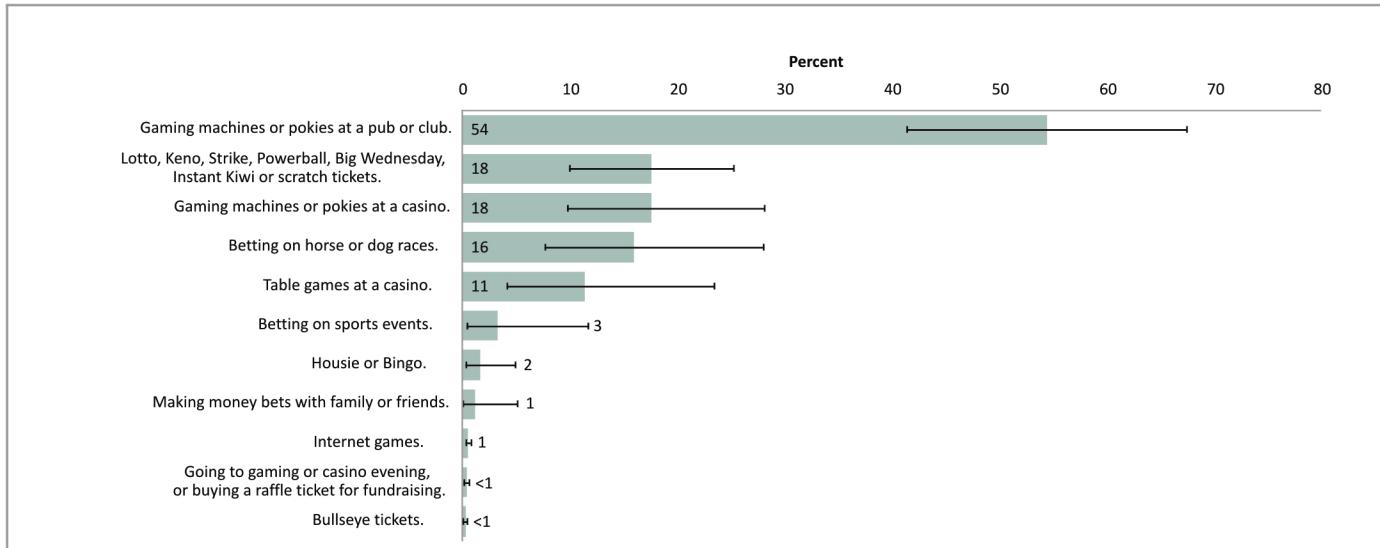
Note: Figures only include those people who said they had spent more time or money than they intended on gambling during the previous 12 months; hence results are not indicative of total population proportions.

### 3.2.2 Types of gambling that people spent more time or money on than intended

Respondents who reported an experience during the previous year where they spent more time or money on gambling than they meant to were asked what type or types of activities they had been gambling on. If they mentioned more than one activity, they were then asked which type of gambling that this experience had most frequently happened with.

Over half of those respondents who had overdone their gambling during the previous 12 months said that this had happened with non-casino gambling machines (or, “pokies in pubs or clubs”). The next most commonly mentioned activities, by around a sixth of those who reported overdoing it, were New Zealand Lotteries products, casino gaming machines and betting on horse or dog races. As noted previously, the small sample size means that these findings should be interpreted with caution (Figure 3.4).

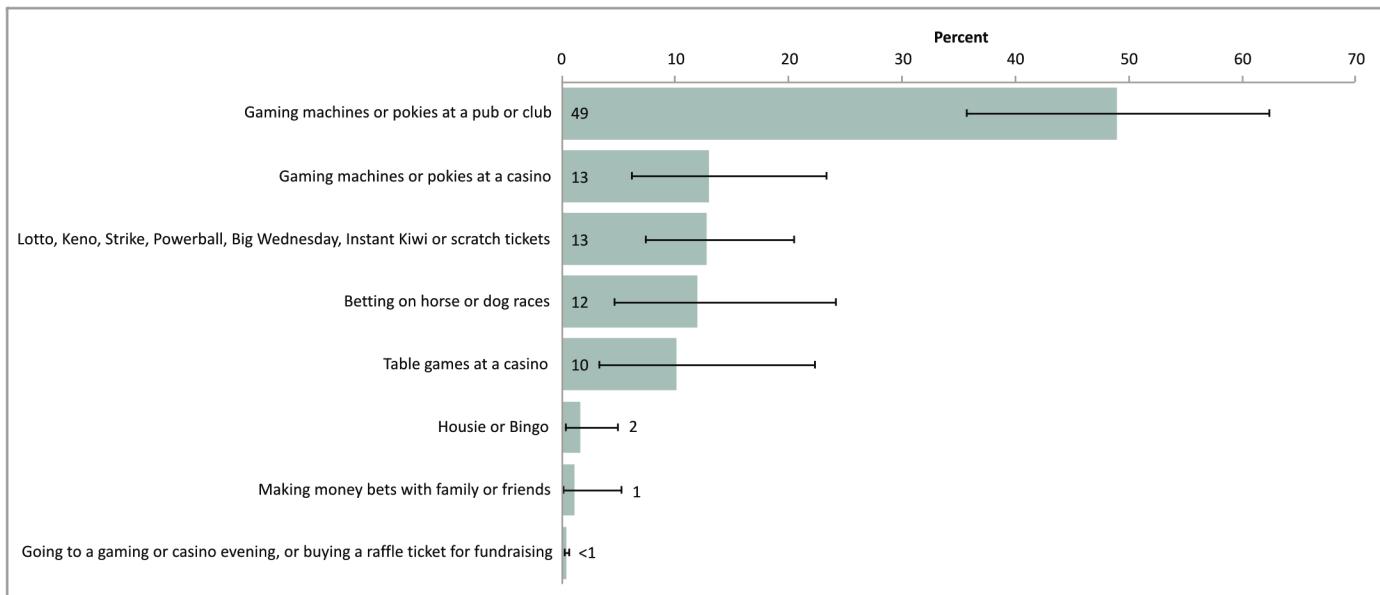
**Figure 3.4 Types of activity on which people gambled more than intended during previous 12 months (multiple responses) (n=149)**



Note: Figures only include those people who said they had overdone their gambling; hence results are not indicative of total population proportions

Almost half of the people who had overdone their gambling during the previous 12 months said that the activity this had happened most often with was playing gaming machines in pubs or clubs (Figure 3.5).

**Figure 3.5 Type of activity on which people most often experienced gambling more than intended during previous 12 months (n=149)**

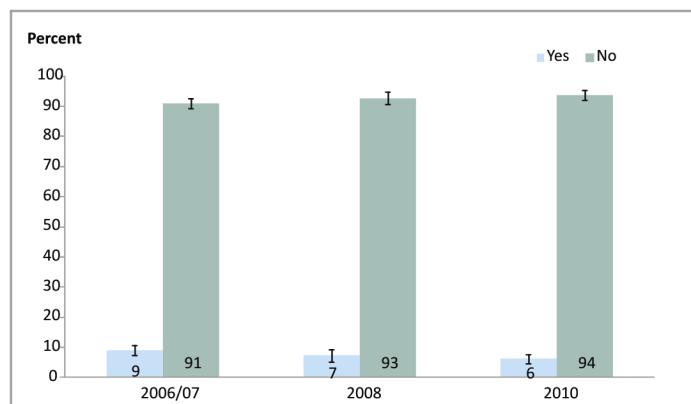


Note: Figures only include those people who said they had overdone their gambling; hence results are not indicative of total population proportions

### 3.2.3 Overdoing gambling: Comparison with previous years

The proportion of people aged 18 years and over saying they had overdone their gambling during the previous 12 months was significantly lower in 2010 than in 2006/07: 6%, down from 10% (Figure 3.6).

**Figure 3.6 Experience of gambling more than intended during previous 12 months: 2006/07 (N = 1973), 2008 (N = 1608) and 2010 (N = 1740)**



All respondents

### 3.2.4 Discussion: Personal experience of overdoing gambling during previous 12 months

Analyses of the activities on which people report gambling more than they meant to produce findings consistent with previous surveys. Continuous activities (in particular non-casino pokies/EGMs) were the most likely to be mentioned as the type of activity that people had gambled on more than intended. The findings show that people at risk of gambling problems are more likely to gamble more than they mean to, as are people who frequently play continuous gambling activities.

A higher proportion of Māori people said they had overdone their gambling during the previous 12 months, this may be related to their gambling participation behaviour with Māori being more likely than people of other ethnicities to report having played gaming machines (pokies) in pubs or clubs during the previous 12 months (Gray 2011).

### 3.3 Friend or family member's experience of overdoing gambling in the past 12 months

All respondents were asked whether, in the last 12 months, they felt that someone close to them, like a friend, family member or partner, had had a day or occasion where they spent much more time or money than they meant to on gambling.

Just over one in five people (21.5%) in the survey said that someone close to them had overdone their gambling during the previous 12 months.

When the data were examined by gender, age and ethnicity (Table 4.7), results showed:

- There was no difference between the responses of males and females.
- The only difference by age group was that people aged 65 years and over were less likely to report that someone close to them had overdone their gambling in the previous 12 months.
- People of Māori or Pacific ethnicities were more likely than people of European/Other ethnicities to say that someone close to them had overdone their gambling.

**Table 3.7 Gender, age and ethnic differences in reporting of a friend, family member or partner's experience of gambling more than intended during the previous 12 months (N = 1740)**

Family or friend gambled more than intended?	Gender		Age group (in years)						Prioritised ethnicity				Total
	Male	Female	15-24	25-34	34-44	45-54	55-64	65+	Maori	Pacific	Asian	Euro/Other	
	%	%	%	%	%	%	%	%	%	%	%	%	
Yes	20	23	23	24	23	22	25	13	42	36	21	17	22
No	80	78	77	76	78	78	75	87	58	65	79	83	79
All respondents	711	1029	197	277	425	335	233	273	460	301	113	866	1740

When the data were examined by household and neighbourhood characteristics (Table 3.8) results showed:

- People living in high deprivation areas were more likely than people living in areas of either moderate or low deprivation to say that someone close to them had overdone their gambling.
- There were no differences by household composition or equivalised income.

**Table 3.8 Household and neighbourhood differences in reporting of friend, family member or partner's experience of gambling more than intended during previous 12 months (N = 1740)**

Family or friend gambled more than intended?	Deprivation			Household composition				Household equivalised income				Total	
	Low (1-3)	Mid (4-7)	High (8-10)	Couple	Family	Family	Not stated	Low	Medium	High			
				Single person	no children	with children							
				%	%	%							
Yes	15	21	30	18	20	23	19	21	23	21	21	22	
No	85	79	70	82	80	77	81	79	77	79	79	79	
All respondents	407	557	776	271	419	896	114	435	544	708	53	1740	

When the data were examined by gambling behaviour and ‘problem gambling’ risk (Table 3.9), the results showed:

- Compared with non-gamblers, people who gambled frequently on continuous activities and people who had participated in four or more gambling activities over the previous 12 months were more likely to report that someone close to them had overdone their gambling.
- Over half of the ‘moderate-risk’ or ‘problem gamblers’ reported that somebody close to them had overdone their gambling. People who showed any level of ‘problem gambling’ risk were more likely than those people without any risk of gambling problems to know someone who had gambled more than they intended.

**Table 3.9 Gambling behaviour and differences in reporting of friend, family member or partner's experience of gambling more than intended during previous 12 months (N = 1740)**

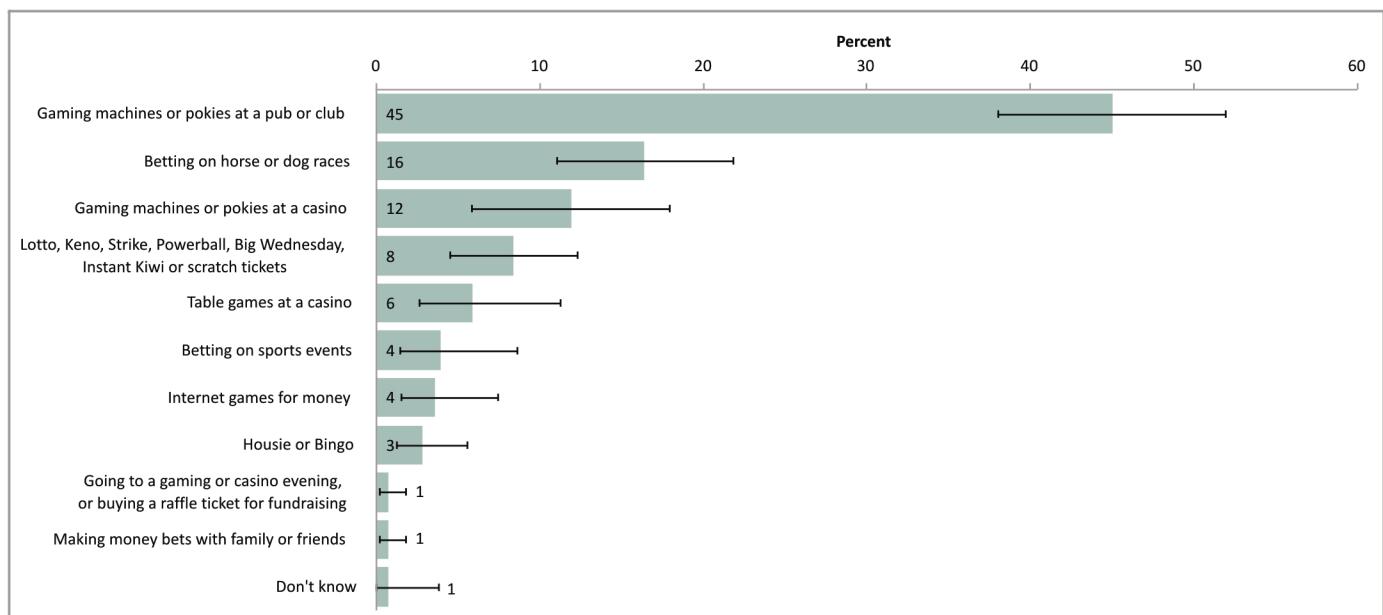
Family or friend gambled more than intended?	Gambling type				Number of activities participated					PGSI				Total
	Non-gambl.	Infreq. gambl.	Non-contin.	Contin. gambler	None	1	2	3	4 or more	Non-gambler	Non-problem gambler	Low-risk gambler	Moderate risk/probl. gambler	
%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Yes	13	23	22	38	13	20	24	21	32	13	21	38	55	22
No	87	77	78	62	87	80	76	80	68	87	79	62	45	79
All responds.	336	941	352	86	338	452	424	282	244	336	1194	133	77	1740

### 3.3.1 Types of gambling that friends or family members of respondents spent more time or money on than they meant to

People who reported that they knew someone close to them who had spent more time or money on gambling than they meant to were asked which type of gambling activity this happened most often with.

Just under half (45%) of those who knew someone who had overdone their gambling during the previous 12 months said that the main activity this happened with was gaming machines at pubs or clubs. The next most commonly mentioned activities were betting on horse or dog races and playing gaming machines at casinos (Figure 3.7).

**Figure 3.7 Type of gambling on which friend, family member or partner most often gambled more than intended (n=496)**

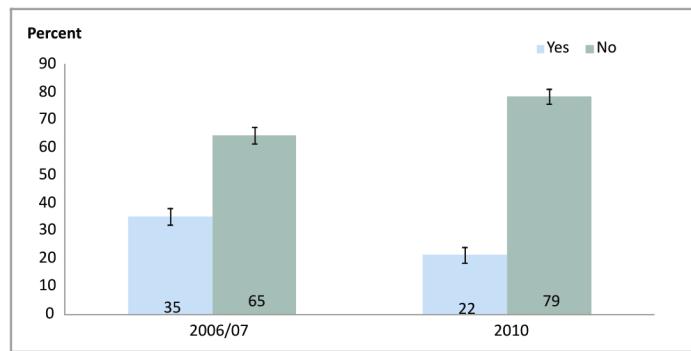


Note: Figures only include those people who said someone close to them had overdone their gambling; hence results are not indicative of total population proportions

### 3.3.2 Comparison with previous years: Friend or family member overdoing gambling

Since 2006/07, the proportion of people who said that someone close to them had overdone their gambling has dropped significantly from 35% to 22% (Figure 3.8).

**Figure 3.8 Reports of friend, family member or partner gambling more than intended in the previous 12 months: 2006/07 (N = 1973) and 2010 (N = 1740)**



All respondents

### 3.3.3 Discussion: Friend or family member's experience of overdoing gambling during previous 12 months

Previous surveys such as the New Zealand Health Survey have found that people of Māori and Pacific ethnicities were more likely to be negatively affected by someone else's gambling (Ministry of Health 2009). The 2010 HLS findings also show that people from these ethnic groups are more likely to know someone who they think has gambled more than intended.

Although there was no difference by household income, people living in the most deprived areas were more likely to know someone who had had this experience. Previous studies have shown a significant association between individual gambling behaviour and the gambling environment in a neighbourhood, specifically that people who lived near TAB or electronic gaming machine (EGM) venues were more likely to participate in those forms of gambling (Ministry of Health 2008). EGM venues in particular are more concentrated in the most deprived areas of New Zealand (Wheeler et al 2006).

People who gamble frequently on continuous modes, or participate in four or more activities, and particularly people who have become at risk of having a gambling problem, are more likely to say that someone close to them has gambled more than intended.

Although responses to the 2006/07 and 2010 surveys showed similar overall levels of gambling participation (see Table 4.4, Gray 2011), people in 2010 were less likely to report that anyone close to them had gambled more than they meant to.

## **3.4 Experience of harmful gambling in the household**

Arguments and financial issues have been identified as harms from gambling (Dyall, 2003; Tse, Wong & Chan, 2007; Perese, 2009).

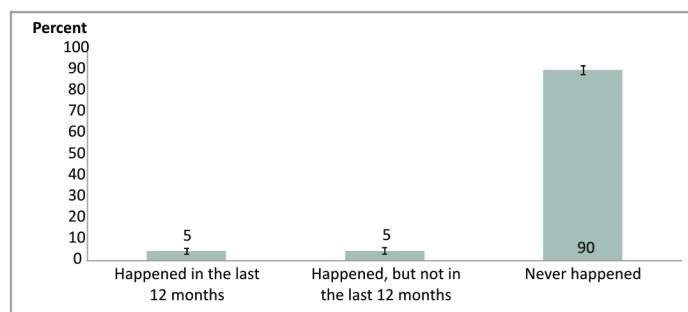
This section presents results relating to questions which ask about people's experiences of arguments or household bills not being paid due to gambling. While these questions do not directly measure neglect or the severity of harm, they provide an indicator of the number of households and families in New Zealand that may be being affected by gambling in a negative way.

In the 2010 HLS the questions were asked based on both whether the events had ever occurred, or had happened in the previous 12 months. The 2008 HLS restricted the recall period to the previous 12 months. The 'ever occurred?' question was included in the 2010 HLS to allow comparisons with the GBAS results (see section 3.4.2). The majority of results presented below refer only to arguments and household bill defaults reported to have occurred in the previous 12 months.

### **3.4.1 Arguments about time or money spent on gambling**

Respondents were asked whether there had been some argument about time or money spent on betting or gambling in their wider family or household, whether or not they were part of the argument. Five percent of people said this had happened in the previous 12 months (Figure 3.9).

**Figure 3.9 Arguments occurred in the wider family or household about time or money spent on gambling (N=1740)**



All respondents

When the data were examined by gender, age and ethnicity (Table 3.10), results showed:

- Females were more likely than males to say that there had been an argument in their wider family or household about the time or money spent on gambling during the previous 12 months.
- Arguments occurring in a household were reported by 35-44 year olds at almost twice the rate of 45-54 years olds (45-54 year olds were most likely to say there had been an argument, but not during the previous 12 months).
- Māori and Pacific people were more likely than people of Asian or European/other ethnicities to say that there had been an argument in their wider family or household about gambling in the previous 12 months.
- Being in the 35-44 year age group or being of Māori or Pacific ethnicity are associated with a higher risk of 'problem gambling' (Ministry of Health, 2009). The higher rate of 'problem gambling' is likely to be the most important factor explaining the higher proportion of arguments about gambling for people in these groups.

**Table 3.10 Gender, age and ethnic differences in reported arguments in the wider family or household about time or money spent on gambling (N = 1740)**

Arguments in the household?	Gender		Age group (in years)						Prioritised ethnicity				Total
	Male	Female	15-24	25-34	34-44	45-54	55-64	65+	Maori	Pacific	Asian	Euro/Other	
	%	%	%	%	%	%	%	%	%	%	%	%	%
Happened in the last 12 months	4	6	8	5	7	4	6	3	12	11	5	4	5
Happened, but not in the last 12 months	6	10	4	9	8	12	10	6	10	10	5	8	8
Never happened	89	84	89	86	85	85	84	92	78	79	91	88	87
All respondents	711	1029	197	277	425	335	233	273	460	301	113	866	1740

Analysis of the data by household and neighbourhood characteristics found that people living in areas of high deprivation were more likely than those living in areas of low to moderate deprivation to say that there had been an argument about gambling in their wider family or household (Table 3.11). The difference between neighbourhoods of low and moderate deprivation was not statistically significant.

**Table 3.11 Household and neighbourhood differences in reported arguments in the wider family or household about time or money spent on gambling (N = 1740)**

Arguments in the household?	Deprivation			Household composition				Household equivalised income				Total	
				Couple	Family	Family							
	Low	Mid	High	Single person	no children	with children	no children	Low	Medium	High	Not stated		
	(1-3)	(4-7)	(8-10)	%	%	%	%	%	%	%	%	%	
Happened in the last 12 months	2	5	9	5	4	6	5	6	7	3	0	5	
Happened, but not in the last 12 months	5	12	7	5	11	8	5	5	8	11	12	8	
Never happened	93	83	84	90	85	86	90	89	86	86	87	87	
All respondents	407	557	776	271	419	896	114	435	544	708	53	1740	

Analysis of the responses by gambling behaviours (Table 3.12) showed that:

- People who gambled frequently on continuous activities were more likely than less frequent gamblers, or frequent gamblers on non-continuous activities to report arguments in their wider family or household about gambling in the previous 12 months.
- The more types of gambling activity people had participated in, the more likely they were to report that there had been an argument about gambling in their wider household in the previous 12 months.
- One in three ‘moderate-risk’ or ‘problem gamblers’ (34%) said that there had been an argument in their wider household about gambling during the previous 12 months.

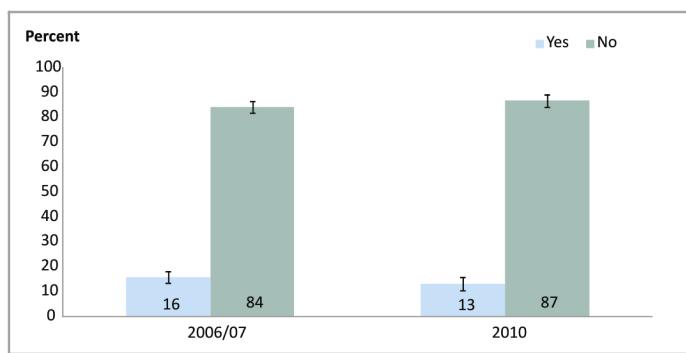
**Table 3.12 Gambling behaviours and differences in reported arguments in the wider family or household about time or money spent on gambling (N = 1740)**

Arguments in the household? Non- gambl. Infreq. gambl. Non- contin. contin. Contin. gambler gambler	Gambling type				Number of activities participated					PGSI				Total
	%	%	%	%	None	1	2	3	4 or more	Non- gambler	Non- problem gambler	Low- risk	Moderate risk gambler	
Happened in the last 12 months	4	5	6	25	4	4	4	6	10	4	4	8	27	5
Happened, but not in the last 12 months	4	8	11	17	4	7	9	11	11	4	8	16	12	8
Never happened	93	87	84	58	93	89	87	83	78	93	88	76	61	87
All responds.	336	941	352	86	338	452	424	282	244	336	1194	133	57	1740

### 3.4.2 Comparison with previous years: household arguments about gambling

Between 2006/07 and 2010, the proportion of people reporting that there had (ever) been an argument in their wider household about gambling did not change (Figure 3.10).

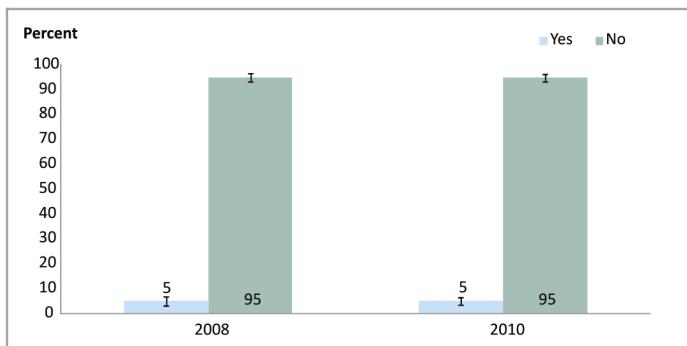
**Figure 3.10 Reported arguments in the wider family or household about time or money spent on gambling, ever: 2006/07 (N = 1973) and 2010 (N = 1740)**



All respondents

The proportion of people who reported that there had been an argument in their wider household in the previous 12 months about gambling did not change between 2008 and 2010 (Figure 3.11).

**Figure 3.11 Reported arguments in the wider family or household about time or money spent on gambling, past 12 months: 2008 (N = 1608) and 2010 (N = 1740)**

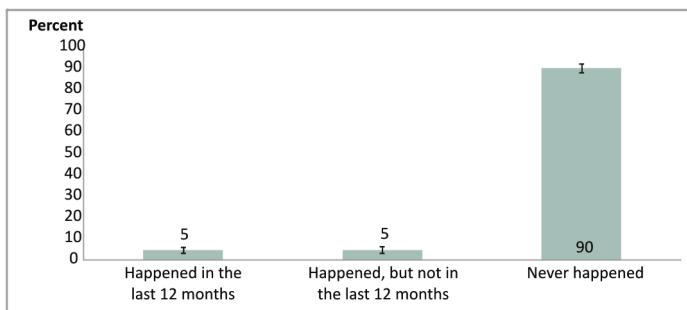


All respondents

### 3.4.3 Going without because too much money was spent on gambling

Respondents were asked whether someone in their wider family or household had to go without something they needed, or bills weren't paid, because too much was spent on gambling by another person. Five percent of people said there had been an occasion in their wider household when someone had gone without or been unable to pay a bill due to gambling during the previous 12 months (Figure 3.12).

**Figure 3.12 Experience going without or an unpaid bill because someone spent too much on gambling (N = 1740)**



All respondents

When the data were examined by gender, age and ethnicity (Table 3.13), results showed females were more likely than males to report that someone had gone without or been unable to pay a bill due to gambling in their wider household in the previous 12 months. Māori and Pacific people were significantly more likely than people of Asian or European/other ethnicities to say that this had happened in their wider family or household in the previous 12 months. The effect of ethnicity is likely to be influenced by Māori and Pacific people being at higher risk of 'problem gambling' compared with European/other people (Ministry of Health, 2009).

**Table 3.13 Gender, age and ethnic differences in reported experiences of going without or having unpaid bills due to too much spending on gambling (N = 1740)**

Experience of going without or an unpaid bill?	Gender		Age group (in years)						Prioritised ethnicity				Total
	Male	Female	15-24	25-34	34-44	45-54	55-64	65+	Maori	Pacific	Asian	Euro/ Other	
	%	%	%	%	%	%	%	%	%	%	%	%	%
Happened in the last 12 months	3	6	7	5	6	4	4	2	13	15	1	3	5
Happened, but not in the last 12 months	4	6	3	5	5	5	9	2	7	7	5	5	5
Never happened	93	88	89	90	89	91	86	96	80	78	94	92	90
All respondents	711	1029	197	277	425	335	233	273	460	301	113	866	1740

Analysis of the data by deprivation, household composition and incomes (Table 3.14) found that people living in areas of high deprivation were more likely than people in areas with low to moderate deprivation to say that someone in their wider household had gone without or been unable to pay a bill due to gambling in the previous 12 months. Six percent of people who live with children reported that someone had gone without, or a bill had gone unpaid due to too much money being spent on gambling in the past 12 months.

**Table 3.14 Household and neighbourhood differences in reported experiences of going without or having unpaid bills due to too much spending on gambling (N = 1740)**

Experience of going without or an unpaid bill?	Deprivation			Household composition				Household equivalised income				Total					
	Low (1-3)	Mid (4-7)	High (8-10)	Couple	Family	Family	Not stated										
				Single person	no children	with children											
				%	%	%	%	%	%	%	%	%					
Happened in the last 12 months	2	4	10	4	3	6	5	5	6	4	1	5					
Happened, but not in the last 12 months	4	8	3	7	6	5	3	4	4	7	12	5					
Never happened	95	89	87	90	91	90	92	91	91	90	88	90					
All respondents	407	557	776	271	419	896	114	435	544	708	53	1740					

Analysis of the data by gambling activities and behaviours (Table 3.15) showed the following:

- People who gambled frequently on continuous activities were more likely than other gamblers to say that someone had gone without or been unable to pay a bill due to gambling in their wider household in the previous 12 months.
- People who participated in more gambling activities were more likely to say that this type of incident had happened in their wider household during the previous 12 months.
- More than one in four ‘moderate-risk’ or ‘problem gamblers’ said that someone in their wider household had gone without or been unable to pay a bill due to gambling in the previous 12 months. ‘Low-risk’ gamblers were more likely than those who were not at any risk of having gambling problems to say that this had happened during the previous 12 months.

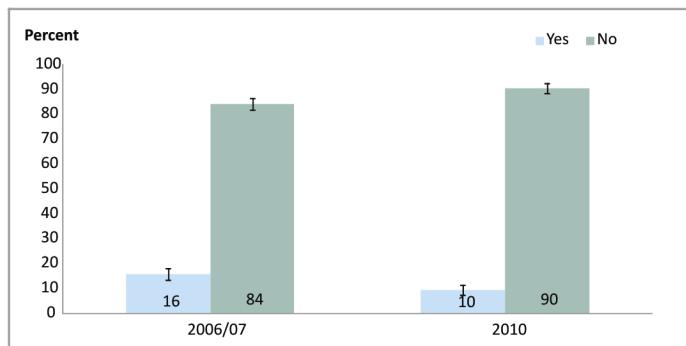
**Table 3.15 Gambling behaviours and differences in reported experiences of going without or having unpaid bills due to too much spending on gambling (N = 1740)**

Experience of going without or an unpaid bill?	Gambling type					Number of activities participated					PGSI					Total
	Non- gambl.	Infreq. gambl.	Non- contin.	Contin. gambler		None	1	2	3	4 or more	Non- gambler	Non- problem gambler	Low- risk gambler	Moderate risk/probl. gambler		
%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
<b>Happened in the last</b>																
12 months	3	5	4	15		3	4	5	4	8	3	4	9	29	5	
<b>Happened, but not in the last</b>																
12 months	4	5	6	4		4	4	5	8	5	4	5	6	4	5	
<b>Never</b>																
never happened	93	90	89	81		93	92	90	89	87	93	91	85	67	90	
All responds.	336	941	352	86		338	452	424	282	244	336	1194	133	77	1740	

### 3.4.4 Comparison with previous years: household going without because of gambling

The proportion of people who said that someone in their wider household had ever had to go without or been unable to pay a bill due to gambling was significantly lower in 2010 than it was in 2006/07 (Figure 3.13).

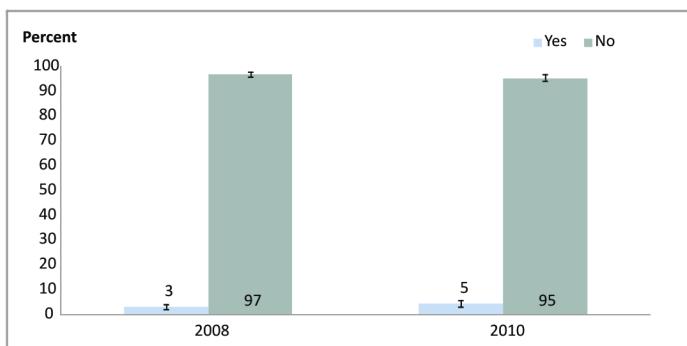
**Figure 3.13 Reported experiences of going without or having unpaid bills due to too much spending on gambling, ever: 2006/07 (N = 1973) and 2010 (N = 1740)**



All respondents

Compared with 2008 the proportion of people who said that, in the previous 12 months, someone in their wider household had gone without or been unable to pay a bill due to gambling had not changed (Figure 3.14).

**Figure 3.14 Reported experiences of going without or having unpaid bills due to too much spending on gambling in the past 12 months: 2008 (N = 1608) and 2010 (N = 1740)**



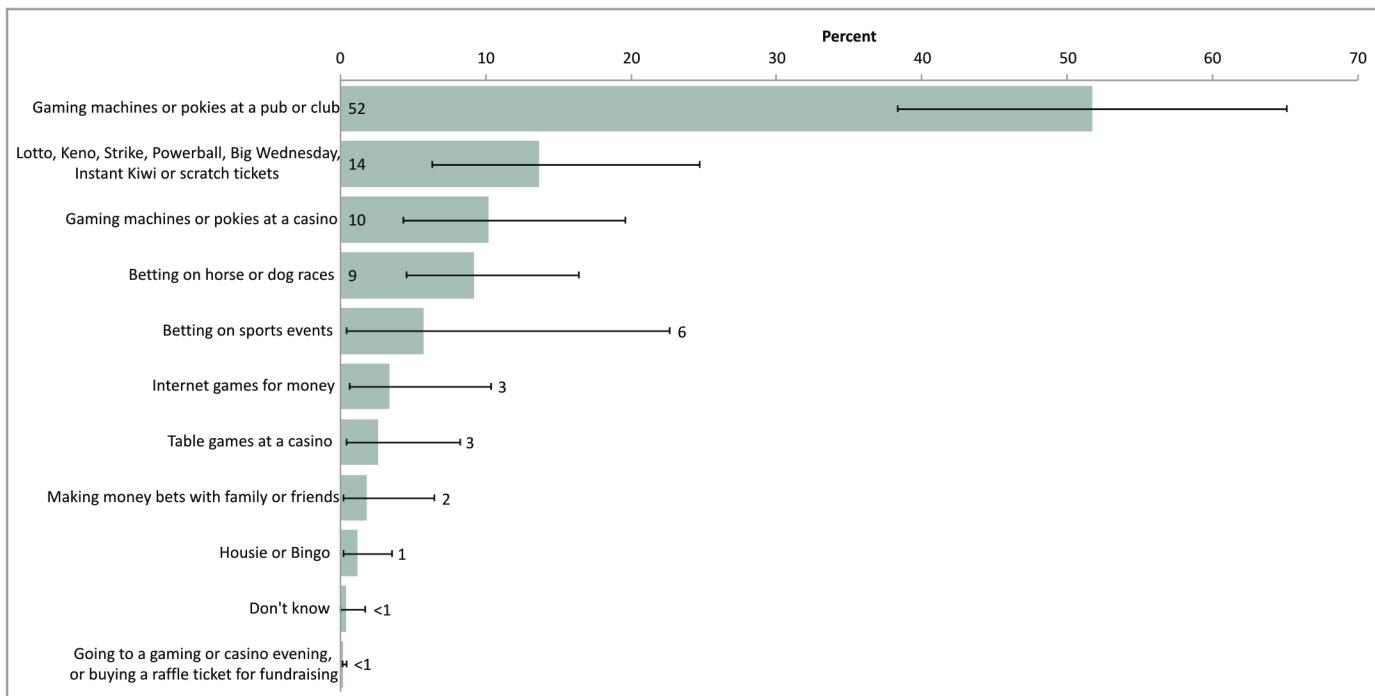
All respondents

### 3.4.5 Gambling modes related to household harm

Overall, 6.4% of respondents answered that there had been an argument and/or people going without or not paying bills in their household because of gambling in the last 12 months. These people were asked what type of gambling these events occurred most with (Figure 3.15).

Consistent with the types of gambling people report spending more time or money on than intended (see Sections 3.2.2 and 3.3.1), the most commonly mentioned form of gambling associated with arguments or unpaid bills was gaming machines in pubs or clubs (Figure 3.15).

**Figure 3.15 Gambling modes most often related to a family or household member going without or an argument due to gambling in the past 12 months (n=181)**



Note: Figures only include those people who said they had experienced household harm as result of gambling; hence results are not indicative of total population proportions



### 3.4.6 Discussion: Experience of gambling harm in the household

Reporting of household harm is overrepresented among Māori or Pacific peoples, people living in areas of high deprivation, people who regularly play continuous modes of gambling, those who have played four or more different modes of gambling in the past year, and those who are categorised as ‘moderate-risk’ or ‘problem gamblers’ using the PGSI score. These groups are all associated with a higher risk of ‘problem gambling’ (Ministry of Health, 2009). The influence of these groups in terms of household harm is likely to be due, to some extent, to their level of risky gambling behaviour. As well as this, non-casino gaming machines (a continuous gambling mode) are the mode of gambling most likely to be identified as being related to these forms of household harm.

It is important to note that New Zealanders who do not gamble, or gamble very little, are also affected by gambling harms. The harms from gambling do not only affect ‘problem gamblers’. Something that requires further investigation is the extent of these are harms at levels of ‘low-risk’ and ‘non-problem’ gambling, and the extent to which these are being experienced due to the risky gambling of someone in the wider family or household, as ‘problem gamblers’ are more likely to have family members who gamble (Clarke et al, 2007).

## 3.5 Use of problem gambling support services

Various services are available in New Zealand to help people who are experiencing harm from gambling as well as those that are concerned about them. Gambling Helpline<sup>5</sup> is a 24-hour freephone service which helped over 5,000 clients in 2010, two-thirds of them gamblers (Gambling Helpline Limited, 2011). The 0800 number of the Gambling Helpline is included on all of HSC’s Choice Not Chance promotion materials. The Helpline service also offers specific phone-lines for Māori, Pacific peoples, Youth, people struggling with debt, and a mobile phone text message service. There are free face-to-face counselling services, support groups offered throughout New Zealand and various New Zealand websites offering advice and support.

People at risk of harm from gambling may also experience problems with alcohol, depression, are often smokers, and they may be experiencing problems with relationships or finances (Abbott 2001; Ministry of Health 2009). This means that gamblers and their family members may access services aimed to help people with one of these other issues, rather than their gambling. Counsellors and other support services could become aware of the gambling and may help provide the skills to minimise its effects, or refer the client to a specific problem gambling service.

### 3.5.1 Use of a problem gambling support service

All respondents were shown a list of problem gambling support services and were asked which services they had heard of<sup>6</sup> and whether they had ever accessed a service like any of those listed, either for themselves or for someone else.

The majority of New Zealanders (96%) have never accessed a problem gambling support service for either themselves or someone else.

Analysis of the responses by key demographic variables found that females were more likely than males to say that they had accessed a problem gambling support service. There were no differences between people from different ethnic groups (Table 3.16).

<sup>5</sup> 0800 654 655 <http://www.gamblingproblem.co.nz/>

<sup>6</sup> These responses will be reported on in section 5.2, “Knowledge of gambling help services”

**Table 3.16 Gender, age or ethnic differences in the reported use of problem gambling support services (N= 1740)**

Accessed a help service?	Gender		Age group (in years)						Prioritised ethnicity				Total
			15-24	25-34	34-44	45-54	55-64	65+	Maori	Pacific	Asian	Euro/Other	
	%	%	%	%	%	%	%	%	%	%	%	%	
Yes	2	5	3	1	4	5	8	2	5	6	4	3	4
No	98	95	97	99	96	95	92	98	95	94	96	97	96
All respondents	711	1029	197	277	425	335	233	273	460	301	113	866	1740

Analysis of the responses by neighbourhood and household characteristics found that there were no differences between the responses of people living in more or less deprived areas or different types of household. People with a high household equivalised income were more likely than people with a low household equivalised income to have ever accessed a support service (Table 3.17).

**Table 3.17 Household and neighbourhood differences in the reported use of problem gambling support services (N= 1740)**

Accessed a help service?	Deprivation			Household composition				Household equivalised income				Total
				Couple	Family	Family						
	Low	Mid	High	Single person	no children	with children	no children	Low	Medium	High	Not stated	
	(1-3)	(4-7)	(8-10)									
	%	%	%	%	%	%	%	%	%	%	%	%
Yes	4	4	4	3	4	3	4	2	4	5	4	4
No	96	96	96	97	96	97	96	98	96	95	96	96
All respondents	407	557	776	271	419	896	114	435	544	708	53	1740

Examination of the responses by gambling behaviours (Table 3.18) found that people's current frequency of gambling and the number of activities people currently participate in are not related to whether or not they have ever accessed a help service. Some people who are currently non-gamblers or 'non-problem gamblers', as measured using the PGSI, had accessed a support service. These people may have been gamblers in the past (more than 12 months ago) and accessed support services for themselves, or they may have accessed the services because of concerns they had about someone else's gambling.

'Low-risk', 'moderate-risk' and 'problem gamblers' were more likely to have accessed support services. Ten percent of people classified as 'moderate-risk' or 'problem gamblers' had ever accessed a support service.

**Table 3.18 Gambling behaviours differences in the reported use of problem gambling support services (N= 1740)**

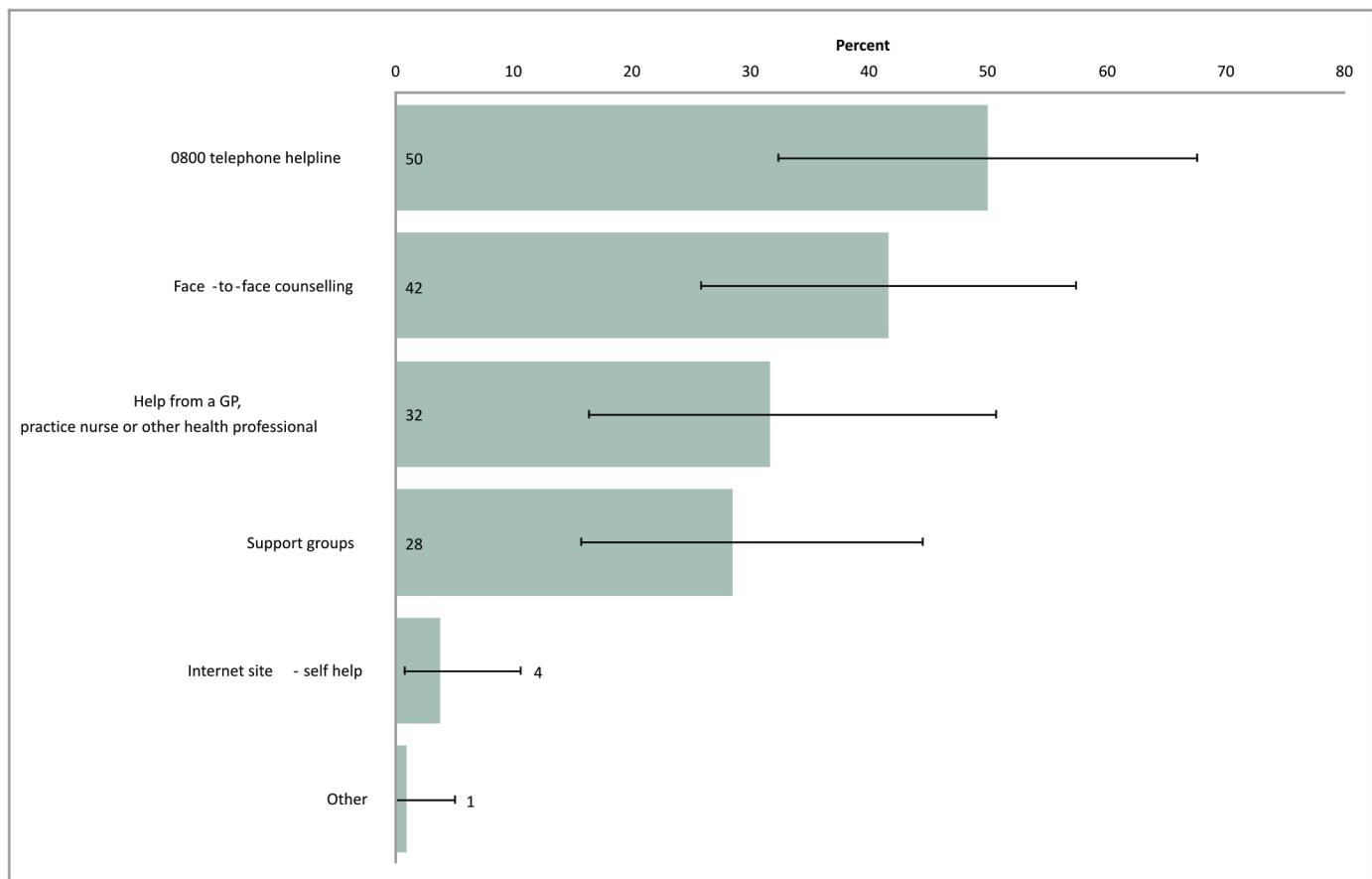
Accessed a help service?	Gambling type				Number of activities participated					PGSI				Total
	Non- gambl.	Infreq. gambl.	Non- contin.	Contin. gambler	None	1	2	3	4 or more	Non- gambler	Non- problem gambler	Low- risk gambler	Moderate risk/probl. gambler	
	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Yes	2	4	5	5	2	5	4	4	4	2	3	12	10	4
No	98	96	95	96	98	95	96	97	96	98	97	88	90	96
All responds.	336	941	352	86	338	452	424	282	244	336	1194	133	77	1740

### 3.5.2 Types of service accessed

Those respondents who said that they had accessed a problem gambling support service were asked to specify the type of service they accessed (multiple responses were allowed).

Half of the people who had accessed a problem gambling support service said they had used the telephone helpline. Around four in ten had gone to counselling and around three in ten had got help from a health professional or gone to a support group. The number of responses to this question indicates that many people sought help from more than one source. For example, the Helpline, websites, and family doctor may provide referrals to the face-to-face and support group counselling services (Figure 3.16).

**Figure 3.16 Types of problem gambling support services used by people who had accessed a service (multiple response) (n=90)**



Note. Figures only include those people who said they had used a gambling help service; hence results are not indicative of total population proportions

## 4 Views and knowledge about gambling harm

### 4.1 Potentially harmful gambling activities

Some forms of gambling activity have been shown to be more likely to result in harm than others. For instance, forms of gambling where winnings can be immediately reinvested, such as gaming machines, are associated with a greater level of risky gambling behaviour compared with forms where there is a delay, such as lottery tickets (see Abbott & Volberg, 2000; Section 4.1 of this report).

All people in the survey were asked whether they thought any forms of gambling were more likely than others to attract people into playing more often and for more money than they should, and if so which forms of gambling they were.

#### 4.1.1 Whether some types of gambling are considered more harmful than others

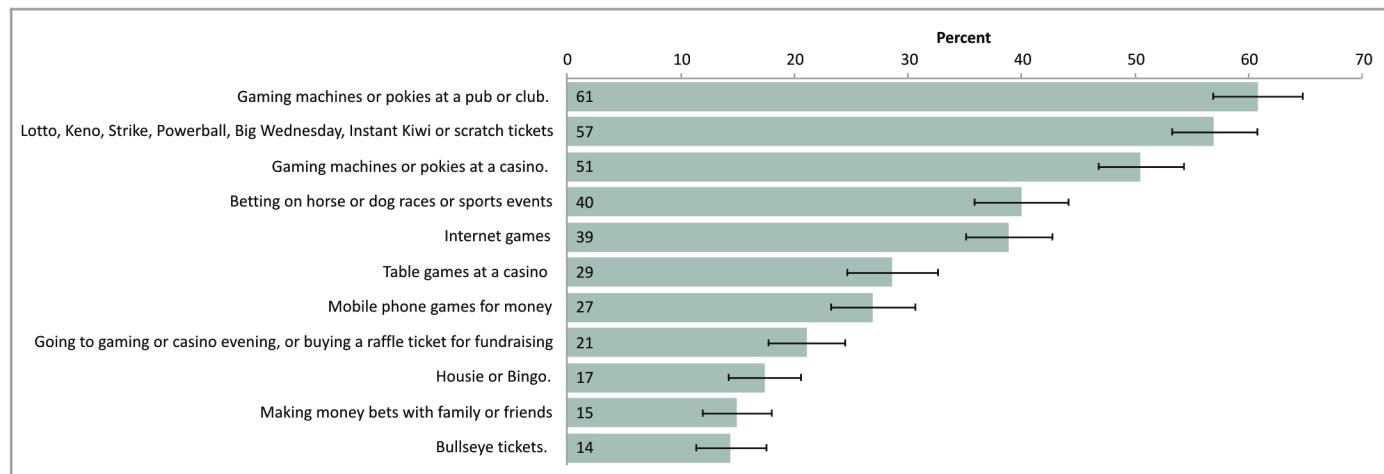
The majority of people (87%) said there were some types of gambling that were more harmful than others, with only 1% saying they did not know. The most commonly mentioned form of gambling was gaming machines (pokies) in pubs and clubs (61% of all people). New Zealand Lotteries products were mentioned by 57% of all people and 51% mentioned gaming machines in casinos (Figure 4.1).

People of Pacific and Asian ethnicities were less likely than people of Māori or European/other ethnicities to think that a particular type of gambling was more harmful than other types. People with higher household incomes were more likely than people with low or medium household incomes to think that a particular type of gambling was more harmful than other types. Among people with different gambling behaviours or levels of ‘problem gambling’ risk, there were no differences in opinion about whether some forms of gambling were more harmful than others.

#### 4.1.2 Types of gambling which are more harmful

The proportion of the sample who thought each form of gambling listed was more likely than others to attract people into playing more often and for more money than they should is presented in Figure 4.1. This was a multiple response question so the percentages do not sum to 100.

**Figure 4.1 Types of gambling that are seen as more harmful than others (multiple response) (N = 1740)**



All respondents

### **4.1.3 Comparison with previous years: Types of gambling considered more harmful**

There was no change in the overall proportion of people who thought some forms of gambling were more harmful than others; 86% in 2006/07 and 87% in 2010.

Since 2006/07, the proportion of people who thought that casino activities – gaming machines or table games – were more harmful than other activities dropped, while the proportion of people who thought New Zealand Lotteries products (lottery or scratch tickets) were more harmful increased (Table 4.1). The New Zealand Lotteries product “Bullseye” has been kept separate for this analysis because it did not exist in 2006/07.

Some forms of gambling were seen as more harmful in 2010 than they had been in 2006/07. These included gambling for fundraising, making bets with friends or family and playing housie or bingo.

**Table 4.1 Types of gambling considered more harmful: 2006/07 (N = 1973) and 2010 (N = 1740)**

Type of gambling activity	2006/07	2010
	%	%
Gaming machines or pokies at a pub or club	64	61
Lotto, Keno, Strike, Powerball, Big Wednesday, Instant Kiwi or scratch tickets	41	57
Gaming machines or pokies at a casino	67	51
Betting on horse or dog races or sports events	47	40
Internet games	30	39
Table games at a casino	51	29
Mobile phone games for money	22	27
Going to gaming or casino evening, or buying a raffle ticket for fundraising	10	21
Housie or Bingo	11	17
Making money bets with family or friends	3	15
Bullseye tickets	N/A	14
All respondents	1973	1740

### **4.1.4 Discussion: Types of gambling considered more harmful**

Most people, regardless of their own gambling behaviour, thought that there were forms of gambling that were more harmful than others. The more commonly identified types of gambling activity people see as harmful are also those that are more commonly identified as types associated with people’s experiences of (them or someone they know) overdoing their gambling and household harm from gambling (Sections 3.2.2, 3.3.1, and 3.4.5).

There has been no change in the numbers of people who think any forms of gambling are more harmful than others between survey years. There have been however, significant changes in people’s opinions about the relative harmfulness of specific types of gambling. These changes represent some activities being seen as less harmful (eg, table games at a casino) and others as more harmful (eg, internet games) in 2010 compared with 2006/07. There was no change in the proportion of people who thought gaming machines at a pub or club were more harmful than other activities.

## 4.2 “Social undesirability” of gambling activities

Everyone in the survey was shown a card listing different gambling activities and asked whether they thought any of the activities were “socially undesirable” (defined as “you wouldn’t want this activity in your community”). This question was adapted from the Department of Internal Affairs (DIA) 2005 Gambling Participation and Attitudes Survey (DIA, 2008).

### 4.2.1 Whether certain types of gambling are socially undesirable

Overall, 63% of people said some forms of gambling were socially undesirable. When the responses were explored by key demographic details, people of Asian and Māori ethnicities were more likely than people of European/other ethnicities to think that certain gambling activities were socially undesirable (Table 4.2). The responses to this question did not differ by socio-economic status or household composition (Table 4.3).

**Table 4.2 Gender, age and ethnic differences in perceived social desirability of specific gambling activities (N = 1740)**

Some gambling socially undesirable?	Gender		Age group (in years)						Prioritised ethnicity				Total
	Male	Female	15-24	25-34	34-44	45-54	55-64	65+	Maori	Pacific	Asian	Euro/ Other	
	%	%	%	%	%	%	%	%	%	%	%	%	
Yes	64	63	68	57	64	66	59	65	73	65	79	60	63
No	36	37	32	43	36	34	41	35	26	34	21	40	36
Don't know	0	0	0	0	1	0	0	1	1	1	0	0	0
All respondents	711	1029	197	277	425	335	233	273	460	301	113	866	1740

**Table 4.3 Neighbourhood and household differences in perceived social desirability of specific gambling activities (N = 1740)**

Some gambling socially undesirable?	Deprivation			Household composition				Household equivalised income				Total	
	Low (1-3)	Mid (4-7)	High (8-10)	Single person	Couple	Family	Family	Low	Medium	High	Not stated		
					no children	with children	no children						
					%	%	%						
Yes	62	65	63	63	59	65	57	68	63	61	54	63	
No	38	35	36	37	41	34	43	31	37	39	46	36	
Don't know	0	0	1	1	0	0	0	1	0	0	0	0	
All respondents	407	557	776	271	419	896	114	435	544	708	53	1740	

Exploration of the data by gambling behaviours found that non-gamblers were more likely to think some forms were of gambling were socially undesirable compared to frequent non-continuous gamblers, people who took part in four or more different types of gambling activity in the past year, and ‘non-problem’ or ‘low-risk’ gamblers (Table 4.4). People classified as ‘low-risk’ gamblers were less likely than ‘moderate-risk/problem gamblers’ to think there are socially undesirable forms of gambling (this was only marginally significant due to the small sizes of the groups involved).

**Table 4.4 Respondent's gambling behaviours and perceived social desirability of specific gambling activities (N = 1740)**

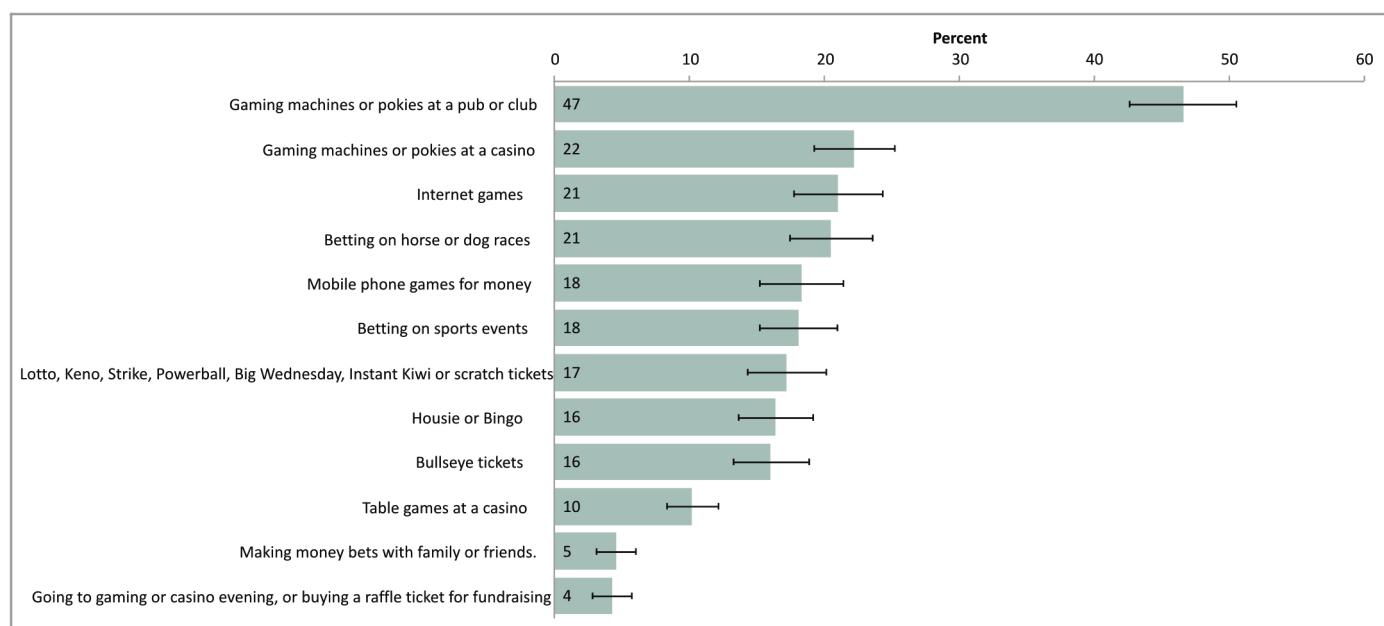
Some gambling socially undesirable?	Gambling type				Number of activities participated					PGSI				Total %
	Non- gambl.	Infreq. gambl.	Non- contin.	Contin. gambler	None	1	2	3	4 or more	Non- gambler	Non- problem gambler	Low- risk gambler	Moderate risk/probl. gambler	
	%	%	%	%	%	%	%	%	%	%	%	%	%	
Yes	74	62	58	53	73	67	63	58	52	74	62	49	67	63
No	26	38	42	47	27	33	38	42	47	26	38	51	33	36
Don't know	0	0	0	0	0	0	0	0	0	0	0	1	0	0
All responds.	336	941	352	86	338	452	424	282	244	336	1194	133	77	1740

## 4.2.2 Types of gambling activities considered socially undesirable

The proportion of the people surveyed who thought each type of gambling was socially undesirable is presented in Figure 4.2. This was a multiple response question so the percentages do not sum to 100.

Nearly half of the people surveyed (47%) thought that gaming machines (pokies) in pubs or clubs were socially undesirable. While gaming machines in casinos were the next most likely to be considered socially undesirable, they were only mentioned by 22% of all people.

**Figure 4.2 Types of gambling considered socially undesirable (multiple response) (N = 1740)**



All respondents



#### 4.2.3 Demographic differences in responses to “types of gambling that are socially undesirable”

Exploration of responses by key demographic factors showed that Māori (60%) were more likely than European/other people (44%) to think that gaming machines in pubs or clubs were socially undesirable. Half of all Asian people thought this, with a similar proportion (47%) of Pacific peoples thinking gaming machines in pubs or clubs were socially undesirable.

People of European/other ethnicities were the least likely to think that New Zealand Lotteries products were socially undesirable (14%). The same was true with regards to betting on races and sports events (16% and 14% respectively). Asian people were more likely than Māori people to think that New Zealand lotteries products (44% cf 26%) and betting on sports events (38% cf 23%) were socially undesirable. Thirty percent of Pacific peoples thought Lotteries products were socially undesirable and the same proportion thought betting on sports events was socially undesirable.

In the 2006/07 GBAS, people were asked whether each gambling activity fitted a range of statements. Betting on races and sports and buying lottery tickets were the two forms of gambling most commonly seen as “a traditional part of life in New Zealand” (National Research Bureau, 2007, p. 61).

#### 4.2.4 Discussion: Types of gambling that are socially undesirable

The types of gambling most commonly perceived as socially undesirable were consistent with the types perceived as most likely to be more harmful (Section 5.1.2), and which are associated with a greater experience of harm (Sections 4.2.3, 4.2.7, and 4.3.5).

A similar question regarding social undesirability was asked by the DIA on a five yearly basis between 1985 and 2005 (DIA, 2008). The 2005 survey found that a higher proportion of people thought internet gambling, casino gambling, telephone games, betting on races, and betting on sports were socially undesirable compared with the 2010 HLS result. In the 2005 DIA survey, respondents’ rating of the social undesirability of non-casino gaming machines reached a peak of 64%. The 2010 HLS result is similar to the previous DIA survey’s in 2000, in which 45% of respondents thought non-casino gaming machines were socially undesirable. Non-casino gaming machine numbers in New Zealand were at their highest in 2003 (25,221 machines; DIA, 2011b) while expenditure on non-casino gaming machines peaked in 2004 and 2005 (DIA, 2008). There were 18,944 machines when the HLS was carried out in 2010, a similar number to that recorded in early 2001 (18,650 in December 2000 increasing to 19,332 by June), at which point the number of machines was increasing sharply (DIA, 2011b).

### 4.3 Extent to which people can identify signs of harmful gambling

Everyone in the survey was asked whether they could describe any of the signs that a person is gambling at a harmful level.

Most people (60%) said they could identify at least one sign a person was gambling at a harmful level. There were no significant gender, age, or ethnicity differences in whether people said they could identify the signs someone is gambling at a harmful level.

Exploration of the data by household characteristics showed that people living on their own were less likely to say they could identify the signs that someone is gambling at a harmful level compared with people from all other household types<sup>7</sup>. People with high household incomes were more likely than people with lower incomes to say that they could identify the signs that someone was gambling at a harmful level (Table 4.5).

<sup>7</sup> The comparison with ‘families without children’ was only marginally significant because of the small size of this group.

**Table 4.5 Household and neighbourhood characteristics and ability to identify signs of gambling harm (N = 1740)**

Ability to identify signs of harm?	Deprivation			Household composition				Household equivalised income				Total
				Couple	Family	Family						
	Low (1-3)	Mid (4-7)	High (8-10)	Single person	no children	with children	no children	Low	Medium	High	Not stated	
	%	%	%	%	%	%	%	%	%	%	%	
Yes	59	63	60	48	66	58	60	56	58	67	64	60
No	41	37	40	52	34	42	40	44	42	33	36	40
All respondents	407	557	776	271	419	896	114	435	544	708	53	1740

Analysis of the responses by gambling behaviours showed that gambling type and the number of different activities a person gambled on did not influence whether people said they could identify the signs that someone was gambling at a harmful level. People at ‘low-risk’ of gambling problems were more likely than those who did not gamble, or who were not at risk of gambling problems, to say that they could identify signs that someone was gambling at a harmful level (Table 4.6). Due to the small number of people in the ‘moderate-risk’ group no significant difference was found between this and the ‘low-risk’ gambler group.

**Table 4.6 Gambling behaviours and ability to identify signs of gambling harm (N = 1740)**

Ability to identify signs of harm?	Gambling type				Number of activities participated					PGSI				Total	
	Non-gambl.	Infreq. gambl.	Non-contin.	Contin. gambler	None	1	2	3	4 or more	Non-gambler	Non-problem gambler	Low-risk gambler	Moderate risk/probl. gambler		
	%	%	%	%	%	%	%	%	%	%	%	%	%		
	Yes	57	63	59	59	57	58	60	66	64	57	60	74	61	60
No	43	38	41	41	43	42	41	34	36	43	40	26	39	40	
All responds.	336	941	352	86	338	452	424	282	244	336	1194	133	57	1740	

### 4.3.1 Signs that a person is gambling at a harmful level

People who said they believed they could describe the signs that a person is gambling at a harmful level (n = 1047) were asked what these signs were. Their answers were coded into overall categories, which are shown in Table 4.7. This was a multiple response question so the percentages do not add up to 100.

There were three major themes in the signs people thought showed someone was gambling too much. These were money problems, the physical and psychological effects on the person who was gambling at a harmful level, and the effect of harmful gambling on people around the gambler.

The most commonly reported signs were “financial problems/lack of money/debt” and “obsessed with gambling/addicted/gambling more” (40% and 31% respectively of those who said they could identify signs).

**Table 4.7 Specific signs that a person is gambling at a harmful level as a proportion of those who could describe signs (n = 1047)**

Signs someone is gambling at a harmful level	Total
	%
Financial problems/lack of money/debt	40
Obsessed with gambling/addicted/gambling more	31
Anxious/paranoid/nervous/stressed	23
Asking to borrow or get money/family bailing them out	22
Not paying household bills	20
Lying/deceitful/secretive	17
Marriage or family problems/break ups/relationship problems	14
Stealing/crime	9
Angry/aggressive/violent/abusive	8
Children suffer/children and family neglected	7
Withdrawn/detached/isolating themselves/unsociable	7
Not looking after themselves/poor appearance/poor health	6
Depressed/unhappy/suicidal/desperate	6
Keeping odd hours/coming home late	6
Other reasons	6
Selling possessions/pawning property.	6
Behaviour change/change in personality/mood swings	5
Work suffers/don't have a job	5
Drinking and smoking/smoking more/alcoholism/drugs	3
Denial	2
Respondents who could describe signs	1047

Note: Figures only include those people who said they could describe signs; hence results are not indicative of total population proportion

Exploration of the data relating to the specific signs of gambling harm that were mentioned by respondents who said they could identify signs (n = 1047) showed that females were more likely than males to mention financial problems, lying or deceit, and neglect of children. Pacific people were more likely to mention depression than people of European/other ethnicities and people of European/other ethnicities were more likely to mention signs of obsession or addiction than Māori or Pacific people (Table 4.8).

**Table 4.8 Gender, age and ethnic differences in identify the specific signs that a person is gambling at a harmful level as a proportion of those who could describe signs (n = 1047)**

Signs someone is gambling at a harmful level	Gender		Age group (in years)						Prioritised ethnicity				Total
	Male	Female	15-24	25-34	34-44	45-54	55-64	65+	Maori	Pacific	Asian	Euro/ Other	
	%	%	%	%	%	%	%	%	%	%	%	%	%
Financial problems/lack of money/debt	34	45	43	39	47	44	30	36	33	23	44	42	40
Obsessed with gambling/addicted/ gambling more	33	29	37	23	31	31	38	22	18	13	23	34	31
Anxious/paranoid/ nervous/stressed	23	23	32	20	23	25	17	20	21	34	23	23	23
Asking to borrow or get money/family bailing them out	25	20	24	25	30	19	17	16	26	25	11	23	22
Not paying household bills	19	21	13	22	25	23	15	21	28	19	9	20	20
Lying/deceitful/ secretive	12	22	16	13	19	24	15	14	18	11	3	19	17
Marriage or family problems/break ups/relationship problems	11	16	11	18	12	12	15	17	15	14	16	13	14
Stealing/crime	7	11	3	10	10	13	13	4	6	5	9	10	9
Angry/aggressive/ violent/abusive	9	7	4	6	6	9	16	5	12	13	16	6	8
Children suffer/children and family neglected	4	10	6	5	11	6	4	13	14	9	2	7	7
Withdrawn/detached/isolating themselves/ unsociable	5	9	5	11	7	6	8	6	7	4	2	8	7
Not looking after themselves/poor appearance/ poor health	8	5	4	7	6	9	6	3	6	13	11	5	6
Depressed/unhappy/ suicidal/desperate	6	6	7	4	5	4	12	4	5	18	15	4	6
Keeping odd hours/ coming home late	3	8	9	3	8	5	6	3	7	5	2	6	6
Other reasons	8	4	11	4	4	3	5	10	5	2	14	5	6
Selling possessions/ pawning property	6	5	12	7	8	2	2	3	6	7	3	6	6
Behaviour change/change in personality/ mood swings	5	6	2	4	8	11	4	2	6	6	7	5	5
Work suffers/ don't have a job	6	4	3	9	2	5	5	5	0	2	8	6	5
Drinking and smoking/smoking more/ alcoholism/drugs	4	3	4	1	1	2	8	4	2	2	3	4	3
Denial	2	2	1	1	0	2	4	5	1	2	1	2	2
Respondents who could describe signs	408	639	109	182	267	219	145	125	282	182	63	520	1047

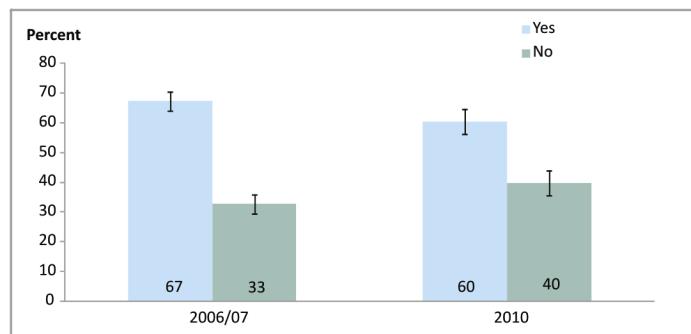


Note: Figures in previous table only include those people who said they could describe signs; hence results are not indicative of total population proportions

### 4.3.2 Comparison with previous years: signs that a person is gambling at a harmful level

The proportion of people who said they could describe the signs that someone was gambling at a harmful level was lower in 2010 than in 2006/07 (Figure 4.3). See Section 4.3.3 for a discussion.

**Figure 4.3 Ability to describe the signs that someone is gambling at a harmful level, 2006/07 (N = 1973) and 2010 (N = 1740)**



All respondents

To enable meaningful comparisons between years the proportion of people who indicated each sign that someone was gambling at a harmful level was based on the total sample for each year, not just those who said they could recognise signs (Table 4.9). Although more people in 2006/07 had been able to identify signs that someone was gambling at a harmful level, there were few differences between the proportions of people in 2006/07 and 2010 who mentioned specific signs. In 2006/07 a higher proportion of people mentioned “not paying household bills” and “lying, secrecy or deceit”.

**Table 4.9 Specific signs respondents believe indicate that someone is gambling at a harmful level, 2006/07 (N = 1973) and 2010 (N = 1740) (multiple response)**

Signs someone is gambling at a harmful level	2006/07 %	2010 %
Financial problems/lack of money/debt	28	24
Obsessed with gambling/addicted/gambling more	16	19
Anxious/paranoid/nervous/stressed	14	14
Asking to borrow or get money/family bailing them out	14	14
Not paying household bills	17	12
Lying/deceitful/secrective	14	10
Marriage or family problems/break ups/relationship problems	7	8
Stealing/crime	7	5
Angry/aggressive/violent/abusive	6	5
Children suffer/children neglected/not spending time with family	3	4
All respondents	1973	1740

Note: Proportions are based on the total sample, not just those people who said they could recognise signs, to enable meaningful comparisons between years.

### **4.3.3 Discussion: Signs that a person is gambling at a harmful level**

The proportion of people who thought they could recognise signs someone was gambling at a harmful level did not differ across most demographic variables. Of the three gambling behaviours examined, the only difference found was that ‘low-risk’ gamblers were more likely to say they could recognise a sign of harm compared with non-gamblers and ‘non-problem gamblers’. ‘Low-risk’ gamblers were the group most likely to have used a support service in the past (see Section 3.5.1).

The change in the percentage of people saying they can recognise the signs of harmful gambling from 2006/07 to 2010 is difficult to ascribe meaning to without more in-depth analysis. People may be less aware of the signs of harmful gambling than they were three years earlier. Conversely, it may indicate that there is less need for people to recognise the signs. For instance, fewer people said they knew someone who had gambled too much in the past year in 2010 compared with 2006/07 (see Section 3.3.2).

The commonly mentioned signs of harm are fairly representative of the actual harms caused by risky gambling. For instance, the 2006/07 New Zealand health survey indicated that as risk of ‘problem gambling’ increases so does self-reported psychological distress, while self-reported health decreases (Ministry of Health, 2009). Qualitative research has indicated that arguments and financial issues are common outcomes in harmful gambling among Māori, Asian, and Samoan New Zealanders (Dyall, 2003; Tse et al, 2007; Perese, 2009). Research from Australia shows that harm relating to work, finances, and general health become more common with increased risk of being a ‘problem gambler’ (Productivity Commission, 1999).

## **4.4 Consequences of gambling too much**

The public health approach to gambling harm recognises it as a community rather than just an individual problem. Everyone in the survey was asked whether they could identify the likely consequences for the wider community and individuals within that community, when someone gambles too much.

### **4.4.1 Extent to which people can identify consequences of gambling too much for the community**

Two in three people (66%) said that they could identify consequences for the wider community of someone gambling too much. Explorations of the responses by demographic variables, household and neighbourhood characteristic and gambling behaviours were completed (Table 4.10 and Table 4.11).

People aged between 15 and 24 years were less likely than people aged between 35 and 54 years to be able to identify consequences for the wider community when someone gambles too much.

People of European/other ethnicities were more likely to be able to think of consequences compared with Māori and Pacific people.

A person from a couple-only household was more likely to say they could identify consequences for the community than someone from a household consisting of a family with children.

People were more likely to say they could think of consequences as income group increased.

Gambling behaviours did not affect whether people could think of consequences for the wider community.

**Table 4.10 Gender, age and ethnic differences in the ability to identify consequences for the wider community when someone gambles too much (N = 1740)**

Ability to identify consequences	Gender		Age group (in years)						Prioritised ethnicity				Total
			15-24	25-34	34-44	45-54	55-64	65+	Maori	Pacific	Asian	Euro/ Other	
	%	%	%	%	%	%	%	%	%	%	%	%	
Yes	69	64	55	62	72	75	70	65	53	55	54	71	66
No	31	36	45	38	28	26	30	35	47	45	46	30	34
All respondents	711	1029	197	277	425	335	233	273	460	301	113	866	1740

**Table 4.11 Household and neighbourhood differences in the ability to identify consequences when someone gambles too much (N = 1740)**

Ability to identify consequences	Deprivation			Household composition				Household equivalised income				Total	
	Low (1-3)	Mid (4-7)	High (8-10)	Couple	Family	Family	Not stated	Low	Medium	High			
				Single person	no children	with children							
				%	%	%	%	%	%	%	%	%	
Yes	66	70	62	66	74	60	61	54	65	82	36	66	
No	34	30	38	34	26	40	39	46	35	18	64	34	
All respondents	407	557	776	271	419	896	114	435	544	708	53	1740	

#### 4.4.2 Ways that gambling too much might affect the wider community

Everyone in the survey who said they could think of consequences for the wider community when someone gambles too much (n=1103) were asked to specify what these consequences were. Their answers were coded into overall categories (Table 4.12). The most frequently mentioned consequence for the wider community was “crime/fraud/strain on the justice system” (31% of those who could identify a consequence).

**Table 4.12 Consequences for the wider community when someone gambles too much (multiple response) (n = 1103)**

Consequence of gambling too much	Total
	%
Crime/fraud/strain on justice system	31
Children suffer	20
Aggression/violence/arguments/fighting	10
Community suffers/community breakdown	7
Individuals don't contribute to the community/less money flowing into community	7
Community supports them/picks up the pieces	6
Social burden/more social services needed	6
Negative impact on friends and neighbours	6
Health problems/drain on health services	5
Use of taxpayer money/supported by government agencies	5
Dishonesty/lies/loss of trust	5
Negative impact on work/workplace	5
Set bad example to others/influence others to gamble	3
Alcohol/smoking/drug issues	3
Other consequences	2
Respondents who could identify consequences	1103

Note: Figures only include those people who said they could identify consequences for the wider community; hence results are not indicative of total population proportions

Exploration of the data by gender, age and ethnicity showed that of the people that could identify consequences for the community females were more likely than males to mention impacts on friends. There were no other significant differences between these groups (Table 4.13).



**Table 4.13 Gender, age and ethnic differences in the specific consequences of gambling too much listed by respondents (multiple response) (n = 1103)**

Consequences of gambling too much	Gender		Age group (in years)						Prioritised ethnicity				Total
			15-24	25-34	34-44	45-54	55-64	65+	Maori	Pacific	Asian	Euro/ Other	
	%	%	%	%	%	%	%	%	%	%	%	%	%
Crime/fraud/strain on justice system	31	31	18	30	41	36	32	27	26	22	30	33	31
Children suffer	17	23	17	20	18	24	19	18	25	15	4	21	20
Aggression/violence/ arguments/fighting	10	10	8	12	11	12	6	9	16	15	12	9	10
Community suffers/community breakdown	8	6	6	12	6	5	8	7	3	5	1	8	7
Individuals don't contribute to the community/less money flowing into community	7	6	6	9	7	9	5	4	8	1	3	7	7
Community supports them/ picks up the pieces	5	7	2	13	4	3	7	9	7	8	1	6	6
Social burden/more social services needed	6	6	0	6	8	11	5	3	5	2	0	7	6
Negative impact on friends and neighbours	3	9	10	8	8	3	5	0	8	14	7	5	6
Health problems/drain on health services	6	5	1	7	5	9	7	3	6	4	4	5	5
Use of taxpayer money/supported by government agencies	6	5	1	6	4	5	7	6	2	4	1	6	5
Dishonesty/lies/ loss of trust	4	6	6	7	4	4	9	2	3	5	5	5	5
Negative impact on work/workplace	4	6	0	7	5	5	11	2	4	4	3	5	5
Set bad example to others/influence others to gamble	4	2	10	2	1	2	1	3	3	7	11	2	3
Alcohol/smoking/ drug issues	2	3	3	6	3	3	1	0	1	0	4	3	3
Other consequences	2	2	5	2	1	1	2	1	0	3	0	2	2
Respondents who could identify consequences	470	633	97	161	290	226	163	166	263	158	62	620	1103

Note: Figures only include those people who said they could identify consequences for the wider community; hence results are not indicative of total population proportions

#### **4.4.3 Comparison with previous years: ways that gambling too much might affect the wider community**

The percentage of people who said they could identify consequences for the wider community increased slightly, from 61% in 2006/07 to 66% in 2010. However, this increase was not statistically significant.

To enable meaningful comparisons between years the proportion of people mentioning each consequence was based on the total sample for each year, not just those people who said they could identify a consequence (Table 4.14). The only change between years was that fewer people mentioned “crime/fraud/strain on the justice system” in 2010 compared with 2006/07.

**Table 4.14 Consequences for the wider community when someone gambles too much (multiple response): 2006/07 (N = 1973) and 2010(N = 1740)**

Consequences of gambling too much	2006/07 %	2010 %
Crime/fraud/strain on justice system.	28	21
Children suffer.	7	13
Aggression/violence/arguments/fighting.	7	6
Community suffers/community breakdown.	6	5
Individuals don't contribute to the community/less money flowing into community.	2	4
Community supports them/picks up the pieces.	4	4
Social burden/more social services needed.	4	4
All respondents	1973	1740

Note: Proportions are based on the total sample, not just those people who said they could identify consequences for the community, to enable meaningful comparisons between years.

#### **4.4.4 Discussion: Ways in which gambling too much might affect the wider community**

There were few differences between demographic groups in relation to the ability to identify ways harmful gambling may affect the wider community. Where there were differences, such as for European/other ethnicity compared with Māori and Pacific, or by income group, the findings indicate that people from groups that are at a lower risk of harmful gambling are more likely to say they can identify consequences for the wider community.



## 5 Responses to gambling harm

### 5.1 Strategies and actions to help someone who is gambling too much

All advertising for the HSC ‘Kiwi Lives’ campaign includes information about gambling helplines and directs people to websites where they can learn more about harmful gambling and ways to intervene. In addition, other minimising gambling harm providers produce resources detailing signs that someone might be gambling too much and ways to help people who exhibit these behaviours.

Everyone in the survey was asked whether they knew what strategies they could use or actions they could employ to help people who were gambling too much and what those strategies or actions were.

#### 5.1.1 Proportion of people aware of strategies or actions that would help someone who is gambling too much

Sixty-two percent of people said that they knew what they could do to help someone who was gambling too much. The most commonly mentioned actions were encouraging the person to get professional help (42%) and talking to them about their problem (42%).

When the responses relating to awareness of helping strategies was examined by gender, age and ethnic group (Table 5.1), the youngest (15-24 years) and oldest (65 years and over) age groups were found to be less likely than the other age groups to say they knew how to help someone who was gambling too much. The 65+ age group was significantly different from people aged between 25 and 64 years, but the 15 to 24 age group was only significantly different from the 25 to 34 and 45 to 54 age groups. People of European/other ethnicities were more likely than Māori people to say they knew what to do to help someone who was gambling too much.

**Table 5.1 Gender, age, and ethnic differences in respondent’s awareness of gambling help strategies (N = 1740)**

Aware of helping of strategies?	Gender		Age group (in years)						Prioritised ethnicity				Total	
	Male %	Female %	15-24 %	25-34 %	34-44 %	45-54 %	55-64 %	65+ %	Maori %	Pacific %	Asian %	Euro/Other %		
Yes	61	63	53	69	64	71	64	51	54	60	53	64	62	
No	39	38	47	31	36	29	36	49	46	40	47	36	38	
All respondents	711	1029	197	277	425	335	233	273	460	301	113	866	1740	

When the data relating to awareness of helping strategies was examined by household and neighbourhood characteristics (Table 5.2), people living in areas of low deprivation were more likely than people in areas of high deprivation to say that they knew how to help someone who was gambling too much. People with a high household equivalised income were more likely than people with a low equivalised income to say that they knew how to help someone gambling at a harmful level.

**Table 5.2 Respondent's awareness of gambling help strategies: differences by household and neighbourhood characteristics (N = 1740)**

Aware of helping of strategies?	Deprivation			Household composition				Household equivalised income				Total %
				Couple	Family	Family						
	Low (1-3)	Mid (4-7)	High (8-10)	Single person	no children	with children	no children	Low	Medium	High	Not stated	
	%	%	%	%	%	%	%	%	%	%	%	
Yes	70	61	53	52	66	59	65	53	62	70	62	62
No	30	39	47	48	34	41	35	47	38	30	38	38
All respondents	407	557	776	271	419	896	114	435	544	708	53	1740

Analysis of the data by gambling behaviour (Table 5.3) showed people who had participated in two or more gambling activities the previous year were more likely than those who gambled on no or one activity to say they knew what to do to help someone who was gambling too much. ‘Low-risk’ gamblers were more likely than non-gamblers to say they knew what to do to help someone who was gambling too much. ‘Moderate-risk’ and ‘problem gamblers’ were the least likely to say they knew what to do, but the small size of the group meant they did not differ significantly from the other three groups.

**Table 5.3 Respondent's awareness of gambling help strategies: differences by gambling behaviours (N = 1740)**

Aware of helping of strategies?	Gambling type				Number of activities participated					PGSI				Total %
	Non- gambl.	Infreq. gambl.	Non- contin.	Contin. gambler	None	1	2	3	4 or more	Non- gambler	Non- problem gambler	Low- risk gambler	Moderate- risk/probl. gambler	
	%	%	%	%	%	%	%	%	%	%	%	%	%	
	Yes	52	64	66	53	53	55	68	67	69	52	64	70	44
No	48	36	34	47	47	46	32	33	31	48	36	30	56	38
All responds.	336	941	352	86	338	452	424	282	244	336	1194	133	77	1740

### 5.1.2 Strategies and actions that help someone who is gambling too much

People who said they knew what they could do to help a friend or family member who was gambling too much (n=1043) were asked to specify what these strategies or actions were (Table 5.4). This was an unprompted question, and multiple responses could be given meaning the percentages do not sum to 100.

**Table 5.4 Specific actions and strategies thought to help someone who is gambling too much as a proportion of those people who could think of ways to help (multiple response) (n = 1043)**

Actions/strategies	Total
	%
Tell them to get help/help them seek professional advice	42
Talk to them/make them aware of dangers/open discussion/confront them	42
Ring/direct them to helpline	22
Be supportive/listen to them/spend time with them	10
Stop/discourage gambling/limit access to gambling venues	9
Cut off/control their money for them	6
Give them brochures/show ads/expose them to other gamblers' experiences	4
Don't bail them out/don't lend them money	3
Offer alternative activities/sports	3
Get medical help	3
Involve family/friends	2
Help them with money management/budgeting/setting limits	2
Exercise tough love/discipline them/let them bear the consequences	2
Other	1
Pray for them/invite them to church	1
Respondents who could think of something to do to help	1043

Note: The figures only include those people who said they could think of a way to help someone who was gambling too much; hence results are not indicative of total population proportions

When the responses of those people who said they knew how to help someone who gambled too much (n = 1043) were analysed by demographic details (Table 5.5) it showed that people of European/other ethnicities were more likely than Māori people to mention directing a person to professional help. However, in general Māori were more likely to specifically mention the Gambling Helpline. Pacific people were more likely than European/other people to mention praying or inviting the person to church.

**Table 5.5 Gender, age and ethnic differences in the specific actions and strategies identified for people who gamble too much as a proportion of those people who could think of ways to help (multiple response) (n = 1043)**

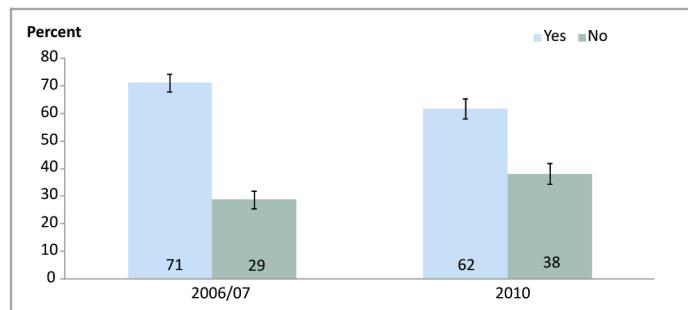
Actions/strategies	Gender		Age group (in years)						Prioritised ethnicity				Total
			15-24	25-34	34-44	45-54	55-64	65+	Maori	Pacific	Asian	Euro/ Other	
	%	%	%	%	%	%	%	%	%	%	%	%	
Tell them to get help/help them seek professional advice	38.6	44.9	31	37	45	50	42	45	29	31	28	46	42
Talk to them/make them aware of dangers/open discussion/confront them	47.5	36	40	35	39	40	45	54	41	55	48	40	42
Ring/direct them to helpline	20.7	22.3	23	32	22	18	23	9	26	14	20	22	22
Be supportive/listen to them/spend time with them	8.4	12.1	13	20	7	9	6	6	6	8	8	11	10
Stop/discourage gambling/limit access to gambling venues	8.3	8.8	15	6	6	10	5	9	12	17	33	5	9
Cut off/control their money for them	6.3	5.3	10	11	8	2	3	1	13	4	2	5	6
Give them brochures/show ads/expose them to other gamblers' experiences	3.1	5.1	16	4	4	2	0	0	3	1	3	5	4
Don't bail them out/don't lend them money	2.7	4	2	2	8	4	1	4	4	3	1	4	3
Offer alternative activities/sports	1.2	5.5	3	7	2	3	4	1	2	5	9	3	3
Get medical help	1.6	3.9	0	5	3	0	7	1	1	0	0	3	3
Involve family/friends <sup>4</sup>	0.9	3	5	3	1	1	2		5	1	0	2	2
Help them with money management/budgeting/setting limits	2.8	1.3	1	0	3	3	1	3	3	6	0	2	2
Exercise tough love/discipline them/let them bear the consequences	1.9	1.3	0	1	2	0	5	2	2	1	0	2	2
Other	0.8	1.4	1	2	2	1	1	0	2	2	1	1	1
Pray for them/invite them to church	0.6	1.1	0	0	3	1	0	1	1	4	1	1	1
Respondents who could think of something to do to help	431	612	102	157	271	226	145	142	268	184	53	538	1043

Note: The figures only include those people who said they could think of a way to help someone who was gambling too much; hence results are not indicative of total population proportions

### 5.1.3 Comparison with previous years: Strategies and actions to help someone who is gambling too much

Since 2006/07 the proportion of people who said that they knew what to do to help someone who was gambling too much had dropped by 9 percentage points (Figure 5.1). See Section 5.1.4 for a discussion of what this decrease may mean.

**Figure 5.1 Knowing ways to help someone who was gambling too much: 2006/07 (1973) and 2010 (N = 1740)**



All respondents

To enable meaningful comparisons between years the proportion of people who reported each way of helping someone who was gambling too much was based on the total sample for each year, not just those people who said they could think of ways of helping someone (Table 5.6). Out of the total sample for each year the proportions of people mentioning specific actions were quite similar, despite the fact that a lower proportion of people in 2010 said that they knew what to do. There were small significant decreases in the proportion of people saying that controlling a person's money or offering alternative activities were ways of helping someone gambling at a harmful level. However, there were no significant changes for the most frequently reported ways to help people.

**Table 5.6 Things to do to help someone who is gambling too much (multiple response): 2006/07 (N = 1973) and 2010 (N = 1740)**

Actions/strategies	2006/07	2010
	%	%
Tell them to get help/help them seek professional advice	25	26
Talk to them/make them aware of dangers/open discussion/confront them	28	26
Ring/direct them to helpline	17	13
Be supportive/listen to them/spend time with them	7	6
Stop/discourage gambling/limit access to gambling venues	7	5
Cut off/control their money for them	6	4
Give them brochures/show ads/expose them to other gamblers' experiences	2	3
Don't bail them out/don't lend them money	2	2
Offer alternative activities/sports	6	2
Get medical help	1	2
All respondents	1973	1740

Note: Proportions are based on the total sample, not just those people who said they could think of things to help someone who is gambling too much, to enable meaningful comparisons between years.

## **5.1.4 Discussion: Strategies and actions to help someone who is gambling too much**

There was a tendency for people at lower risk of gambling harm (eg, people from the least deprived areas, high income groups, and those of European/other ethnicities) to report having greater awareness of gambling-related issues and solutions, similar to the findings regarding consequences of gambling too much. The findings indicate that the groups who are most likely to experience harm are the least aware of how to address the harm. However, more than half of all groups questioned said they knew what to do to help someone who was gambling too much.

'Low-risk' gamblers were the most likely of all the PGSI groups to say they knew how to help. The finding is consistent with the earlier finding that this group is the most likely to have used help services in the past (see Section 3.5.1).

The proportion of people who said they knew how to help someone who was gambling too much decreased between 2006/07 and 2010. This decrease is consistent with the finding regarding awareness of the signs that someone was gambling at a harmful level (Section 4.3). However, fewer people in 2010 said they knew someone who had gambled too much than in 2006/07 (see Section 3.3.2), consequently the need to know how to help someone may also be lower. The proportion of the total population of the study reporting specific actions and strategies to help someone who was gambling too much was fairly consistent across years.

## **5.2 Knowledge of gambling help services**

There are numerous gambling help services in New Zealand, for example the Salvation Army's Oasis counselling and advice centres, the Problem Gambling Foundation, and many ethnic-specific provider groups. HSC gambling harm advertising refers people to the Gambling Helpline, a free nationwide service.

All people in the study (N= 1740) were asked whether they had heard of any of the services on a list of services designed to help people who gamble too much, and if so which ones.

### **5.2.1 Proportion of people who know of a problem gambling support service**

Analysis of the responses by gender, age and ethnicity showed people aged 15 to 24 were less likely to have heard of any services than all other people<sup>8</sup> (Table 5.7). Asian people were less likely than people in other ethnic groups to have heard of a service and people of European/other ethnicities were the most likely to have heard of a service (Table 5.7).

**Table 5.7 Gender, age and ethnic differences in knowledge of a problem gambling support service (N = 1740)**

Heard of a gambling help service?	Gender		Age group (in years)						Prioritised ethnicity				Total
	Male	Female	15-24	25-34	34-44	45-54	55-64	65+	Maori	Pacific	Asian	Euro/ Other	
			%	%	%	%	%	%	%	%	%	%	%
Yes	89	85	79	89	86	91	90	86	82	77	53	92	87
No	11	15	21	11	14	9	10	14	18	23	47	8	14
All respondents	711	1029	197	277	425	335	233	273	460	301	113	866	1740

<sup>8</sup> The comparison with those aged 65+ was only marginally significant due to the size of this group.

Analysis of the responses by neighbourhood and household characteristics was undertaken (Table 5.8). Results showed people living in areas of high deprivation were less likely to have heard of a service compared with people in less deprived areas; and people with low household equivalised incomes were less likely than those with higher incomes to have heard of gambling help services.

**Table 5.8 Knowledge of a gambling help service: differences by household and neighbourhood characteristics (N = 1740)**

Heard of a gambling help service?	Deprivation			Household composition				Household equivalised income				Total %
	Low (1-3)	Mid (4-7)	High (8-10)	Couple person	Family children	Family children	No children	Low	Medium	High	Not stated	
	%	%	%	%	%	%	%	%	%	%	%	
Yes	89	89	81	82	92	85	83	80	88	91	88	87
No	11	11	20	18	8	15	17	20	12	9	12	14
All respondents	407	557	776	271	419	896	114	435	544	708	53	1740

Responses to the question regarding knowledge of a problem gambling support service were analysed by the type of gambling behaviour a respondent engaged in (Table 5.9). People who gambled frequently on non-continuous activities were more likely than non-gamblers to have heard of support services. People who had engaged in more types of gambling activity in the previous 12 months were more likely than people who had engaged in fewer activities to have heard of support services. Non-gamblers were less likely to have heard of a support service than ‘non-problem gamblers’ or ‘low-risk’ gamblers. Although ‘moderate-risk’ and ‘problem gamblers’ had the lowest recognition of problem gambling support services they did not differ significantly from the other groups.

**Table 5.9 Influence of gambling behaviours on knowledge of a problem gambling support service (N= 1740)**

Heard of a gambling help service?	Gambling type				Number of activities participated					PGSI				Total %
	Non- gambl.	Infreq. gambl.	Non- contin.	Contin. gambler	None	1	2	3	4 or more	Non- problem gambler	Non- risk gambler	Low- risk gambler	Moderate- risk/probl. gambler	
	%	%	%	%	%	%	%	%	%	%	%	%	%	
Yes	78	88	92	82	78	84	88	92	95	78	89	93	72	87
No	22	12	8	18	22	17	12	8	5	22	11	7	28	14
All responds.	336	941	352	86	338	452	424	282	244	336	1194	133	77	1740

## 5.2.2 Services recognised

The proportion of the total sample that recognised each gambling help service is presented in Table 5.10. This was a multiple response questions so the percentages do not sum to 100.

The majority of people (87%) had heard of at least one gambling help service. The most commonly recognised services were the 0800 telephone helpline (77% of all people) and support groups (52% of all people). Comparatively fewer people had heard of internet self-help sites (11% of all people).

**Table 5.10 Types of problem gambling support services recognised by all study respondents (multiple response) (N = 1740)**

Type of service	Total
	%
0800 telephone helpline	77
Support groups	52
Face-to-face counselling	34
Help from a GP, practice nurse or other health professional	31
Internet site - self help	11
All respondents	1740

The responses that related to recognition of a problem gambling support service were analysed by key demographic factors (Table 5.11), analysis showed:

- Females were more likely than males to have heard of getting help from health professionals.
- People aged 45-64 were more likely to have heard of support groups than people aged 15-24 and 35-44.
- European/other people were more likely to have heard of all of the help services, with the exception of internet self-help, compared with all other ethnicities.

**Table 5.11 Gender, age, and ethnic differences in the recognition of specific problem gambling support services (multiple response) (N = 1740)**

Type of service	Gender		Age group (in years)						Prioritised ethnicity				Total
	Male	Female	15-24	25-34	34-44	45-54	55-64	65+	Maori	Pacific	Asian	Euro/ Other	
	%	%	%	%	%	%	%	%	%	%	%	%	%
0800 telephone helpline	80	75	73	81	74	81	78	76	75	69	45	82	77
Support groups	50	54	41	53	49	62	61	49	47	36	20	58	52
Face-to-face counselling	35	34	31	37	30	37	37	35	30	24	16	38	34
Help from a GP, practice nurse or other health professional	26	35	21	23	31	33	40	40	23	21	11	35	31
Internet site - self help	9	13	20	14	7	11	5	7	13	11	6	11	11
All respondents	711	1029	197	277	425	335	233	273	460	301	113	866	1740

### 5.2.3 Comparison with previous years: recognition of problem gambling support services

The question about recognition of problem gambling support services was asked differently in the 2006/07 survey. In 2006/07 respondents were first asked if they could think of any problem gambling support services. If they said 'yes' they could think of a service they were then asked to name the first one they could think of. Following these two questions they were then shown a card listing different generic types of support services, and asked if they had



heard of any of them. Respondents who identified a generic service were then asked to name a specific service. For 2010 only the set of questions listing generic services on a show card were used. Comparison between years should therefore be treated with caution (Table 5.12).

In 2010, a higher proportion of people said that they had heard of the 0800 telephone helpline for harmful gambling than in 2006/07.

**Table 5.12 Recognition of problem gambling support services (multiple response): 2006/07 (N = 1973) and 2010 (N = 1740)**

Type of service	2006/07	2010
	%	%
0800 telephone helpline	68	77
Face-to-face counselling	36	34
Help from a GP, practice nurse or other health professional	27	31
Internet site - self help	9	11
All respondents	1973	1740

## 5.2.4 Discussion: Recognition of problem gambling support services

There is some evidence that gambling behaviour is related to recognition of problem gambling support services. Most people, including non-gamblers, had heard of at least one of the problem gambling support services. Recognition was higher amongst gamblers, and increased as the number of gambling activities participated in increased. Recognition was lower amongst people aged 15-24 years compared with most other age groups, and amongst Asian people compared with people of other ethnicities. Both of these groups have a high proportion of non-gamblers (Gray, 2011).

People from groups at lower risk of ‘problem gambling’ (eg, European/other ethnicity, low deprivation neighbourhoods, and higher income) were the most likely to recognise at least one problem gambling support service. This finding is consistent with the previous finding that people from some higher risk groups are less confident about ways of responding to harmful gambling behaviours compared with the lower risk groups (see Section 5.1.4). However, the majority (about 80%) of the higher risk groups were aware of services they could contact.

## 5.3 Conversations about avoiding gambling harm

### 5.3.1 Talking about gambling harm

All respondents were asked whether, during the previous 12 months, their family or household had talked about the dangers of gambling or the harm it could cause.

About one in five people (18%) said that their family or household had talked about the dangers of gambling or the harm it could cause during the previous 12 months. There were no differences between the proportion of people of different ages, genders and ethnicities who had discussed gambling harms with their family or household. People who lived alone were less likely than others to have talked with their family or household about gambling harms than all other household types (Table 5.13).

**Table 5.13 Discussions about gambling harm: differences based on household characteristics (N=1740)**

Talked about gambling harm?	Deprivation			Household composition				Household equivalised income				Total
				Couple	Family	Family						
	Low (1-3)	Mid (4-7)	High (8-10)	Single person	no children	with children	no children	Low	Medium	High	Not stated	
	%	%	%	%	%	%	%	%	%	%	%	
Yes	16	20	18	8	21	18	20	14	17	22	23	18
No	84	80	82	92	79	82	80	86	83	78	78	82
All respondents	407	557	776	271	419	896	114	435	544	708	53	1740

When data relating to discussions about gambling harm were analysed by types of gambling behaviours (Table 5.14) results showed gambling type and number of activities a person participated in did not influence the likelihood that a person had talked with their family about gambling harms. Non-gamblers were less likely to have discussed gambling harm with their family or household than ‘non-problem gamblers’, ‘low-risk’ gamblers, and ‘moderate-risk/problem gamblers’. However, only 27% of people who were ‘moderate-risk’ or ‘problem gamblers’ had talked with their family or household about this subject.

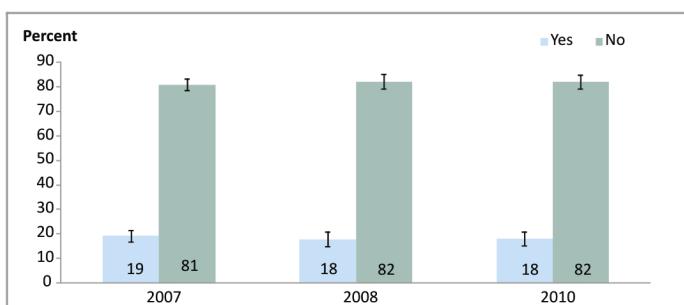
**Table 5.14 Influence of gambling behaviours on likelihood of talking about gambling harm (N = 1740)**

Talk about gambling harm?	Gambling type				Number of activities participated					PGSI				Total
	Non- gambl.	Infreq. gambl.	Non- contin.	Contin. gambler	None	1	2	3	4 or more	Non- gambler	Non- problem gambler	Low- risk gambler	Moderate risk/probl. gambler	
	%	%	%	%	%	%	%	%	%	%	%	%	%	
	Yes	13	19	20	21	13	17	21	21	18	13	19	24	27
No	87	81	80	79	87	83	79	79	82	87	81	76	73	82
All responds.	336	941	352	86	338	452	424	282	244	336	1194	133	77	1740

### 5.3.2 Comparison with previous years: discussions about gambling harm

The proportion of people who had discussed gambling harm with their family and household was very similar across all three time periods in which the question was asked (Figure 5.2).

**Figure 5.2 Discussions about gambling harm: 2006/07 (N = 1973), 2008 (N = 1608) and 2010 (N = 1740)**



All respondents

### 5.3.3 Talking about how to avoid gambling harm

Everyone in the survey was asked whether, during the previous 12 months, their family or household had talked about helpful ways to avoid gambling too much. For the previous 12 months, 11% of people said that their family or household had talked about ways to avoid gambling too much.

Analysis of the responses relating to discussions on avoiding gambling harm by key variables found that:

- People of European/other ethnicities were less likely than people of all other ethnic groups to have discussed ways to avoid gambling too much (Table 5.15).
- Over one in four Asian people and nearly one in four Pacific people said that their family or household had discussed ways to avoid gambling too much during the previous 12 months (Table 5.15).
- People living in the least deprived areas were less likely than people living in the most deprived areas to have discussed ways to avoid gambling too much (Table 5.16).
- People living alone were the least likely to have discussed ways of avoiding gambling too much with their family or household (Table 5.16).
- There were no significant differences among people with different household equivalised incomes (Table 5.16).
- People who participated frequently in continuous gambling activities were more likely than non-continuous and less frequent gamblers to have discussed ways to avoid gambling too much. However the size of the group means that this difference is not statistically significant (Table 5.17).
- ‘Moderate-risk’ and ‘problem gamblers’ were significantly more likely to have talked about ways of avoiding gambling too much compared with non-gamblers and ‘non-problem gamblers’. Over a third of ‘moderate-risk’ and ‘problem gamblers’ and nearly one in five (18%) ‘low-risk’ gamblers had discussed ways to avoid gambling too much with their family or household (Table 5.17).

**Table 5.15 Gender, age and ethnic differences in discussing ways to avoid gambling harm (N = 1740)**

Talked about avoid harm?	Gender		Age group (in years)						Prioritised ethnicity				Total
	Male	Female	15-24	25-34	34-44	45-54	55-64	65+	Maori	Pacific	Asian	Euro/ Other	
			%	%	%	%	%	%	%	%	%	%	%
Yes	9	12	11	10	12	14	13	5	16	22	27	7	11
No	91	88	89	90	88	87	88	95	84	78	73	93	89
All respondents	711	1029	197	277	425	335	233	273	460	301	113	866	1740

**Table 5.16 Household and neighbourhood differences in discussing ways to avoid gambling harm (N = 1740)**

Talked about avoid harm?	Deprivation			Household composition				Household equivalised income				Total
	Low (1-3)	Mid (4-7)	High (8-10)	Couple Single person	Family no children	Family with children	Family no children	Low	Medium	High	Not stated	
				%	%	%	%	%	%	%	%	
				%	%	%	%	%	%	%	%	
Yes	7	12	14	6	10	11	16	12	11	9	10	11
No	93	88	87	94	90	89	84	88	89	91	90	89
All respondents	407	557	776	271	419	896	114	435	544	708	53	1740

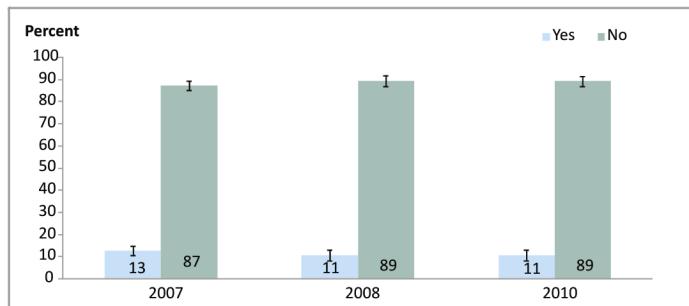
**Table 5.17 Discussing ways to avoid gambling harm: Differences by gambling behaviour (N = 1740)**

Talked about avoid harm?	Gambling type				Number of activities participated					PGSI				Total
	Non- gambl.	Infreq. gambl.	Non- contin.	Contin. gambler	None	1	2	3	4 or more	Non- gambler	Non- problem gambler	Low- risk gambler	Moderate risk/probl. gambler	
	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Yes	9	11	11	21	9	9	13	11	13	9	10	18	37	11
No	91	89	89	80	92	91	87	90	87	91	90	83	63	89
All responds.	336	941	352	86	338	452	424	282	244	336	1194	133	77	1740

### 5.3.4 Comparison with previous years: discussions about avoiding gambling harm

The proportions of people who had discussed ways to avoid gambling too much with their families or households did not change significantly between the three years the question was asked (Figure 5.3).

**Figure 5.3 Family and household discussions about avoiding gambling harm: 2006/07 (N = 1973), 2008 (N = 1608) and 2010 (N = 1740)**



All respondents

### 5.3.5 Discussion: Conversations about avoiding gambling harm

The only gambling-related behaviour for which there were differences in responses relating to household conversations about harm was ‘problem gambler’ status. Conversations about gambling harm became more common as the risk of ‘problem gambling’ increased.

People from groups at higher risk of harm were generally more likely to have discussed gambling harm and how to avoid gambling too much with their families or households. This finding is in contrast to the questions about knowing what to do to help someone who is gambling too much (Section 5.1) and awareness of gambling harm support services (Section 6.2). While the higher risk groups are less likely to report awareness of how to help someone who is gambling too much they are more likely to be discussing ways to address harmful gambling behaviours.



## 5.4 Ways to avoid gambling too much

As well as determining whether people have talked about gambling harms it is useful to understand whether people have used specific methods to avoid gambling too much. This question provides an indication of the response to potentially harmful gambling behaviours.

Everyone in the survey was shown a list of ways to avoid gambling too much and asked whether they or their household had used any of these strategies. Respondents who said yes were asked to indicate which strategies on the list they or their household had used.

### 5.4.1 Proportion of people who use strategies to avoid gambling too much

Nearly one in five people (18%) said that they or their household had used any of the listed strategies to avoid gambling too much. There were no significant differences by gender, age, ethnicity, deprivation, household composition, or household income.

Responses relating to strategies to avoid gambling harm were analysed in relation to an individual's gambling behaviour (Table 5.18), the findings were as follows:

- Among people who gambled frequently on continuous activities, nearly half said that they or their household had used ways to avoid gambling too much. This figure was higher than for any other gambling type. Non-gamblers were significantly less likely to say that their household had used ways to avoid gambling too much compared with all other gambling types.
- People who had participated in no or one gambling activity in the previous 12 months were less likely than those who had participated in more activities to say that they or their household had used ways to avoid gambling too much.
- 'Low-risk' gamblers and 'moderate-risk/problem gamblers' were more likely to say they had used ways to avoid gambling too much compared with non-gamblers and 'non-problem gamblers'.

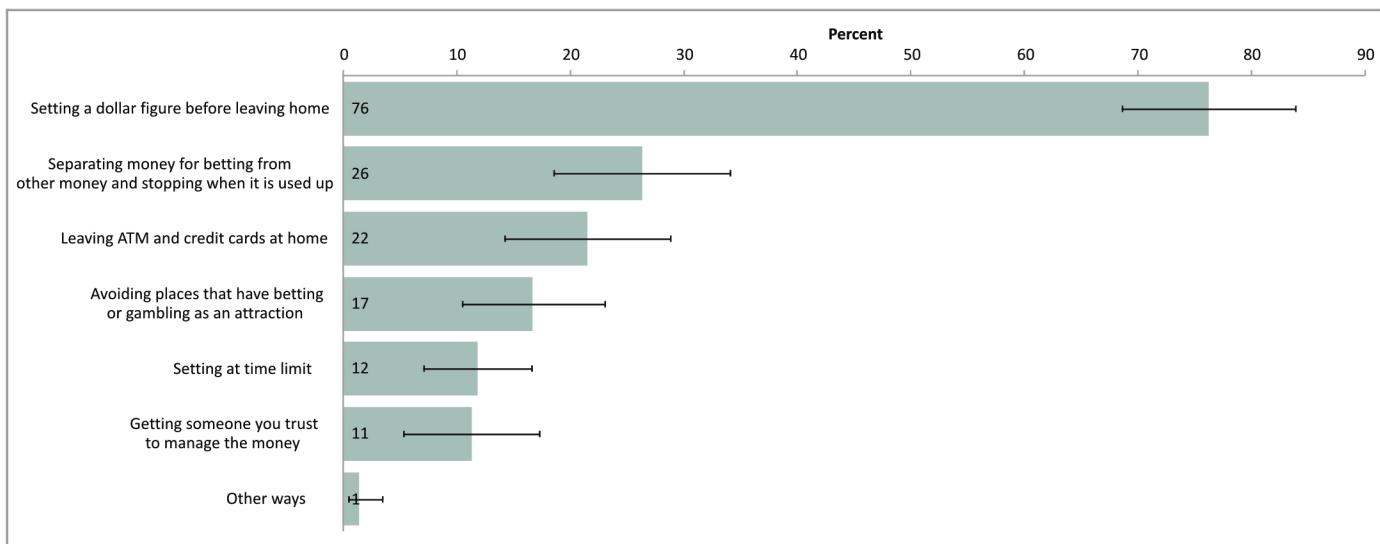
**Table 5.18 Use of strategies to avoid gambling too much: the role of gambling behaviours (N = 1740)**

Used a strategy to avoid gambling too much?	Gambling type				Number of activities participated					PGSI				Total
	Non-gambl.	Infreq. gambl.	Non-contin.	Contin. gambler	None	1	2	3	4 or more	Non-gambler	Non-problem gambler	Low-risk gambler	Moderate risk/probl. gambler	
Yes	3	19	25	49	2	10	23	29	32	3	17	55	65	18
No	98	81	75	51	98	90	77	72	68	98	83	45	35	82
All responds.	336	941	352	86	338	452	424	282	244	336	1194	133	77	1740

### 5.4.2 Specific strategies used to prevent gambling too much

People who said they or their household had used specific strategies to avoid gambling too much (n = 329) were asked which of any listed strategies they had used, and whether they had used any other strategy not on the list. Among the people who had used a strategy to avoid gambling too much, three in four had set a dollar limit before leaving home and one in four had separated gambling money from other spending money, and stopped once it was used up (Figure 5.4).

**Figure 5.4 Strategies respondent or their household used to avoid gambling too much (multiple response) (n = 329)**



Note: Figures only include those people who said they or their household had used strategies to avoid gambling too much in the past year; hence results are not indicative of total population proportions

Table 5.19 and Table 5.20 show the strategies used by people who said that they or their household had used some way to avoid gambling too much, with the proportions of people among each demographic subgroup who mentioned each strategy. Because the respondent numbers for this table comprises only those who had used a strategy to avoid gambling too much (n=329), some of the subgroups (for example, people of Asian ethnicity) contain fewer than 30 respondents and as such have not been included in the analysis due to insufficient power.

Among those who had used ways to avoid gambling too much, females were more likely to mention getting someone to manage the money than males. People aged 35-54 were more likely to suggest setting a dollar figure before leaving home than people aged 15-24. There were no significant differences by ethnicity, deprivation, household composition, or household income.

**Table 5.19 Gender, age and ethnic differences in strategies respondents reported using to avoid gambling too much (multiple response) (n = 329)**

Strategies	Gender		Age group (in years)						Prioritised ethnicity			Total
	Male	Female	15-24	25-34	34-44	45-54	55-64	65+	Maori	Pacific	Euro/ Other	
	%	%	%	%	%	%	%	%	%	%	%	%
Setting a dollar figure before leaving home	81	72	37	75	86	88	73	92	74	45	82	76
Separating money for betting from other money and stopping when it is used up	31	22	36	28	22	32	23	17	23	16	26	26
Leaving ATM and credit cards at home	19	24	51	19	18	17	20	10	27	18	21	22
Avoiding places that have betting or gambling as an attraction	9	24	36	20	11	19	11	5	14	50	14	17
Setting at time limit	10	14	12	2	9	16	15	19	25	10	10	12
Getting someone you trust to manage the money	3	19	22	10	6	13	14	2	18	10	8	11
Other ways	0	2	3	1	1	1	2	0	5	1	1	1
Respondents who said strategies had been used to avoid gambling too much	130	199	36	50	79	76	49	39	107	57	154	329

Note: Figures only include those people who said they or their household had used strategies to avoid gambling too much in the past year; hence results are not indicative of total population proportions

Analysis of results by gambling behaviours (Table 5.20) showed:

- People who had only participated in one gambling activity were more likely to have avoided gambling venues than people who participated in three or more activities.
- There were no other significant differences.

**Table 5.20 Strategies respondents reported employing to avoid gambling too much: differences by gambling behaviours(multiple response) (n = 329)**

Strategies	Gambling type			Number of activities participated				PGSI (measure of risk)			Total
	Infreq. gambl.	Non- contin. gambler	Contin. gambler	1	2	3	4 or more	Non- problem gambler	Low- risk gambler	Moderate risk/probl. gambler	
	%	%	%	%	%	%	%	%	%	%	
Setting a dollar figure before leaving home	76	82	74	62	71	86	85	82	71	56	76
Separating money for betting from other money and stopping when it is used up	29	18	38	21	27	26	29	24	28	41	26
Leaving ATM and credit cards at home	25	14	24	3	24	26	24	20	18	38	22
Avoiding places that have betting or gambling as an attraction	19	12	13	42	21	5	8	17	14	15	17
Setting at time limit	8	16	16	9	9	15	13	10	15	20	12
Getting someone you trust to manage the money	11	9	12	23	14	5	10	10	13	21	11
Other ways	1	2	6	3	0	0	3	1	2	4	1
Respondents who said strategies had been used to avoid gambling too much	183	89	39	46	94	75	97	205	53	54	329

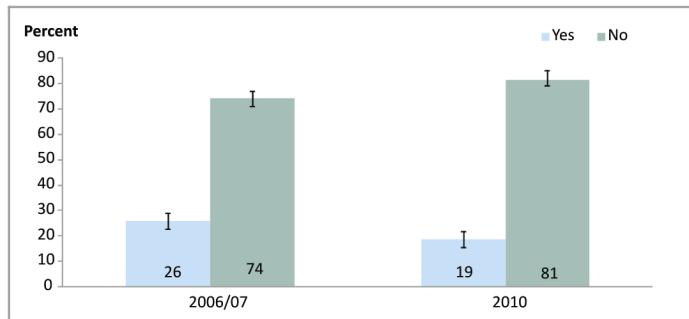
Note: Figures only include those people who said they or their household had used strategies to avoid gambling too much in the past year; hence results are not indicative of total population proportions

### 5.4.3 Comparison with previous years: use of strategies to avoid gambling too much

To enable meaningful comparisons across years the proportion of people mentioning each strategy was based on the total sample for each year aged 18 and over, not just those people who said that they or their household had used strategies to avoid gambling too much (Table 5.21). In 2006/07 the question was only asked of respondents aged 18 and over and so the HLS figures exclude respondents aged 15 to 17. The overall proportion of people saying their household had used each strategy had decreased since 2006/07.

Since 2006/07, the proportion of people aged 18 years old and over who said that they or their household had used strategies to avoid gambling too much has dropped significantly from 26 to 19 percent (Figure 5.5).

**Figure 5.5 Use of any strategies to avoid gambling too much: 2006/07 ( $n = 1774$ ) and 2010 ( $n = 1691$ )**



Respondents aged 18 years and over

**Table 5.21 Proportion of respondents aged 18 years and over who had used each way to avoid gambling too much during previous 12 months (multiple response): 2006/07 ( $n = 1773$ ) and 2010 ( $n = 1691$ )**

Strategies	2006/07 %	2010 %
Setting a dollar figure before leaving home	19	14
Separating money for betting from other money and stopping when it is used up	8	5
Leaving ATM and credit cards at home	9	4
Avoiding places that have betting or gambling as an attraction	8	3
Setting a time limit	7	2
Getting someone you trust to manage the money	4	2
Other ways	1	0
Respondents aged 18 years and over	1773	1691

Note: Proportions are based on the total sample aged 18+, not just those people who said they or their household had used ways to avoid gambling too much, to enable meaningful comparisons between years.

#### 5.4.4 Discussion: use of strategies to avoid gambling too much

Increased frequency of gambling, gambling on more activities, and a higher score on the PGSI, were all related to an increased likelihood that a household had employed strategies to avoid gambling too much. There were no other significant differences for the demographic variables, indicating that groups at higher risk of gambling problems (eg, people from higher deprivation areas) were no more likely to use strategies to avoid gambling too much than lower-risk groups (eg, people from lower deprivation areas).

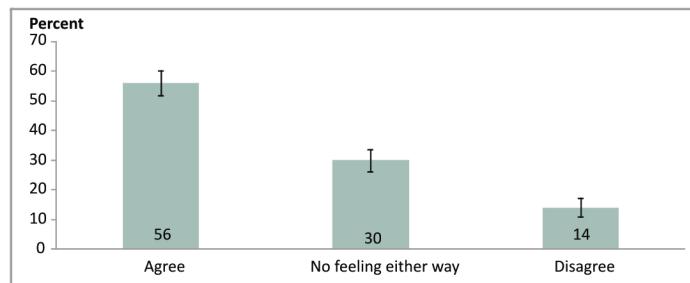
The most common strategy mentioned to avoid gambling too much in both 2006/07 and 2010 was setting a dollar figure before leaving home. This is consistent with the Department of Internal Affairs survey (Department of Internal Affairs, 2008), which used a multiple-response open-ended question asking people what ways they used to stop themselves from gambling too much. In that study, half of the people who said they used strategies to avoid gambling too much said they limited the amount of money they could gamble with. It is not possible to compare the other responses from this study, aside from setting a limit, as the strategies mentioned in the DIA survey do not align with the categories used for the 2010 HLS.

## 6 Addressing gambling harm in the community

### 6.1 Opinion on need for community involvement in preventing gambling harm

Everyone in the survey was asked whether they agreed or disagreed with the statement “There is a need for your community to talk about problems that come from gambling and to work out local solutions”. The majority of those asked (56%) agreed with the statement (Figure 6.1).

**Figure 6.1 Respondents' belief in the need for community solutions for gambling problems (n = 1736)**



Respondents excluding “don't know” responses

Responses were stratified by gender, age and ethnicity (Table 6.1) and the following differences were found:

- Compared with people aged 25 to 34 years and 35 to 44 years, people in the oldest (65 years and over) age group were less likely to agree that their community needed to talk about and work out local solutions to gambling problems.
- Compared with Māori and people of European/other ethnicities, people of Asian and Pacific ethnicities were more likely to agree that their community needed to talk about and work out local solutions to gambling problems.

**Table 6.1 Gender, age and ethnic differences in the belief that gambling harm requires community solutions (n = 1736)**

Community solutions required?	Gender		Age group (in years)						Prioritised ethnicity				Total
	Male %	Female %	15-24	25-34	34-44	45-54	55-64	65+	Maori	Pacific	Asian	Euro/ Other	
			%	%	%	%	%	%	%	%	%	%	%
Agree	55	57	49	59	61	63	57	47	60	76	78	52	56
No feeling either way	32	29	35	31	26	24	29	37	27	20	15	33	30
Disagree	14	14	17	10	14	14	14	17	13	4	8	16	14
Respondents excluding “don't know”	711	1025	196	275	425	334	233	273	459	298	113	866	1736

Analysis by household composition, household income and neighbourhood deprivation revealed no significant differences (Table 6.2).

**Table 6.2 Household and neighbourhood differences in the belief that gambling harm requires community solutions (n = 1736)**

Community solutions required?	Deprivation			Household composition				Household equivalised income				Total %
	Low (1-3)	Mid (4-7)	High (8-10)	Single person	no children	with children	Family no children	Low	Medium	High	Not stated	
	%	%	%	%	%	%	%	%	%	%	%	
Agree	51	57	61	55	55	57	55	56	53	60	47	56
No feeling either way	27	32	31	31	31	31	21	32	31	26	34	30
Disagree	22	12	8	14	14	13	24	12	16	14	19	14
Respondents excluding “don’t know” responses	407	556	773	271	419	893	113	706	543	435	52	1736

There were no significant differences between the responses of people with different frequencies of gambling behaviours or different risks of gambling harm (Table 6.3).

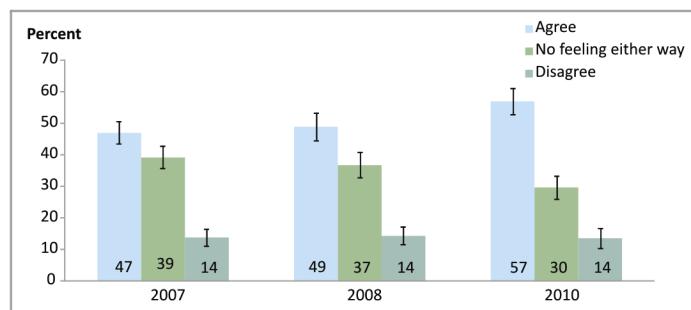
**Table 6.3 Gambling behaviours and differences in the belief that gambling harm requires community solutions (n = 1736)**

Community solutions required?	Gambling type				Number of activities participated					PGSI				Total %
	Non- gambl.	Infreq. gambl.	Non- contin.	Contin. gambler	None	1	2	3	4 or more	Non- gambler	Non- problem gambler	Low- risk gambler	Moderate risk/probl. gambler	
	%	%	%	%	%	%	%	%	%	%	%	%	%	
Agree	60	54	60	55	60	58	59	50	48	60	55	59	57	56
No feeling either way	27	32	29	35	26	27	30	35	34	27	31	34	31	30
Disagree	14	15	11	10	14	14	12	15	17	14	15	7	11	14
Respondents excluding “don’t know”	333	940	352	86	335	452	423	282	244	333	1194	132	77	1736

### 6.1.1 Comparison with previous years: need for community involvement

In 2010, the proportion of adults aged 18 years and over who agreed with this statement had risen significantly from 2006/07. While the proportion who disagreed was the same across all three time periods, in 2010 people were less likely to have no feeling either way (Figure 6.2).

**Figure 6.2 Respondents' belief in the need for community solutions for gambling harm: 2006/07 (n = 1774), 2008 (n = 1543) and 2010 (n = 1691)**



Respondents aged 18 years and over

## 6.2 Personal involvement in community discussions about gambling harm

Everyone was asked whether, in the previous five years, they had taken part in any discussions or meetings in their community about the problems that can be brought on by gambling and how to solve them. Most people (96.5%) had not taken part in community discussions or meetings about gambling harms and working out local solutions.

There were no significant differences in responses by any of the demographic variables (Table 6.4, Table 6.5, and Table 6.6)

**Table 6.4 Gender, age and ethnic differences in respondents who had taken part in community discussions about gambling harm and solutions in previous 5 years (N = 1740)**

Taken part in community discussions?	Gender		Age group (in years)						Prioritised ethnicity				Total
	Male	Female	15-24	25-34	34-44	45-54	55-64	65+	Maori	Pacific	Asian	Euro/ Other	
	%	%	%	%	%	%	%	%	%	%	%	%	%
Yes	3	4	4	1	6	4	3	3	6	8	4	3	4
No	97	96	96	99	94	97	97	97	94	92	96	97	97
All respondents	711	1029	197	277	425	335	233	273	460	301	113	866	1740

**Table 6.5 Household and neighbourhood differences in respondents who had taken part in community discussions about gambling harm and solutions in previous 5 years (N = 1740)**

Taken part in community discussions?	Deprivation			Household composition				Household equivalised income				Total	
	Low	Mid	High	Couple person	no children	with children	Family children	Family no children	Low	Medium	High	Not stated	
	(1-3)	(4-7)	(8-10)	%	%	%	%	%	%	%	%	%	
Yes	2	3	6	3	2	5	4	4	3	4	4	1	4
No	98	97	94	97	98	95	96	96	97	96	96	99	97
All respondents	407	557	776	271	419	896	114	114	435	544	708	53	1740

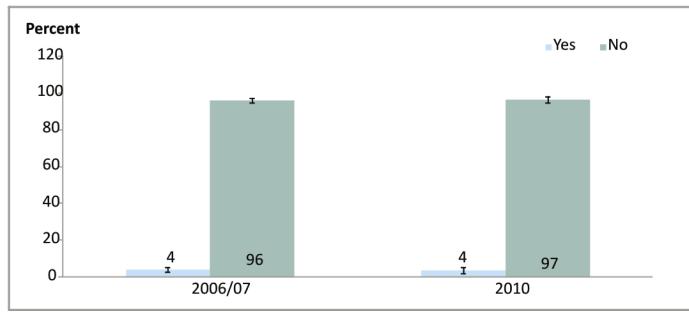
**Table 6.6 Gambling behaviour differences in respondents who had taken part in community discussions about gambling harm and solutions in previous 5 years (N = 1740)**

Taken part in community discussions?	Gambling type				Number of activities participated					PGSI				Total
	Non-gambl.	Infreq. gambl.	Non-contin.	Contin. gambler	None	1	2	3	4 or more	Non-gambler	Non-problem gambler	Low-risk gambler	Moderate risk/probl. gambler	
	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Yes	4	3	5	4	4	2	4	6	2	4	4	4	1	4
No	97	97	95	96	97	98	96	94	98	97	97	96	99	97
All responds.	336	941	352	86	338	452	424	282	244	336	1194	133	57	1740

## 6.2.1 Comparison with previous years: involvement in community discussion

There was no difference in the proportion of people who said they had taken part in community discussions about gambling harm and solutions between 2006/07 and 2010 (Figure 6.3).

**Figure 6.3 Respondents who had taken part in community discussions about gambling harm and solutions in previous 5 years: 2006/07 (N = 1973) and 2010 (N = 1740)**



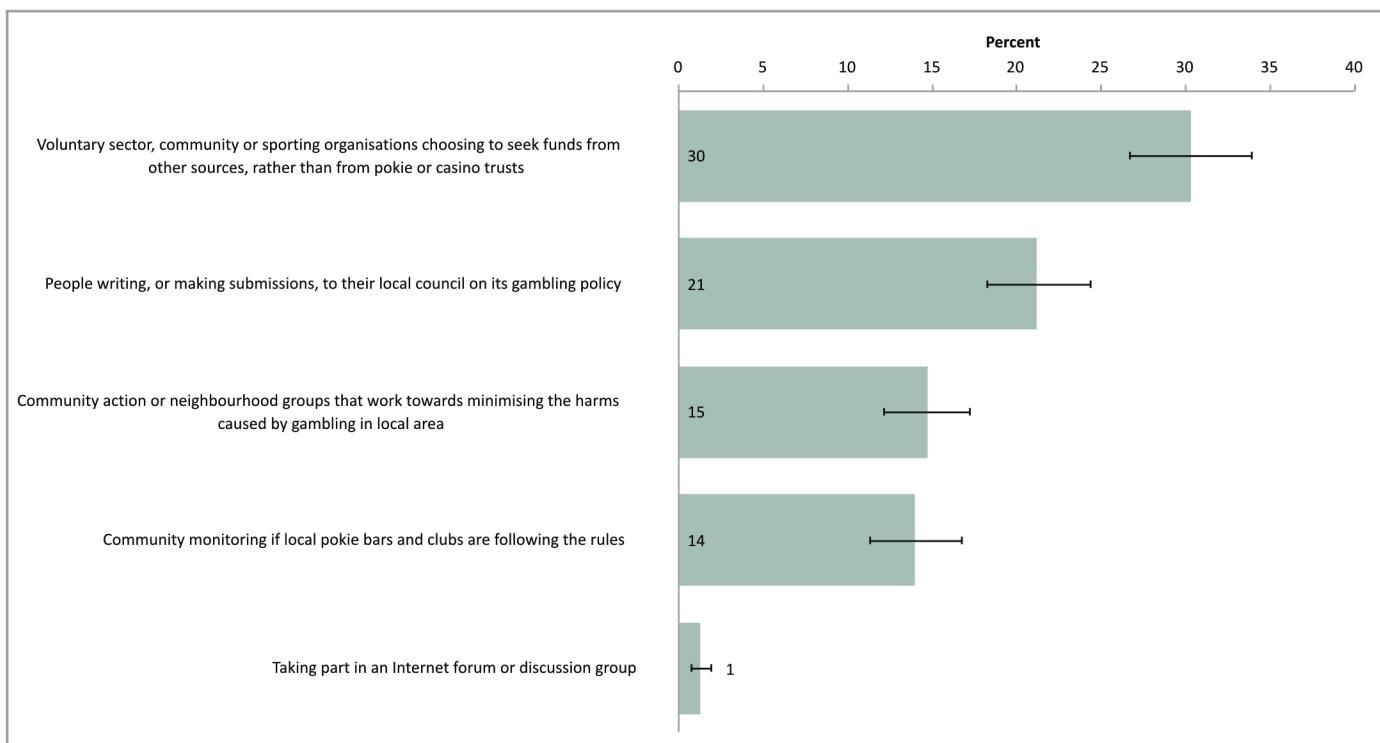
All respondents

## 6.3 Familiarity with community actions to reduce gambling harm

Everyone in the survey was asked whether they had heard of a number of strategies or actions that people and communities could do in relation to gambling harm and gambling policy.

The most commonly recognised community action (thirty percent) was community, voluntary and sporting organisations seeking funds from sources that were not associated with gambling. Twenty-one percent of people had heard about making submissions to the local council on its gambling policy, and fifteen percent of people had heard about community action groups and communities monitoring local gaming venues (such as pokie bars) to check that they are compliant with the rules (Figure 6.4).

**Figure 6.4 Respondents' familiarity with community actions to reduce gambling harm (multiple responses) (N = 1740)**



All respondents

Analysis by demographic variables found that people of European/other ethnicities were more likely than people of Pacific ethnicities to have heard of organisations seeking funding from sources other than those derived from gambling (Table 6.7). While the percentages of Asian people who have heard of organisations seeking funds from non-gambling sources and people writing submissions look lower than those for other ethnic groups, Asian people are not significantly less likely to have heard of these actions. There were no other significant differences.



**Table 6.7 Gender, age and ethnic differences in respondent's familiarity with community actions to reduce gambling harm (N = 1740)**

Community actions	Gender		Age group (in years)						Prioritised ethnicity				Total
	Male	Female	15-24	25-34	34-44	45-54	55-64	65+	Maori	Pacific	Asian	Euro/Other	
	%	%	%	%	%	%	%	%	%	%	%	%	%
Voluntary sector, community or sporting organisations choosing to seek funds from other sources, rather than from pokie or casino trusts	34	27	21	33	34	36	34	25	28	20	5	34	30
People writing, or making submissions, to their local council on its gambling policy	21	21	12	16	20	33	22	25	22	24	7	23	21
Community action or neighbourhood groups that work towards minimising the harms caused by gambling in local area	14	15	14	11	16	18	17	12	18	20	7	15	15
Community monitoring if local pokie bars and clubs are following the rules	16	12	11	11	16	22	11	12	17	13	14	14	14
Taking part in an Internet forum or discussion group	2	1	1	2	2	2	1	1	4	3	2	1	1
All respondents	711	1029	197	277	425	335	233	273	460	301	113	866	1740

Analysis by household characteristics found that people living in areas of medium deprivation were the most likely to have heard of organisations seeking funds from sources not associated with gambling. People with high household incomes were more likely than people with low household incomes to have heard of organisations seeking funds from sources not associated with gambling, and writing submissions to local councils on gambling policy (Table 6.8).

**Table 6.8 Household characteristics and familiarity with community actions to reduce gambling harm (N = 1740)**

Community actions	Deprivation			Household composition				Household equivalised income				Total	
				Couple	Family	Family							
	Low	Mid	High	Single person	no children	with children	no children	Low	Medium	High	Not stated		
	(1-3)	(4-7)	(8-10)	%	%	%	%	%	%	%	%	%	
Voluntary sector, community or sporting organisations choosing to seek funds from other sources, rather than from pokie or casino trusts	27	38	25	34	32	32	12	20	33	39	20	30	
People writing, or making submissions, to their local council on its gambling policy	19	23	22	24	24	20	19	15	23	26	11	21	
Community action or neighbourhood groups that work towards minimising the harms caused by gambling in local area	13	14	18	14	13	18	10	11	19	14	10	15	
Community monitoring if local pokie bars and clubs are following the rules	12	15	15	13	14	15	16	12	13	17	11	14	
Taking part in an Internet forum or discussion group	1	1	1	1	2	1	0	2	1	1	3	1	
All respondents	407	557	776	271	419	896	114	435	544	708	53	1740	

Analysis by gambling behaviours showed that, overall, people were more likely to have heard of organisations seeking funds from sources that were not associated with gambling or heard of writing submissions to local councils on gambling policy, as the number of gambling activities participated in increased (Table 6.9).

**Table 6.9 Familiarity with community actions to reduce gambling harm stratified by respondent's gambling behaviours (N = 1740)**

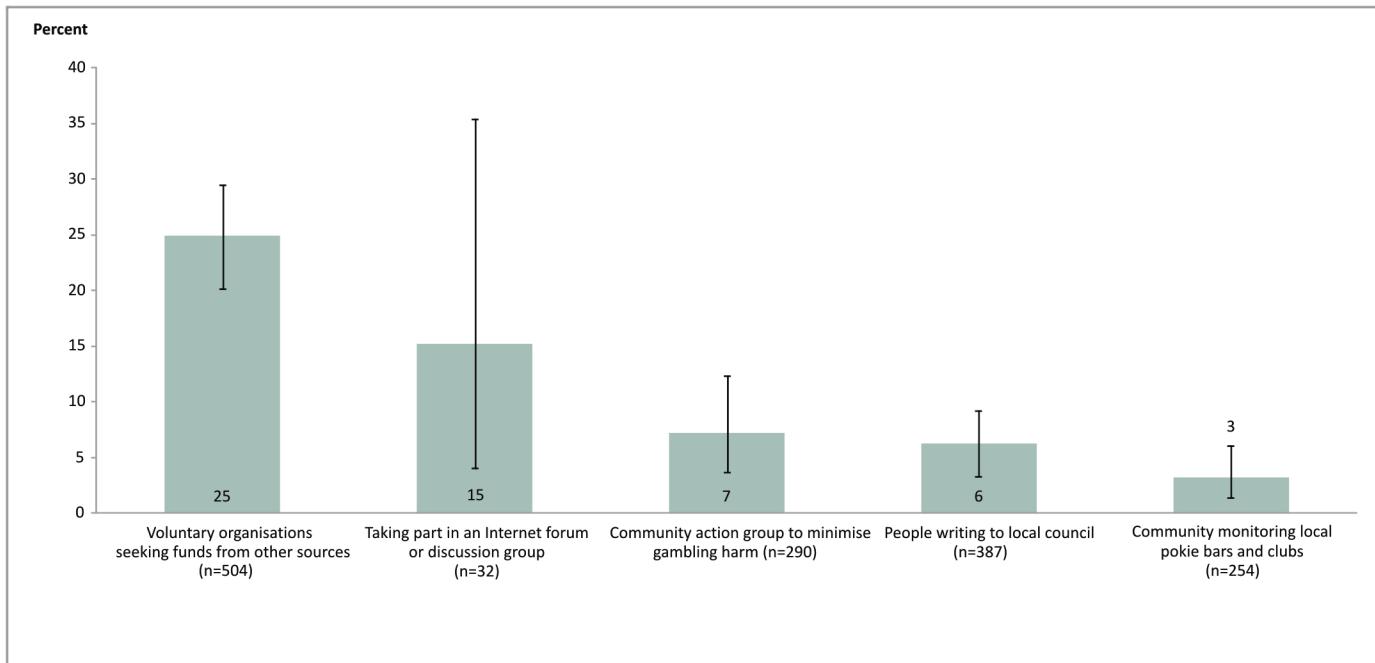
Community actions	Gambling type				Number of activities participated					PGSI					Total		
	Non-gambl.	Infreq. gambl.	Non-contin.	Contin.	None	1	2	3	4 or more	Non-gambl.	Non-problem gambl.	Low-risk gambl.	Moderate risk/probl. gambl.				
	%	%	%	%	%	%	%	%	%	%	%	%	%	%			
Voluntary sector, community or sporting organisations choosing to seek funds from other sources, rather than from pokie or casino trusts																	
23	31	35	25		24	24	31	40	37	23	33	25	23	30			
People writing, or making submissions, to their local council on its gambling policy																	
16	21	29	21		16	18	22	26	27	16	22	27	14	21			
Community action or neighbourhood groups that work towards minimising the harms caused by gambling in local area																	
13	14	17	20		14	12	18	16	13	13	15	16	12	15			
Community monitoring if local pokie bars and clubs are following the rules																	
12	14	16	20		13	10	16	17	15	12	14	22	13	14			
Taking part in an Internet forum or discussion group																	
1	2	2	0		1	3	1	1	0	1	1	0	3	1			
All responds.				336	941	352	86	338	452	424	282	244	336	1194	133	77	1740

## 6.4 Involvement with community actions to reduce gambling harm

People who said they had heard of a community activity to reduce gambling harm were asked whether they had been involved in it (the numbers of people aware of each type of action ranged from 32 to 504 across the five activities).

One in four people who were aware of community groups seeking funds from sources that were not associated with gambling had been involved in this activity. Most people who had heard of the other actions had not personally been involved (Figure 6.5).

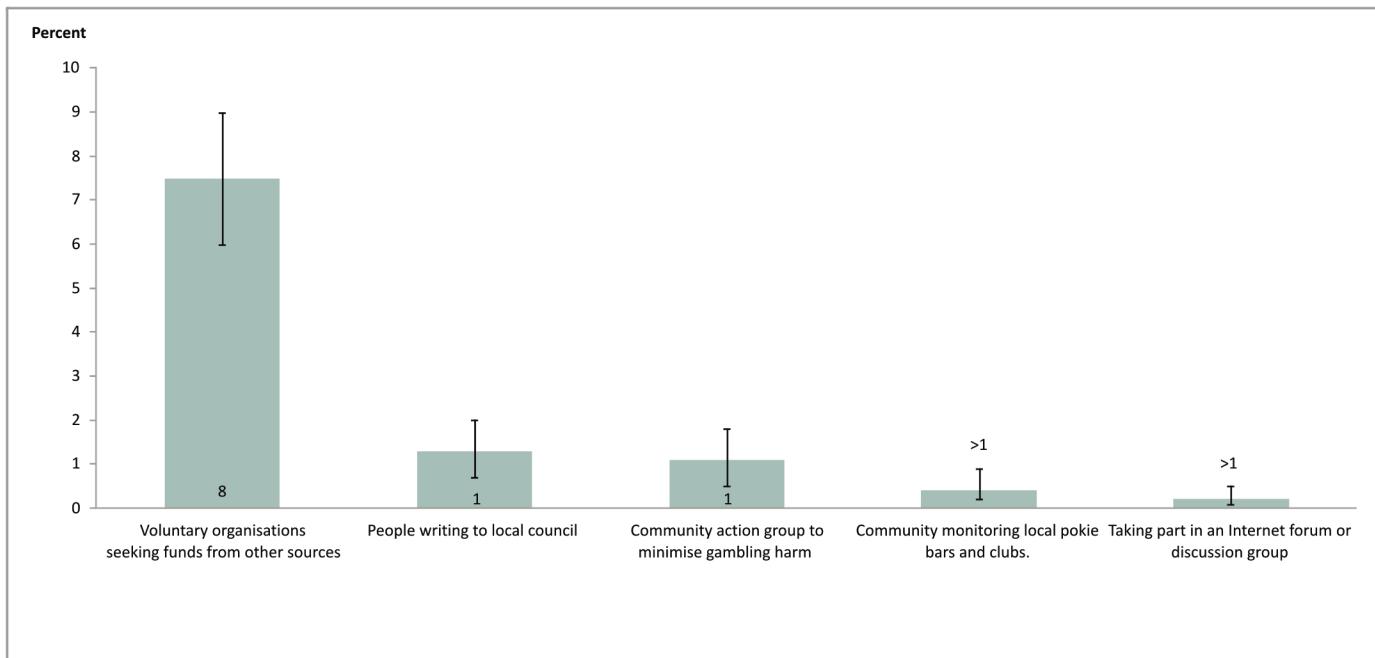
**Figure 6.5 Respondents' involvement in community actions to reduce gambling harm, among those who are aware of the actions (multiple responses)**



Respondents who said they had heard of each community action.

Overall a very small proportion of all people in the survey had been involved in each community action (Figure 6.6). Seeking funding from non-gambling sources was the most commonly reported action.

**Figure 6.6 All respondents' involvement in community actions to reduce gambling harm (multiple responses) (N = 1740)**



All respondents

## 6.4.1 Comparison with previous years: familiarity and involvement with activities to reduce gambling harm

Since 2006/07, the proportion of people who had heard of organisations seeking funds from non-gambling sources had dropped significantly, but a significantly higher proportion of people were aware of community action groups in 2010 than in 2007 (Table 6.10).

**Table 6.10 Awareness of community actions to reduce gambling harm: 2006/07 (N = 1973) and 2010 (N = 1740)**

Community actions	2006/07	2010
	%	%
Voluntary organisations seeking funds from other sources	45	30
People writing to local council	19	21
Community action group to minimise gambling harm	8	15
Community monitoring local pokie bars and clubs	15	14
Taking part in an Internet forum or discussion group	3	1
All respondents	1973	1740

Since 2006/07, the proportion of people who had been involved in seeking funds from non-gambling sources had dropped significantly, but involvement in all other community actions in 2010 remained similar to 2006/07 (Table 6.11).

**Table 6.11 Involvement with community actions to reduce gambling harm: 2006/07 (N = 1973) and 2010 (N = 1740)**

Community actions	2006/07	2010
	%	%
Voluntary organisations seeking funds from other sources	16	8
People writing to local council	2	1
Community action group to minimise gambling harm	1	1
Community monitoring local pokie bars and clubs	1	<1
Taking part in an Internet forum or discussion group	<1	<1
All respondents	1973	1740

Note: Proportions are based on the total sample, not just those people who said they had heard of each community action, to enable meaningful comparisons between years.

## 6.4.2 Discussion: community activities to reduce gambling harm

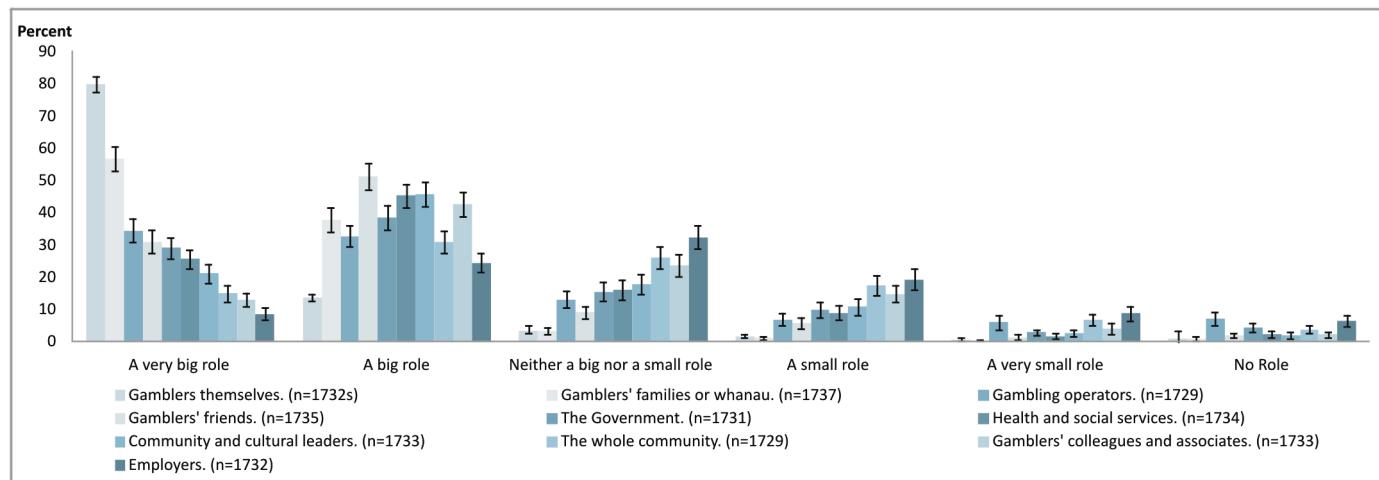
In 2010, as previously, only small numbers of people among the overall representative study population were personally involved in community actions to reduce gambling harm. However more people in 2010 felt that their community needed to discuss gambling harms and solutions and more people were aware of community action groups.

## 6.5 Responsibility of different groups of people for preventing gambling harm

All study participants were read out a list of different types of people and groups. This list included gamblers' families, gamblers' friends, gamblers themselves, gamblers' colleagues, the whole community, community and cultural leaders, gambling operators, the government, health and social services and employers, and asked what role, if any, they thought each group should have in preventing people from gambling too much. Responses were on a five-point scale from "a very big role" to "a very small role". These questions were adapted and expanded from similar questions asked in the 2006/07 GBAS, to monitor public opinion about where the most responsibility lies for preventing people from gambling too much.

Any differences between subgroups of respondents are commented on in the text for each of these questions.

**Figure 6.7 Role that different groups of people should have in preventing people from gambling too much**



Respondents excluding "don't know" responses

**Table 6.12 The extent to which different groups of people are seen to have a role in preventing gambling harm**

Who should prevent gambling harm?	A very big role %	A big role %	Neither big/sml %	A sml role %	A very sml role %	No role %	n
Gamblers themselves	80	14	3	2	1	1	1737
Gamblers' families or whānau	57	38	3	1	0	1	1732
Gambling operators	34	33	13	7	6	7	1735
Gambler's friends	31	51	9	6	1	2	1734
The Government	29	38	16	10	3	4	1731
Health and social services	26	45	16	9	2	2	1729
Community and cultural leaders	21	46	18	11	3	2	1733
The whole community	15	31	26	17	7	4	1733
Gamblers' colleagues and associates	13	43	24	15	4	2	1729
Employers	9	25	32	19	9	6	1732

Respondents excluding "don't know" responses

### **6.5.1 Gamblers' families or whānau**

Of all respondents in the study, most people (95%) thought that gamblers' family or whānau should have a big or very big role in gambling harm prevention, with over one in two people saying they should have a very big role (Figure 6.7, and Table 6.12).

### **6.5.2 Gamblers' friends**

Over 82% of people thought that gamblers' friends should have a big or very big role, with 31% of people saying that friends should have a very big role. As age increased, people were less likely to say that gamblers' friends should have a big or very big role. Particularly, older people aged 65 years and over were less likely to say that gamblers' friends should have a big or very big role (68%).

### **6.5.3 Gamblers themselves**

Most people (94%) thought that gamblers themselves should have a big or very big role in preventing people from gambling too much, with 80% of people saying they should have a very big role.

### **6.5.4 Gamblers' colleagues and associates**

Over half of the people in the survey (55%) thought that gamblers' colleagues and associates should have a big or very big role in preventing people from gambling too much, though only 13% thought they should have a very big role.

In exploring differences between ethnic groups it was found that Asian people were more likely (76%) than Māori (57%) and people of European/other ethnicities (52%) to say that gamblers' colleagues and associates should have a big or very big role in preventing people from gambling too much. People who gambled frequently on continuous activities were less likely (30%) compared with non-gamblers (58%) and infrequent gamblers (55%) to say that a gambler's colleagues and associates should have a big or very big role in preventing people from gambling too much.

### **6.5.5 The whole community**

Forty-six percent of people thought that the whole community should have a big role in preventing people from gambling too much, with around fifteen percent saying the community should have a very big role. People of Asian (70%) and Pacific (66%) ethnicities were more likely, while people of Māori (45%) and European/other ethnicities (42%) were less likely to say that the whole community should have a big role in preventing people from gambling too much. As the number of gambling activities participated in increased, people were less likely to say that the whole community should have a big role in preventing people from gambling too much.

### **6.5.6 Community and cultural leaders, such kaum?tua, church ministers or youth leaders**

- Sixty-seven percent of people thought that community and cultural leaders should have a big or very big role in preventing people from gambling too much, with 21% saying they should have a very big role. Pacific people were more likely (81%) than Māori (64%) and people of European/other ethnicities (65%) to say that community and cultural leaders should have a big or very big role in preventing people from gambling too much.
- 'Moderate-risk' and 'problem gamblers' (33%) were less likely than non-gamblers (73%) and 'non-problem gamblers' (67%) to say that community and cultural leaders should have a big or very big role in preventing people from gambling too much.
- As the number of gambling activities participated in increased, people were less likely to say that community and cultural leaders should have a big or very big role in preventing people from gambling too much.
- People who gambled frequently on continuous activities (48%) were less likely than non-gamblers (73%) to say that community and cultural leaders should have a big or very big role in preventing people from gambling too much.



### 6.5.7 Gambling operators

Two in three (67%) people thought that gambling operators should have a big or very big role in preventing people from gambling too much, with one in three (34%) saying they should have a very big role.

### 6.5.8 The Government

Sixty-eight percent of people thought the government should play a big or very big role in preventing people from gambling too much, with three in 10 (29%) saying that the government should play a very big role.

Among different ethnic groups, Māori (77%), Pacific (75%) and Asian people (81%) were more likely to say that the government should play a big role compared with people of European/other ethnicities (64%).

### 6.5.9 Health and social services

Seventy-one percent of people thought that health and social services should play a big or very big role in preventing people from gambling too much, with twenty-six percent of people saying they should have a very big role.

### 6.5.10 Employers

Thirty-four percent of people thought that employers should have a big or very big role in preventing people from gambling too much, with 9% saying they should have a very big role.

Asian (58%) and Pacific (53%) people were more likely than people of Māori (37%) or European/other (29%) ethnicities to say that employers should have a big or very big role in preventing people from gambling too much.

People who had not gambled during the previous 12 months were more likely (43%) than infrequent gamblers (28%) or frequent continuous gamblers (20%) to say that employers should have a big or very big role.

‘Moderate-risk’ and ‘problem gamblers’ (19%) were less likely than non-gamblers (43%) to say that employers should have a big or very big role.

### 6.5.11 Comparison with previous years: responsibility of different groups of people for preventing gambling harm

In the 2006/07 GBAS and the 2008 HLS, respondents were asked how extensive or limited they thought the role of five groups of people should be in preventing gambling harm. The groups of people were: “the whole community”, “individuals and their families”, “gambling operators”, “the Government” and “health and social services”.

In 2010, the group “individuals and their families” was split into two categories and instead respondents were asked about the roles of “gamblers’ families or whānau” and “gamblers themselves”. These responses have therefore not been compared. In previous years the question was also worded slightly differently: people were asked how “extensive or limited” the roles of different groups should be, whereas in 2010 this was simplified to “how big or small” roles should be. In 2010 a response option of “no role” was also added, although it was not read out to respondents. These changes may affect the comparability of results.

The following table (Table 6.13) shows the proportion of respondents who said that each of the four groups of people should have “extensive” or “very extensive” roles in 2006/07 and 2008, and “big” or “very big” roles in 2010.

- There was no difference in the proportion of people who thought health and social services or gambling operators should have a big/ extensive role.
- In 2010, the proportion of people who thought the Government should have a “big” role had dropped compared to those who thought the role should be “extensive” in 2006/07.
- In 2010, the proportion of people who thought that the whole community should have a big role in preventing people from gambling too much was lower than the proportions in 2006/07 and 2008 who thought that the whole community should have an extensive role.

**Table 6.13 Groups of people thought to have big/extensive role in preventing people from gambling too much: 2006/07, 2008, 2010, all respondents excluding “don’t know” responses**

Big/extensive role	2006/7		2008		2010	
	%	n	%	n	%	n
Health and social services	76	1954	74	1589	71	1734
The Government	73	1952	71	1589	68	1731
Gambling operators	70	1953	71	1589	67	1729
The whole community	56	1949	55	1589	46	1729

## 6.5.12 Discussion: responsibility of different groups of people for preventing gambling harm

The overall responses from 2010 indicate that the responsibility for preventing excessive gambling is seen to lie primarily with gamblers and those closest to them. External agencies such as the government, health and social services and gambling operators are thought by the majority of people to have a big role. Individuals who are less involved – such as work colleagues or the wider community – are less likely to be thought to have such a big role to play. It appears that some groups of people – for example, those of Asian or Pacific ethnicities, or those who have not been participating in gambling activities – are more likely to say that each of the nominated groups of people should have a big role in preventing gambling harm.

People who gambled more and those who were at risk of gambling problems seemed less likely to think that many groups of people – in particular, those groups of people who might be less close to the gambler, for instance colleagues, employers, community leaders and the wider community – should have a big role in preventing people from gambling too much. While this trend implies that people who gamble heavily are less comfortable with outside assistance for gambling issues, it may also indicate a degree of realism and perspective about the usefulness of help from certain quarters. It may be easier for those people (the majority) who do not gamble excessively to say that many groups of people should hypothetically play a big role.

## 6.6 Local decisions on gaming machines

Operating gaming machines outside of casinos is categorised as class 4 (high risk) gambling. Section 101 of the Gambling Act 2003 requires territorial authorities to adopt a policy on the location of class 4 gambling venues. Other sections of the Act state that new gaming machine venues may not be licensed and the number of machines at existing venues may not lawfully be increased unless the relevant territorial authority gives consent.

## 6.6.1 Knowing who makes decisions about gaming machines

Everyone in the survey was asked whether they knew who was responsible for making local decisions regarding new gaming machines or pokies and adding additional machines in existing venues. The majority of people (67%) said that they were unaware of who made the local decisions about pokie machines.

Individuals' awareness regarding local decision making for gaming machines differed by age: (people under 35 were less likely than people aged 35 and over to say that they knew who made decisions about gaming machines) and ethnicity (people of European/other ethnicities were more likely than Pacific people to say that they knew who made decisions about gaming machines) (see Table 6.14).

**Table 6.14 Gender, age and ethnic difference in respondents' awareness of who makes local decisions about gaming machines (N = 1740)**

Know who makes decisions about local gaming?	Gender		Age group (in years)						Prioritised ethnicity				Total
	Male	Female	15-24	25-34	34-44	45-54	55-64	65+	Maori	Pacific	Asian	Euro/ Other	
	%	%	%	%	%	%	%	%	%	%	%	%	%
Yes	35	31	11	20	38	49	46	36	31	25	28	34	33
No	65	69	89	80	62	51	54	64	69	76	72	66	67
All respondents	711	1029	197	277	425	335	233	273	460	301	113	866	1740

There were differences in awareness of decision making responsibility based on family and household characteristics (Table 6.15). People living with a partner were more likely than people living in family with children to say that they knew who made decisions about gaming machines. People with high household equivalised incomes were more likely than people with low household equivalised incomes to say that they knew who made decisions about gaming machines.

**Table 6.15 Household and neighbourhood differences in respondent's awareness of who makes local decisions about gaming machines (N = 1740)**

Know who makes decisions about local gaming?	Deprivation			Household composition				Household equivalised income				Total
	Low (1-3)	Mid (4-7)	High (8-10)	Couple person	Family no children	Family with children	Family no children	Low	Medium	High	Not stated	
				%	%	%	%	%	%	%	%	
				%	%	%	%	%	%	%	%	
Yes	31	37	30	35	41	29	23	26	35	38	22	33
No	69	63	70	65	60	71	77	74	65	62	78	67
All respondents	407	557	776	271	419	896	114	435	544	708	53	1740

Gambling behaviours were associated with differences in respondents' reporting of awareness of where responsibility lay for local gaming machine decisions (Table 6.16). People who gambled frequently on non-continuous activities were more likely than people who had not gambled at all or people who gambled infrequently to say that they knew who made decisions about gaming machines, while non-gamblers were less likely than people who had participated in gambling activities to say that they knew who was responsible. As the number of activities participated in increased, people were more likely to say that they knew who made decisions on gaming machines. People who had not gambled at all were less likely than people who gambled but experienced no problems to say that they knew who made decisions regarding gaming machines.

**Table 6.16 Gambling behaviours and differences in respondent's awareness of who makes local decisions about gaming machines (N = 1740)**

Know who makes decisions about local gaming?	Gambling type				Number of activities participated					PGSI				Total
	Non- gambl.	Infreq. gambl.	Non- contin.	Contin. gambler	None	1	2	3	4 or more	Non- gambler	Non- problem gambler	Low- risk gambler	Moderate risk/probl. gambler	
Yes	21	33	46	36	21	33	38	38	36	21	36	33	27	33
No	79	67	54	64	79	68	62	62	64	79	64	67	73	67
All responds.	336	941	352	86	338	452	424	282	244	336	1194	133	77	1740

## 6.6.2 Who is responsible for local decisions about gaming machines?

Everyone who indicated that they knew who was responsible for local decisions about gaming machines (n= 577) was asked to identify the group or body they thought had the responsibility. Responses were stratified by key demographic details (Table 6.17). Among those who said that they knew who made decisions about gaming machines, Māori were more likely than Pacific people to correctly state that the local government or council made the decisions. Pacific people were more likely than people from European or other ethnic groups to say that central government departments made the decisions.

**Table 6.17 Demographic differences in respondents' ability to identify the group responsible for local gaming decisions (n= 577)**

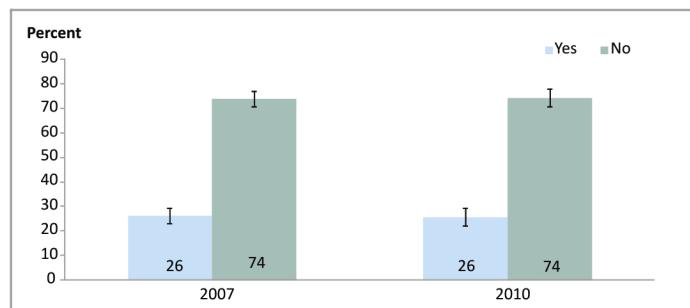
Who is responsible for local decisions?	Gender		Age group (in years)					Prioritised ethnicity			Total
	Male	Female	25-34	34-44	45-54	55-64	65+	Maori	Pacific	Euro/ Other	
	%	%	%	%	%	%	%	%	%	%	%
Local government/city council/district council/											
Mayor/council employee	69	82	88	81	69	80	72	84	64	75	75
Central government/the government/MP/government											
departments unspecified	17	6	10	10	10	7	14	12	39	10	12
Department of Internal Affairs	13	3	0	3	21	4	10	5	4	10	9
Gaming authority/board/trust	4	4	3	2	7	5	3	4	1	5	4
Licensing body unspecified	4	2	6	1	3	5	2	8	0	3	3
Respondents who responded 'yes' to											
knowing who was responsible	259	318	54	150	153	101	93	144	77	328	577

Note: responses have been suppressed if the subgroups (for example, people of Asian ethnicity) contain fewer than 30 respondents. Figures only include those people who said they could identify who is responsible for local decision about gaming machines; hence results are not indicative of total population proportions

### 6.6.3 Comparison with previous years: knowledge of who makes local decisions on gaming machines

While a number of organisations were mentioned by people who said they knew who made decisions about gaming machines, local government or council has the delegated authority in this area. Figure 6.8 shows the proportion of people aged 18 and over in 2006/07 and 2010 who knew that it was their local council who made the decisions about gaming machines. In 2006/07 this question was only asked of those respondents aged 18 and over. Between 2006/07 and 2010 there was no change in the proportion of people who knew who made the decisions about gaming machines in their area.

**Figure 6.8 Awareness that local council makes decisions about gaming machines: 2006/07 (n = 1774) and 2010 (n = 1691)**



Respondents aged 18 years and over

### 6.6.4 Discussion: knowledge of who makes local decisions on gaming machines

The lack of change in awareness about local decisions about gaming machines is echoed in the lack of change regarding people's involvement in community actions, as noted in Section 6.4.

## 6.7 Decisions on fundraising for the community from gambling activities

One of the purposes of New Zealand's Gambling Act 2003 is to "ensure that money from gambling benefits the community" (Part 1, s3 (g)). The Act requires separation between gaming machine societies, commercial gaming machine venues and grant recipients. It also requires the application and distribution of grants to be transparent. The Department of Internal Affairs (DIA) aims to ensure that the benefits of gambling outweigh the costs and that the community – which benefits from gambling via grants but also bears the costs via social harms – is seen as the key stakeholder. In 2005 the DIA found a reduced public satisfaction with the distribution of gambling profits, 13% down from 25% in 1995 (Manch 2008).

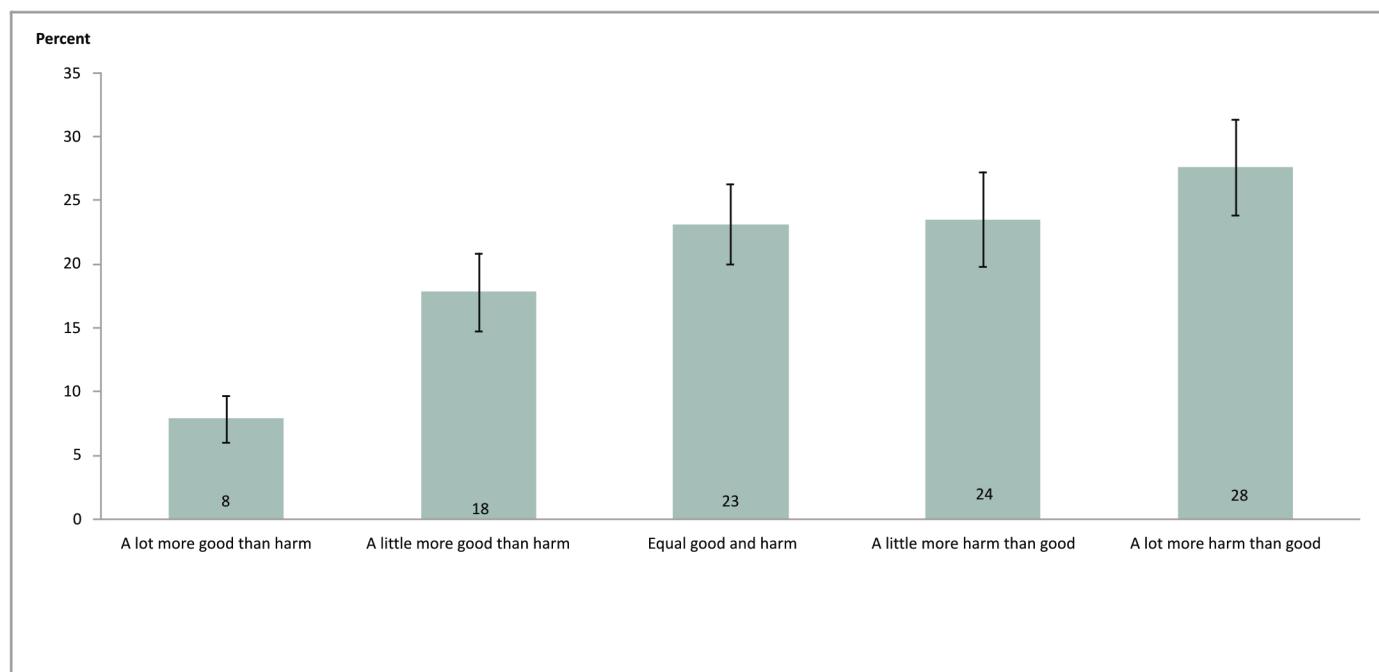
Gambling profits can be distributed by industry representatives (for example casino operators), community groups by way of fundraising activities, government organisations such as the Lotteries Commission, and societies that administer the approval of grants for community or sporting purposes. It has been argued that all of these methods of funding distribution have their own issues with regard to ethics and the association of community purposes with gambling (Adams and Rossen 2005).

## 6.7.1 Whether fundraising from gambling does more good or harm

Everyone was asked whether they thought raising money through gambling does more good than harm, or more harm than good, in the community. There were five response options, ranging from “Does a lot more good than harm” to “Does a lot more harm than good”.

Fifty-two percent of people asked thought that raising money through gambling did more harm than good in the community (Figure 6.9). Twenty-six percent of people thought it did more good than harm, with 8% saying it did a lot more good. Twenty-three percent thought it did equal good and harm.

**Figure 6.9 Respondents' views on the positive or negative effect on a community of raising funds through gambling (n = 1724)**



Respondents excluding “don't know” responses

When the data were examined by key demographic and household variables (Table 6.18), people aged 15-24 years were more likely than people aged 65 years and over to think that raising money through gambling did more harm than good. People aged 25-34 years were more likely than people aged 55 years and over to think that raising money through gambling did more harm than good. People of Pacific ethnicities were more likely than people of European/other ethnicities to think that raising money through gambling did more harm than good. People living in family households with or without children were more likely than single people to say that raising money though gambling did more harm than good (Table 6.19).

**Table 6.18 Demographic differences in respondent's views on the positive or negative effect on a community of raising funds through gambling (n = 1724)**

Good or harm caused by raising funds through gambling?	Gender		Age group (in years)						Prioritised ethnicity				Total
	Male	Female	15-24	25-34	34-44	45-54	55-64	65+	Maori	Pacific	Asian	Euro/ Other	
	%	%	%	%	%	%	%	%	%	%	%	%	%
<b>More good</b>													
<b>than harm</b>	<b>27</b>	<b>24</b>	<b>21</b>	<b>19</b>	<b>26</b>	<b>29</b>	<b>28</b>	<b>32</b>	<b>21</b>	<b>18</b>	<b>17</b>	<b>28</b>	<b>26</b>
A lot more good than harm	9	7	3	4	10	9	11	12	7	6	8	8	8
A little more good than harm	18	17	18	15	16	20	17	20	14	12	9	20	18
Equal good and harm	23	24	19	17	26	22	26	29	28	19	16	24	23
<b>More harm</b>													
<b>than good</b>	<b>51</b>	<b>52</b>	<b>60</b>	<b>64</b>	<b>48</b>	<b>49</b>	<b>46</b>	<b>39</b>	<b>51</b>	<b>63</b>	<b>67</b>	<b>49</b>	<b>51</b>
A little more harm than good	24	23	28	35	15	23	23	18	20	22	17	25	24
A lot more harm than good	27	28	32	29	33	26	23	21	31	41	50	24	28
Respondents excl. "don't know"	709	1015	195	276	419	331	233	270	454	298	113	859	1724

Note: rows in bold are aggregate figures eg, 'more good than harm' is the sum of those who responded 'a lot more good than harm' and those who responded 'a little more good than harm'.

**Table 6.19 Household and neighbourhood differences in respondents' views on the positive or negative effect on a community of raising funds through gambling (n = 1724)**

Good or harm caused by raising funds through gambling	Deprivation			Household composition				Household equivalised income				Total %
	Low (1-3)	Mid (4-7)	High (8-10)	Single person	no children	with children	Family children	Low	Medium	High	Not stated	
	%	%	%	%	%	%	%	%	%	%	%	
<b>More good than harm</b>	<b>23</b>	<b>28</b>	<b>26</b>	<b>33</b>	<b>31</b>	<b>20</b>	<b>18</b>	<b>25</b>	<b>22</b>	<b>29</b>	<b>34</b>	<b>26</b>
A lot more good than harm	7	7	9	10	10	6	6	9	6	9	11	8
A little more good than harm	16	21	17	23	21	14	12	16	16	20	23	18
Equal good and harm	21	26	23	28	23	24	21	25	25	20	20	23
<b>More harm than good</b>	<b>56</b>	<b>47</b>	<b>51</b>	<b>39</b>	<b>47</b>	<b>56</b>	<b>62</b>	<b>50</b>	<b>53</b>	<b>51</b>	<b>46</b>	<b>51</b>
A little harm than good	29	19	22	13	26	24	34	22	26	22	30	24
A lot more harm than good	27	27	29	26	21	32	28	28	27	29	16	28
Respondents excluding "don't know" responses	404	554	766	267	419	887	111	701	540	431	52	1724

Note: rows in bold are aggregate figures eg, 'more good than harm' is the sum of those who responded 'a lot more good than harm' and those who responded 'a little more good than harm'.

When the responses were explored in relation to gambling behaviours (Table 6.20), non-gamblers were found more likely than infrequent gamblers and non-continuous gamblers to say that raising money through gambling did more harm than good. As the number of gambling activities increased, people were more likely to say that raising money through gambling did more good than harm. 'Non-problem gamblers' and 'low-risk' gamblers were more likely than non-gamblers to say that raising money through gambling did more good than harm. Non-gamblers were more likely than 'non-problem gamblers' to say that raising money through gambling did more harm than good.

**Table 6.20 Gambling behaviours and respondents' views on the positive or negative effect on a community of raising funds through gambling (n = 1724)**

Good or harm caused by raising funds through gambling?	Gambling type					Number of activities participated					PGSI					Total
	Non- gambl.	Infreq. gambl.	Non- contin.	Contin. gambler	None	1	2	3	4 or more	Non- gambler	Non- problem gambler	Low- risk gambler	Moderate risk/probl. gambler			
%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	
<b>More good</b>																
<b>than harm</b>	<b>15</b>	<b>26</b>	<b>35</b>	<b>31</b>	<b>15</b>	<b>20</b>	<b>30</b>	<b>32</b>	<b>36</b>	<b>15</b>	<b>28</b>	<b>34</b>	<b>24</b>	<b>26</b>		
A lot more good than harm	5	7	15	9	5	6	9	9	11	5	9	9	10	8		
A little more good than harm	10	19	21	22	10	14	20	23	25	10	19	26	13	18		
Equal good and harm	21	23	25	30	21	22	25	24	25	21	23	27	27	23		
<b>More harm</b>																
<b>than good</b>	<b>64</b>	<b>51</b>	<b>40</b>	<b>40</b>	<b>65</b>	<b>57</b>	<b>46</b>	<b>44</b>	<b>39</b>	<b>64</b>	<b>49</b>	<b>39</b>	<b>50</b>	<b>51</b>		
A little harm than good	21	26	19	17	22	24	27	20	22	21	25	18	17	24		
A lot more harm than good	43	25	21	23	43	33	19	24	17	43	24	21	33	28		
Respondents excluding "don't know"	329	933	351	86	331	450	420	280	243	329	1186	133	76	1724		

Note: rows in bold are aggregate figures eg, 'more good than harm' is the sum of those who responded 'a lot more good than harm' and those who responded 'a little more good than harm'.

## 6.7.2 Comparison with previous years: Whether fundraising from gambling does more good or harm

Over the three years that people were asked, the proportions who thought that raising money through gambling did more harm than good or more good than harm had not changed significantly (Table 6.21).

**Table 6.21 Respondents' views on the positive or negative effect on a community of fundraising through gambling: 2006/07 (n = 1951), 2008 (n = 1580) and 2010 (n = 1724)**

Good or harm caused by raising funds through gambling?	2006/07	2008	2010
	%	%	%
<b>More good than harm</b>	<b>29</b>	<b>27</b>	<b>26</b>
A lot more good than harm	12	9	8
A little more good than harm	17	19	18
Equal good and harm	19	25	23
<b>More harm than good</b>	<b>52</b>	<b>48</b>	<b>51</b>
A little harm than good	22	24	24
A lot more harm than good	30	24	28
Respondents excluding "don't know" responses	1951	1580	1724

Note: rows in bold are aggregate figures eg, 'more good than harm' is the sum of those who responded 'a lot more good than harm' and those who responded 'a little more good than harm'.

### 6.7.3 Discussion: Whether fundraising from gambling does more good or harm

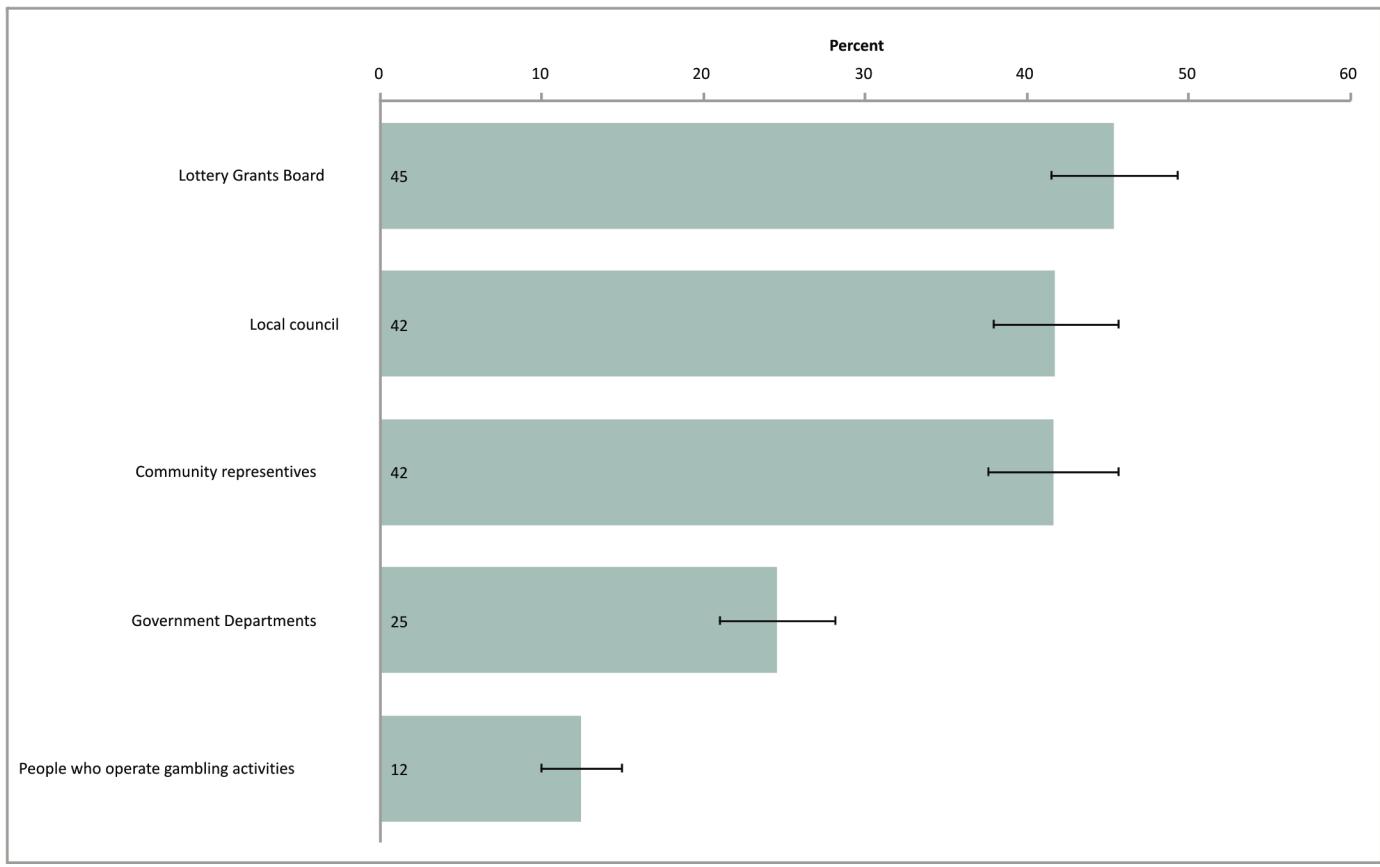
These results show that there has not been significant change in public opinion about the harms and benefits of fundraising through gambling. It is clear that those people who are more interested in gambling activities – those who gamble more – were more likely to note the benefits rather than the harms of fundraising through gambling. However, this was more evident in the frequency of gambling and number of gambling activities categories, than the PGSI classifications.

People who are less likely to be familiar with household gambling harms – those of European/other ethnicities and older people – appear more likely to think that the fundraising does more good than harm.

## 6.8 Who should distribute gambling profits

Everyone in the survey was asked to consider, when gambling profits go to causes such as sport, charities and other community purposes, who they thought the profits should be distributed by. Respondents were provided with a list of possible groups of people and could nominate as many as they wished. The three most popular options for "who should distribute gambling profits" were the Lottery Grants Board (or similar), local councils and community representatives (Figure 6.10). Twenty-five percent of people thought that government departments should distribute profits, and twelve percent thought that people who operate gambling activities should be able to distribute profits. Pokie trusts were given as an example of "people who operate gambling activities".

**Figure 6.10 Groups identified as being appropriate to distribute gambling profits (multiple responses) (N = 1740)**



All respondents

When responses were examined by key demographic details (Table 6.22), females were more likely than males to say that community representatives should distribute gambling profits. As age increased, people were more likely to think that a Lottery Grants Board or similar should distribute profits, and less likely to mention local councils and government departments.

**Table 6.22 Gender, age and ethnic differences in views regarding who should distribute gambling profits (N = 1740)**

Groups who should distribute gambling profits	Gender		Age group (in years)						Prioritised ethnicity				Total
	Male	Female	15-24	25-34	34-44	45-54	55-64	65+	Maori	Pacific	Asian	Euro/Other	
	%	%	%	%	%	%	%	%	%	%	%	%	%
Lottery Grants Board	46	45	31	36	43	57	56	52	46	30	18	49	45
Local council	42	41	50	58	46	33	38	25	34	40	49	42	42
Community representatives	36	47	38	42	44	44	38	43	34	30	20	46	42
Government Departments	26	24	34	39	20	15	23	17	24	32	60	20	25
People who operate gambling activities	12	13	15	9	8	14	15	14	18	15	10	12	12
All respondents	711	1029	197	277	425	335	233	273	460	301	113	866	1740

People with high household equivalised incomes were more likely than those with low incomes to say that a Lottery Grants Board or similar should distribute profits (Table 6.23).

**Table 6.23 Household and neighbourhood differences in views about the distribution of gambling profits (N = 1740)**

Groups who should distribute gambling profits	Deprivation			Household composition				Household equivalised income				Total
	Low (1-3)	Mid (4-7)	High (8-10)	Couple person	Family children	Family children	no	with	no	Not stated		
				%	%	%	%	%	%	%		
				%	%	%	%	%	%	%		
Lottery Grants Board	45	47	44	53	58	38	32	34	47	56	29	45
Local council	41	46	38	36	36	48	39	42	44	40	30	42
Community representatives	43	45	35	39	46	40	51	37	42	47	28	42
Government Departments	22	25	26	18	24	24	23	29	22	23	19	25
People who operate gambling activities	11	12	15	7	16	11	16	14	13	12	7	12
All respondents	407	557	776	271	419	896	114	435	544	708	53	1740

People who gambled frequently on continuous and non-continuous gambling activities were more likely than non-gamblers to say that a Lottery Grants Board should distribute gambling profits (Table 6.24). As the number of activities participated in increased, people were more likely to say that Lottery Grants Boards, community representatives and people who operate gambling activities should distribute gambling profits, and less likely to mention local councils and government departments.

**Table 6.24 Respondents' gambling behaviours and views about the distribution of gambling profits (N = 1740)**

Groups who should distribute gambling profits		Gambling type					Number of activities participated					PGSI					Total
Non-freq.	Infreq.	Non-gambl.	Contin.	Gambler	None	1	2	3	4 or more	Non-gambler	Non-problem gambler	Low-risk gambler	Moderate risk/probl. gambler	%	%		
Lottery Grants																	
Board	25	47	58	56	26	41	53	52	57	25	50	57	45	45			
Local council	49	43	32	27	48	48	39	35	34	49	40	41	29	42			
Community represents.	31	46	43	25	30	41	46	47	44	31	45	32	36	42			
Government Departs.	31	25	19	25	31	29	25	14	21	31	23	20	32	25			
People who operate gambling activities	7	13	16	14	8	10	14	19	13	7	13	15	27	12			
All responds.	336	941	352	86	338	452	424	282	244	336	1194	133	77	1740			

### 6.8.1 What is meant by “community representative”

Everyone who said that community representatives should distribute gambling profits to community purposes was asked to specify who they meant by “community representatives”. Responses were recorded verbatim and combined into categories. Respondents could nominate more than one definition of “community representative”.

The most commonly mentioned definition of “community representative” (by nearly three in 10 people who thought they should be responsible for distributing profits) was “charities, churches or service organisations”. Females were more likely than males, and Māori were more likely than Pacific peoples, to define community representatives as “schools or Boards of Trustees” (Table 6.25).

**Table 6.25 Respondents' definitions of "community representative" – differences by age, gender and ethnicity (n = 658)**

Definition of community representatives	Gender		Age group (in years)						Prioritised ethnicity			Total
	Male	Female	15-24	25-34	34-44	45-54	55-64	65+	Maori	Pacific	Euro/ Other	
	%	%	%	%	%	%	%	%	%	%	%	%
Charities/churches/ service organisations	27	28	18	24	23	39	38	26	23	37	27	28
Community trusts/groups	19	19	24	17	17	16	19	19	18	10	19	19
Community leader/ elders/ respected people/ JP/ Police	13	20	31	13	18	21	10	8	15	28	16	17
Sports clubs/organisations	16	15	17	14	18	18	12	9	16	9	15	15
Schools/Boards of Trustees	5	15	8	16	13	10	14	3	22	5	10	11
Other specified community groups	4	9	10	7	5	2	6	11	9	9	7	7
Community Board members	5	6	2	2	3	5	14	7	2	7	6	5
Elected community representatives	8	3	0	3	5	14	1	5	1	1	6	5
Marae/iwi representatives	3	4	1	10	1	5	5	1	14	1	3	4
Health organisations/ hospitals/doctors	2	2	5	0	2	2	3	3	3	0	3	2
Members of Parliament	3	2	1	3	5	2	1	1	3	8	2	2
Other	8	11	9	14	9	8	7	10	6	5	10	10
Don't know	12	7	6	20	8	2	11	8	5	2	10	9
Respondents who said community representatives should distribute gambling profits	248	410	64	89	169	138	96	102	173	79	380	658

Note: Figures only include those people who said community representatives should distribute gambling profits; hence results are not indicative of total population proportions



## 7 Advertising and promotion about gambling and harm minimisation

The New Zealand Lotteries Commission (NZ Lotteries, also referred to as Lotto) provides a number of games for New Zealanders to participate in, with the profits from these games funding \$165 million of New Zealand community arts, heritage, sporting, recreation and health research services and projects in the 2009/10 financial year (NZ Lotteries 2010). These games include weekly lottery draws (Lotto, Big Wednesday, Powerball, Strike), daily draws (Keno, Bullseye) and scratch tickets (Instant Kiwi, which can only be bought in a store). NZ Lotteries spent close to \$25 million on promotion and retail support activities in the 2009/10 financial year. These promotion activities included the launch of a new game, Bullseye, a revamp of Instant Kiwi after 20 years, a \$22.4 million Powerball prize, and a Big Wednesday promotion to win a luxury trip to meet Donald Trump (NZ Lotteries 2010).

The New Zealand Racing Board reported that in 2010 they “set ambitious goals to capitalise” on the Football World Cup, which was a success for them with over 34,000 new accounts being opened during the tournament (New Zealand Racing Board 2011). New clients were attracted by a cash incentive offer (Betcha \$20) and two-thirds of them were under 30 years old. A number of racing events are heavily promoted in New Zealand, the Melbourne Cup, and New Zealand Cup and Show week being two of them.

HSC’s education and awareness programme was started in April 2007, at which point the first gambling harm minimisation mass media campaign and associated brand was launched. HSC has since that time received approximately \$1.4 million a year for its entire education and awareness programme with less than \$1 million being spent on advertising. While other problem gambling services have at times done some advertising, this role largely sits with the HSC.

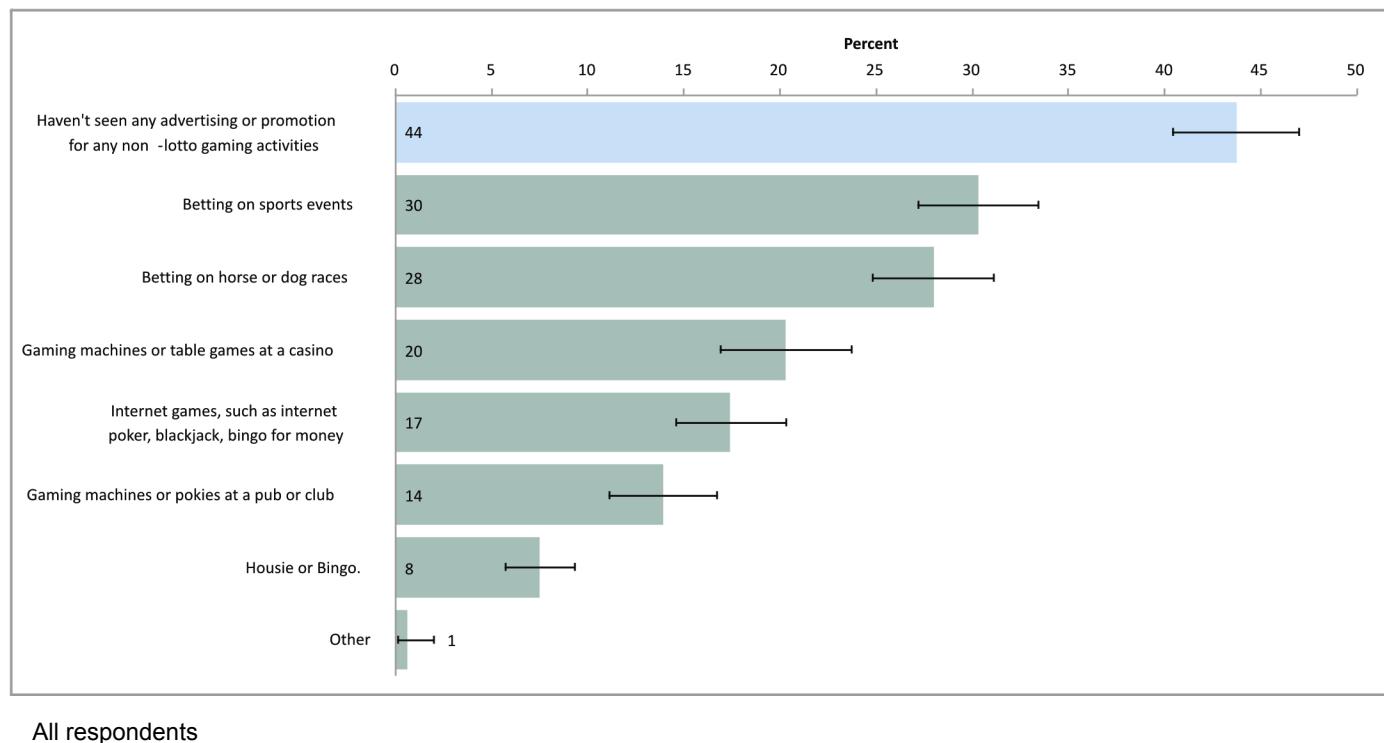
This section presents results on people’s awareness of and response to gambling advertising, as well as awareness of advertising from the minimising gambling harm sector.

### 7.1 Awareness of gambling advertising

Over 99% of people in New Zealand who had done any gambling in the previous 12 months had seen NZ Lotteries advertising.

Everyone in the survey was asked whether they had, in the previous 12 months, seen or heard any advertising or promotion for a list of gambling activities (see Figure 7.1). Forty four percent of people had not seen any advertising for gambling activities (other than Lotteries advertising). The activities for which advertising was most commonly recognised (outside of Lotto advertising) were betting on sports events (30%) and betting on horse or dog races (28%).

**Figure 7.1 Awareness of non-lottery gambling advertising (multiple response) (N = 1740)**



## 7.2 Responses to gambling advertising

This section presents results on whether people think they gambled more because of gambling advertising. Results are then presented for NZ Lotteries advertising specifically.

### 7.2.1 Gambling more as a result of seeing advertising

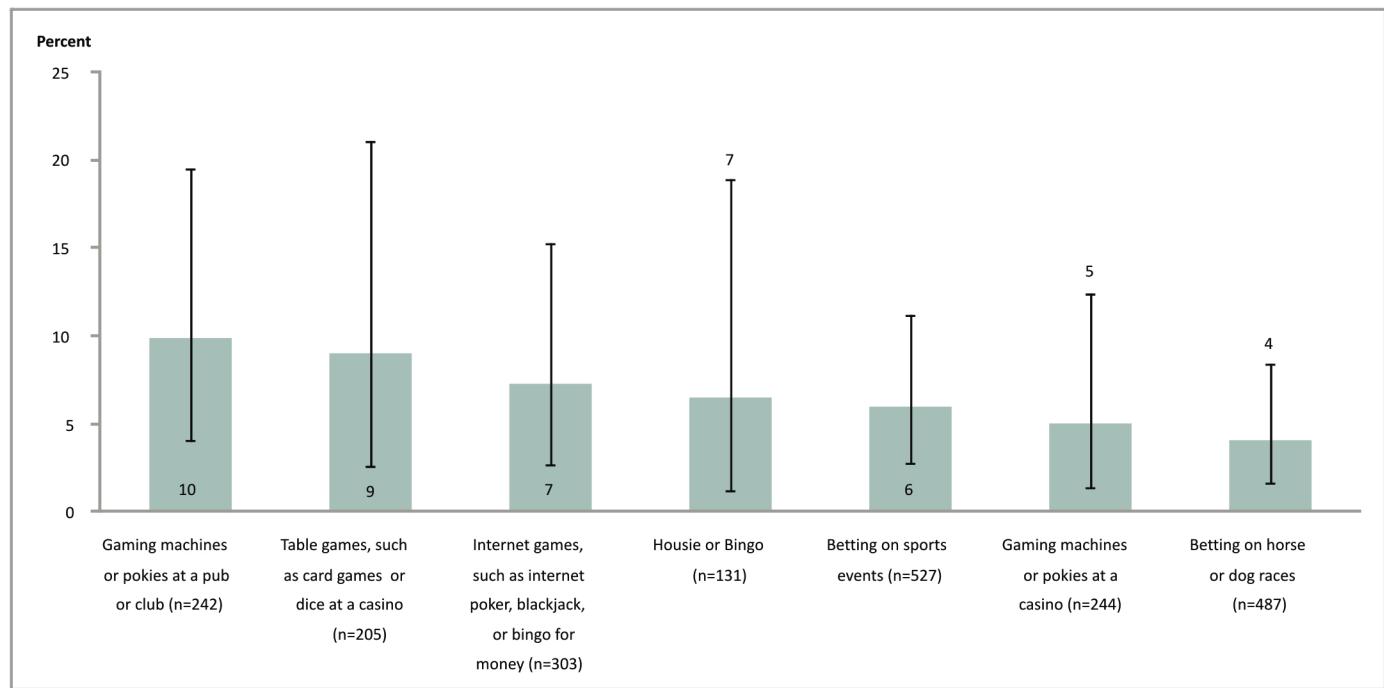
Gamblers who recalled advertising for a gambling activity (other than NZ Lotteries products) in the previous 12 months (57%) were asked whether, as a result of seeing that advertising, they thought they had gambled or gambled more often.

Among people who had seen advertising for non-Lottery gambling activities, 5% said that they had, as a result of seeing the advertising, gambled or gambled more often on non-Lottery activities.

Figure 7.2 shows, among the people who were aware of each gambling activity, the proportion that had gambled or gambled more often on non-Lottery activities, as a result of seeing advertising. It should be noted that the total responses for each activity depicted in this graph are different, because they relate to the number of people who were aware of advertising for each gambling activity.

Ten percent of people who had seen advertising for non-casino gaming said they gambled more on non-Lottery activities as a result, as had nine percent of people who had seen advertising for table games at a casino.

**Figure 7.2 Proportion of people who had seen advertising for each specific gambling activity who said they had gambled more as a result of seeing advertising for any of the listed activities in the last 12 months (multiple response).**



Note: Figures only include those people who said they had seen advertising for each specific gambling activity; hence results are not indicative of total population proportions

### 7.2.2 Buying more Lotto tickets as a result of advertising for big draws

Everyone who had bought a NZ Lotteries product in the previous 12 months (63%, see Gray, 2011 for more information on Lotteries participation) was asked whether they had bought more Lotto tickets or spent more on Lotto products as a result of seeing Lotto advertising or promotion for a big jackpot or prize draw. Forty-three percent of people who had bought NZ Lotteries products during the previous 12 months said that they had bought more tickets or spent more as a result of seeing Lotto advertising.

Among those who had bought a Lotto product, people aged 25-44 years were more likely than those aged 65 years and over to have bought a ticket as a result of seeing Lotto advertising.

People who lived alone were less likely than people who lived with partners or family to have spent more on Lotto products as a result of seeing Lotto advertising.

There were no significant differences between the proportions of people with different levels of ‘problem gambling’ risk that had bought Lotto products in the previous 12 months and spent more as a result of Lotto advertising. There were also no significant differences between people with different gambling participation patterns.

### 7.2.3 Gambling more on other activities as a result of advertising for Lotto products

Everyone who had participated in a gambling activity in the previous 12 months (n= 1404) was asked to think of any advertising or promotion they might have seen for Lotto products in the previous 12 months, including advertising for a big jackpot or prize draw. They were asked whether they had gambled, or gambled more often, on any non-Lotto gaming activities as a result of seeing or hearing any advertising or promotion for Lotto products.

Fourteen percent said that they had gambled, or gambled more often, on non-lottery gambling activities as a result of seeing advertising or promotion for Lotto products.

Responses to the question regarding increased likelihood of gambling on non-lottery activities in response to seeing ‘Lotto’ advertising were explored by key demographic factors (Table 7.1 and Table 7.2). People of Asian ethnicities were more likely than people of other ethnicities to say that they had, as a result of seeing advertising for Lotto products, gambled more on other non-Lotto gambling activities. Among people who had gambled in the previous year, people living in areas of the greatest deprivation were more likely than those living in moderately deprived areas to have gambled more on a non-Lotto activity as a result of seeing Lotto advertising.

**Table 7.1 Gender, age and ethnic differences in gambling on non-lottery activities following exposure to Lotto advertising (n = 1393)**

Gambled more on non-lottery?	Gender		Age group (in years)						Prioritised ethnicity				Total
	Male	Female	15-24	25-34	34-44	45-54	55-64	65+	Maori	Pacific	Asian	Euro/ Other	
	%	%	%	%	%	%	%	%	%	%	%	%	%
Yes	16	12	17	17	14	14	14	8	15	16	37	12	14
No	84	88	83	83	86	86	86	92	85	84	63	88	86
Respondents who had gambled during previous 12 months and had seen Lotto advertising	566	827	124	212	344	284	200	229	374	220	63	736	1393

Note: Figures only include those people who had seen Lotto advertising and had gambled in the last 12 months; hence results are not indicative of total population proportions

**Table 7.2 Household and neighbourhood differences in respondent’s gambling on non-lottery activities following exposure to Lotto advertising (n = 1393)**

Gambled more on non-lottery?	Deprivation			Household composition			Household equivalised income				Total	
	Low (1-3)	Mid (4-7)	High (8-10)	Single person	no children	with children	no children	Not stated				
								Household equivalised income	Total			
								%	%	%	%	
Yes	19	9	15	13	14	12	13	14	14	15	4	14
No	81	91	85	87	87	88	87	86	86	85	96	86
Respondents who had gambled during previous 12 months and had seen Lotto advertising	331	465	597	212	369	697	84	519	448	389	37	1393

Note: Figures only include those people who had seen Lotto advertising and had gambled in the last 12 months; hence results are not indicative of total population proportions

Examination of the responses by gambling behaviour showed 32% of ‘moderate-risk’ or ‘problem gamblers’ said that they had, as a result of seeing advertising for Lotto products, gambled more on other non-Lotto gambling activities (Table 7.3).

**Table 7.3 Gambling behaviour and respondent's gambling on non-lottery activities following exposure to Lotto advertising (n = 1393)**

Gambled more on non-lottery?	Gambling type			Number of activities participated				PGSI			Total
	Infreq. gambl.	Non- contin. gambler	Contin. gambler	1	2	3	4 or more	Non- problem gambler	Low- risk gambler	Moderate risk/probl. gambler	
	%	%	%	%	%	%	%	%	%	%	
Yes	14	13	18	17	12	7	19	14	10	32	14
No	86	87	82	83	88	93	81	87	91	68	86
Respondents who had gambled during previous 12 months and had seen Lotto advertising	931	351	86	446	419	282	244	1183	133	77	1393

Note: Figures only include those people who had seen Lotto advertising and had gambled in the last 12 months; hence results are not indicative of total population proportions

## 7.2.4 Discussion: Gambling more as a result of gambling advertising

To summarise, five percent of people who had gambled in some way in the past twelve months report that they did so, or did it more often because they saw or heard advertising or promotion for non-Lotto gambling activities, while fourteen percent report that it was because of Lotto promotions or advertisements. Of those who played a Lotto game in the past twelve months 43% report they bought a ticket or spent more on Lotto products because they saw or heard about a big Lotto jackpot or prize draw.

The proportion of people who think they spend more on Lotto products as a result of seeing Lotto advertising or promotions is fairly consistent across all the different groupings analysed, the only differences being that people who think they spent more on Lotto products are less represented among people who live alone, while 25–44 year olds are more likely than those aged 65+ years to think they spent more on Lotto products as a result of Lotto advertising.

Asian people, and ‘moderate-risk’ or ‘problem gamblers’ were more likely to think they have gambled more on non-Lotto activities as a result of seeing Lotto advertising. This may relate to their participation in non-Lotto games: at-risk gamblers are more likely to play non-Lotto games than ‘non-problem gamblers’, and (as noted above) Asian people are overrepresented among this at-risk group (see Table 4.1). Further insight into the effect Lotto advertising might have on non-Lotto gaming could be provided through analysis of the Department of Internal Affairs’ gambling expenditure data at times when there is more compared with less Lotto promotion.

## 7.3 Advertising about gambling harm and solutions

### 7.3.1 Awareness of advertising about gambling harm and solutions

Everyone in the survey was asked whether, in the previous three months, they had seen or heard any advertising, or noticed any leaflets or posters that explain how gambling might harm them, their family or friends, and what they could do about it. Fifty nine percent of people had seen advertising about gambling harm or solutions during the previous three months.

Analysis of the responses by key demographic details (Table 7.4) showed that as age increases, people are less likely to have seen or heard advertising about gambling harm and solutions during the previous three months and people of Asian ethnicities were less likely than people of other ethnicities to report seeing or hearing advertising about gambling harm and solutions.

**Table 7.4 Gender, age and ethnic differences in respondents awareness of advertising about gambling harm and solutions (N = 1740)**

Aware of advertising about harm?	Gender		Age group (in years)						Prioritised ethnicity				Total
	Male	Female	15-24	25-34	34-44	45-54	55-64	65+	Maori	Pacific	Asian	Euro/Other	
	%	%	%	%	%	%	%	%	%	%	%	%	%
Yes	58	61	66	65	57	59	61	47	61	58	34	62	59
No	42	40	34	35	43	41	39	53	39	43	66	38	41
All respondents	711	1029	197	277	425	335	233	273	460	301	113	866	1740

Analysis of the responses by geographic and household characteristics showed that people who lived alone were less likely than those who live with a partner and those who were part of a family with children to have seen or heard advertising about gambling harm and solutions. People who lived in areas of high deprivation were less likely than those in less deprived areas to report seeing or hearing advertising about gambling harm and solutions in the past three months and people with low household incomes were less likely than those with high incomes, to report seeing or hearing advertising about gambling harm and solutions in the past three months (Table 7.5)

**Table 7.5 Household and neighbourhood characteristics and awareness of advertising about gambling harm and solutions (N = 1740)**

Aware of advertising about harm?	Deprivation			Household composition					Household equivalised income				Total
	Low (1-3)	Mid (4-7)	High (8-10)	Couple	Family	Family	Other	Low	Medium	High	Not stated		
				Single person	no children	with children	no children						
				%	%	%	%						
Yes	62	62	54	47	62	61	58	55	53	62	64	50	59
No	38	38	46	53	38	39	42	45	48	38	36	50	41
All respondents	407	557	776	271	419	896	114	40	435	544	708	53	1740

When the data relating to advertising about harm were analysed by the type of gambling behaviours respondents reported engaging in, analysis showed that people who gambled frequently on non-continuous gambling activities were more likely than those who did not gamble at all to report seeing or hearing advertising about gambling harms and solutions. As the number of gambling activities participated in increases, people were more likely to report seeing or hearing advertising about gambling harms and solutions (Table 7.6). No PGSI classification group was significantly more or less likely to report seeing or hearing advertising about gambling harms and solutions.

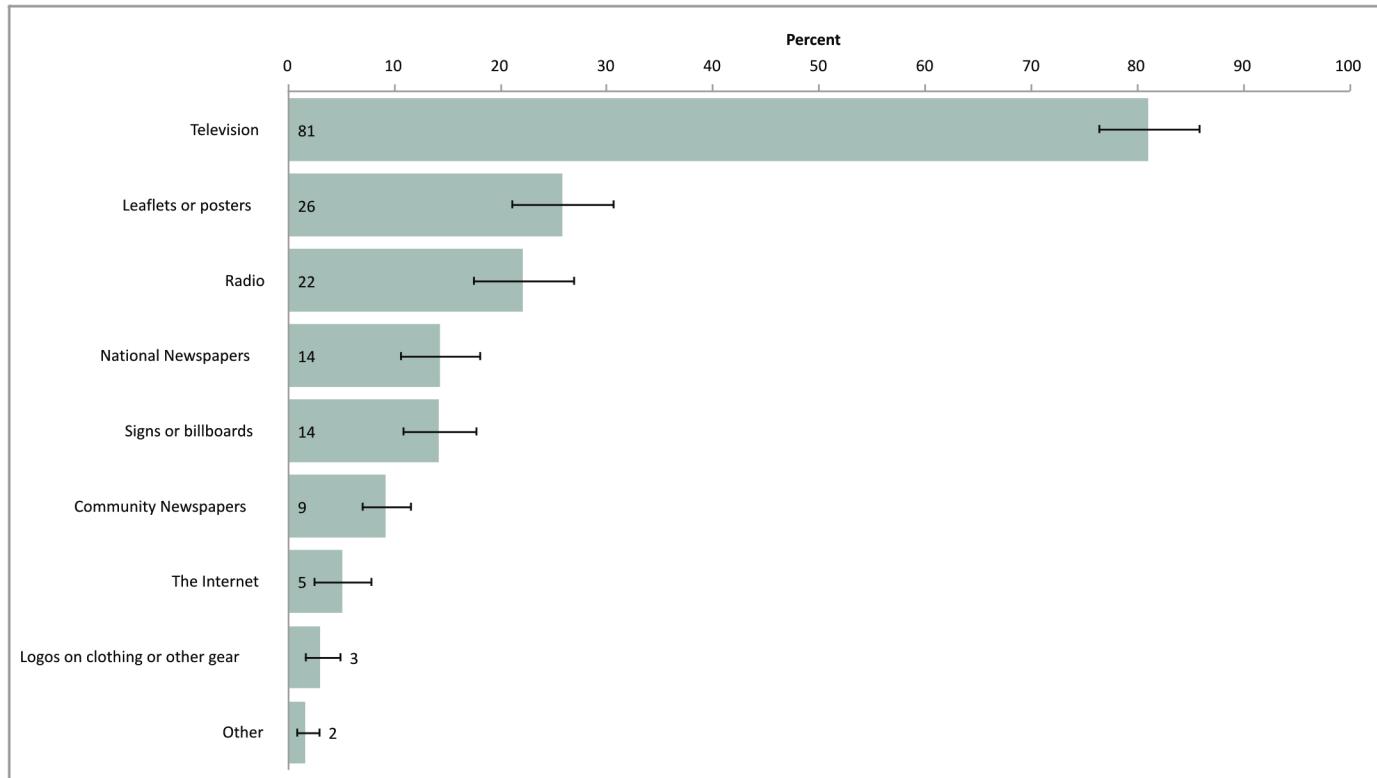
**Table 7.6 Gambling behaviours and awareness of advertising about gambling harm and solutions (N =1740)**

Aware of advertising about harm?	Gambling type				Number of activities participated					PGSI				Total
	Non- gambl.	Infreq. gambl.	Non- contin.	Contin. gambler	None	1	2	3	4 or more	Non- gambler	Non- problem gambler	Low- risk gambler	Moderate risk/probl. gambler	
	%	%	%	%	%	%	%	%	%	%	%	%	%	
Yes	50	60	66	68	51	54	63	66	65	50	60	68	70	59
No	50	40	34	32	49	46	37	34	35	50	40	32	30	41
All responds.	336	941	352	86	338	452	424	282	244	336	1194	133	77	1740

### 7.3.2 Sources of advertising about gambling harm and solutions

People who said they had seen or heard advertising about gambling harm and solutions were asked which types of advertising they had seen or heard in the previous three months. Eighty-one percent of people who recalled seeing advertising about gambling harms and solutions during the previous three months said they had seen television advertising. Twenty-six percent had seen leaflets or posters, and twenty-two percent had heard radio advertising (Figure 7.3).

**Figure 7.3 Respondents recall of the source of advertisements about gambling harms and solutions (multiple response) (n=997)**



Respondents who had seen or heard advertising about gambling harms and solutions

### 7.3.3 Comparison with previous years: awareness of advertising about gambling harm and solutions

Table 7.7 contains the 2006/7 and 2010 data relating to where people recalled hearing or seeing advertising about gambling harm in the 3 months prior to the survey. Compared with 2006/07, the proportion of people in 2010 who recalled having seen television advertising about gambling harm and solutions had more than doubled and the overall proportion of people in 2010 who were aware of any advertising about gambling harm and solutions was significantly higher than in 2006/07; 65% were not aware of any advertising about gambling harm and solutions in 2007 and compared with only 41% in 2010.

**Table 7.7 Recall of gambling harm advertising (multiple response): 2006/07 (N = 1973) and 2010 (N = 1740)**

Source	2006/07	2010
	%	%
Television	22	48
Leaflets or posters	16	15
Radio	7	13
National Newspapers	6	9
Signs or billboards	6	8
Community Newspapers	5	5
The Internet	2	3
Logos on clothing or other gear	1	2
Using a celebrity person	2	N/A
Other	0	2
Don't know	0	N/A
Not aware of any advertising	65	41
All respondents	1973	1740

Note: Proportions are based on the total sample, not just those people who said they could recognise signs, to enable meaningful comparisons between years.

In summary, the findings show that there are no differences between Māori, Pacific and European/other ethnicities recall of seeing or hearing advertisements about the harms of gambling. People of Asian ethnicity were significantly less likely to see or hear any advertising about the harms of gambling. The more gambling activities people participate in, the more likely they are to see this kind of advertising.

The results suggest that people of Asian ethnicities, older people, people who live alone, people on a low income, and non-gamblers are less likely to see or hear advertisements that warn of the harms from gambling.

## 8 References

- Abbott, M.W., & Volberg, R.A. (1996). The New Zealand national survey of problem and pathological gambling. *Journal of Gambling Studies* 12(2): 143-160
- Abbott, M. W., & Volberg, R. A. (2000). *Taking the pulse on gambling and problem gambling in New Zealand: A report on Phase One of the 1999 National Prevalence Survey*. Retrieved from [\\$file/TakingthePulse.pdf](http://www.dia.govt.nz/pubforms.nsf/URL/TakingthePulse.pdf)
- Abbott, M.W. (2001). *Problem and non-problem gamblers in New Zealand: A report on phase two of the 1999 National Prevalence Survey*: Report number six of the New Zealand Gaming Survey. Retrieved from [\\$file/Report6.pdf](http://www.dia.govt.nz/Pubforms.nsf/URL/Report6.pdf)
- Adams, P.J., & Rossen, F. V. (2005). *The Ethics of Receiving Funds from the Proceeds of Gambling*. Retrieved from University of Auckland Centre for Gambling Studies website: [\\$file/GamblingEthics.pdf](http://www.fmhs.auckland.ac.nz/soph/depts/sch/adams/_docs/GamblingEthics.pdf)
- Blakely, T. (2002). *The New Zealand Census-Mortality Study: Socioeconomic inequalities and adult mortality 1991-94*. Retrieved from Ministry of Health website: [\\$file/new-zealand-census-mortality-study.pdf](http://www.moh.govt.nz/notebook/nbbooks.nsf/0/1A0383E25FCCE062CC256BDC000C6987)
- Clarke, D., Tse, S. Abbott, M., Townsend, S., Kingi, P., & Manaia, W. (2007) Reasons for Starting and Continuing Gambling in a Mixed Ethnic Community Sample of Pathological and Non-problem Gamblers. *International Gambling Studies* 7(3), 299-313
- Department of Internal Affairs (2008). *People's Participation in, and Attitudes to, Gambling, 1985-2005*. Retrieved from [\\$file/GamblingParticipationSurvey1985-2005.pdf](http://www.dia.govt.nz/Pubforms.nsf/URL/GamblingParticipationSurvey1985-2005.pdf)
- Department of Internal Affairs (2010). *Gambling Expenditure Statistics*. Retrieved from [\\$file/Expendstats1986-2010.pdf](http://www.dia.govt.nz/pubforms.nsf/URL/Expendstats1986-2010.pdf)
- Department of Internal Affairs (2011a). *Gambling Fact Sheet 3: Classes of Gambling*. Retrieved from [http://www.dia.govt.nz/diawebsite.nsf/Files/GamblingFactSheets/\\$file/FactSheet3-May2011.pdf](http://www.dia.govt.nz/diawebsite.nsf/Files/GamblingFactSheets/$file/FactSheet3-May2011.pdf)
- Department of Internal Affairs (2011b). *Gaming Machine Numbers: June 1994 to June 2011 at 3-Monthly Intervals*. Retrieved from [\\$file/LineGraph\\_30%20June%202011.pdf](http://www.dia.govt.nz/Pubforms.nsf/URL/LineGraph_30%20June%202011.pdf)
- Devlin, M. (2010). *Methodology Report for the 2008 Health and Lifestyles Survey*. Retrieved from Health Sponsorship Council website: <http://www.hsc.org.nz/sites/default/files/publications/HLS%202008-methodology-report-fnl-100625.pdf>
- Devlin, M. (2011a). *Methodology Report for the 2010 Health and Lifestyles Survey*. Retrieved from Health Sponsorship Council website: <http://www.hsc.org.nz/sites/default/files/publications/HLS%202010%20methodology-report-fnl-110128.pdf>

- Devlin, M. (2011b). *Technical report: Groups at risk of at-risk gambling*. Retrieved from Health Sponsorship Council website: <http://www.hsc.org.nz/sites/default/files/publications/groups%20atrisk%20of%20atrisk%20gambling-fnl-110513.pdf>
- Devlin, M. (2012a). *Low-risk, Moderate-risk & Problem gambling in New Zealand [In Fact]*. Retrieved from Health Sponsorship Council website: <http://www.hsc.org.nz/researchpublications.html> (forthcoming)
- Devlin, M. (2012b). *Technical Report: Casino gambling in New Zealand*. Retrieved from Health Sponsorship Council website: <http://www.hsc.org.nz/sites/default/files/publications/Casino%20gambling-fnl-120222.pdf>
- Devlin, M. E., & Walton, D. (2012). The prevalence of problem gambling in New Zealand as measured by the PGSI: Adjusting prevalence estimates using meta-analysis. *International Gambling Studies*. Advance online publication. Doi: 10.1080/14459795.2011.653384
- Dyall, L. (2003) *Kanohi-ki-te-Kanohi: A Maori Face to Gambling* (Thesis submitted for the degree of Doctor of Philosophy). Retrieved from The University of Auckland. (<http://hdl.handle.net/2292/3123>).
- Ferris, J., & Wynne, H. (2001). *The Canadian Problem Gambling Index: Final Report*. Retrieved from Canadian Centre on Substance Abuse website: <http://www.ccsa.ca/2003%20and%20earlier%20ccsa%20documents/ccsa-008805-2001.pdf>
- Gambling Helpline Limited. (2011). *Problem Gambling in New Zealand: Service user data - Gambling Helpline client data*. Retrieved from Ministry of Health website: <http://www.health.govt.nz/our-work/preventative-health-wellness/problem-gambling/service-user-data/gambling-helpline-client-data>
- Gray, R. (2011). *New Zealanders' Participation in Gambling: Results from the 2010 Health and Lifestyles Survey*. Retrieved from Health Sponsorship Council website: [http://www.hsc.org.nz/sites/default/files/publications/Gambling\\_Participation\\_final-web.pdf](http://www.hsc.org.nz/sites/default/files/publications/Gambling_Participation_final-web.pdf)
- Jensen, J. (1988). *Income Equivalences and the Estimation of Family Expenditure on Children*. Wellington: Department of Social Welfare
- Manch, K. (2008). *Risks and benefits associated with funding sport through gambling*. Speech to SPARC conference, 23 June 2008
- Ministry of Health. (2004). *Ethnicity Data Protocols for the Health and Disability Sector*. Retrieved from <http://www.health.govt.nz/publication/ethnicity-data-protocols-health-and-disability-sector>
- Ministry of Health. (2008). *Raising the Odds? Gambling behaviour and neighbourhood access to gambling venues in New Zealand*. Retrieved from <http://www.health.govt.nz/publication/raising-odds-gambling-behaviour-and-neighbourhood-access-gambling-venues-new-zealand>
- Ministry of Health. (2009). *A Focus on Problem Gambling: Results of the 2006/07 New Zealand Health Survey*. Retrieved from <http://www.health.govt.nz/publication/focus-problem-gambling-results-2006-07-new-zealand-health-survey>
- Ministry of Health. (2010a). *Preventing and Minimising Gambling Harm: Six-year strategic plan 2010/11–2015/16*. Retrieved from <http://www.health.govt.nz/publication/preventing-and-minimising-gambling-harm-six-year-strategic-plan-2010-11-2015-16>

Ministry of Health. (2010b). *Living Standards and Health: New Zealand 2006/07*. Retrieved from <http://www.health.govt.nz/publication/living-standards-and-health-new-zealand-2006-07>

National Research Bureau. (2007). *2006/07 Gaming and Betting Activities Survey: New Zealanders' knowledge, views and experience of gambling and gambling-related harm*. Retrieved from Health Sponsorship Council website: <http://www.hsc.org.nz/sites/default/files/publications/GBAS%202006-07%20Report%20Final.pdf>

New Zealand Lotteries. (2010). *NZ Lotteries Annual Report 2009–2010*. Retrieved from <http://www.mylotto.co.nz/wps/wcm/myconnect/lotteries2/nzlotteries/Global/AboutNZLotteries/CorporatePublications/>

New Zealand Racing Board. (2011). *Annual Report 2010*. Retrieved from <http://www.nzracingboard.co.nz/annual-reports.html>

Perese, L. (2009). *You Bet Your Life...and Mine! Contemporary Samoan Gambling in New Zealand* (Thesis submitted for the degree of Doctor of Philosophy). Retrieved from The University of Auckland. (<http://hdl.handle.net/2292/4958>).

Productivity Commission. (1999). *Australia's gambling industries: Inquiry report No: 10*. Retrieved from <http://www.pc.gov.au/projects/inquiry/gambling/docs/finalreport>

Salmond, C., Crampton, P., & Atkinson, J. (2007). NZDep2006 Index of Deprivation. Retrieved from University of Otago website: <http://www.otago.ac.nz/wellington/otago020348.pdf>

Statistics New Zealand. (2010). *National Population Estimates: June 2010 quarter*. Retrieved from [http://www.stats.govt.nz/browse\\_for\\_stats/population/estimates\\_and\\_projections/NationalPopulationEstimates\\_HOTPJun10qtr.aspx](http://www.stats.govt.nz/browse_for_stats/population/estimates_and_projections/NationalPopulationEstimates_HOTPJun10qtr.aspx)

Tse, S., Wong, J., & Chan, P. (2007). Needs and Gaps Analysis: Problem Gambling Interventions Among New Zealand Asian Peoples. *International Journal of Mental Health and Addiction*, 5(1), 81-88. doi:10.1007/s11469-006-9039-3

Wheeler, B., Rigby J., & Huriwai T. (2006). Pokies and poverty: problem gambling risk factor geography in NZ. *Health & Place*. 12(1).

ODDS

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WIN

PLACE

