



**NEW ZEALAND 2012 NATIONAL GAMBLING STUDY:  
OVERVIEW AND GAMBLING PARTICIPATION**

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PO Box 5013  
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**Authors:**

Professor Max Abbott  
Dr Maria Bellringer  
Dr Nick Garrett  
Dr Stuart Mundy-McPherson

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## EXECUTIVE SUMMARY

This report describes the purpose and methodology of the first phase of the National Gambling Prevalence and 12 Month Incidence Study. It also presents and discusses gambling participation results from the study and examines change over time by making comparisons with the results of previous New Zealand and international surveys. Study results concerning gambling-related harm including problem gambling and attitudes towards gambling are presented in separate reports.

A randomly selected national sample of 6,251 people aged 18 years and older living in private households was interviewed face-to-face from March to October 2012. The response rate was 64% and the sample was weighted to enable generalisation of the survey findings to the general adult population.

The survey instrument for the 2012 National Gambling Survey was extensive and covered 11 key areas:

1. Leisure activities and gambling participation
2. Past gambling and recent gambling behaviour change
3. Problem gambling
  - Problem Gambling Severity Index
  - South Oaks Gambling Screen
  - Help-seeking behaviours (including readiness to change)
  - Gambling in households
4. Life events and on-going hassles
5. Gambling in New Zealand
6. Mental health
  - General psychological distress
  - Quality of life
7. Alcohol use/misuse
8. Substance use/misuse
  - Tobacco
  - Other drugs
9. Health conditions
10. Social connectedness
11. New Zealand Deprivation Index
12. Demographics

### **Gambling participation**

#### *Overall participation*

- Eighty percent of the adult population (18 years and older) participated in some form of gambling during the past year and 86% said they had done so at some time in the past.
- The past year participation rate has not changed since previous 2005 and 2010 surveys; however, it is lower than during the 1990s when around 90% participated this frequently. The lifetime rate was also higher during the 1990s, around 95%.
- Approximately one in five adults (22%) gambled weekly or more often, a substantial decrease from the 1991 (48%) and 1999 (40%) surveys.

- Decreased participation was even greater for people who took part weekly or more often in continuous<sup>1</sup> forms of gambling such as EGMs, horse and dog race betting and casino table games; falling from 18% in 1991 to 10% in 1999 and six percent in the current survey. This reduction is of interest because people in this category (regular continuous gamblers) have high self-reported gambling expenditure and more often take part in multiple gambling activities. They are also much more likely to be problem and at-risk gamblers than people who participate less frequently in these forms or who participate regularly in non-continuous forms.
- The percentage of people who participated weekly or more often in non-continuous gambling activities including Lotto and raffles (and either not at all or less than weekly in continuous activities) also reduced, though to a lesser extent than was the case for regular continuous gamblers. In both 1991 and 1999, 30% of adults were in this category. This almost halved to 16% in the present survey.
- Participation rates have also declined over time in a number of other countries during the past decade, following earlier rises associated with the introduction and increase in availability of new gambling activities. Decreases started during the 1990s in New Zealand, earlier than in most other places, when gambling availability and expenditure were increasing significantly.

### *Participation in particular activities*

- As in previous years, Lotto was most popular (62% of adults participated during the last year). This was followed by raffles (47%), Instant Kiwi (33%), bets with friends and workmates (15%), non-casino EGMs (14%), and horse and dog race betting (12%). Ten percent or less participated in any other particular activity.
- Gambling on overseas internet sites was infrequent, less than one percent, as in previous New Zealand surveys.
- Other than Lotto (17%), Instant Kiwi and raffle tickets (both 3%) no other activity was participated in weekly or more often by more than two percent of adults.
- Most people who took part in any activity during the past year, other than Lotto, did so less than monthly.
- Surveys conducted since 1985 show that past year and weekly participation in almost all types of gambling peaked during the few years after their introduction and declined steadily in subsequent years. In most cases these decreases were substantial.
- Past year participation in non-casino EGMs, horse and dog race betting, Instant Kiwi, betting with friends or workmates, 'casino' evening fundraising, overseas raffles or lotteries, card games, Keno, housie, 0900 games and dice games all reduced by a half or more from previous high points. Participation in casino EGMs and table games, Lotto, raffles and sports betting reduced somewhat less.
- Weekly participation decreases were far greater than annual decreases. Weekly Lotto participation fell from 42% to 17%, Instant Kiwi from 13% to 3%, raffles from 7% to 3%, non-casino EGMs from 5% to 1% and horse and dog race betting from 4% to 1%. Very low percentages participated this often in other activities and it is uncertain whether apparent changes are real. None, however, were higher than in previous surveys.
- From 2005 to 2012, past year and weekly participation continued to decrease for most of the more popular gambling activities including non-casino EGMs. Participation in

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<sup>1</sup> For a definition of continuous and non-continuous forms of gambling see section 4.1.6. This section also defines regular gamblers, infrequent gamblers and non-gamblers.

casino EGMs and table games, horse and dog race betting and card games decreased less and in some cases apparent changes may not be real. Participation in sports betting has not changed.

### *Mode of access*

- While less than one percent of adults accessed overseas gambling internet sites in the past year, larger numbers used the internet to access other gambling activities.
- For most activities that can be accessed both online and offline, a large majority elected to take part offline. However, for a few activities relatively large proportions participated online.
- Five percent of adults used the internet to buy Lotto tickets during the past year, approximately eight percent of people who participated in Lotto during that time.
- A smaller proportion of adults (0.7%) bought Keno online. However, proportionally more (23%) past year Keno participants participated this way.
- Around three percent of adults played poker for money or prizes in a private residence during the past year, two percent at a commercial venue and 0.5% online.
- During the past year, eight percent of adults bet on horse or dog races in person at a track, eight percent in person at a TAB, three percent via telephone, online or by interactive television, and less than one percent through an overseas betting organisation or website.
- During the past year, three percent of adults bet at a sports event in person, three percent in person at a TAB, two percent via telephone, online or interactive television, and less than one percent through an overseas betting organisation or website.

### *EGM session length and setting*

- Average session length was examined by frequency of participation and EGM setting. Most people who gambled less than weekly on EGMs, irrespective of setting, had typical session lengths of an hour or less.
- Over half (55%) of frequent casino EGM participants reported typical sessions of three hours or more, compared to very small numbers of frequent pub (3%) and club (4%) EGM participants.
- Around two-thirds of frequent pub and club EGM participants (both 68%) reported typical session lengths of an hour or less, compared to six percent of frequent casino EGM participants.
- Previous research has found long session length to be related to high overall gambling expenditure and problem gambling.

### *Number of activities*

- Two out of five (43%) adults participated in one or two gambling activities during the past year and approximately one in five (22%) participated in four or more.
- Most people who took part in only a few gambling activities participated less than monthly.
- Participation in four or more activities (22%) has decreased since 2005 (28%) and a high point of around 40% during the 1990s.

- Participation in multiple activities was associated with very high reported overall gambling expenditure (see below) and has been found in some studies to be an independent risk factor for problem gambling, additional to regular participation in particular gambling activities.

### **Gambling expenditure**

- Average self-reported annual gambling expenditure was \$853 compared to \$573 (adjusted by the consumer price index) in 2005. However, more forms of gambling were included in the 2012 survey and this difference may not indicate an actual increase. This compares with adjusted expenditure of \$725 in 1991, \$606 in 1995 and \$642 in 2000.
- Excluding short-term speculative investments, the highest proportion of self-reported expenditure was on Lotto (29%), followed by casino gambling (18%), horse and dog race betting (14%) and non-casino EGMs (12%). These were also the four top expenditure categories in 1999. Less than 10% was spent on any other individual activity and less than one percent was spent on overseas internet gambling.
- Self-reported expenditure has a complex relationship to actual gambling expenditure. Estimated total past year reported gambling expenditure (excluding short-term speculative investments) was \$2 billion, three-quarters (\$1.5 billion) of which was spent on TAB horse and dog race and sports betting, NZ Lotteries Commission products, casino table games and EGMs and non-casino EGMs. Official expenditure (losses) on these four categories of gambling was \$2 billion in 2011 and \$2.1 billion in 2012. In the present survey, as in previous surveys, reported Lotto, horse and dog race and sports betting expenditure was higher than actual official expenditure, and reported non-casino EGM and casino gambling expenditure was lower. Non-casino EGM expenditure was greatly under-reported.
- Around 15% of adults reported spending over \$1,000 and just under a half spent nothing or less than \$200 per annum.
- While the proportion of adults who participated in a large number of separate gambling activities has declined, over the past decade there has been a substantial increase in the average annual gambling expenditure of people in this category, especially those who participate in seven or more different activities.
- Regular continuous gamblers reported average typical monthly gambling expenditure (\$264) was much higher than that of regular non-continuous gamblers (\$89) and infrequent (less than weekly) gamblers (\$46). Over a half (60%) of regular continuous gamblers reported spending \$100 or more per month, compared to 26% of regular non-continuous gamblers and eight percent of infrequent gamblers. Given the significant under-reporting of EGM expenditure, the differences between regular continuous gamblers and adults in the other two categories will be even greater.
- For the adult population as a whole, Lotto was the only gambling activity where average monthly expenditure exceeded \$10.
- For people who participated in each activity during the past year, average reported monthly expenditure was highest for cards (\$77), followed by casino table games (\$71), horse and dog race betting (\$65), overseas internet gambling (\$62), casino EGMs (\$52), non-casino EGMs (\$49), sports betting (\$43), housie (\$35) and Lotto (\$26). Eleven dollars or less per month was spent on any other particular activity. Card games also ranked first in 1999, followed by track (horse and dog race) betting, casino table games, housie, casino EGMs and non-casino EGMs.

## **Gambling preferences**

- Most adults (80%) who took part in one or more gambling activities during the past year said they had a most enjoyed or favourite type. Reflecting the participation findings, Lotto was favoured most often (17%), followed by raffles and Instant Kiwi (both 9%), horse and dog race betting (6%), bets with friends or workmates (5%), casino gambling and non-casino EGMs (both 4%). Other activities were preferred by two percent or fewer people.
- In 1999, 74% said they had a favourite type and Lotto was most also most preferred (26%), followed by track (horse and dog race) betting (10%), Instant Kiwi and casino gambling (both 6%), TeleBingo (5%), non-casino EGMs and card games (both 4%), and sports betting, housie and raffles (all 2%).
- Regular continuous gamblers (91.5%) more often reported having a most enjoyed activity than regular non-continuous gamblers (79%) and infrequent gamblers (63%).
- Regular continuous gamblers more often preferred Instant Kiwi (25%), followed by non-casino EGMs (15.5%), horse and dog race betting (13%), Lotto (9.5%), casino gambling (7%) and card games (6%).
- Forty percent of regular non-continuous gamblers preferred Lotto, followed by raffles (8%), horse and dog race betting (7%), and bets with friends and workmates (6%).
- Infrequent gamblers also most often preferred Lotto (18%), followed by raffles (13.5%), Instant Kiwi (12%), horse and dog race betting (7%), and bets with friends and workmates (6%).
- Adults who preferred continuous forms of gambling were generally strongly over-represented in the group that took part in multiple gambling activities and under-represented in the group that took part in a few. Adults who preferred horse and dog race betting, casino gambling, non-casino EGMs and card games between them accounted for 58% of people who took part in seven to nine activities and 64% of those who took part in seven or more. In contrast, adults with these preferences accounted for only 16% of people who participated in one or two activities.
- Gambling preferences were strongly associated with overall gambling expenditure.
- Around nine in ten adults who reported spending \$100 or more per month had a preference compared to less than two-thirds of those who spent \$20 or less.
- Adults who favoured the four continuous forms of gambling mentioned in relation to number of activities participated in also made up relatively high percentages of adults who spent \$100 or more per month.

## **Reasons for gambling**

- Reasons given for participating vary considerably for different gambling activities.
- Winning money or prizes was mentioned most often, ranging from 95% for short-term speculative investments to 39% for raffles. Over 80% gave this reason for taking part in Lotto, Keno and text games. Less than 50% did so in relation to raffles, card games and betting with friends and workmates.
- Excitement and challenge was mentioned by over 50% of participants in relation to casino table games, sports betting, overseas internet gambling, horse and dog race betting, betting with friends or workmates, and card games.
- Entertainment was mentioned by over 50% of participants in relation to card games, casino table games, casino EGMs, overseas internet gambling, horse and dog race betting, non-casino EGMs, sports betting, and bets with friends or workmates.

- To be with people or to get out of the house was mentioned most often in relation to card games (45%) and housie (37%). It was also mentioned by over 20% of participants in relation to horse and dog race betting, casino table games and casino EGMs.
- Most participants (81%) said they purchased raffles to support a worthy cause. It was also mentioned by around a quarter (24%) of people who played housie.
- Participating because it is an interest or hobby was mentioned by moderate numbers of participants as the reason they made short-term speculative investments (30%) and participated in card games (26%), sports betting (24%) and horse and dog race betting (22%).
- Curiosity was given as a reason in relation to short-term speculative investments (21%), overseas internet gambling (20%), text games or competitions (18%), non-casino EGMs (13%) and casino EGMs (12%).
- As a gift was mentioned by 20% of adults who had purchased Instant Kiwi tickets and by 16% who had purchased Lotto tickets.
- Reasons given for taking part in different gambling activities have been fairly consistent since 1985. However, participating to win prizes or money has increased considerably over time for some activities, most notably Lotto, Keno, housie, sports betting, casino gambling and non-casino EGMs. In the first few years after most new activities were introduced, moderate to quite large proportions said they had taken part out of curiosity. In subsequent years this reason was given much less often.

### **Reasons for not gambling**

- The reasons given most frequently for not having participated in gambling activities during the past year were moral or religious objections (43%), a lack of interest or desire to gamble (31%), considering it a waste of money or having other priorities (29%), considering the chances of winning not being good or losing more than winning (14%), not being able to afford it (9%) and because it is addictive and/or have seen people in trouble with gambling (8%).

### **Beliefs about gambling activities**

#### *Perceptions of winning or losing*

- For most gambling activities the majority of participants considered that during the past year they had lost rather than made money. This was particularly the case for raffles, Lotto, Keno, text games or competitions and overseas internet gambling. Making short-term speculative investments and playing poker online were exceptions where more thought they had won than lost. In the case of casino table games and sports betting in some contexts, there was little or no difference between the proportions who considered that they had won and lost.
- Perceptions of winning or losing have remained fairly consistent across surveys conducted since 2000 other than for housie, where over time there has been an increase in the proportion of participants who consider that they lost money.

### *Use of systems or special skills*

- Moderately large proportions of participants reported having used systems or special skills to improve their chances of winning in some gambling activities. This was especially the case for short-term speculative investments (48%), casino table games (20%), sports betting and horse and dog race betting (both 17%), and card games (10%). These are activities where knowledge and skill can play some part in determining outcomes.
- Between five percent and 10% of Lotto, Keno and non-casino EGM participants and adults who made bets with friends or workmates used systems or special skills. Participants in other activities used these methods less frequently. Outcomes in Lotto and these other activities are driven entirely or almost entirely by chance.
- Since 2000 there has been a reduction in the use of systems and special skills in relation to Keno and probably Lotto and non-casino EGMs.

### **Methods used to moderate gambling participation**

- Around 30% of adults who participated in one or more gambling activities during the past year used a method to stop themselves from spending too much money and/or time gambling. Around a fifth (22%) used a single method, six percent used two methods and two percent used three or more.
- Of the people who used a method, over two-thirds (69%) said they set a money limit. Other methods used by five percent or more were separating betting money and stopping when it is used, avoiding venues, setting a time limit, and leaving ATM and credit cards at home. Large majorities (88%-95%) believed these methods were effective. Smaller numbers of people mentioned a variety of other methods.
- Regular continuous gamblers (46%) used methods to moderate their gambling more frequently than regular non-continuous (33%) and infrequent (26%) gamblers did. They also more often used two or more methods.
- Participants with higher monthly gambling expenditure more often set money limits than those in lower expenditure groups. Adults in the highest expenditure group more often than those in the lowest groups said that they separated gambling money and stopped when it was spent, left ATM and credit cards at home, and set time limits. Adults in the lowest expenditure group relative to those in the higher groups more often said gambling was a waste of time, was against their religious or other beliefs, that they can't afford gambling or gamble only when they can, and that they prioritise other things.

### **Recent gambling behaviour change**

- Participants were asked to think about all of the gambling activities they had taken part in and to indicate whether, during the past 12 months, their overall gambling involvement had increased a lot, increased, stayed much the same, decreased, or decreased a lot. More (16.5%) said it had decreased than increased (4.5%).
- Over a third (35%) of participants said their gambling had increased because of friends and family. Next most often mentioned were more money to spend now (28%), more opportunities to gamble (20%), wanted to or felt like it (18%) and wanted to win or win more money (11%).

- The most frequently mentioned reasons for decreased participation were priorities having changed (36%), wanting to save money or spend it on other things (35%), having less money to spend (33%), a loss of interest in gambling activities (24%), having less time or being more busy (24%), and having fewer opportunities to gamble (13%).
- Participants were asked about significant life events during the past year and whether any of these events had influenced their gambling participation. A major change in financial situation was most often considered to lead to both increased (25%) and decreased (23%) gambling. Other events that participants believed had led to increased participation were troubles at work (16%), the death of someone close (12%), major illness or injury (10%), an increase in arguments with someone close (9%), an earthquake or other natural disaster (7%), and moving to a new town or city (5%). Other events that were mentioned in relation to decreased participation were pregnancy or new family additions (12%), a major change in living or work conditions (10%), the death of someone close (9%), major illness or injury (9%), taking on a loan, mortgage or making a big purchase (8%), an earthquake or other natural disaster (7%), moving house (6%) and moving to a new town or city (5.5%).
- More regular continuous gamblers (13%) than regular non-continuous (6%) or infrequent (5%) gamblers increased their involvement. More regular continuous gamblers (19.5%) and infrequent gamblers (21%) than regular non-continuous gamblers (14%) decreased their involvement.
- The nature (both increases and decreases) and degree of change varied somewhat in relation to average monthly gambling expenditure. The involvement of adults with high expenditure (over \$100 per month) more often decreased than was the case for adults with lower expenditure. However, adults who spent between \$101 and \$500 per month (but not those who spent over \$500 per month) increased their involvement relative to people with lower expenditure.
- Changes in involvement also varied somewhat in relation to most preferred gambling activity. For half of the preferred activities, more than 70% of participants said their involvement had stayed much the same. Adults with a preference for overseas internet gambling reported the most change with 85% saying their involvement had decreased. Other preferences associated with higher levels of decreased involvement were non-casino EGMs (33%), card games and sports betting (both 31%). No preferred activity was associated with more decreases than increases.
- Reasons given both for increased and decreased involvement varied somewhat according to gambling category (regular continuous, regular non-continuous and infrequent), monthly gambling expenditure and preferred activity.

### **Participation differences between socio-demographic groups**

- There was considerable variation across different social groups with regard to particular activities engaged in, and the intensity of participation, as assessed by frequency of involvement and self-reported expenditure. These differences are of interest for a variety of reasons, including their association with loss of control and gambling-related harms.

### ***Gender***

- As in 2005, males and females had similar levels of past year participation but males more often took part in a number of continuous gambling activities whilst females more

often purchased raffle tickets and Instant Kiwi, and played housie. During the 1980s and 1990s, males had somewhat higher overall participation rates than females.

- There was no gender difference in participant assessments of whether or not their overall gambling involvement had changed during the past three months.
- Somewhat more females (61%) than males (56%) were infrequent gamblers. The slight apparent differences with regard to regular continuous and non-continuous gambling are unlikely to be significant.
- Males more often said they preferred card games and sports betting whereas females favoured Instant Kiwi.
- There was no gender difference with respect to the average number of activities engaged in; however, males on average spent almost double what females did (respectively \$91 and \$53 in a typical month). More males also typically spent over \$100 per month. The average expenditure difference has been similar in surveys conducted since 1990.

### *Age*

- Past-year participation was higher for adults in the age groups between 25 and 64 years (range of 81% - 84%) than for the youngest (74%) and oldest groups (77%). The youngest and oldest groups also participated less in 2005. In the 1999 and earlier surveys, while older adults participated less, young adults participated at a similar rate to those in the other age groups.
- People in the three youngest groups more often than those in the oldest group considered that their overall gambling involvement had reduced during the past 12 months. They also more often considered that their gambling involvement had increased.
- While regular continuous gambling participation did not vary by age, younger men (18-34 years) were much less likely to be regular non-continuous gamblers and more likely to be infrequent gamblers than men in the older age groups. In 1999 younger adults, particularly those aged 18-24 years, were also more likely to be regular non-continuous gamblers. However, at that time, they were much more likely than other groups to be infrequent gamblers.
- Younger adults participated more often than older adults in a number of continuous activities including EGMs, casino table games, cards and sports betting. The youngest group (18-24 years) had much lower levels of involvement in Lotto and raffles.
- Younger adults more often had a most preferred activity. Relative to other age groups they preferred Instant Kiwi, card games, sports betting and non-casino EGMs. People in the older groups more often preferred Lotto and raffles.
- Younger adults more often than adults in the oldest group participated in seven or more activities during the past year.
- Adults aged 25-34 years had higher average expenditure and relatively more typically spent over \$100 per month. Since 2005, expenditure has increased across all age groups, but more so in the younger groups.

### *Age and gender*

- In all age groups, males and females had similar past year overall gambling participation.

- In all age groups, males and females had similar past year Lotto and non-casino EGM participation.
- Over the age of 44 years, females had higher past year participation in Instant Kiwi than males. Gender differences were not apparent for younger adults.

### *Ethnicity*

- In 2012, Māori (85%) and European/Other (82%) adults had the highest levels of past year gambling participation, followed by Pacific Islanders (75%) and Asians (61%). While participation has reduced across all ethnic groups since the 1990s, relative differences between the groups have not changed over time.
- Over a half of Pacific Island and Asian adults who did not participate during the past year said they did not do so for moral or religious reasons.
- While the ethnic groups did not vary with respect to increased gambling involvement during the past 12 months, Māori and Pacific participants more often than European/Other and Asians believed that their involvement had decreased during this time.
- Twenty-eight percent of Māori adults gambled weekly or more often, compared to 25% of Pacific Island adults, 22.5% of European/Other and 11% of Asians. Rates of regular continuous gambling reduced both for Māori and European/Other since 1999. Rates do not appear to have reduced for Pacific Islanders or Asians. However, more Māori than European/Other or Asians were regular continuous gamblers. This was also the case in 1999.
- Māori had higher levels of non-casino EGM and Instant Kiwi participation than adults in the other main ethnic groups. Relative to European/Other, Māori and Pacific Island adults participated more in card games and housie. Relative to Pacific Island and Asian adults, Māori and European/Other adults more often participated in horse and dog race betting and purchased Lotto and raffle tickets. Pacific Islanders had higher levels of casino EGM participation than Māori and European/Other adults. Asian participation was relatively low for most gambling activities other than casino table games and casino EGMs where it was similar to adults of other ethnicities.
- All ethnic groups most preferred Lotto. Māori and European/Other more often preferred horse and dog race betting than Pacific Islanders or Asians. Māori and Pacific Islanders more often preferred housie. Māori preferred non-casino EGMs more than adults of other ethnicities. Asians least often preferred this gambling activity.
- Māori had high rates of participation in multiple gambling activities and Asians had low rates.
- Māori and Pacific Islanders had higher average monthly gambling expenditure than Europeans/Other and Asians. This was also the case in 1999.
- While expenditure increased across all ethnic groups since 2005, the increases were more substantial for Asians and Pacific Islanders.

### *Ethnicity and gender*

- Males and females, in all ethnic groups, had similar past year participation rates.

### *Ethnicity, adjusting for age*

- After adjusting for age, Māori and European/Other males and females had higher past year participation rates than males and females in the general population. Pacific and Asian males and females participated less than males and females in the total population.
- After adjusting for age, European/Other females, Māori males and females and Pacific males had higher past year non-casino EGM participation compared to males and females in the total population.

### *County of birth and time resident*

- Migrants (72%) participated less in gambling activities during the past year than New Zealand-born (83.5%) adults. Recent migrants (58%) had substantially lower participation than both New Zealand-born and longer-term (75%) migrants.
- Over a half of migrants who did not participate during the past year said this was because of religious or moral reasons.
- Migrants also had lower rates both of regular continuous and infrequent participation. Recent migrants had lower rates of regular non-continuous participation than longer-term migrants.
- Migrants had lower past year participation rates for making bets with friends or workmates, raffles, Lotto, Instant Kiwi, horse and dog race betting, sports betting and non-casino EGMs. They did not differ from local-born adults with respect to casino participation. Recent migrants less often than long-term migrants made bets with friends or workmates, purchased raffles, Lotto or Instant Kiwi tickets, and played non-casino EGMs. Rates were not different for horse and dog race betting and casino gambling. Overall, longer term migrants much more resembled New Zealand-born residents than recent migrants.
- Migrants had fairly similar gambling preferences to local-born adults other than that they less often favoured Instant Kiwi, horse and dog race betting, and non-casino EGMs. Preferences did not vary between recent and long-term migrants.
- Migrants, especially recent migrants, less often took part in multiple gambling activities, had lower average monthly gambling expenditure and less often typically spent over \$10 per month.
- The overall participation findings for migrants and recent migrants are similar to that found in 1999.

### *Education*

- Adults with no formal qualifications (83%) and those with trade or vocational qualifications (84%) had somewhat higher participation than adults with only school qualifications (78%) or a degree (79%). In 1999, adults with vocational or trade qualifications also had higher participation rates; however, so too did those with school qualifications. In this earlier survey, adults with a degree also had relatively low participation, along with adults with no formal qualifications.
- The three groups did not differ with regard to their assessment of whether their gambling had increased overall during the past year. However, adults with no formal qualifications more often than those with degrees were of the view that it had decreased.

- Adults with no qualifications were more likely to be regular continuous gamblers than other adults. Adults with degrees were much less likely to be in this category and more likely to gamble infrequently.
- Relative to adults in the other educational groups, those with a degree less often played non-casino EGMs or purchased Instant Kiwi tickets. Those with no formal qualifications less often bet with friends or workmates or played text games. There were some other participation differences, mainly involving a difference between just two groups. For example, adults with no formal education more often played Keno and housie than did adults with degrees.
- Reflecting the participation findings, adults with degrees less often preferred non-casino EGMs than other adults. They also less often preferred Instant Kiwi than did people in two of the other three education groups. As with participation, there were some additional differences, mostly applying to two groups.
- Adults with degrees and those with no qualifications more often took part in only a single gambling activity during the past year and somewhat less often participated in multiple activities.
- The average monthly gambling expenditure of adults with degrees was less than that of other adults, especially those with no formal education or with trade or vocational qualifications. Adults with degrees also less often typically spent \$100 or more per month on gambling. In 1999, adults with degrees were also under-represented among people who spent larger amounts on gambling. In that survey people without qualifications were over-represented.

### *Occupation*

- Employed adults (83%) more often participated than students, homemakers and retired adults (75%). Unemployed adults (79%) fell between these groups. In 1999 and 2005, employed adults also more often participated than people outside the paid workforce.
- Over half of adults with vocational or trade qualifications who did not participate during the past year said they did not do so for religious or moral reasons.
- Employed adults, relative to students, homemakers and retired adults, somewhat more often were of the view that their gambling had decreased during the past year. Unemployed adults, on the other hand, more often reported a decrease than did people in the other two occupational groups.
- Relatively more unemployed adults than employed adults were regular continuous gamblers. On the other hand, more employed than unemployed adults were regular non-continuous gamblers. Employed adults were over-represented, relative to students, homemakers and retired adults, in the infrequent participation category. In 1999, in contrast, employed rather than unemployed adults were over-represented among regular continuous gamblers.
- Employed adults more often than people in the other two groups made bets with friends or workmates and purchased Lotto and raffle tickets. More employed and unemployed adults, relative to others, played card games, bought Instant Kiwi tickets and participated in casino gambling and overseas internet gambling. Employed adults, relative to those who were students, homemakers or retired, more often participated in horse and dog race betting. Relative to this group and unemployed adults, employed adults had low housie participation. Unemployed adults had much higher participation rates than either of the other groups in non-casino EGMs.
- Consistent with the participation findings, unemployed people more often reported a preference for non-casino EGMs than was the case for employed people. More

unemployed than employed people also preferred house. Employed people more often preferred making bets with friends and workmates than those in the other two groups, and preferred casino gambling and horse and dog race betting more than adults who were students, homemakers or retired.

- People in the latter group somewhat more often than those in the other groups participated in only one gambling activity during the past two weeks. They somewhat less often took part in multiple activities.
- Unemployed adults had the highest average expenditure followed by the employed and student, homemaker and retired groups. The unemployed and employed groups had proportionately more people who spent \$100 or more per month. Similar differences between these groups occurred in 1999. Since 2005, all groups increased their expenditure, but particularly unemployed people whose average expenditure almost doubled.

### ***Religion***

- Past year participation rates were similar for Anglicans, Presbyterians, Catholics and people with no religion. They ranged from 85% to 88%. Other Christians (67.5%) and Other religions (66%) had lower participation rates. All of the foregoing groups had somewhat higher participation rates in 1999. The differences between the groups, however, have not changed.
- Over a half of Other Christians and people of Other religions who did not gamble during the past year gave religious or moral reasons for not participating.
- Relative to Presbyterians and Other Christians, more adults with no religion increased their participation during the past 12 months. Similar proportions in all groups considered that their gambling had decreased.
- The groups differed little with respect to regular continuous gambling. However, there were some differences within the other gambling categories. Other Christians, Other religions and people with no religion had lower rates of regular non-continuous gambling participation than the other groups. These two religious groups also had lower rates of infrequent gambling than people with no religion. This is similar to the 1999 pattern of results.
- Adults in the no religion, Anglican, Presbyterian and Catholic groups had higher past year participation than Other Christians and Other religions in betting with friends or workmates, buying Lotto, raffle and Instant Kiwi tickets, and horse and dog race betting and sports betting. People with no religion more often played cards and non-casino EGMs than Anglicans, Presbyterians and Other Christians and less often bought raffle tickets than Anglicans, Presbyterians and Catholics. Adults of Other religions had low non-casino EGM participation. Other people with no religion also bought Lotto tickets less often than Catholics and more often bet on sports than adults in the other groups apart from Catholics. People with no religion and Catholics had higher rates of participation in casino gambling than Presbyterians and Other Christians. Anglicans less often bought Bullseye than adults in the other groups apart from Presbyterians.
- Adults with no religion more frequently said they most preferred cards than was the case for Anglicans and Other Christians. More adults with no religion and Anglicans preferred to bet with friends or workmates than was the case for adults in the Other Christian group. Lotto was most preferred by all religious groups, ranging from 14% to 21%. Lotto preferences were highest for Catholics and Anglicans and lowest for Other Christians and people with no religion. Adults in the latter group more often favoured Instant Kiwi than Anglicans and Presbyterians. Relatively large numbers of

Catholics and Anglicans favoured horse and dog race betting. This gambling activity was least favoured by Other Christians, Other religions and people with no religion. Adults in the Other religion group less often favoured non-casino EGMs than adults in the other groups.

- Adults of Other religions and Other Christians less often participated in multiple gambling activities than adults in the other groups. Catholics and adults with no religion had the highest rates of participation in multiple activities.
- Catholics and people of no religion had the highest average gambling expenditure and larger proportions who reported spending over \$100 per month. Presbyterians had the lowest expenditure. Although people in the Other Christian and Other religion groups had low overall gambling participation, their average expenditure was higher or similar to that of some of the other religious groups. Catholics also had the highest expenditure in 1999, followed in descending order by Other religions, Anglicans, Presbyterians, people of no religion and Other Christians.

### *Household size*

- People living in two and four person households (both 83%) had somewhat higher past year gambling participation than people living in single households (77%), or households of with four or five or more people resident (76%). The last two groups also had lower participation in 1999.
- The groups did not differ in terms of participant assessment of changes in overall gambling involvement during the past year.
- At least weekly participation was highest in one and two person households and lowest in households of five or more. There was minimal variation with respect to regular continuous gambling. The difference in weekly participation was a consequence of greater proportions of regular non-continuous gamblers in households with four or more people living in them.
- Relative to adults living alone, people living in households with other people had higher past year participation in Instant Kiwi, text games or competitions, casino gambling and non-casino EGMs. Relative to adults living with five or more people, those living alone or with a smaller number of people had higher participation in Lotto. Compared to people living alone, those living in three and five or larger households had higher card game participation. People living in two and four person households purchased raffles more often than those living households of five or more.
- Adults living in households with five or more people more often preferred playing card games and Instant Kiwi than adults who lived alone. In contrast, people in single person households more often favoured Lotto than those living in households of five or more. Relative to adults living in two, three and four-person households, adults who lived alone less often favoured casino gambling.
- The number of gambling activities participated in did not vary much by household size. However, people living alone less often took part in four or more activities during the past year.
- Adults living in two and three person households spent, on average, somewhat more monthly than those in other sized households. In 1999, adults living in households of five or more spent the most, followed by people who lived in two person households. There was little or no difference between people who lived in one, three and four person residences.

## *Personal income*

- Past year gambling participation was highest for people who earned over \$100,000 per annum (88.5%) and lowest for those who earned \$20,000 or less (74%). People in all other income groups participated more than those in the lowest group. People in the highest income group also participated more than people in the second lowest group (\$20,001-\$40,000). In 1999, people in the two lowest groups also had lower overall gambling participation. However, at that time, there was no difference between the other (middle and upper) income groups.
- The income groups did not differ with regard to self-assessed change in gambling participation during the past year.
- Just over a quarter of people in the two highest income groups and around a fifth of those in the two lowest groups participated weekly or more. The difference between the high and low income groups was largely attributable to the much larger proportion of regular non-continuous gamblers in the two highest groups (23.5% and 22%) relative to the two lowest groups (12% and 14%). In 1999, there was no difference between the income groups with respect to weekly or more frequent gambling and the proportions of regular continuous and non-continuous gamblers.
- Adults in the four highest income groups (\$40,001-\$60,000, \$60,001-\$80,000, \$80,001-\$100,000 and over \$100,000) more often made bets with friends and workmates than adults in the two lowest income groups (up to \$20,000 and \$20,001-\$40,000). Adults in the four highest groups more often bought Lotto tickets than those in the two lowest groups. Adults in the two highest income groups had much higher participation in horse and dog race betting than those in the two lowest groups. More adults in all income groups earning over \$20,000 purchased raffle tickets than those in the lowest group. Two of the three higher income groups also purchased raffle tickets more often than those in the second lowest income group. All income groups earning below \$100,000 participated in Bullseye more than the group earning \$100,000 and over. The second highest income group had higher participation in sports betting than the two lowest groups. The three lowest income groups had higher non-casino EGM participation than the three highest groups. The three lowest income groups also had higher involvement in Instant Kiwi than the highest income group. The lowest income group had higher participation in housie than some of the other income groups. The third lowest group participated more often in casino gambling than the lowest group.
- Relative to adults in the lowest income group, more adults in all other groups said that they preferred making bets with friends and workmates. More people in the third highest group than in the lowest group said they most preferred Lotto. More people in the lowest income group, relative to those in the highest and third highest groups, favoured Instant Kiwi. People in the second lowest group also favoured Instant Kiwi more than those in the top group. In contrast to Instant Kiwi preferences, more people in the two highest income groups preferred horse and dog race betting than those in the lowest income group. People in the highest group also more often preferred horse and dog race betting than those in the second and third lowest groups. People in the two lowest groups, relative to those in the second and third highest groups favoured non-casino EGMs.
- People the third lowest and second highest income groups more often participated in four or more gambling activities than those in other income groups.
- Average monthly gambling expenditure was highest in the second highest income group and lowest in the lowest income group. The third lowest income group ranked second in gambling expenditure, followed by the highest income group, the third highest and the second lowest. The groups earning above \$40,001 had larger proportions of people

who typically spent over \$100 monthly. In 1999, the lowest income group also spent less on gambling than the other groups. At that time, however, the highest income group spent substantially more than any of the other groups which, apart from the lowest income group, had similar expenditures.

### *Household income*

- The findings for household income are fairly similar to those for personal income and, for that reason, are not fully summarised here. With regard to weekly or more frequent participation and regular non-continuous gambling, however, there was less variation between the income groups than was found for personal income. There was also somewhat less variation between the income groups with regard to participation in, and preferences for, particular gambling activities.

### *Location*

- Past year gambling participation (75%) was lower in Auckland than in Wellington (81%), Christchurch (82.5%) and the rest of New Zealand (83%). Although participation was lower in Auckland, typical monthly expenditure was higher in that city than elsewhere. Wellington ranked next, followed by Christchurch and the rest of the country. Auckland also had somewhat lower participation in 1999 (84%) relative to Wellington (86.5%), Christchurch (90%) and the rest of New Zealand (87%).

### **Participation in gambling type games not for money or prizes**

- Somewhat less than one in five adults (17%) participated in gambling-type games during the past year.
- Nearly half of people who participated during the past year did so weekly or more often.
- Males, Māori (relative to European/Other and Asian), people aged 44 years and younger, people with school qualifications or higher, people with no religion (relative to all Christian groups other than Catholics) and people living in households of five or more (relative to one and two person households) had high levels of participation.

### **Conclusions**

Gambling participation and official gambling expenditure in New Zealand increased significantly from the late 1980s following the introduction of new gambling activities including lotteries, EGMs and casino table games. After reaching a high point during the 1990s, despite additional forms of gambling being introduced and some existing forms being made more accessible, past year and regular gambling participation declined, particularly regular participation in continuous forms. The proportion of adults who take part in multiple gambling activities also declined. These and some other changes in gambling-related behaviours and beliefs are consistent with the notion of adaptation and suggest that gambling-related problems and harm may have decreased during the past decade. However, self-reported gambling expenditure appears to have recently increased which means, among other things, that the smaller proportion of the population which participates regularly in continuous forms of gambling spends substantially more than in the past. Furthermore, while reductions have

occurred across most sectors of society, wide variations in participation and expenditure remain, with some groups having particularly high levels of involvement in high risk activities. Māori, Pacific Islanders, adults aged 65 years and older, people who lack formal qualifications and unemployed people are in this category. Some of these groups, and some others, have ‘bimodal’ patterns of participation with relatively large numbers of both non-gamblers and regular continuous gamblers. The second report on the NGS (Abbott et al., 2014) examines gambling-related harm in New Zealand, its distribution across the population and comparisons with findings from previous surveys.

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## 1. OVERVIEW AND PURPOSE OF THE PROJECT

### Introduction

This report provides an overview of the first phase of the National Gambling Prevalence and 12 Month Incidence Study (NGS) and presents the gambling participation findings. This is the first report of three. It includes an overview of relevant international and national literature that informed the design of the study, and interpretation and discussion of the findings. The gambling-related harm and problem gambling findings and findings regarding attitudes towards gambling are covered in separate reports.

This section provides background information and an outline of the study objectives.

### Study objectives

The primary aims of the first phase of the NGS are to:

- Inform on detailed changes in gambling participation in New Zealand
- Provide epidemiological information on problem gambling
- Inform on risk and resiliency factors for problem gambling
- Act as a sampling frame for a longitudinal study.

### Gambling and gambling-related harm

Gambling, staking money or other valued possessions on events driven largely or totally by chance, has a long pedigree. There is evidence of gambling in ancient civilisations, prehistoric cultures and indigenous tribal societies (Abbott & Volberg, 1999; Binde, 2005). While widespread, some societies had little or no exposure to gambling until recently. Others experienced long-term alternating cycles of liberalisation and restriction, the latter typically linked to rising public and official concern about gambling eroding morals and the public order (Rose, 2003; Miers, 2004).

During the past 25 years, in many parts of the world, there has been unprecedented growth in gambling availability, participation and expenditure. It has been particularly strong in jurisdictions where electronic gaming machines (EGMs) and large urban casinos were widely introduced. The introduction of state lotteries and other types of lottery including instant lotteries (scratch cards) often preceded these developments. It has been argued that this expansion is quantitatively and qualitatively unique and is affected by interrelated forces that continue to drive the evolution of commercial gambling globally (Abbott & Volberg, 1999). They include the growing legitimacy and acceptance of legal gambling, the intersection of gambling and financial technologies, impacts of the internet, spread of gambling to traditionally non-gambling settings and other globalisation forces.

Following the liberalisation of gambling in the late 20<sup>th</sup> Century, a growing number of people and organisations became concerned about the personal and social harm considered to be associated with gambling. This led to government agencies commissioning general population surveys to assess some of these harms. The major focus was on pathological and problem gambling. While there are numerous historical references and descriptions in early works of fiction to problem gambling and associated personal and social costs, as well as accounts in the

clinical and scientific literature, it was not until 1980 that pathological gambling was formally recognised as a mental disorder. It is currently classified as an addiction (American Psychiatric Association, 2013).

Gambling forms vary considerably. General population and clinical studies have shown that these differences include the potential to lead to the development of problem gambling and associated forms of harm. For example, regular involvement with EGMs, casino table games and betting on racing and sporting events is more often associated with problem gambling than involvement with some other activities including lotteries. The former group of activities are continuous in nature and involve an element of skill or perceived skill (Abbott et al., 2004; Binde, 2011, Stevens & Young, 2010; Walker, 1992).

Increased awareness and understanding of problem gambling and other social costs related to the expansion of commercial gambling has, in many countries, led to legislative and other measures aimed at minimising harm and the establishment of services to assist problem gamblers and other people affected by them. New Zealand was among the first countries to develop services for problem gamblers with a national helpline established in 1993 and clinics developed in major centres during the following few years (Sullivan, Abbott, McAvoy & Arroll, 1994). In the helpline's first year, similar numbers of callers reported having problems with EGMs and horse and dog race betting. Few other gambling forms were mentioned. Ten years later, in 2004, 91% of callers reported problems with EGMs; four percent with horse and dog race betting (Ministry of Health, 2005).

### **Gambling expansion in New Zealand**

During the 1970s and most of the 1980s, legal gambling in New Zealand was largely confined to Golden Kiwi (a state lottery) and on- and off-course betting on horse and dog racing. Significant, albeit undetermined, numbers of people took part in housie (bingo), charitable raffles and 'casino' evenings, prize competitions and other forms of gambling, both legal and illegal. In 1984, 80% of total official gambling expenditure was on track (horse and dog race) betting and 20% on lotteries. New forms of gambling were introduced during the late 1980s, commencing with Lotto in 1987, followed by EGMs in pubs and clubs in 1988 and Instant Kiwi (a scratch lottery) in 1989. From 1987 to 1990, gambling expenditure more than doubled and accounted for 1.5% of household expenditure (Department of Internal Affairs, 1995).

During the 1990s, casinos were established in Christchurch, Auckland, Dunedin and Queenstown. Free to air national television coverage of horse and dog races was introduced with facilities for telephone betting; sports betting was legalised and additional lottery products (Daily Keno and TeleBingo) were provided. Over the decade, total expenditure more than doubled, albeit that annual increases were at a lower rate than during 1987-1990 (Abbott & Volberg, 2000).

Since 2000, a further casino was established in Hamilton. Additional lottery products (e.g. Bullseye) were introduced and internet access provided to Totalisator Agency Board (TAB) betting and Lotteries Commission products. There was strong growth in the number of non-casino EGM venues and machines. The latter reached a peak of 25,221 in 2004. In that year total gambling expenditure was \$2.04 billion and non-casino EGM expenditure accounted for half.

New gambling legislation was passed in 2003 (Gambling Act 2003) and came into effect the following year. The Act was intended to control the growth of gambling and prevent and

minimise gambling-related harm. It placed emphasis on promoting public awareness, harm prevention and minimisation. The Act imposed limits on the number of non-casino EGMs per venue and gave territorial authorities more control over numbers of machines and their locations. In 2007, all non-casino EGMs were connected to a centralised electronic monitoring system that provides information on funds used to gamble, the number and location of machines, tampering with machines and suspected Act contraventions. The Act prohibited the issuing of further casino licenses and precluded existing venues from increasing their gambling opportunities. It also prohibited bookmaking and remote interactive gambling (gambling via the internet, telephone and text messaging). While illegal to offer these forms of gambling in New Zealand, it is not illegal to access offshore sites.

Following passage of the Act, non-casino EGM venues and machine numbers dropped steadily. By 2012, the number of machines had fallen to 17,534, similar to the 2000 total. Machine expenditure also reduced, from \$1.04 billion in 2004 to \$0.85 billion. Since 2004, total gambling expenditure has remained around \$2 billion per annum. The percentage accounted for by non-casino EGMs has reduced to around 40%. While overall expenditure has remained fairly constant it has dropped by 19% in inflation-adjusted terms.

### **New Zealand repeat gambling surveys**

The first gambling participation survey was conducted by the Department of Internal Affairs (DIA) in 1985. The Department repeated this survey at five year intervals until 2005 (Department of Internal Affairs, 2007). These studies employed similar methodology and questions and are unique internationally in the timespan covered. They will be discussed further in other sections of this report. In 1985, 85% of people aged 16 years and older reported taking part in at least one form of gambling during the preceding 12 months. In 1990 and 1995, 90% reported taking part. In 2000 and 2005, participation dropped to 87% and 80% respectively.

The first national study of gambling and problem gambling in New Zealand was undertaken during 1991 (Abbott & Volberg, 1991; Abbott & Volberg, 1996; Volberg & Abbott, 1994). This was also the first national study internationally to use a validated problem gambling measure (the South Oaks Gambling Screen - Revised: SOGS-R). In contrast to the DIA surveys, it employed lifetime and past six month time frames to assess both gambling participation and problem gambling. A repeat of this study, using almost identical methodology, was conducted in 1999 (Abbott & Volberg, 2000; Abbott, 2001). In 1991, 89% of adults reported taking part in some form of gambling during the past six months. The corresponding 1999 figure was 86%. These percentages are virtually identical to those from the 1990 and 2000 DIA surveys.

While there was relatively little change in the percentage of adults who gambled in the past six months from 1991 to 1999, there was a more substantial reduction in the percentage who participated weekly or more often in continuous forms of gambling such as EGMs and horse and dog race betting (reduced from 18% to 10%). There was no change for people who took part this often in non-continuous forms, mainly Lotto and raffles. In 1991, 1.2% of adults were estimated to be current (past six months) probable pathological gamblers and a further 2.1% were estimated to be less serious problem gamblers. The corresponding estimates in 1999 were 0.5% and 0.8%, statistically significant reductions.

In 1991, males, younger adults, Māori, Pacific Islanders and unemployed people were greatly over-represented among people who had experienced gambling problems during the past six months (Abbott & Volberg, 1991). In 1999, Māori and Pacific Islanders remained at high risk but gender, age and socio-economic differences between problem and non-problem gamblers

had diminished to varying degrees (Abbott & Volberg, 2000). While male gender and younger age, along with low income and single status, are almost universal risk factors for problem gambling (Abbott et al., 2013; Williams, Volberg & Stevens, 2011), gender differences have greatly diminished in some jurisdictions, typically those in which EGMs have become widely distributed (Abbott et al., 2004; Volberg, 2004; Productivity Commission, 2010). New Zealand national helpline records are consistent with the survey findings. Initially, the great majority of problem gambler callers were male. By 2000, gender differences were minimal.

Both of the aforementioned series of surveys included much more information about gambling and related matters, including reported gambling expenditure and attitudes towards gambling. As mentioned, the 1991 and 1999 national studies also covered problem gambling.

Gambling participation and problem gambling questions were included in the New Zealand Health Surveys (NZHS) conducted in 2002/03, 2006/07 and 2011/12 (Ministry of Health, 2006; 2009; 2012). The gambling findings from the 2011/12 survey have not yet been fully reported. In contrast to the DIA surveys and 1991 and 1999 national surveys, which were presented to participants as gambling studies, the latter were presented as general health studies. The DIA and NZHS interviews were conducted face-to-face; the 1991 and 1999 surveys primarily involved telephone interviews, although sub-samples of participants were also interviewed face-to-face in greater depth (Abbott, 2001; Abbott & Volberg, 1992).

The NZHS studies found a slight reduction in past year gambling participation from 2002/03 to 2006/07. Somewhat higher reductions were found for some forms including non-casino EGMs and track (horse and dog race) betting. Although the NZHSs included problem gambling measures in 2002/03 a non-standard group of questions was used. Consequently the findings cannot be compared with those from other studies. The 2006/07 and 2011/12 surveys included the Problem Gambling Severity Index (PGSI), a validated current (past 12 months) measure. In 2006/07, 0.4% of adults were estimated to be problem gamblers, 1.4% were estimated to be at moderate risk and a further 3.5% at low risk. These estimates cannot be directly compared with those derived from the SOGS-R or other problem gambling measures. However, methods have been developed to make adjustments for methodological differences between gambling studies and adjusted rates will be considered later in this report.

A few other gambling and problem gambling surveys have also been conducted. Their findings are somewhat more difficult to interpret because of methodological differences between studies.

### **Gambling in New Zealand today**

The rapid growth of gambling expenditure from 1987, initially generated by the expansion of lottery products and the liberalisation of EGMs, followed by the establishment of casinos, has passed. Since 2004, total gambling expenditure has reduced in inflation-adjusted terms with a fall in non-casino EGM spending accounting for much of this reduction in more recent years. Overall, gambling participation appears to have increased early in the expansion phase, plateaued, and then started to decline from the late 1990s. There are indications that this reduction was greatest with respect to regular participation in continuous forms of gambling including EGMs and track betting. There are also indications that the prevalence of problem gambling and associated harms may have reduced during the 1990s. However, some caution is required in inferring change from just two surveys, even when similar methodologies have been used in both studies. There is less certainty about what has happened since 1999 owing to the differing methodologies and measures used in the relevant surveys.

Overall it appears that, as the Productivity Commission put it for Australia, “gambling is now a ‘mature’ industry” (Productivity Commission, 2010, p.8). While ‘mature’, this does not mean it is stagnant. The various industry sectors continue to seek opportunities to grow new markets and expand overall market share. Recently, special legislation was enacted to permit SkyCity to increase the number of table games and EGMs in the Auckland casino. Furthermore, gambling technologies are evolving rapidly with advances in information technology and innovations in EGM design and online services.

### **The National Gambling Study (NGS)**

A major purpose of the NGS is to assess changes since the previous national gambling and problem gambling surveys were conducted, especially in relation to the 1999 national study that provided detailed information on various aspects of gambling participation and problem gambling. Comparison with gambling participation and attitude findings from the DIA survey series from 1985 to 2005 is also important as is comparison with the participation and problem gambling findings from the NZHSs. Comparison of findings from the NGS and 2011/12 NZHS survey will assist in gauging the reliability of their respective findings. Furthermore, it may be possible to combine data from these two studies to obtain more precise prevalence estimates and boost statistical power to examine some other relationships in greater detail than would otherwise be the case.

The research agreement between the Ministry of Health and AUT University required that, where possible, questions and measures would be used that allow comparisons to other relevant national and international data sets. It also required that sufficiently large samples of Māori, Pacific and Asian participants be included to ensure meaningful analysis. As indicated earlier, a further important purpose of the study was to recruit participants and lay the foundations for a 12 month follow-up study that may extend to 36 months or beyond. Large-scale jurisdiction-wide prospective studies of this type are currently underway in Sweden and Australia and these are the major international data sets that will be examined in relation to the NGS and its longitudinal extension. The foregoing requirements and considerations, along with a finite budget, provided directives and constraints that contributed to the design of the study and content of the questionnaire.

Early on, the decision was made to use household recruitment and computer-assisted face-to-face interviews. This is an expensive method, especially when carried out nation-wide. One of the consequences of this decision was that the sample was smaller than it could have been if other methods such as telephone interviews had been used. This means there is less statistical power to provide more precise estimates and examine relationships between factors of potential interest, both in the present survey and in its longitudinal extension. Considerations in reaching this decision are provided in the next few paragraphs. The requirement for boosted ethnic sub-samples, although providing additional information, means increased sample complexity and somewhat reduced overall statistical power.

The wide diversity of measures and methodologies used in gambling surveys internationally is a significant problem in the interpretation of findings. This matter was examined a number of years ago (Abbott & Volberg, 1999; Productivity Commission, 1999). A more recent review (Sassen, Kraus & Buhringer, 2011) concluded that despite awareness of this issue and discussion of the importance of methodological consistency, comparability of problem gambling estimates remain highly limited by significant variation between studies with regard to survey description, administration format, exclusion criteria, assessment instrument, cut-off scores, sample frame and reference period. They concluded that the assessment of differences within and between

countries may be improved by using valid and reliable instruments and by applying comparable survey methodology in well-defined populations.

Williams and Volberg (2010) also considered the relevant literature and conducted a study to examine the impact of survey administration format on problem prevalence rates. They found that rates were influenced by how the study was presented (as a gambling or health and recreation study), the administration format (face-to-face or telephone) and the exclusory criteria (past year gambling or no gambling requirement). They concluded that surveys with more accurate rates will be those that:

- Achieve a good response rate (generally much higher using face-to-face recruitment and administration)
- Minimise known sampling bias (face-to-face formats generate more representative samples because they are better at recruiting young people, males and people in ethnic groups that are almost always under-represented in telephone surveys)
- Produce the least response distortion (face-to-face interviews generally lead to more candid/valid reporting)
- Do not erroneously exclude genuine problem gamblers or include non-genuine problem gamblers (best to present a problem gambling screen to all participants not just those who report gambling above a certain amount).

They further concluded that when carrying out a gambling survey it is best either to replicate the methodology of a previous survey or, if there is none, to use a face-to-face computer-assisted method.

Williams, Volberg and Stevens (2011) took this work further when they examined 190 jurisdiction-wide adult prevalence studies conducted world-wide and assessed the impact of the main methodological elements influencing prevalence rates, namely assessment instrument, time frame used to assess problem gambling, how the survey is described to prospective participants, how the survey is administered and the threshold criterion that determines when problem questions are asked. These impacts were quantified and weights were developed that enable standardised rates to be calculated; rates that would have been obtained using the more valid approach. These weights were subsequently applied to the 190 studies to provide an assessment of differences in prevalence rates, both over time and across jurisdictions. They will be used in the present study to assist in interpreting problem gambling prevalence estimates in New Zealand surveys conducted since 1999.

As mentioned earlier, the DIA and NZHS studies employed face-to-face household interviews. The 1991 and 1999 national surveys, on the other hand, primarily used telephone interviews. The decision to use face-to-face interviews in the present study means that some caution is required when comparing the findings with those of the latter surveys. It will, however, assist in making comparisons with the DIA and NZHS findings, albeit that consideration will need to be given to the NZHSs being presented as general health rather than gambling studies.

Given the importance of comparison with the findings of the 1991 and 1999 studies, a case could have been made for a strict replication, namely a two-phase survey commencing with landline telephone interviews selected from electronic directories, followed by in-depth face-to-face interviews with sub-samples of identified problem and non-problem gamblers. However this would have compromised comparisons being made with the majority of other New Zealand gambling and problem gambling studies. Furthermore, the case for a strict replication would need to take into account the fact that over a decade has passed since the 1999 study and a further decade since the 1991 study. During this time, there have been changes in the way

problem gambling is conceptualised and measured, landline telephone ownership has declined markedly and response and participation rates for telephone interviews have dropped considerably. As a consequence, a strict replication was no longer possible and an attempt to do this would have compromised other study objectives.

Other reasons for using face-to-face interviews include enabling more detailed information to be collected, establishing rapport and increasing on-going participation in the 12 month and subsequent follow-up interviews.

While the decision to employ face-to-face interviews necessitates caution when comparing the present study findings with those of the 1991 and 1999 national surveys, it is probably less than what would have been required if telephone interviews had been used, resulting in a low response rate and non-representative sample.

Inclusion of the PGSI (Ferris & Wynne, 2001) will facilitate comparison with past 12 month prevalence estimates from the 2006/07 and 2011/12 NZHSs and many recent national studies (including the major ethnic minority populations in New Zealand, particularly Māori, Pacific and Asian) and international studies. It will also allow comparison with the scores and profiles of people seeking help from specialist gambling services in New Zealand. As mentioned earlier, the 1991 and 1999 national studies used the SOGS-R to measure both lifetime and current (past six months) problem gambling. The PGSI had not been developed at the time and the SOGS and SOGS-R were the most widely used measures in general population gambling studies. It was decided to also use the SOGS-R, as administered in the earlier national studies, in the present study. This would provide a lifetime measure, which the PGSI does not provide, as well as allow more direct comparison with both the lifetime and current problem gambling findings from the earlier studies. However, this meant using both six month (SOGS-R) and 12 month (PGSI) time frames as well as repetition of a number of questions. From trial interviews and cognitive testing it was found that switching time frames confused participants and annoyed some of them. It was decided to drop the current frame from the SOGS-R but retain the lifetime frame. This is how the original SOGS was presented, prior to its adaptation in 1991 (Abbott & Volberg, 1991; 1992).

In summary, the NGS design is a national survey of adults aged 18 years and older, employing face-to-face household recruitment and interviews. Māori, Pacific and Asian people were over-sampled. The first phase of the study took place during 2012. Major participation findings are presented and discussed in this report. Consenting participants were followed up and re-interviewed 12 months later. A range of measures was included in the study. Measures, in addition to gambling participation and problem gambling measures, included leisure activities, major life events, mental health and quality of life, substance use and misuse, health conditions, social connectedness, the New Zealand Deprivation Index and demographic information including cultural identity.



## **2. PROJECT PROCESSES**

### **2.1 Ethics approval**

Ethical approval for the conduct of the project was granted by the Northern Y Regional Ethics Committee of the Health and Disability Ethics Committees on 26 May 2011 (Reference: NTY/11/04/040). An amendment to the process which pertained to the participants followed up at 12 months receiving a \$20 koha (gift for recognition of time given to the survey) and information about the prevalence phase of the study was granted by the Health and Disability Ethics Committees on 9 July 2013 (Reference: NTY/11/04/040/AM02).

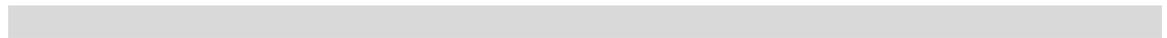
During the research the following measures were taken to protect the identity of the participants:

- All participants were allocated a code by the research team to protect their identities
- No personal identifying information has been reported.

In addition, participants were informed that participation in the research was voluntary and that they could withdraw at any time, prior to data reporting.

### **2.2 Reference group**

A Reference Group was established specifically for this project to provide advice and recommendations throughout the project, particularly at key stages such as questionnaire development and data reporting. Reference group members comprised academics and others knowledgeable in the conduct and interpretation of large-scale national studies, statisticians, problem gambling clinicians, Government representatives (Department of Internal Affairs and Ministry of Health), gambling industry representatives, and Māori, Pacific and Asian problem gambling treatment sector representatives.



### 3. RESEARCH METHODS

#### 3.1 Survey instrument

The survey instrument<sup>2</sup> for the 2012 National Gambling Survey was extensive and covered 11 key areas:

1. Leisure activities and gambling participation
2. Past gambling and recent gambling behaviour change
3. Problem gambling
  - Problem Gambling Severity Index  
The nine-item Problem Gambling Severity Index (PGSI) (Ferris & Wynne, 2001) was used to measure severity of gambling problems in a past 12 month time frame.
  - South Oaks Gambling Screen  
The South Oaks Gambling Screen-Revised (SOGS-R) was used to measure lifetime gambling problems (Abbott & Volberg, 2006; Lesieur & Blume, 1987).
  - Help-seeking behaviours (including readiness to change)  
The Gambling Readiness to Change Scale was based on the Alcohol Readiness to Change questionnaire (Rollnick et al., 1992) and is a nine-item scale with three items each measuring the three stages of pre-contemplation, contemplation and action from Prochaska and DiClemente's (1986) stages of change model.
  - Gambling in households
4. Life events and on-going hassles
5. Gambling in New Zealand
6. Mental health
  - General psychological distress  
The Kessler-10 (K-10) questionnaire was included to provide a continuous measure of general psychological distress that is responsive to change over time. The K-10 has been well validated internationally. Its brevity and simple response format are attractive features. It also produces a summary measure indicating probability of currently experiencing an anxiety or depressive disorder (Kessler & Mroczek, 1994).
  - Quality of life  
Quality of life was assessed by the WHOQoL-8, an eight item version of a widely used measure. This short form has been used in a number of countries, is robust psychometrically, and overall performance is strongly correlated with scores from the original WHOQoL instrument (Schmidt, Muhlan & Power, 2005).

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<sup>2</sup> Available from the Gambling and Addictions Research Centre, Auckland University of Technology website: [www.aut-grc.ac.nz](http://www.aut-grc.ac.nz)

7. Alcohol use/misuse  
To identify hazardous alcohol consumption or active alcohol use disorders (including alcohol abuse or dependence) a brief version (AUDIT-C, three-item scale) of the Alcohol Use Disorders Identification Test (AUDIT) (Saunders et al., 1993) was administered.
8. Substance use/misuse
  - Tobacco
  - Other drugs
9. Health conditions
10. Social connectedness  
Questions around social connectedness were based on those used in the Victorian Gambling Study (Victorian Responsible Gambling Foundation, 2011; 2012).
11. New Zealand Deprivation Index  
The New Zealand Deprivation Index measures the level of socio-economic deprivation in meshblock geographical areas. It is created from Census data. The 2006 version was used, based on the latest census at the time. The index data are based on average socio-economic circumstances of the population in a meshblock and not to individuals. It is a ten-item scale with a score of 1 indicating residence in the least deprived decile and a score of 10 indicating residence in the most deprived decile (Salmond, Crampton & Atkinson, 2007).
12. Demographics

## **3.2 Pilot survey**

The National Research Bureau (NRB) conducted all the survey field work.

A pilot survey was conducted with 272 respondents from 24 September to 1 November 2011. The pilot survey had nationwide coverage, with the exception that the Canterbury District was excluded, due to the impact of the recent earthquakes in the area.

The aims of the pilot were to:

- Field test the questionnaire to ensure that there were no significant problems
- Assess the average interview length
- Provide an indicative response rate against a funder-contracted target of 65%.

The final response rate for the pilot survey was 45%, well below the targeted rate. Whilst a longer time-in-field, with recovery attempts may have lifted this rate slightly, the major factor attributed to the low rate was the length of the interview (on average the pilot interview took 61 minutes to complete).

A subsequent meeting between the Ministry of Health, AUT University, members of the Reference Group and NRB, in November 2011, resulted in the deletion of a number of questions to reduce the expected average duration of the interview to around 45 minutes.

The pilot highlighted some questionnaire wording/routing changes and show card amendments to improve overall comprehension, questionnaire flow and reduce possible interviewee irritation.

A one page introductory letter in Chinese was also produced for the main survey as a way of assisting with the recruitment of Chinese respondents.

### **3.3 Overview of the survey methodology**

A general overview of the survey methodology is outlined in this section. Specific details of survey sampling procedures are outlined in section 3.5.

Key aspects of the survey methodology were as follows:

- The survey sampling was at three levels: first meshblocks (small areas) were selected, then dwellings were selected within each meshblock, and finally an eligible respondent was selected for an interview within each dwelling.
- Random selection procedures were used at all three of these sampling levels in order to minimise sampling bias. These procedures were used to ensure known, non-zero probabilities of selection for all final respondents.
- Interviews were conducted face-to-face with respondents in their homes (dwellings).
- Interviews were conducted using Computer-Assisted Personal Interviewing (CAPI) software; that is, interviewers used laptop computers to administer the interview.
- The survey had nationwide coverage.
- All adults were eligible; that is, gamblers and non-gamblers. The survey was representative of the New Zealand adult population. 'Adults' for the National Gambling Survey was defined as people aged 18 years or older.
- The interview length varied depending on the respondent's level of involvement with gambling activities.
- The household call pattern, call backs to households, and the interviewers' approach was designed to achieve an expected response rate of 65%. Up to seven calls were made to a household to contact the eligible respondent. Household calls were made on different days (week days and weekend days) and at different times of the day, in order to maximise the chance of contacting people.
- There was no inducement or coercion of respondents. To this end, a consent form was signed or approved by respondents before the interview began. Koha was given to participants at the follow-up interview after 12 months, as reciprocity in recognition for respondents' time.
- There were 'core' (non-screened) and 'screened' households within each meshblock. Interviews conducted in screened households boosted the number of interviews conducted with Māori, Asian and Pacific respondents.
- Interviewers were trained on the specifics of the National Gambling Survey. Interviewers regularly uploaded completed interviews to NRB's intranet.

### **3.4 Survey plan**

This survey is a part of the 2011 to 2013 National Gambling Survey. A diagram showing the three surveys that comprise the National Gambling Survey is shown overleaf.

**1. Pilot Survey – October 2011**

Sample size = 272 interviews.

62 meshblocks were randomly selected nationwide (with the exception of the Canterbury District, due to the effects of the earthquakes).

All procedures were designed to mimic the main survey.



**2. Main Survey – March to October 2012**

Sample size = 6,251 interviews.

1,000 meshblocks were randomly selected nationwide.



**3. Incidence (or Longitudinal) Survey - March to November 2013**

Sample size = 3,745 interviews. This survey was a follow-up of respondents interviewed in the main survey.

All main survey respondents who provided contact details were re-contacted, where possible.

For comparative purposes, respondents were contacted 12 months after the original interview date, or as near to this date as practically possible.

### **3.5 Survey population and frame**

The sampling procedures used for the survey are specified in this section.

#### **3.5.1 Target population**

##### **Geographic coverage**

Geographically, the survey extended across all areas of the North Island, South Island and Waiheke Island. Other off-shore islands, on shore islands, waterways and inlets were not covered by the survey.

Primary sampling units (or PSUs) for the survey were Statistics New Zealand's meshblock areas. PSUs containing less than nine dwellings were excluded from the survey frame; that is, they could not be selected.

##### **Dwellings coverage**

The survey covered the eligible population living within permanent, private dwellings.

Expressed in terms of the Census descriptions for various dwelling types, the phrase 'permanent, private dwelling' is defined as either a separate house, or two or more houses or flats joined together or a flat or house joined to a business or shop or a bach, crib or hut (as long as they are not attached to a work camp), that are used as private dwellings.

Private dwelling types that were not included in the survey were temporary private dwellings such as caravans, cabins or tents in a motor camp, or boats. All non-private dwellings were excluded from the survey. Examples of this type of dwelling are: hotels, motels, guest houses, boarding houses, homes for the elderly, hostels, motor camps, hospitals, barracks and prisons. This is a limitation of the current project.

## **Eligible respondents**

All people aged 18 years and older (that is, adults) who were usually resident within permanent private dwellings were eligible for selection as respondents.

The term 'usually resident' excluded people who were present within the dwelling at the time of interview but who usually resided elsewhere (either within NZ or overseas).

### **3.5.2 Survey frame**

#### **Description**

The survey frame was a list of meshblocks that fell within the geographical coverage of the survey. A meshblock is the smallest geographical statistical unit for which data are collected and processed by Statistics New Zealand. They provide the aggregation into larger statistical units such as area units, territorial local authorities and regions.

In the 2006 Statistics Census, there were 41,384 meshblocks defined in New Zealand. As previously described, off-shore islands (excluding Waiheke Island), on shore islands, waterways and inlets were removed from the survey frame, and meshblocks with less than nine dwellings were also removed from the survey frame. A total of 34,728 meshblocks remained in the survey frame. While these two processes excluded 6,656 meshblocks (or 16% of all meshblocks), they excluded only two percent of all dwellings from the survey frame.

#### **Frame to respondent differences**

The survey frame provided the first stage in the sampling process which proceeded to dwelling selection within the meshblock and then on to respondent selection within the dwelling. The procedure for this selection process is described in the Sample Design section.

### **3.5.3 Sample design - stratification**

#### **Stratification by District Health Board**

As a replication of the sampling procedure used in the 2006/07 New Zealand Health Survey, the frame of meshblocks was first stratified according to District Health Board (DHB) areas. There are 21 DHB areas in New Zealand.

#### **Sorting by urban area**

Within each of the DHBs, further sorting was applied according to type of area. There are four types of area:

- Main urban areas, which have populations of 30,000 or more.
- Secondary urban areas, which have populations between 10,000 and 30,000.
- Minor urban areas, which have populations between 1,000 and 10,000.
- Rural areas, which sometimes include rural centres where there are populations between 300 and 1,000 in a reasonably compact area.

The main urban areas, secondary urban areas, minor urban areas and the rural areas were sorted separately within each DHB.

### **Rationale for stratification**

The stratification according to DHB and urban areas enabled the allocation of sample in a way that enhanced its ability to reflect any diversity of respondent behaviour which is related to geographical location. It also provided a platform from which some targeting of ethnic minorities was implemented.

#### ***3.5.4 Sample design - sampling stages***

Sampling was via a systematic probability proportional to size (PPS) random selection of PSUs from the sample frame of PSUs. Full sample design sampling stages information is detailed in Appendix 1.

#### ***3.5.5 Sample design - sample sizes***

### **Primary sampling units (PSUs)**

For the survey, 1,000 Statistics New Zealand meshblocks (PSUs) were sampled. The rationale for selecting 1,000 PSUs related to controlling intra-cluster correlation, an acceptable degree of precision in the results and the likely estimated attrition for follow-up surveys, the likely incidence of problem gamblers, and balancing the cost of data collection against the available budget. The degree of over-sampling of specific ethnic groups was a requirement of the project contract. Full sample design sample sizes information is detailed in Appendix 1.

#### ***3.5.6 Sample design - substitution***

PSUs were selected without replacement. This meant that each meshblock in the sample frame was selected once. There was no substitute for non-response.

#### ***3.5.7 Sample size and sample expectation***

Interviews were conducted with 6,251 respondents. Based on the sampling methodology outlined above, the expected sample size for the survey was 6,000 respondents.

### 3.5.8 Composition of the achieved sample for gender and age groups

Sub-sample category	Unweighted frequency	Weighted frequency	Unweighted percent	Weighted percent
<b>Gender</b>				
Male	2,642	2,998	42.3	48.0
Female	3,609	3,253	57.7	52.0
<i>Total</i>	<i>6,251</i>	<i>6,251</i>	<i>100.0</i>	<i>100.0</i>
<b>Age groups</b>				
18 - 24 years	571	795	9.1	12.7
25 - 34 years	1,069	1,133	17.1	18.1
35 - 44 years	1,261	1,193	20.2	19.1
45 - 54 years	1,195	1,204	19.1	19.3
55 - 64 years	922	883	14.7	14.1
65+ years	1,226	1,037	19.6	16.6
<i>Total</i>	<i>6,244<sup>#</sup></i>	<i>6,245</i>	<i>99.8<sup>+</sup></i>	<i>99.9<sup>+</sup></i>

<sup>#</sup> Seven respondents refused all three age questions: date of birth, age at last birthday and age group

<sup>+</sup> Does not add to 100% due to rounding

### 3.5.9 Composition of the achieved sample for ethnic groups

The table below shows un-prioritised frequencies; that is, some respondents identified with more than one of these four broad ethnic groups and have been included in each group they identified with.

Ethnic group(s)	Frequency	Percent of Responses	Percent of Respondents	Target Frequency <sup>†</sup>	Percent complete
European/Other	4,035	58.9	64.5	3,400	118.7
Māori	1,164	17.0	18.6	1,200	97.0
Pacific	830	12.1	13.3	700	118.6
Asian	827	12.1	13.2	700	118.1
<i>Total</i>	<i>6,856</i>	<i>100.0</i>	<i>109.7</i>	<i>6,000</i>	<i>104.2<sup>#</sup></i>

<sup>#</sup> 6,251 respondents/6,000 expected respondents

<sup>†</sup> The target frequency figures are based on the sample design, including boosting. They are not based on New Zealand population proportions. Please note that these are expected frequencies.

It is important to bear in mind that the target frequencies shown here are based on the variables described previously. In particular, the response rate of 65% that was targeted for both the Core (non-screened) and Screened samples is one of the key factors in determining the target.

The composition of the observed (unweighted) sample relative to the expected (weighted) composition for ethnic groups is provided below.

Sub-sample category	Unweighted frequency	Weighted frequency	Unweighted percent	Weighted percent
<b>Ethnic group</b>				
European/Other	4,035	5,036	64.5	80.6
Māori	1,164	634	18.6	10.1
Pacific	830	322	13.3	5.2
Asian	827	512	13.2	8.2
<i>Total</i>	<i>6,856</i>	<i>6,504</i>	<i>109.6</i>	<i>104.1</i>

## **3.6 Data collection and quality control**

### **3.6.1 Collection mode and period**

The 2012 National Gambling Survey interview team consisted of 144 National Research Bureau professional interviewers. Interviews were conducted in respondents' homes, with the interviewer typing responses directly into a laptop computer using Statistics Netherlands Blaise Computer Assisted Personal Interview (CAPI) software. Show cards with pre-determined response categories were used to assist respondents, where appropriate.

The data collection (fieldwork) period was from 17 March to 8 October 2012.

### **3.6.2 Interviewer training**

Interviewers received a one-day training course on how to conduct the 2012 National Gambling Survey interviews, in addition to their standard social research training. Material used in the training included:

- The origin and purpose of the survey
- Public information materials (invitation letter, information brochure)
- Meshblock maps for household enumeration and selection
- Instructions for sampling dwellings
- Kish grids for respondent selection
- Core and screened household sampling instructions
- Details on how to administer the survey
- Consent forms
- Questionnaire content
- Response category show cards
- Thank you cards
- Cultural competence and safety training
- Tests designed to assess the training comprehension.

Every interviewer was then provided with a comprehensive training manual, encompassing all of the above, to which they could refer at any time.

In addition, field supervisors were trained as interviewers and received additional training on:

- Contact and support with interviewers
- Progress and evaluation forms for interviewers.

Throughout the survey, supervisors met regularly with their teams to assess performance and address any concerns, whilst any updates regarding the questionnaire were advised through the NRB's Lotus Notes intranet. NRB head office staff also kept an overview of progress and encouraged, where required, extra effort.

### **3.6.3 Enumeration**

Before selecting households to participate in the National Gambling Survey, interviewers re-enumerated the dwellings in their area (meshblock) to take account of the number of new dwellings built and the number of buildings demolished since the last 2006 Census enumeration. Enumeration counts are used for calculating probabilities of selection and for weighting.

### **3.6.4 Call pattern**

The call pattern used in the National Gambling Survey was an important component of achieving high response performance.

#### **Number of calls**

The 'call' refers to one visit on one day during a particular time band (e.g. 5 pm to 8 pm). NRB conducted a total of up to seven calls at each sampled dwelling, at different times of the day and on different days of the week, before accepting that dwelling as a non-contact.

#### **Spacing of calls**

Making all seven calls within the first week or two after a dwelling is first approached does not capture people away from their dwelling for that period. Therefore, the procedure used was to spread the seven calls across the survey month in which the meshblock was issued. This helped not only in the case of people who were temporarily away, but also helped for people who were busy work-wise, socially or for family reasons when their dwelling was first approached.

#### **Recovery attempts**

Where a meshblock or interviewer-meshblock combination produced a below-standard response rate, it was targeted for recovery. In general, a different interviewer was assigned to re-visit that meshblock to re-attempt the soft refusals, with an explanation to refusers as to why the interviewer was approaching them again.

### **3.6.5 Call-backs**

An initial call, followed by up to six call-backs, was made to each dwelling (that is, seven calls in total). However, few homes required this many calls. Interviewers could also go to an eighth call if they secured an appointment on the seventh call.

As well as being spread over a month, when needed (as described above), call-backs were spread throughout the week, for example, 10 am Saturday, 2 pm Sunday, 6 pm Monday, 4.30 pm Wednesday. People have certain routines, and in this way interviewers were more likely to find someone at home on at least one of these occasions. The rule was "different day, different time".

As calls were made on weekend days and week days, interviewers were able to combine some call-backs with interview appointments.

Call-backs were separated by at least two hours. The exception was in rural areas a long way from interviewers' homes, where it was logical to make another call-back sooner, before the interviewer left the meshblock.

### **3.6.6 Interviews check and validation**

Checking of interviewers' work was undertaken using four different auditing methods. These were paperwork, telephone, physical, and electronic audits.

#### **Paperwork audits**

Area supervisors and NRB in-house field staff undertook checks of interviewers' paperwork. This covered checking meshblock maps, sampling sheets, respondent selection (screening sheets) and time sheets to ensure the correct household selection procedure had been used and that the correct respondent had been chosen.

#### **Telephone audits**

This step refers to the field supervisor in each area telephoning the household to confirm that the interview was conducted and to check that the respondent is the one stated. It is rare for interviewers who are properly trained and field-supported to falsify interviews; nevertheless NRB perform a 20% field check on each interviewer as a precautionary measure.

#### **Physical audits**

Physical audits by area supervisors were conducted on the first completed meshblock of new interviewers, to ensure that the work of new interviewers met the required standard. In addition to this, supervisors physically audited (visited) the meshblocks of all interviewers (regardless of experience) at random during the duration of the survey.

#### **Electronic audits**

Electronic audits of data, such as interview duration and question timings, were also carried out; that is, survey para-data were analysed. Electronic audits help to ensure the integrity of interview data as they are a valuable guard against the falsification of interviews and ensure that supervisory staff are quickly alerted to any interviews that have been falsified.

### **3.6.7 Informed consent**

The National Gambling Survey was voluntary, relying on the goodwill of participants. All adults selected for the survey were given an invitation letter from the Ministry of Health (Appendix 2) and an information brochure (Appendix 3). If they agreed to take part, they were asked to sign a consent form (Appendix 4). Invitation to take part in the 12-month follow-up survey was sought at the end of the baseline survey.

## **3.7 Data processing**

This section outlines the processes used to collect, check and output the interview data for the 2012 National Gambling Survey.

### **3.7.1 Capture**

Questionnaire responses were entered directly on interviewers' laptops, using Statistics Netherlands' Blaise (version 4.8) Computer-Assisted Personal Interview (CAPI) software.

### **3.7.2 Coding**

Many of the questions used single pre-coded response options, while some allowed multiple pre-coded responses. However, there were some exceptions.

Additionally there were questions that offered an 'other' category, where respondents could specify non-standard responses. Each 'other' category response was recorded in the Blaise computer software and then either re-categorised to an existing code, coded to a newly set-up 'standard' code, or coded as 'other' by NRB coders.

In cases where respondents were unwilling or unable to answer questions, interviewers recorded these responses as either 'refused' or 'don't know'. In general, these responses were not offered to respondents; for example, they were not listed on the respondent show cards.

### **3.7.3 Security of information**

Any information collected in the survey that could be used to identify individuals was treated as strictly confidential. Data were transferred from interviewers' laptops to NRB offices via NRB's secure Lotus Notes intranet upload facility.

Names and addresses of people and households who participated in the survey have not been stored with response data.

### **3.7.4 Checking and editing**

NRB undertook routine checking and editing of the data throughout the field period of the National Gambling Survey. In addition, the final unit record data set was edited for range and logic. Any inconsistencies found have been remedied by returning to the interviewer and, if necessary, to the respondent for clarification and correction.

### **3.7.5 Imputation**

No explicit unit record or item imputation was used in the survey to deal with either unit record or item non-response. 'Refused' and 'Don't know' responses (i.e. item non-response) were typically zero percent, although for a very few questions, these responses were in the one percent to two percent range. The household and personal income questions were the only questions in the National Gambling Survey to have significant levels of item non-response (these were 5.7% for personal income and 11.4% for household income).

## 3.8 Response rates and interview durations

### 3.8.1 Response rates

This section outlines the response rates achieved, provides sample numbers and completion percentages, shows the final outcomes of contact attempts, provides the formulae used for calculating response rates and estimating the number of eligible households, and provides further detailed response rate analysis.

The unweighted response rate for the National Gambling Survey sample overall was 63.7% (as summarised in the table below), and the weighted response rate was 63.6%.

The response rate calculations use variables recorded on the sampling sheets by interviewers. The outcome of the final call to each sampled dwelling is the particular variable used in the response rate calculation. Note that these are the final outcomes, as interviewers could call at a selected dwelling up to a maximum of seven times (an initial call and up to six call-backs), on different days and at different times of the day. A final outcome can be recorded at any one of the seven calls to a dwelling.

Sample	Interviews	Estimated eligibles	Response rate <sup>#</sup>	Total dwellings visited
1,000 meshblocks	6,251	9,807	63.7%	23,182

<sup>#</sup> The response rate is calculated by dividing the number of interviews by the number of estimated eligibles.

### 3.8.2 Interview procedure/protocol

The large majority of interviews were conducted in respondents' own homes. A minority of interviews were undertaken in other settings of the respondents' choosing. In most cases this was at the respondents' place of paid employment. Interviewers read out questions from their laptop and displayed show cards.

The protocol of each interviewer followed was:

- Households selected to participate in the survey were offered the household letter, which was signed by Kevin Woods, the Director-General of the Ministry of Health.
- All NRB interviewers wore a photo ID card, which showed their three-digit interviewer ID number, and also NRB's 0800 number.
- Interviewers also carried a laminated copy of the letter. It was useful to have a copy that could be shown to the 'door-opener', which could be re-used (e.g. would not get damaged, wet in the rain, get ripped) especially given that a letter was generally not left in the screened sample households where no-one was ('ethnically') eligible to take part and also, for example, was not left when the interviewer had a household refusal.
- NRB staff introduced themselves as being from NRB and stated that they were there to conduct a survey on behalf of the Ministry of Health, led by Professor Max Abbott.
- Every household was offered a survey brochure.

### Minimising respondent burden and maximising response rates

The questionnaire and operational processes were carefully designed to ensure that the impact on respondents was minimised. For example:

- Only one eligible adult was selected per dwelling

- Well-tested and largely well-proven questions were used
- Professionally trained interviewers conducted the interview
- Appointments were taken for interviews to be conducted at a time to suit the respondent and their family
- Language, culture and gender matching of eligible respondents and interviewer were undertaken, where necessary
- A proxy respondent could be used in the case of severe ill health or cognitive disability.

The following methods were used to maximise response rates:

- In-field support of interviewers
- Use of well-designed call pattern processes, allowing for up to seven call-backs at differing times of the week and day
- Revisiting ‘closed’ meshblocks during a recovery phase (i.e. when visiting households where no contact had been established or the selected respondent was unable to take part at that time but did not refuse to participate)
- Using a different interviewer.

### 3.8.3 Response rate calculations

As noted above, the response rate calculations use variables recorded on the sampling sheets by interviewers. The outcome of the final call to each sampled dwelling is the particular variable used in the response rate calculation. Full details are presented in Appendix 1.

### 3.8.4 Response rates by area (DHB)

A relatively even distribution of response rates across New Zealand is desirable, rather than high response rates in some areas and low response rates in other areas, although some variation is to be expected. To examine the distribution of response rates by area, the DHB variable was chosen (see table overleaf).

DHB No.	DHB	No. of interviews	No. of mesh-blocks (PSUs)	Unweighted response rate (%)	Weighted response rate (%)
01	Northland	271	48	61	62
02	Waitemata	680	107	63	62
03	Auckland	715	102	61	60
04	Counties Manukau	956	116	62	63
05	Waikato	557	93	65	64
06	Lakes	192	33	65	66
07	Bay of Plenty	363	58	69	69
08	Tairāwhiti	135	17	75	76
09	Taranaki	145	25	63	63
10	Hawke’s Bay	262	43	68	69
11	Whanganui	106	18	69	67
12	Midcentral	226	40	63	64
13	Hutt	215	37	56	55
14	Capital and Coast	398	68	63	62
15	Wairarapa	50	10	61	60
16	Nelson Marlborough	136	26	68	68
17	West Coast	22	6	54	55
18	Canterbury	474	88	65	66
19	South Canterbury	45	9	69	70
20	Otago	180	32	66	66
21	Southland	123	24	64	65
	<i>Overall</i>	<i>6,251</i>	<i>1,000</i>	<i>64</i>	<i>64</i>

### 3.8.5 Interview durations by range

Interview durations were timed within each laptop from the keystroke entry of the first item of information to the last, of those items specifically integral to the questionnaire. There was a wide variation in the interview duration: 15% of interviews were less than 30 minutes, 67% were 30 to 59 minutes, and 18% were 60 minutes or longer. A breakdown of interview durations by 10 minute range is shown in the table below.

Minutes	Frequency	Percent	Cumulative frequency	Cumulative percent
< 30	951	15.21	951	15.21
30 - 39	1,638	26.20	2,589	41.42
40 - 49	1,607	25.71	4,196	67.13
50 - 59	939	15.02	5,135	82.15
60 - 69	578	9.25	5,713	91.39
70 +	538	8.61	6,251	100.00
<i>Total</i>	<i>6,251</i>	<i>100.0</i>	<i>NA</i>	<i>NA</i>

## 3.9 Weightings

To ensure that the findings from the survey are representative of the New Zealand population, each of the 6,251 interviewed participants was assigned a survey weight.

### 3.9.1 Overview of the weighting process

Survey weights applied to the 2012 National Gambling Survey were as follows:

- Selection weights. These are applied to each interview to adjust for the probability of selection into the sample. Specifically they deal with the probability of selecting the meshblock, the household and the individual.
- Benchmark adjustments. These were applied to adjust for any disproportion in the age, gender or ethnicity of participants relative to the Census (2006) expectations.

### 3.9.2 Respondent selection weights

A full description of the respondent selection weight procedure is detailed in Appendix 1. In brief, each respondent typically represented between 200 and 500 adults in the New Zealand population.

### 3.9.3 Benchmark adjustments

The population weights are further adjusted by comparing the sums of the population weights within 24 demographic cells with the Census 2006 counts within those cells. The nested cells used for these comparisons were as follows:

- Gender (2 levels)
- Age group (3 levels)
- Ethnicity (4 levels).

The population weights are adjusted by the factor:

$$\frac{E_i}{O_i}$$

Where:

$E_i$ : is the Census 2006 count for the  $i$ th.cell

$O_i$ : is the sum of the population weights for the  $i$ th.cell

### 3.10 Data analysis

#### 3.10.1 Variance estimation

The sample design for the 2012 National Gambling Survey was a stratified three stage cluster design, with the strata being the District Health Board regions (21), the primary sampling units (PSUs) being Census 2006 meshblocks (1,000), the secondary sampling units (SSUs) being occupied private dwellings, and the tertiary sampling unit (TSUs) being a person aged 18 years or above in the dwelling. The selection weights (inverse of the probability of selecting a person) were modified for non-response and then post-stratified to a population table, gender (male or female) by age group (18-39 years, 40-59 years, 60+ years) by ‘prioritised’ ethnic group (Māori, Pacific, Asian, European/Other).

The Jackknife method of producing replicated estimates was used to estimate sample errors<sup>3</sup> (Rust, 1985). For each replicate, a PSU respondent’s weights were set to zero and the other respondents’ weights in the same stratum as the PSU were multiplied by  $m/(m-1)$ , where  $m$  is the number of sampled PSUs in the stratum. These weights were then calibrated to the three-way population table mentioned in the previous paragraph. In all, 987 replicate weights were produced corresponding to the PSUs which had respondents. These weights were produced using the survey package written by Thomas Lumley in R (R Core Team, 2013).

#### 3.10.2 Confidence intervals

##### Proportions

As many of the subpopulation estimates of proportions (e.g. preferred gambling activity by problem gambling status) either had small sample sizes or small estimates, the method of constructing confidence intervals using the normal approximation leads to intervals whose coverage is not close to the nominal level, for example a 95% confidence interval may have an actual coverage of 90%. So, as in earlier New Zealand gambling surveys, the method proposed by Korn and Graubard, and assessed in the New Zealand context by Gray, Haslett and Kuzmich (2004), was used with two modifications.

The method Korn and Graubard suggest is to use an “exact method” of constructing a confidence interval for binomial variables. Their suggestion is the well-known Clopper-Pearson

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<sup>3</sup> Specifically the JKN method since the sample was stratified.

approach. However, rather than use the actual sample size in the Clopper-Pearson formula, they suggest using the “effective” sample size, which is the actual sample size divided by the design effect<sup>4</sup> of the complex survey. As they were dealing with situations where the number of PSUs minus the number of strata (M-L, for example) was small, they also modified the effective sample size by a ratio of t-values squared; the numerator having n-1 degrees of freedom, where n is the final number of respondents; the denominator having M-L degrees of freedom.

The first modification was to use a different exact method, the equal-tailed Jeffreys prior interval because it has better coverage properties than the Clopper-Pearson interval (Brown, Cai, & DasGupta, 2001). The second modification was to dispense with the t-value adjustment since both n and M-L were generally over 30, at which point a t-value is very close to a z-value and hence the ratio is very close to 1.

## Counts

Where the estimate was a count or continuous variable (e.g. average number of gambling activities, or average amount of money lost gambling) the usual normal approximation was used.

### 3.10.3 Standardised estimates

In order to make comparison with estimates from surveys conducted in other countries, some estimates (e.g. problem gambling status by gender and ethnicity) were standardised to the World Health Organisation (WHO) World Standard Population Distribution (%), based on world average population between 2000 and 2025 which appears as Table 4 in the report Age Standardization of rates: A new WHO standard (Ahmad, Boschi-Pinto, Lopez, Murray, Lozano, & Inoue, 2001).

The table is presented in five-year age groups (e.g. 15-19 years), so to get the standardised percentage of 18 and 19 year olds; 40% of the percentage was used, which amounts to assuming the age distribution of 15-19 year olds is uniform, which is not quite the case.

### 3.10.4 Logistic regression

In order to identify risk factors for problem gambling, logistic regression was carried out using outcome variables of PGSI problem gambling (Yes/No), PGSI moderate-risk plus problem gambling (Yes/No), SOGS probable pathological gamblers (Yes/No), and SOGS problem plus probable pathological gamblers (Yes/No). Bivariate analyses were first carried out to examine associations between the individual factors and outcome measures, and the best subset of the individual factors was identified for the multivariate analyses. These analyses are presented in the companion reports to this report.

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<sup>4</sup> The design effect is the ratio of the variance of the estimator under the complex sample design to the same estimator under a simple random sample design of the same size. It is an inflation/deflation factor for the variance due to using a design different from a simple random sample.

## 4. RESULTS

This Chapter details the results of data analyses focusing on gambling participation (Section 4.1) and changes over time and comparisons (Section 4.2).

### 4.1 Gambling participation

#### 4.1.1 Type of gambling activities engaged in

Table 1 and Table 2 indicate the wide variety of gambling and gambling-like activities that New Zealanders aged 18 years and over participated in during the 12 months prior to the survey as well as the various settings in which they take place and the modalities by which they are accessed. Past year and frequent (weekly or more often) participation estimates are provided for the total adult population (Table 1) and past year gamblers (adults who engaged in any form of gambling during the past year) (Table 2).

**Table 1: Total participation in gambling activities in past 12 months and weekly or more often**

Gambling activity	Total participation % (95% CI)			
	Past year		Weekly or more often	
Cards for money (not in casino)	4.5	(3.9 - 5.2)	0.3	(0.2 - 0.5)
Poker for money/prizes (commercial venue in NZ)	1.8	(1.4 - 2.3)	0.1	(0.1 - 0.2)
Poker for money/prizes (friends/family private residence)	3.2	(2.7 - 3.9)	0.1	(0.1 - 0.3)
Poker for money/prizes online	0.5	(0.3 - 0.8)	0.1	(0.1 - 0.3)
Bets with friends/workmates for money/prizes	15.3	(14.1 - 16.5)	0.6	(0.4 - 0.9)
Text game or competition	2.9	(2.3 - 3.5)	0.3	(0.1 - 0.5)
New Zealand raffle/lottery	47.1	(45.5 - 48.7)	3.0	(2.6 - 3.6)
Lotto online	5.0	(4.3 - 5.8)	1.6	(1.2 - 2.0)
Lotto from a store	60.8	(59.3 - 62.3)	16.2	(15.1 - 17.3)
Keno online	0.7	(0.5 - 1.0)	0.1	(0.0 - 0.2)
Keno from a store	2.2	(1.9 - 2.7)	0.4	(0.3 - 0.6)
Instant Kiwi tickets or other scratch tickets	33.2	(31.7 - 34.7)	3.1	(2.6 - 3.6)
Housie or bingo	1.7	(1.3 - 2.0)	0.2	(0.2 - 0.4)
Horse/dog race betting (at the track)	8.3	(7.5 - 9.3)	0.2	(0.1 - 0.4)
Horse/dog race betting (TAB in person)	7.8	(7.0 - 8.7)	0.9	(0.7 - 1.2)
Horse/dog race betting (TAB telephone, online, interactive TV)	3.0	(2.5 - 3.7)	0.6	(0.4 - 0.9)
Horse/dog race betting (overseas betting organisation or TAB)	0.4	(0.2 - 0.7)	0.1	(0.0 - 0.2)
Sports betting (TAB at event)	3.0	(2.4 - 3.6)	0.3	(0.2 - 0.6)
Sports betting (TAB in person)	3.1	(2.5 - 3.7)	0.2	(0.1 - 0.4)
Sports betting (TAB telephone, online or interactive TV)	2.0	(1.5 - 2.6)	0.2	(0.1 - 0.5)
Sports betting (overseas TAB, organisation/website)	0.4	(0.2 - 0.6)	0.1	(0.0 - 0.2)
Casino table games or EGMs (overseas)	3.8	(3.2 - 4.4)	0.0	(0.0 - 0.1)
Casino table games or EGMs (NZ)	9.7	(8.7 - 10.7)	0.2	(0.1 - 0.3)
Casino table games (NZ)	3.9	(3.2 - 4.7)	0.0	(0.0 - 0.0)
Casino EGMs (NZ)	8.4	(7.5 - 9.4)	0.1	(0.0 - 0.2)
Pub EGMs	12.2	(11.2 - 13.3)	1.2	(0.9 - 1.5)
Club EGMs	5.7	(4.9 - 6.4)	0.5	(0.3 - 0.7)
Short-term speculative investments	0.9	(0.7 - 1.2)	0.2	(0.1 - 0.3)
Overseas internet gambling for money/prizes	0.7	(0.4 - 1.0)	0.1	(0.0 - 0.2)

**Table 2: Past year gamblers' participation in gambling activities in past 12 months and weekly or more often**

Gambling activity	Past year gamblers' participation % (95% CI)			
	Past year		Weekly or more often	
Cards for money (not in casino)	5.6	(4.8 - 6.5)	0.4	(0.3 - 0.6)
Poker for money/prizes (commercial venue in NZ)	2.3	(1.8 - 2.9)	0.2	(0.1 - 0.3)
Poker for money/prizes (friends/family private residence)	4.0	(3.3 - 4.8)	0.2	(0.1 - 0.3)
Poker for money/prizes online	0.6	(0.3 - 1.0)	0.2	(0.1 - 0.3)
Bets with friends/workmates for money/prizes	19.0	(17.6 - 20.4)	0.8	(0.6 - 1.1)
Text game or competition	3.6	(2.9 - 4.4)	0.3	(0.1 - 0.6)
New Zealand raffle/lottery	58.6	(56.8 - 60.4)	3.8	(3.2 - 4.4)
Lotto online	6.2	(5.4 - 7.2)	2.0	(1.5 - 2.5)
Lotto from a store	75.6	(74.1 - 77.1)	20.1	(18.8 - 21.5)
Keno online	0.9	(0.6 - 1.2)	0.1	(0.1 - 0.3)
Keno from a store	2.8	(2.3 - 3.3)	0.5	(0.3 - 0.7)
Instant Kiwi tickets or other scratch tickets	41.3	(39.6 - 43.1)	3.8	(3.2 - 4.5)
Housie or bingo	2.1	(1.7 - 2.5)	0.3	(0.2 - 0.4)
Horse/dog race betting (at the track)	10.4	(9.3 - 11.5)	0.2	(0.1 - 0.5)
Horse/dog race betting (TAB in person)	9.7	(8.7 - 10.9)	1.1	(0.8 - 1.5)
Horse/dog race betting (TAB telephone, online, interactive TV)	3.8	(3.1 - 4.5)	0.7	(0.5 - 1.1)
Horse/dog race betting (overseas betting organisation or TAB)	0.5	(0.3 - 0.8)	0.1	(0.0 - 0.3)
Sports betting (TAB at event)	3.7	(3.0 - 4.5)	0.4	(0.2 - 0.8)
Sports betting (TAB in person)	3.8	(3.1 - 4.6)	0.3	(0.2 - 0.5)
Sports betting (TAB telephone, online or interactive TV)	2.5	(1.9 - 3.2)	0.3	(0.1 - 0.6)
Sports betting (overseas TAB, organisation/website)	0.5	(0.2 - 0.8)	0.1	(0.0 - 0.2)
Casino table games or EGMs (overseas)	4.7	(4.0 - 5.5)	0.0	(0.0 - 0.1)
Casino table games or EGMs (NZ)	12.0	(10.9 - 13.3)	0.2	(0.1 - 0.4)
Casino table games (NZ)	4.9	(4.0 - 5.8)	0.0	(0.0 - 0.1)
Casino EGMs (NZ)	10.5	(9.4 - 11.7)	0.1	(0.1 - 0.3)
Pub EGMs	15.2	(13.9 - 16.5)	1.5	(1.1 - 1.9)
Club EGMs	7.0	(6.2 - 8.0)	0.6	(0.4 - 0.9)
Short-term speculative investments	1.1	(0.8 - 1.5)	0.2	(0.1 - 0.4)
Overseas internet gambling for money/prizes	0.8	(0.5 - 1.2)	0.1	(0.0 - 0.3)

Lotto was the gambling activity most often participated in with more than a half of adults having taken part during the past 12 months (60.8% from a store; 5% online) followed by a New Zealand lottery or raffle (47.1%), Instant Kiwi or other scratch tickets (33.2%) and bets with friends or workmates (15.3%). Somewhat lower rates applied to EGMs (12.2% at a pub, 8.4% at a casino and 5.7% at a club), betting on horse or dog races (8.3% at the track, 7.8% at a TAB, 3.0% at a TAB via telephone, online or interactive television), casino table games (3.9% in New Zealand), betting on sports events (3.0% via the TAB at an event, 3.1% at a TAB and 2.0% at a TAB via telephone, online or interactive television), playing cards for money (not at a casino) (4.5%), playing poker for money or prizes (3.2% with friends or family at a private residence, 1.8% at a commercial venue in New Zealand and 0.5% on-line), playing a text game for money or prizes (2.9%), playing keno (2.2% from a store, 0.7% online) and playing housie or bingo (1.7%). Just less than one percent (0.9%) reported making short-term speculative investments in the past year. Only a small number (0.7%) engaged in overseas internet gambling for money or prizes. Apart from Lotto, relatively small numbers of people reported participating weekly or more often in other forms of gambling.

#### 4.1.2 Type of gambling activities engaged in by gender, age and ethnicity

Figure 1 shows past year participation in gambling activities by gender. It is evident that there is no difference between males and females with respect to overall past year gambling participation (any gambling activity). However there are differences in some activities. Males are more likely than females to bet with friends and workmates and participate in horse/dog race betting, casino gambling generally, sports betting, card games, casino table games and making short-term speculative investments. Females are more likely to purchase raffle or lottery tickets and Instant Kiwi or other scratch tickets and play housie or bingo. There were no gender differences with respect to Lotto, non-casino and casino EGMs, Keno, Bullseye and overseas internet gambling. There was also no difference with respect to text game or competition involvement.

**Figure 1: Past year participation in each activity by gender**

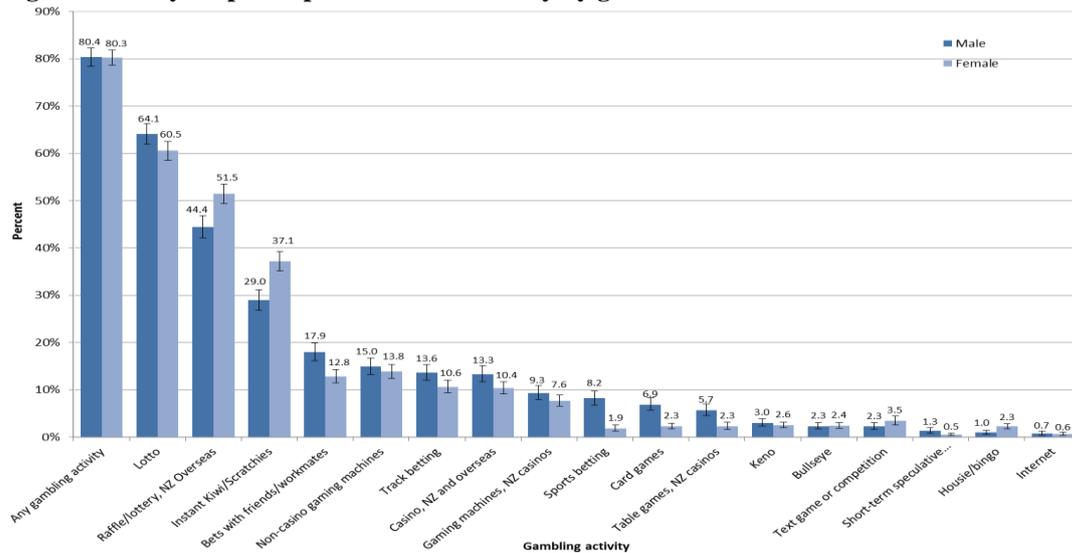


Figure 2 examines past year gambling participation by age and gender. No significant differences are evident.

**Figure 2: Past 12 month gambling participation by age and gender**

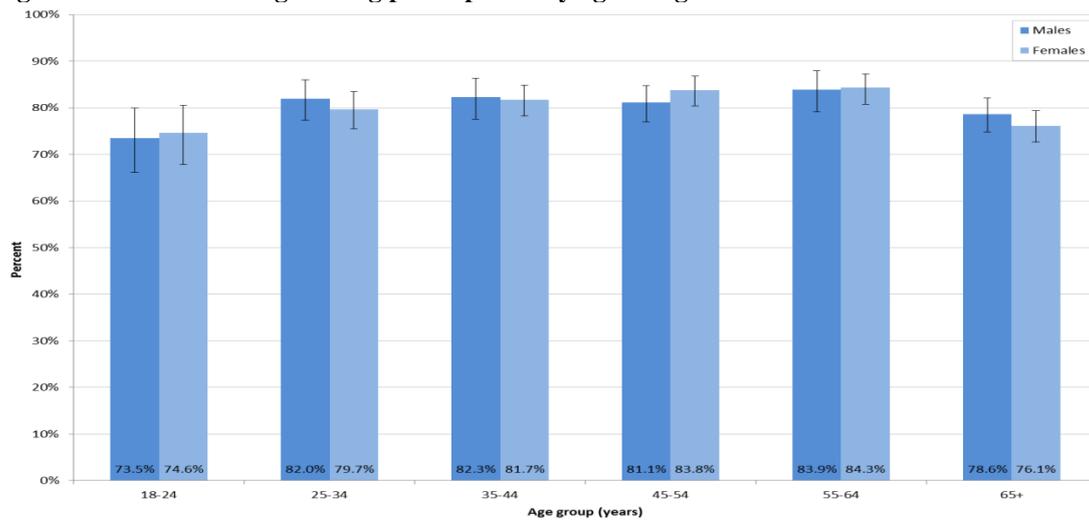


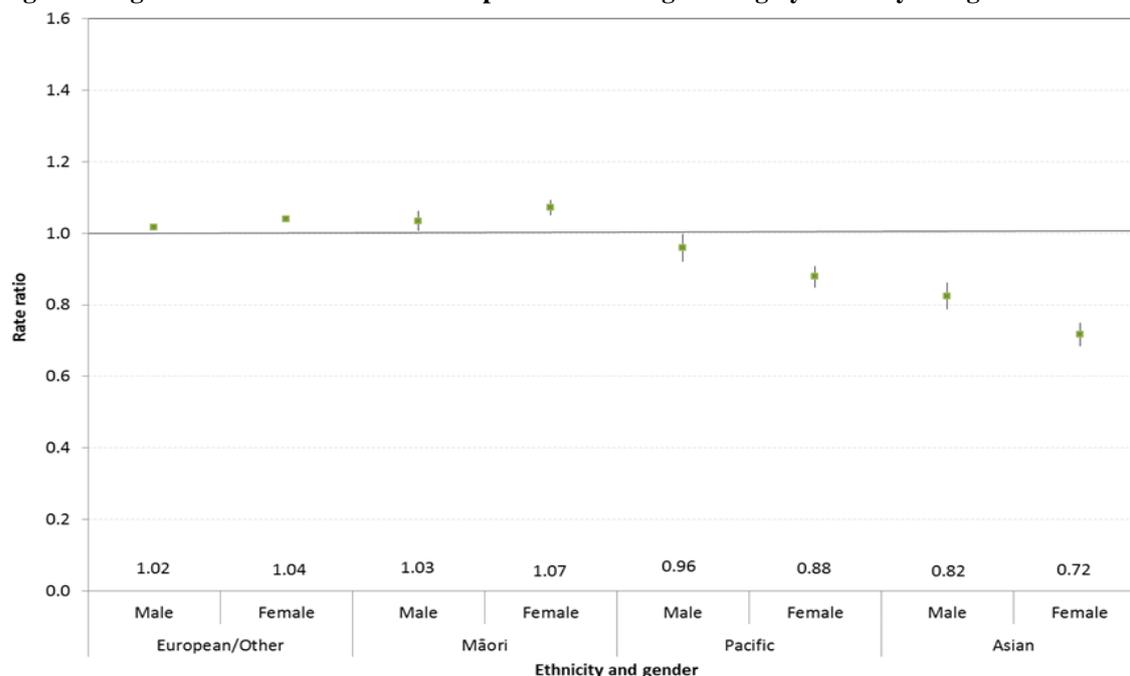
Table 3 considers participation by ethnicity and gender. Māori and European/Other have the highest participation (85.0% and 82.4% respectively). Pacific adults have lower participation than these two groups (74.5%). The Asian group has lower participation than all three of the other groups (61.2%). Within each of the four ethnic groups none of the apparent slight gender differences are likely to be statistically significant<sup>5</sup>.

**Table 3: Past 12 month gambling participation by ethnicity and gender**

Ethnic group	Gender	Past year participation % (95% CI)	
		Total adults	
European/Other	Males	81.7	(79.3 - 83.9)
	Females	83.2	(81.4 - 84.8)
	<i>Total</i>	82.4	(81.0 - 83.8)
Māori	Males	83.7	(79.5 - 87.3)
	Females	86.2	(83.0 - 89.0)
	<i>Total</i>	85.0	(82.4 - 87.4)
Pacific	Males	78.1	(72.1 - 83.3)
	Females	71.1	(66.6 - 75.4)
	<i>Total</i>	74.5	(70.5 - 78.2)
Asian	Males	65.7	(59.9 - 71.2)
	Females	57.3	(52.0 - 62.5)
	<i>Total</i>	61.2	(57.2 - 65.2)

Figure 3 shows that after adjusting for age, Māori and European/Other males and females were more likely to have participated in gambling during the past year compared to males and females in the total population. Pacific and Asian males and females were less likely to have gambled during this period.

**Figure 3: Age standardised rate ratios for past 12 months gambling by ethnicity and gender**



<sup>5</sup> When confidence intervals overlap, it is unlikely that there are statistically significant differences between groups; however, this cannot be confirmed without statistical testing.

Table 4 examines past 12 months participation in the different forms of gambling by age. As mentioned previously, people in the youngest (18-24 years) and oldest (65+ years) groups are less likely to gamble on any form than adults of other ages. Younger adults (18-24 years and 25-34 years) more frequently participated in card games, Instant Kiwi or other scratch tickets, sports betting, casino table games, casino EGMs and non-casino EGMs. Younger adults, especially those aged 18-24 years, were less likely to purchase Lotto or raffle tickets. Adults in the 35-44 years, 45-54 years and 55-64 years groups had similar levels of engagement across all gambling forms. Relative to these groups, older adults (65+ years) had lower levels of participation in making bets with friends or workmates, text games or competitions, Lotto and overseas internet gambling.

**Table 4: Gambling participation by activity in the last 12 months by age group, total adult population**

Gambling activity	Prevalence for total adults % (95% CI)					
	18 - 24 years	25 - 34 years	35 - 44 years	45 - 54 years	55 - 64 years	65+ years
Any gambling activity	74.0 (69.1 - 78.4)	80.8 (77.8 - 83.5)	82.0 (79.2 - 84.6)	82.5 (79.9 - 84.8)	84.1 (81.2 - 86.7)	77.3 (74.7 - 79.7)
Card games	10.0 (7.0 - 13.7)	9.1 (7.0 - 11.5)	3.6 (2.5 - 5.1)	2.6 (1.8 - 3.8)	1.3 (0.6 - 2.3)	1.3 (0.7 - 2.1)
Bets with friends/ workmates	19.2 (15.1 - 23.8)	18.2 (15.4 - 21.3)	17.6 (15.2 - 20.3)	14.9 (12.6 - 17.5)	14.5 (12.0 - 17.4)	7.2 (5.8 - 9.0)
Text game or competition	4.7 (2.8 - 7.3)	5.0 (3.2 - 7.3)	3.6 (2.6 - 5.0)	2.3 (1.5 - 3.5)	1.3 (0.6 - 2.6)	0.4 (0.1 - 0.8)
NZ raffle/lottery	27.9 (23.2 - 33.0)	44.9 (41.0 - 48.7)	53.7 (50.2 - 57.1)	51.6 (48.3 - 55)	55.6 (51.7 - 59.5)	50.3 (47.1 - 53.5)
Lotto	33.8 (29 - 38.9)	60.8 (57.1 - 64.5)	68.0 (64.7 - 71.2)	70.5 (67.3 - 73.6)	71.3 (67.9 - 74.5)	61.6 (58.5 - 64.6)
Keno	1.8 (0.7 - 3.7)	3.0 (2.1 - 4.2)	3.6 (2.5 - 5.0)	2.7 (1.8 - 3.8)	3.0 (1.9 - 4.5)	2.3 (1.6 - 3.3)
Bullseye	1.3 (0.4 - 2.9)	2.6 (1.6 - 4.2)	2.8 (1.9 - 3.9)	2.7 (1.9 - 3.8)	2.7 (1.7 - 4.0)	1.8 (1.2 - 2.8)
Instant Kiwi tickets/ other scratch tickets	45.8 (40.4 - 51.2)	40.9 (37.2 - 44.8)	29.4 (26.5 - 32.5)	30.4 (27.5 - 33.5)	28.9 (25.6 - 32.4)	26.4 (23.8 - 29.1)
Housie or bingo	2.5 (1.4 - 4.1)	1.8 (1.2 - 2.8)	1.2 (0.7 - 2.0)	1.2 (0.7 - 1.8)	2.0 (1.2 - 3.2)	1.5 (0.9 - 2.3)
Horse/dog race betting	14.1 (10.5 - 18.3)	12.6 (10.0 - 15.5)	12.6 (10.4 - 15.0)	10.6 (8.7 - 12.8)	13.3 (10.8 - 16.1)	10.0 (8.3 - 11.9)
Sports betting	10.5 (7.1 - 14.9)	9.2 (7.0 - 11.8)	4.0 (2.8 - 5.6)	3.1 (2.1 - 4.3)	2.2 (1.3 - 3.6)	1.4 (0.9 - 2.3)
Casino table games or EGMs (NZ and overseas)	19.1 (15.3 - 23.4)	17.5 (14.7 - 20.7)	9.0 (7.3 - 11.0)	9.2 (7.4 - 11.2)	10.6 (8.1 - 13.4)	7.2 (5.6 - 9.2)
Casino table games (NZ)	10.6 (7.4 - 14.5)	7.1 (5.1 - 9.4)	2.3 (1.5 - 3.5)	1.9 (1.2 - 2.9)	2.4 (1.4 - 3.9)	0.9 (0.4 - 1.9)
Casino EGMs (NZ)	12.2 (9.2 - 15.8)	12.8 (10.2 - 15.7)	6.2 (4.8 - 7.9)	6.9 (5.4 - 8.7)	7.7 (5.6 - 10.1)	5.9 (4.4 - 7.7)
Non-casino EGMs	27.8 (23.1 - 32.8)	21.0 (17.9 - 24.3)	12.0 (10.0 - 14.3)	9.9 (8.1 - 12.1)	10.3 (8.1 - 12.8)	8.2 (6.6 - 10.1)
Short-term spec. investments	0.3 (0.1 - 1.0)	1.3 (0.5 - 2.5)	1.0 (0.4 - 1.9)	0.8 (0.4 - 1.6)	1.0 (0.5 - 1.9)	0.9 (0.4 - 1.8)
Overseas internet gambling	1.1 (0.5 - 2.0)	1.9 (0.9 - 3.5)	0.7 (0.3 - 1.5)	0.1 (0.0 - 0.5)	0.2 (0.1 - 0.7)	- -

In Table 5, past 12 months participation in the different gambling activities is considered by ethnicity. Relative to European/Other and Asian, Māori and Pacific adults participated more often in card games and housie or bingo. They participated more often than European/Other in Keno and Bullseye. Māori were more likely to purchase Instant Kiwi and other scratch tickets

and to participate in non-casino EGMs than adults in the other ethnic groups. Māori and European/Other more often purchased raffle or lottery and Lotto tickets than Pacific and Asian adults. They also had higher levels of participation in betting on horse and dog racing. Pacific adults had higher levels of participation in casino EGMs than people in the European/Other and Māori groups. Asian adults had low levels of participation relative to the other groups in bets with friends and workmates, raffles or lotteries, Lotto, Instant Kiwi or other scratch tickets, housie or bingo, horse or dog race betting, sports betting and non-casino EGMs.

All ethnic groups had very low levels of overseas internet gambling with no differences between them.

More extensive socio-demographic information relating to past year participation in the various gambling forms is provided in Appendices 5 and 6.

**Table 5: Gambling participation by activity in the last 12 months by ethnicity, total adult population**

Gambling activity	Prevalence for total adults % (95% CI)							
	European/Other		Māori		Pacific		Asian	
Any gambling activity	82.4	(81.0 - 83.8)	85.0	(82.4 - 87.4)	74.5	(70.5 - 78.2)	61.2	(57.2 - 65.2)
Card games	4.2	(3.4 - 5.0)	10.0	(8.0 - 12.3)	7.0	(5.2 - 9.2)	3.4	(2.3 - 5.0)
Bets with friends/ workmates	16.3	(14.9 - 17.7)	18.1	(15.5 - 20.9)	14.1	(11.3 - 17.3)	6.1	(4.5 - 8.1)
Text game or competition	3.0	(2.4 - 3.8)	3.3	(2.3 - 4.7)	2.7	(1.6 - 4.3)	1.6	(0.8 - 2.8)
NZ raffle/lottery	50.6	(48.7 - 52.5)	52.6	(49.2 - 55.9)	43.2	(39.0 - 47.4)	24.3	(21.4 - 27.5)
Lotto	63.9	(62.2 - 65.6)	67.7	(64.5 - 70.8)	56.9	(52.9 - 60.9)	47.0	(43.1 - 51.0)
Keno	2.1	(1.6 - 2.6)	5.8	(4.4 - 7.4)	6.7	(5.0 - 8.8)	3.4	(2.3 - 5.0)
Bullseye	2.1	(1.6 - 2.6)	4.4	(3.3 - 5.7)	3.7	(2.6 - 5.2)	2.6	(1.6 - 4.0)
Instant Kiwi tickets or other scratch tickets	34.7	(32.9 - 36.5)	42.1	(38.8 - 45.5)	31.3	(27.4 - 35.4)	20.1	(17.2 - 23.4)
Housie or bingo	1.2	(0.9 - 1.6)	4.5	(3.3 - 5.9)	6.1	(4.1 - 8.8)	0.9	(0.4 - 2.0)
Horse/dog race betting	13.5	(12.3 - 14.9)	13.1	(11.0 - 15.5)	6.5	(4.4 - 9.4)	2.8	(1.7 - 4.3)
Sports betting	5.2	(4.4 - 6.2)	6.8	(5.1 - 8.7)	5.5	(3.3 - 8.5)	2.7	(1.8 - 4.0)
Casino table games or EGMs (NZ overseas)	11.7	(10.5 - 13)	10.4	(8.5 - 12.5)	13.8	(11.0 - 17.1)	13.6	(11.1 - 16.5)
Casino table games (NZ)	4.0	(3.2 - 5.0)	3.0	(1.9 - 4.4)	3.6	(2.3 - 5.5)	5.6	(4.0 - 7.5)
Casino EGMs (NZ)	8.2	(7.1 - 9.4)	7.5	(5.9 - 9.3)	12.3	(9.5 - 15.4)	9.7	(7.5 - 12.2)
Non-casino EGMs	14.5	(13.2 - 15.9)	26.4	(23.7 - 29.3)	15.0	(12.1 - 18.3)	4.2	(2.9 - 5.9)
Short-term speculative investments	0.9	(0.6 - 1.3)	0.7	(0.3 - 1.3)	0.2	(0.0 - 0.7)	2.3	(1.3 - 3.8)
Overseas internet gambling	0.7	(0.4 - 1.1)	1.3	(0.7 - 2.2)	0.6	(0.2 - 1.6)	0.8	(0.3 - 1.7)

#### 4.1.3 Gambling activities by frequency of participation

Table 6 shows further detail regarding frequency of participation in gambling activities. In contrast to Table 1 and Table 2 some activities are grouped, in part, to facilitate comparison with findings from previous surveys and studies. Just over a fifth of adults report gambling at least

once a week and a further fifth less than once a week but at least once a month. Over a third said they did so less than monthly and a fifth did not report gambling during the past year.

**Table 6: Participation in gambling activities by frequency of participation**

Gambling activity	Frequency of participation % (95% CI)							
	At least once a week		Less than once a week but at least once a month		Less than once a month but at least once in the last year		Not participated	
Any gambling activity	22.3	(21.1 - 23.6)	22.1	(20.8 - 23.3)	35.9	(34.4 - 37.4)	19.8	(18.4 - 20.9)
Any non-‘Lotto and/or raffles/lotteries only’	16.9	(15.8 - 18.0)	15.9	(14.7 - 17.0)	20.1	(18.8 - 21.4)	47.1	(45.6 - 48.6)
Lotto and/or raffles/lotteries only	5.4	(4.7 - 6.0)	6.2	(5.5 - 6.9)	15.8	(14.7 - 16.9)	72.7	(71.4 - 74.0)
Any non-‘Lotto-only’ gambling activity	19.5	(18.4 - 20.7)	19.4	(18.2 - 20.6)	30.1	(28.7 - 31.6)	31.0	(29.6 - 32.4)
Lotto-only	2.7	(2.3 - 3.2)	2.7	(2.2 - 3.1)	5.8	(5.1 - 6.4)	88.8	(87.9 - 89.7)
Card games	0.5	(0.3 - 0.7)	1.0	(0.7 - 1.4)	3.0	(2.5 - 3.6)	95.5	(94.8 - 96.1)
Bets with friends/workmates	0.6	(0.4 - 0.9)	0.9	(0.7 - 1.3)	13.7	(12.6 - 14.8)	84.7	(83.5 - 85.9)
Text game or competition	0.3	(0.1 - 0.5)	0.4	(0.2 - 0.7)	2.2	(1.7 - 2.8)	97.1	(96.5 - 97.7)
New Zealand raffle/lottery	3.0	(2.6 - 3.6)	7.6	(6.9 - 8.4)	36.4	(34.9 - 37.9)	52.9	(51.3 - 54.5)
Lotto	17.4	(16.3 - 18.5)	17.2	(16.0 - 18.3)	27.7	(26.3 - 29.1)	37.8	(36.3 - 39.2)
Keno	0.5	(0.3 - 0.7)	0.9	(0.6 - 1.2)	1.4	(1.1 - 1.8)	97.2	(96.7 - 97.7)
Instant Kiwi tickets or other scratch tickets	3.1	(2.6 - 3.6)	9.1	(8.2 - 10.0)	21.1	(19.8 - 22.4)	66.8	(65.3 - 68.3)
Housie or bingo	0.2	(0.2 - 0.4)	0.3	(0.2 - 0.4)	1.1	(0.9 - 1.5)	98.3	(98.0 - 98.7)
Horse/dog race betting	1.2	(0.9 - 1.6)	1.5	(1.1 - 1.9)	9.4	(8.4 - 10.4)	87.9	(86.8 - 89.0)
Sports betting	0.6	(0.3 - 0.9)	0.9	(0.6 - 1.2)	3.5	(2.9 - 4.2)	95.1	(94.3 - 95.8)
Casino table games or EGMs (NZ and overseas)	0.2	(0.1 - 0.3)	0.7	(0.5 - 1.1)	10.9	(9.9 - 11.9)	88.2	(87.1 - 89.3)
Casino table games (NZ)	0.0	(0.0 - 0.0)	0.2	(0.1 - 0.5)	3.7	(3.1 - 4.4)	96.0	(95.3 - 96.8)
Casino EGMs (NZ)	0.1	(0.0 - 0.2)	0.7	(0.5 - 1.1)	7.6	(6.8 - 8.5)	91.5	(90.6 - 92.5)
Non-casino EGMs	1.5	(1.2 - 1.9)	2.7	(2.2 - 3.2)	10.1	(9.2 - 11.1)	85.6	(84.5 - 86.7)
EGMs overall	1.6	(1.3 - 2.0)	3.1	(2.6 - 3.7)	13.5	(12.4 - 14.6)	81.8	(80.5 - 83.0)
Short-term speculative investments	0.2	(0.1 - 0.3)	0.1	(0.1 - 0.3)	0.6	(0.4 - 0.9)	99.1	(98.8 - 99.3)
Overseas internet gambling for money/prizes	0.1	(0.0 - 0.2)	0.2	(0.1 - 0.4)	0.4	(0.2 - 0.6)	99.3	(99.0 - 99.6)

Note: ‘Lotto and/or raffles/lotteries only’ relates to those participants who only played Lotto and/or raffles/lotteries, i.e. they did not take part in other gambling activities. Similarly, ‘Lotto-only’ relates to those participants who only played Lotto and no other gambling activity.

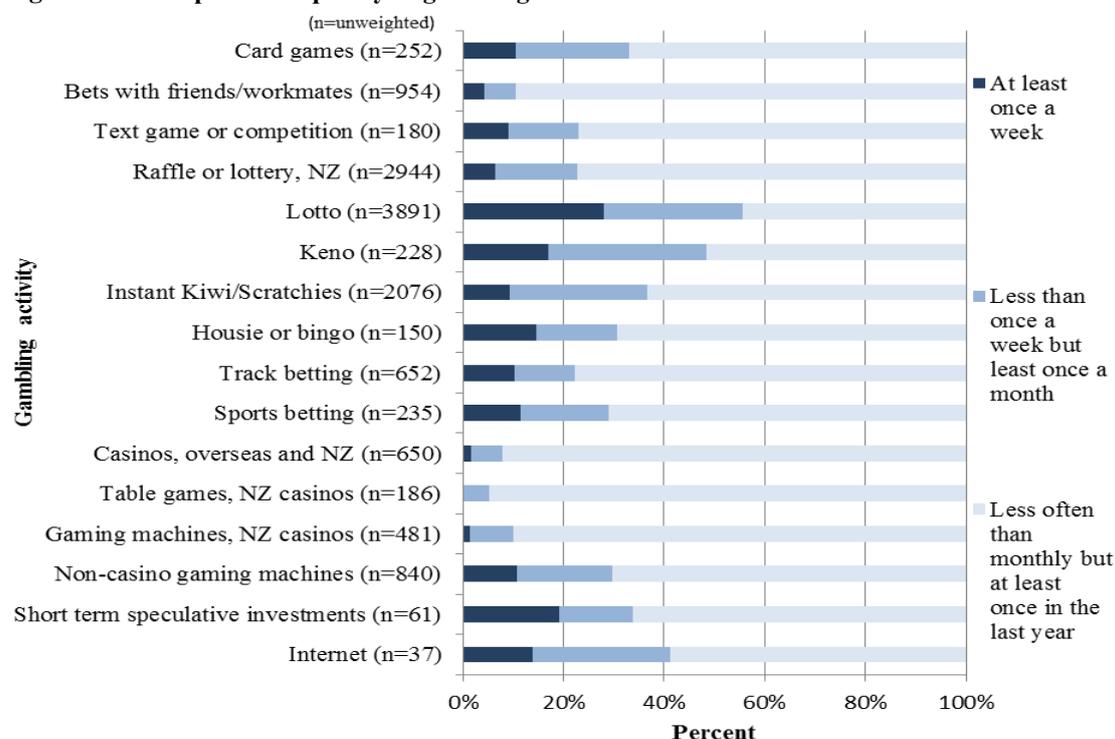
The majority of frequent gamblers participated in Lotto (17.4% of adults gamble weekly or more on this activity). Relatively small numbers take part this often in other forms of gambling. Instant Kiwi and other scratch tickets are the next most popular form (3.1%) followed by New Zealand raffles or lotteries (3.0%), non-casino EGMs (1.5%) and betting on horse or dog races (1.2%). Only 0.1% of adults participated weekly or more on casino EGMs or used overseas internet sites to gamble. The great majority of adults (over 95%) did not participate in any of the

following gambling activities during the past 12 months: overseas internet gambling, short-term speculative investments, housie or bingo, casino table games, Keno, text games or competitions, or card games.

Figure 4 refers just to people who reported participating in a particular activity during the past 12 months. It does not include people who did not report gambling on each form listed. It indicates how often *participants in each activity* reported taking part in *that activity*.

The majority of people who reported participating in a particular gambling activity did so less than monthly. Lotto was the only exception with over a half of past year participants taking part at least once a month or once a week. Just less than a quarter participated frequently (at least once a week). For all other gambling activities, less than a fifth took part weekly or more often. Although only small numbers of people reported making short-term speculative investments, just less than a fifth did so weekly or more often. More than a tenth took part weekly or more in internet gambling, Keno, housie or bingo, sports betting and non-casino EGMs. In contrast, only very small proportions of people who gambled at casinos (on all forms of gambling, EGMs and table games) did so weekly or monthly.

**Figure 4: Participants' frequency of gambling**



#### 4.1.4 Number of gambling activities engaged in

Table 7 provides information on the number of gambling forms that people participated in during the past 12 months. Eight in ten people aged 18 years and over reported having participated in one or more gambling activities during the past 12 months. Approximately a fifth participated in one activity only and a further fifth in two activities. Somewhat fewer people participated in three and somewhat more in four or more activities.

**Table 7: Number of gambling activities participated in during the past 12 months**

Number of activities	Past year participation % (95% CI)			
	Total adults		Past year gamblers	
0	19.6	(18.4 - 20.9)	-	
1	21.9	(20.6 - 23.1)	27.2	(25.7 - 28.7)
2	21.0	(19.8 - 22.2)	26.1	(24.7 - 27.6)
3	15.6	(14.5 - 16.7)	19.5	(18.1 - 20.8)
4 - 6	17.9	(16.7 - 19.1)	22.3	(20.8 - 23.8)
7+	3.9	(3.3 - 4.6)	4.9	(4.1 - 5.7)
<i>Mean</i>	2.3		2.8	
<i>SD</i>	2.0		1.8	

#### 4.1.5 Number of gambling activities engaged in by gender, age and ethnicity

The following three tables provide information regarding the number of gambling activities participated in by gender, age and ethnicity.

In Table 8, confidence intervals overlap for all of the gender comparisons, albeit marginally for males and females who participate in seven or more activities. Consequently, there are unlikely to be statistically significant differences with regard to gender.

**Table 8: Number of gambling activities participated in during the past 12 months by gender**

Number of activities	Past year participation % (95% CI)			
	Male		Female	
0	19.6	(17.6 - 21.5)	19.7	(18.1 - 21.2)
1	21.6	(19.6 - 23.5)	22.1	(20.4 - 23.8)
2	21.3	(19.4 - 23.2)	20.8	(19.2 - 22.4)
3	15.0	(13.4 - 16.7)	16.2	(14.7 - 17.7)
4 - 6	17.7	(15.9 - 19.4)	18.2	(16.5 - 19.8)
7+	4.9	(3.8 - 6.0)	3.1	(2.4 - 3.8)
<i>Mean</i>	2.3		2.2	
<i>SD</i>	2.1		1.9	

Table 9 shows there are somewhat higher proportions of people who did not gamble during the past 12 months in the younger (18-24 year) and older (65+ year) adult categories. Younger adults are more likely to be non-gamblers than other adults, apart from those aged 65 or older. Older adults are more likely to be non-gamblers than adults aged 45-54 years and 55-64 years. Older adults are also more likely to gamble on only one activity than those aged 25-34 years and 45-54 years. Younger adults do not differ in this regard from other adults. However, they are less likely to gamble on two or more activities apart from those aged 25-34 years. There is no difference across the age categories with respect to participation in three activities. In the case of participation in four to six activities, older adults are less likely to be in this category than those aged 25-34 years, 35-44 years and 55-64 years. They are also less likely to take part in six or more activities than people aged 18-34 years. Those in the younger two categories more often participated at this level than adults aged 45 years and older. Overall, younger and older adults are more often non-gamblers and older adults are also less likely to gamble at the highest level (7+ activities). In contrast, younger adults and those in the next youngest category are over-represented at this level.

**Table 9: Number of gambling activities participated in during the past 12 months by age**

Number of activities	Past year participation % (95% CI)					
	18 - 24 years		25 - 34 years		35 - 44 years	
0	26.0	(21.4 - 30.7)	19.2	(16.3 - 22.1)	18.0	(15.3 - 20.7)
1	22.4	(17.8 - 27.1)	18.8	(15.6 - 22.0)	21.3	(18.6 - 24.0)
2	14.4	(10.7 - 18.0)	16.7	(13.9 - 19.5)	22.0	(19.2 - 24.7)
3	12.4	(8.8 - 16.0)	17.0	(14.0 - 20.0)	15.8	(13.4 - 18.2)
4 - 6	18.4	(14.4 - 22.5)	21.5	(18.4 - 24.7)	19.0	(16.5 - 21.5)
7+	6.3	(3.7 - 8.9)	6.8	(4.7 - 8.8)	3.9	(2.6 - 5.1)
<i>Mean</i>	2.3		2.6		2.3	
<i>SD</i>	2.4		2.3		1.9	

Number of activities	Past year participation % (95% CI)					
	45 - 54 years		55 - 64 years		65+ years	
0	17.5	(15.1 - 20.0)	15.9	(13.2 - 18.6)	22.7	(20.2 - 25.2)
1	19.9	(17.3 - 22.5)	24.2	(20.9 - 27.5)	25.7	(23 - 28.3)
2	26.5	(23.5 - 29.5)	22.6	(19.4 - 25.7)	22.0	(19.4 - 24.5)
3	17.1	(14.7 - 19.6)	15.8	(13.2 - 18.4)	14.4	(12.3 - 16.5)
4 - 6	16.4	(13.9 - 18.9)	18.8	(15.8 - 21.9)	13.3	(11 - 15.7)
7+	2.5	(1.6 - 3.5)	2.7	(1.4 - 4.0)	1.9	(1.1 - 2.7)
<i>Mean</i>	2.2		2.3		1.9	
<i>SD</i>	1.8		1.8		1.7	

Table 10 shows over a third of Asian adults (38.8%) reported not gambling during the past 12 months, substantially more than other major ethnic categories. A quarter of Pacific adults (25.5%) were non-gamblers, more than European/Other (17.6%) and Māori (15.0%). The apparent small difference between Māori and European/Other is unlikely to be significant. Asian people were more likely than Māori to participate in only one gambling activity. There were no differences between the other ethnic categories at this level of participation. Asians were much less likely to report participating in two, three, four to six and seven or more gambling activities than people in the other ethnic groupings. There were no differences between European/Other, Māori and Pacific adults with respect to gambling on two or three activities. Māori were more likely to report taking in part in four to six activities than people in the other three categories. They were also more likely to participate in seven or more activities (7.5%) than European/Other (4.0%) and Asian (1.1%).

**Table 10: Number of gambling activities participated in during the past 12 months by ethnicity**

Number of activities	Past year participation % (95% CI)							
	European/Other		Māori		Pacific		Asian	
0	17.6	(16.1 - 19.0)	15.0	(12.5 - 17.5)	25.5	(21.7 - 29.3)	38.8	(34.8 - 42.8)
1	21.7	(20.2 - 23.2)	17.4	(14.8 - 19.9)	19.9	(16.4 - 23.3)	24.3	(20.9 - 27.7)
2	21.5	(20.1 - 23.0)	21.4	(18.8 - 24.0)	18.9	(15.8 - 21.9)	16.9	(14.1 - 19.8)
3	16.7	(15.4 - 18.1)	14.8	(12.5 - 17.1)	13.9	(11.5 - 16.3)	8.9	(6.7 - 11.0)
4 - 6	18.5	(17.0 - 19.9)	23.9	(21.1 - 26.7)	16.3	(13.1 - 19.5)	10.0	(7.6 - 12.4)
7+	4.0	(3.2 - 4.8)	7.5	(5.7 - 9.3)	5.5	(3.4 - 7.7)	1.1	(0.4 - 1.7)
<i>Mean</i>	2.3		2.8		2.2		1.4	
<i>SD</i>	2.0		2.3		2.2		1.7	

More detailed socio-demographic analysis is provided in Appendix 7. People in the following groups were more likely to be non-gamblers: migrants (28.1%) (especially migrants resident less

than five years, 41.9%); students, people looking after children at home or retired (25.4%); Christians other than Anglicans, Presbyterians or Catholics (32.5%), other (non-Christian) religions (33.9%), and lowest personal (26.3%) or family (27.1%) income group.

#### **4.1.6 Pattern of gambling participation**

Table 11 provides information regarding regular continuous gamblers, regular non-continuous gamblers, infrequent gamblers and non-gamblers. Regular continuous gamblers are defined as people who take part weekly or more often in one or more forms of gambling such as EGMs and horse/dog race betting that involve the opportunity for a continuous repeated cycle of placing a stake, playing, determination and ability to collect and reinvest winnings. Regular continuous gamblers may also spend money on non-continuous forms such as Lotto. Regular non-continuous gamblers participate weekly or more on forms of gambling where there are many hours or days before placing a stake or buying a ticket and the determination of the win or loss. They may also take part less frequently than once a week or more on continuous forms.<sup>6</sup> Infrequent gamblers are people who, during the past year, gamble less frequently than weekly or more on any form or forms of gambling. Non-gamblers are people who do not report participating in any gambling activity during the past year.

Only 6.2% of adults were classified as regular continuous gamblers. More than double this percentage (15.7%) were regular non-continuous gamblers. Over a half of adults were infrequent gamblers and, as reported previously, 19.6% were non-gamblers. From Table 11 it is evident that Māori (9.6%) are more likely to be regular continuous gamblers than people from other ethnic groups and Asian adults (3.4%) are less likely to be in this category. Other groups with a higher percentage of regular continuous gamblers include people born in New Zealand (7.1%), lacking formal qualifications (12.3%) and the unemployed (9.5%).

The following groups had lower percentages of regular non-continuous gamblers: Asians, people aged 18-44 years, migrants who arrived before 2008, people with higher education (compared with those with no formal qualification or a trade or other vocational education), unemployed people (relative to employed), Other Christians, people with religions other than Christian, people living in households with five or more people (relative to one and two person households), and people with low personal income.

More than half of people in the majority of groups included in Table 11 were infrequent gamblers. There were relatively lower percentages for Asian and Pacific people, people lacking degree level education, Other Christians and Other religions (relative to people with no religion) and people in the two lowest household incomes (relative to those in the highest groups). The pattern for non-gamblers has been described previously.

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<sup>6</sup> If a participant was a regular continuous gambler on some gambling forms and also a regular non-continuous gambler on other gambling forms, they were classified as a regular continuous gambler.

**Table 11: Gambling pattern of participation by demographics**

Demographic variables	Pattern of participation % (95% CI)							
	Non-gambler		Infrequent		Regular non-continuous		Regular continuous	
Total	19.6	(18.4 - 20.9)	58.4	(56.9 - 60.0)	15.7	(14.7 - 16.8)	6.2	(5.5 - 7.0)
<b>Gender</b>								
Male	19.6	(17.7 - 21.6)	56.0	(53.7 - 58.4)	17.2	(15.7 - 18.8)	7.2	(6.0 - 8.4)
Female	19.7	(18.2 - 21.3)	60.7	(58.7 - 62.6)	14.3	(13.0 - 15.7)	5.4	(4.6 - 6.3)
<b>Ethnic group</b>								
European/Other	17.6	(16.2 - 19.0)	60.0	(58.2 - 61.8)	16.3	(15.1 - 17.6)	6.2	(5.3 - 7.1)
Māori	15.0	(12.6 - 17.6)	57.2	(54.1 - 60.4)	18.2	(16.0 - 20.5)	9.6	(7.8 - 11.6)
Pacific	25.5	(21.8 - 29.5)	49.8	(45.2 - 54.4)	16.2	(13.4 - 19.2)	8.5	(6.3 - 11.2)
Asian	38.8	(34.8 - 42.8)	50.1	(46.1 - 54.0)	7.8	(6.1 - 9.8)	3.4	(2.0 - 5.3)
<b>Age group</b>								
18 - 24 years	26.0	(21.6 - 30.9)	64.6	(59.4 - 69.5)	2.7	(1.5 - 4.5)	6.7	(4.5 - 9.4)
25 - 34 years	19.2	(16.5 - 22.2)	67.2	(63.7 - 70.6)	7.6	(6.0 - 9.6)	5.9	(4.4 - 7.9)
35 - 44 years	18.0	(15.4 - 20.8)	62.3	(59.1 - 65.5)	15.5	(13.2 - 18.0)	4.1	(2.9 - 5.6)
45 - 54 years	17.5	(15.2 - 20.1)	56.1	(52.6 - 59.6)	20.8	(18.0 - 23.7)	5.6	(4.2 - 7.3)
55 - 64 years	15.9	(13.3 - 18.8)	51.9	(47.9 - 55.8)	25.2	(22.0 - 28.5)	7.1	(5.2 - 9.3)
65+ years	22.7	(20.3 - 25.3)	47.8	(44.7 - 51.0)	20.8	(18.3 - 23.4)	8.7	(7.0 - 10.5)
<b>Country of birth</b>								
NZ	16.5	(15.1 - 17.9)	60.2	(58.4 - 62.1)	16.2	(15.0 - 17.5)	7.1	(6.2 - 8.1)
Elsewhere	28.1	(25.6 - 30.7)	53.7	(50.9 - 56.4)	14.2	(12.5 - 16.2)	4.0	(3.1 - 5.0)
<b>Arrival in NZ</b>								
2008 or later	41.9	(34.6 - 49.5)	48.1	(40.7 - 55.5)	7.1	(4.4 - 10.7)	2.9	(1.2 - 6.2)
Before 2008	25.1	(22.7 - 27.7)	54.9	(52.0 - 57.8)	15.8	(13.7 - 18.0)	4.2	(3.3 - 5.3)
<b>Highest qualification</b>								
No formal qual.	17.3	(14.9 - 19.9)	52.0	(48.5 - 55.4)	18.5	(15.9 - 21.2)	12.3	(10.0 - 14.9)
School qual.	21.7	(19.0 - 24.6)	56.1	(52.9 - 59.3)	14.8	(12.8 - 16.9)	7.4	(6.0 - 9.1)
Trade/voc. qual.	16.2	(13.9 - 18.7)	57.4	(54.2 - 60.6)	19.4	(17.1 - 21.9)	6.9	(5.3 - 8.9)
Degree/higher	21.2	(19.3 - 23.3)	63.0	(60.6 - 65.3)	13.0	(11.5 - 14.8)	2.8	(2.1 - 3.6)
<b>Labour force status</b>								
Employed	17.3	(15.8 - 18.9)	60.7	(58.7 - 62.6)	16.7	(15.3 - 18.1)	5.4	(4.5 - 6.3)
Unemployed	20.8	(17.2 - 24.7)	58.3	(53.4 - 63.1)	11.4	(8.8 - 14.6)	9.5	(7.1 - 12.3)
Student/Home/Retired	25.4	(23.1 - 27.8)	52.3	(49.5 - 55.2)	14.7	(13.0 - 16.6)	7.5	(6.2 - 9.0)
<b>Religion</b>								
No religion	15.8	(13.9 - 17.8)	62.4	(59.9 - 64.9)	14.9	(13.3 - 16.5)	7.0	(5.7 - 8.3)
Anglican	14.6	(12.0 - 17.5)	57.5	(53.6 - 61.4)	22.3	(19.3 - 25.6)	5.6	(4.1 - 7.4)
Presbyterian	17.8	(14.1 - 22.0)	57.0	(52.3 - 61.6)	19.2	(15.8 - 23.0)	6.0	(4.1 - 8.3)
Catholic	14.6	(11.9 - 17.5)	58.5	(54.4 - 62.5)	19.4	(16.4 - 22.6)	7.6	(5.7 - 9.8)
Other Christian	32.5	(29.2 - 36.0)	52.4	(48.8 - 56.0)	9.8	(8.0 - 11.8)	5.3	(4.0 - 6.8)
Other religion	33.9	(28.6 - 39.4)	54.0	(48.7 - 59.3)	8.1	(6.1 - 10.6)	4.0	(2.3 - 6.6)
<b>Household size</b>								
1	22.6	(20 - 25.4)	52.1	(48.7 - 55.5)	19.2	(16.7 - 21.9)	6.0	(4.7 - 7.6)
2	17.4	(15.5 - 19.4)	56.0	(53.6 - 58.4)	18.9	(17.1 - 20.9)	7.7	(6.4 - 9.0)
3	20.6	(17.8 - 23.7)	57.9	(54.1 - 61.6)	15.4	(12.9 - 18.1)	6.1	(4.4 - 8.1)
4	17.2	(14.6 - 20.1)	64.1	(60.6 - 67.5)	13.4	(11.3 - 15.8)	5.3	(3.8 - 7.1)
5+	24.2	(20.6 - 28.0)	59.9	(55.8 - 64.0)	10.9	(8.9 - 13.3)	5.0	(3.5 - 6.8)
<b>Personal income (\$)</b>								
Up to 20,000	26.3	(23.9 - 28.8)	55.1	(52.2 - 57.8)	11.6	(10.1 - 13.2)	7.0	(5.8 - 8.4)
20,001 - 40,000	18.9	(16.7 - 21.2)	59.9	(57.0 - 62.7)	14.4	(12.6 - 16.5)	6.8	(5.6 - 8.3)
40,001 - 60,000	14.1	(11.8 - 16.7)	60.5	(57.0 - 64.0)	18.7	(16.1 - 21.5)	6.7	(4.9 - 8.8)
60,001 - 80,000	15.6	(12.5 - 19.2)	61.1	(56.4 - 65.7)	19.2	(15.5 - 23.3)	4.1	(2.5 - 6.3)
80,001 - \$100,000	16.6	(11.3 - 23.1)	56.4	(49.2 - 63.3)	21.9	(16.5 - 28.2)	5.1	(2.8 - 8.7)
Over 100,000	11.5	(8.3 - 15.4)	62.6	(56.3 - 68.6)	23.5	(18.6 - 29.1)	2.4	(0.8 - 6.0)
<b>Household Income (\$)</b>								
Up to 20,000	27.1	(22.6 - 32.0)	52.8	(47.8 - 57.9)	13.2	(10.7 - 16.1)	6.8	(4.7 - 9.6)
20,001 - 40,000	22.8	(20.3 - 25.5)	52.8	(49.8 - 55.8)	16.4	(14.3 - 18.6)	8.0	(6.5 - 9.7)
40,001 - 60,000	23.2	(20.1 - 26.5)	56.8	(52.9 - 60.5)	13.9	(11.6 - 16.5)	6.2	(4.6 - 8.2)
60,001 - 80,000	19.0	(15.8 - 22.6)	57.0	(52.8 - 61.1)	16.8	(14.2 - 19.8)	7.2	(5.3 - 9.5)
80,001 - 100,000	16.7	(13.6 - 20.2)	62.8	(58.7 - 66.8)	15.4	(12.8 - 18.4)	5.0	(3.4 - 7.1)
Over 100,000	14.6	(12.4 - 17.0)	63.4	(60.3 - 66.3)	17.3	(15.1 - 19.7)	4.7	(3.4 - 6.3)

#### 4.1.7 Analyses of EGM participation

Table 12 examines the frequency of EGM participation in various settings (casinos, pubs and clubs) in relation to the amount of time usually spent playing in an average day. Given the

relatively small number of people in some of the cells, confidence intervals are generally large and the findings need to be treated with caution. People who reported weekly or more frequent casino EGM participation had substantially longer typical durations of play than their pub and club counterparts. Over half of casino participants (54.9%) reported sessions of three hours or more compared to 2.9% of those who played pub EGMs and 4.3% of club players. Most, around two thirds, of pub and club participants who gambled at least once a week (67.7% and 67.6% respectively) reported sessions of an hour or less. In contrast, only 5.8% of people who participated in casinos did so for an hour or less.

Most people who gambled less than weekly on EGMs had typical session lengths of an hour or less and relatively few had sessions of two or more hours. However, as was the case for regular (weekly or more often) participants, those who played EGMs in casinos more often reported longer sessions. Almost a quarter (23.4%) who took part less than weekly but at least once a month and over a tenth (12.4%) who took part less than once a month but at least once a year had sessions of two hours or more. Very small numbers of pub or club participants who participated less than weekly reported sessions of two or more hour's duration.

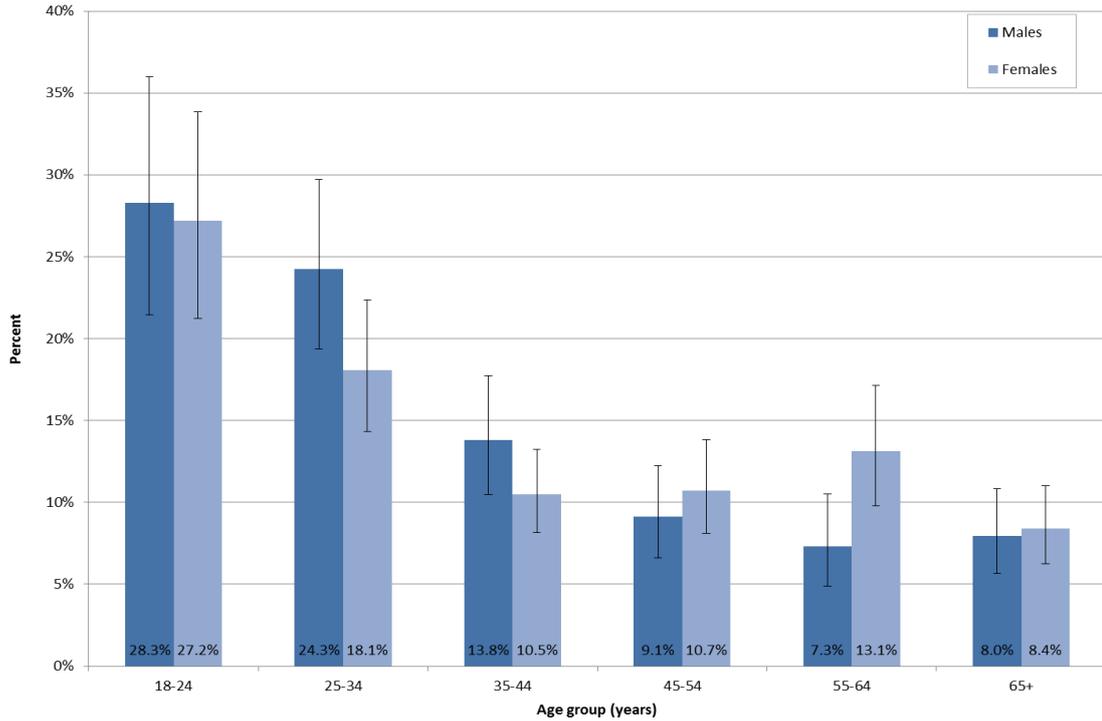
**Table 12: Frequency of participation in EGMs by time spent playing EGMs in an average day**

Venue and time	Frequency of participation % (95% CI)					
	At least once a week		Less than once a week but at least once a month		Less than once a month but at least once a year	
<b>NZ Casino</b>						
Up to 15 minutes	5.8	(0.5 - 27.1)	-	-	21.7	(15.8 - 28.5)
15 - 30 minutes	-	-	30.4	(11.8 - 56.1)	22.4	(16.5 - 29.4)
31 - 60 minutes	-	-	21.0	(9.5 - 37.8)	24.7	(19.2 - 31.0)
1 - 2 hours	15.9	(2.7 - 46.8)	25.1	(12.3 - 42.7)	17.4	(13.2 - 22.4)
2 - 3 hours	23.3	(2.9 - 67.1)	9.8	(3.3 - 21.9)	5.7	(3.3 - 9.2)
3+ hours	54.9	(14.2 - 90.6)	13.6	(5 - 28.5)	6.7	(4.3 - 9.9)
<b>Pub</b>						
Up to 15 minutes	8.1	(2.4 - 19.8)	20.2	(12.6 - 29.9)	41.0	(35.0 - 47.2)
15 - 30 minutes	23.9	(14.2 - 36.2)	34.3	(25.1 - 44.4)	30.8	(25.0 - 37.2)
31 - 60 minutes	35.7	(24 - 48.8)	21.2	(14.8 - 29.0)	19.1	(14.9 - 23.9)
1 - 2 hours	18.8	(10.8 - 29.5)	18.1	(12 - 25.8)	6.2	(4.0 - 9.1)
2 - 3 hours	10.5	(4.8 - 19.4)	4.0	(1.2 - 9.7)	1.4	(0.5 - 3.3)
3+ hours	2.9	(0.9 - 7.1)	2.2	(0.7 - 5.4)	0.4	(0.1 - 1.1)
<b>Club</b>						
Up to 15 minutes	3.4	(0.7 - 10.8)	12.4	(4.3 - 27.1)	30.6	(23.0 - 39.2)
15 - 30 minutes	34.0	(17 - 55.1)	36.7	(23.4 - 51.8)	34.1	(26.9 - 41.9)
31 - 60 minutes	30.2	(13.9 - 51.6)	31.3	(19.7 - 45.1)	24.6	(18.5 - 31.7)
1 - 2 hours	19.8	(7.7 - 38.8)	19.0	(10.2 - 31)	4.7	(2.1 - 9.2)
2 - 3 hours	8.3	(1.6 - 24.7)	0.5	(0.1 - 2.5)	3.5	(1.6 - 6.6)
3+ hours	4.3	(0.9 - 13.4)	-	-	0.2	(0.0 - 1.2)

Note: Past year gamblers who generally gamble less than once a year are omitted from this table due to small sample sizes.

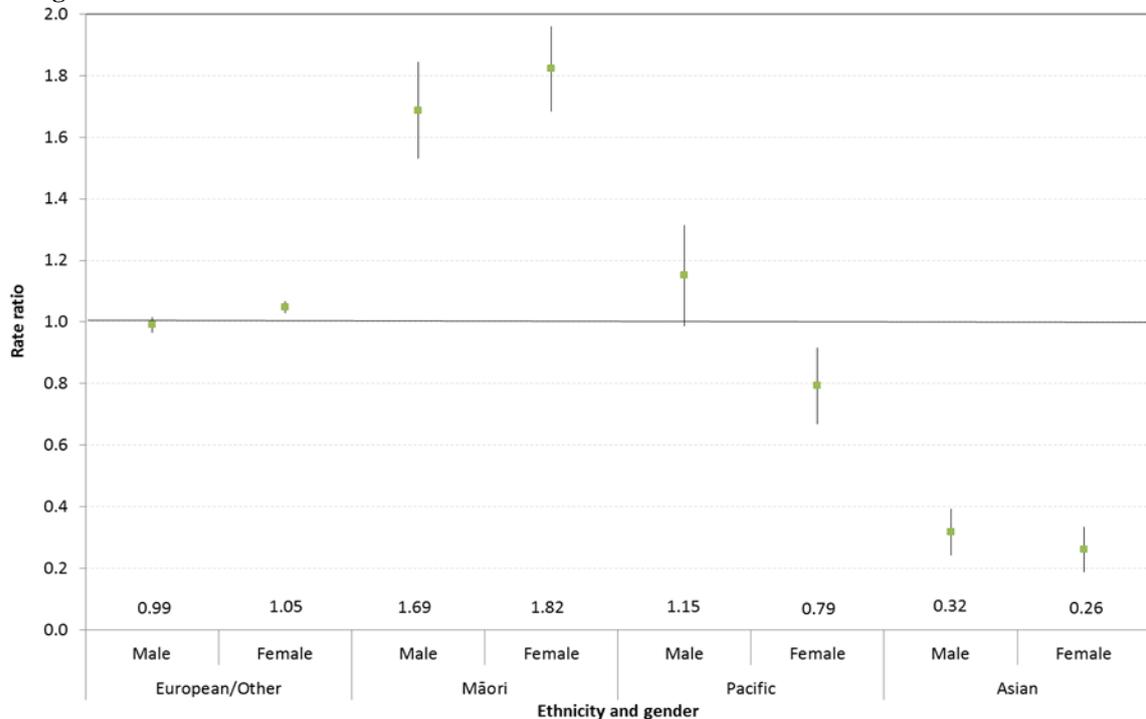
Past year age and gender participation in non-casino EGMs is shown in Figure 5. Overall, as with Instant Kiwi, participation is greater among adults aged 18-24 years and 25-34 years. Within the age groups, however, there are no gender differences.

**Figure 5: Gambling on non-casino gaming machines by age and gender**



In Figure 6, age standardised ethnicity rate ratios are shown for past 12 month non-casino EGM participation. European/Other females, Māori males and females and Pacific males were more likely to have participated compared to males and females in the total population.

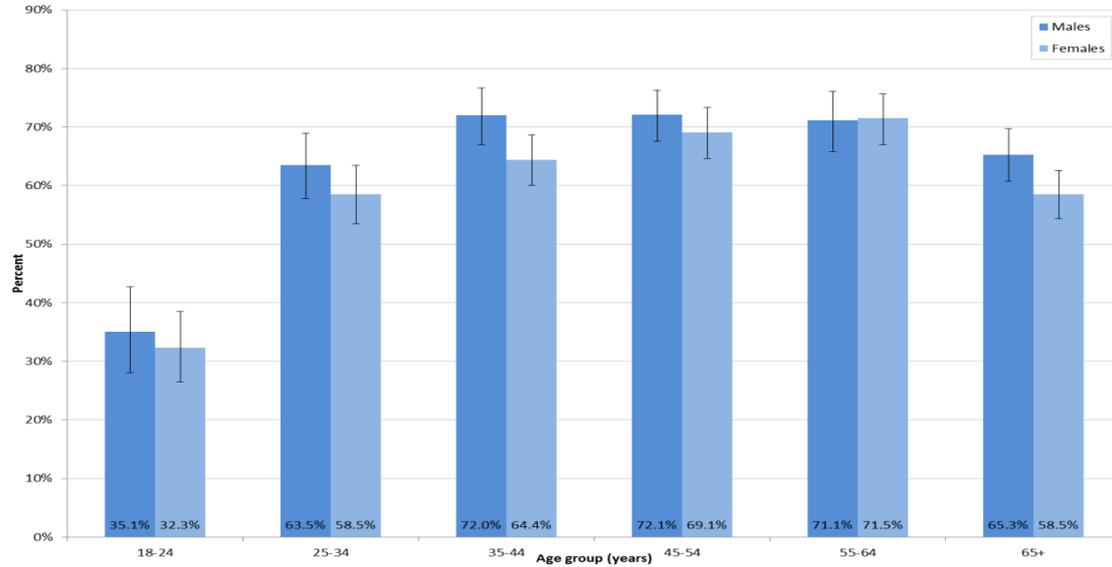
**Figure 6: Age standardised rate ratios for past 12 month non-casino EGM gambling by ethnicity and gender**



#### 4.1.8 Analyses of Lotto, Instant Kiwi and other scratch card participation

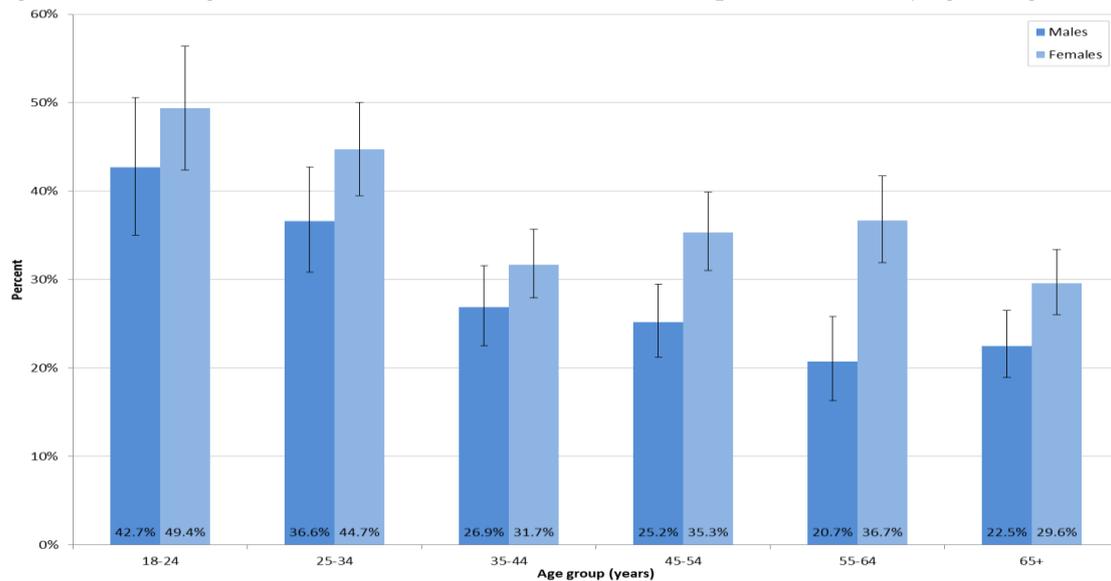
Figure 7 examines past year Lotto participation by age and gender. The major finding is the much lower level of engagement by people aged 18-24 years. Within the age groupings there are unlikely to be any significant gender differences. Older women (65+ years) have lower levels of participation than men aged 35-44 years and men and women aged 45-54 years and 55-64 years.

**Figure 7: Gambling on Lotto in past 12 months by age and gender**



In Figure 6, past year Instant Kiwi and other scratch card participation is considered by age and gender. Higher participation by younger adults (18-24 years and 25-34 years) is evident along with more involvement by women in the 45-54 years and 55-64 years age groups.

**Figure 8: Gambling on Instant Kiwi and other scratch cards in past 12 months by age and gender**



#### 4.1.9 Analyses of participation in games not for money

Table 13 provides information regarding frequency of participation in games that resemble gambling activities but do not involve winning money or receiving prizes.

**Table 13: Past 12 months participation in gambling type games not for money or prizes**

	Participation % (95% CI)							
	At least once/week		Less than once/week, at least once/month		Less than once/month, at least once/year		Not participated	
<b>Total</b>	7.8	(6.9 - 8.7)	3.5	(2.8 - 4.2)	5.6	(4.9 - 6.4)	83.2	(81.9 - 84.4)

Table 14 examines socio-demographic participation differences. Somewhat less than one in five adults (16.8%) participate in gambling-type activities, nearly half of them (7.8% of total adults) at least once a week. Higher levels of participation are evident for males, Māori (relative to European/Other and Asian), younger people, people with school qualifications or higher, people with no religion (relative to all Christian groups other than Catholics), Catholics (relative to Anglicans and Presbyterians), and people living in households of five or more (relative to one and two person households).

**Table 14: Past 12 months participation in gambling type games not for money or prizes by demographics**

Demographic variables	Past year participation % (95% CI)	
Total	16.8	(15.6 - 18.1)
<b>Gender</b>		
Male	20.1	(18.2 - 22.2)
Female	13.8	(12.4 - 15.3)
<b>Ethnic group</b>		
European/Other	16.5	(15.0 - 18.0)
Māori	23.7	(20.9 - 26.6)
Pacific	19.3	(16.1 - 22.8)
Asian	17.7	(14.8 - 20.9)
<b>Age group</b>		
18 - 24 years	30.4	(25.4 - 35.8)
25 - 34 years	28.0	(24.7 - 31.5)
35 - 44 years	17.2	(14.7 - 19.8)
45 - 54 years	11.9	(9.8 - 14.3)
55 - 64 years	9.0	(6.9 - 11.5)
65+ years	6.3	(4.9 - 8.0)
<b>Country of birth</b>		
NZ	17.2	(15.8 - 18.7)
Elsewhere	15.8	(13.7 - 18.2)
<b>Arrival in NZ</b>		
2008 or later	21.3	(15.4 - 28.2)
Before 2008	14.7	(12.4 - 17.1)
<b>Highest qualification</b>		
No formal qual.	9.9	(7.9 - 12.2)
School qual.	21.0	(18.2 - 24.1)
Trade/voc. qual.	15.4	(13.0 - 18.1)
Degree/higher	17.7	(15.7 - 19.7)
<b>Labour force status</b>		
Employed	17.1	(15.6 - 18.7)
Unemployed	20.6	(16.6 - 24.9)
Student/Home/Retired	14.8	(12.4 - 17.4)
<b>Religion</b>		
No religion	20.6	(18.5 - 22.9)
Anglican	12.2	(9.4 - 15.5)

<b>Demographic variables</b>	<b>Past year participation % (95% CI)</b>	
Presbyterian	11.2	(8.5 - 14.4)
Catholic	18.9	(15.7 - 22.5)
Other Christian	14.7	(12.3 - 17.5)
Other religion	15.1	(11.4 - 19.5)
<b>Household size</b>		
1	8.9	(7.1 - 11.0)
2	14.4	(12.7 - 16.3)
3	17.0	(14.3 - 20.1)
4	19.0	(16.2 - 22.1)
5+	22.5	(19.1 - 26.3)
<b>Personal Income (\$)</b>		
Up to 20,000	18.1	(15.7 - 20.7)
20,001 - 40,000	14.9	(12.9 - 17.2)
40,001 - 60,000	16.9	(14.0 - 20.1)
60,001 - 80,000	15.9	(12.7 - 19.7)
80,001 - 100,000	19.6	(14.3 - 25.8)
Over 100,000	21.9	(16.8 - 27.8)
<b>Household Income (\$)</b>		
Up to 20,000	14.9	(10.9 - 19.8)
20,001 - 40,000	14.6	(12.1 - 17.3)
40,001 - 60,000	15.7	(13.0 - 18.7)
60,001 - 80,000	18.3	(15.1 - 21.9)
80,001 - 100,000	15.2	(12.2 - 18.7)
Over 100,000	20.1	(17.4 - 23.0)

#### **4.1.10 Gambling expenditure**

Table 15 shows the total typical monthly gambling expenditure estimates for the New Zealand adult population based on the self-reported expenditure of survey participants who reported gambling in the past 12 months. It also indicates the proportion of expenditure accounted for by each gambling activity. It is evident that short-term speculative investments take the largest share followed by Lotto, betting on horse or dog races, non-casino EGMs, raffles and lotteries, cards for money and casino table games. When short-term speculative investments are removed, the proportions for other forms increase. Very small proportions of the total reported expenditure are on text games or competitions, and overseas internet gambling.

Average typical monthly expenditures on the various forms of gambling are indicated in Table 16. Average expenditure for participants is calculated by summing expenditure on each activity for all the people in each group and then dividing by the number of people who reported betting money on that activity during the past year. Typical monthly expenditure for all respondents is calculated by dividing expenditure by the total number of people who took part in the survey.

Both for past year participants and all respondents, typical monthly expenditure is much higher, respectively, \$5,650 and \$47, for short-term speculative investments. For past year participants, monthly expenditure is higher (ranging from \$43-\$77) for cards, betting on horse or dog races, overseas internet gambling, casino table games, casino EGMs, non-casino EGMs and sports betting. It is somewhat lower (ranging from \$11-\$35) for housie or bingo, Lotto, Keno, and betting with friends and workmates. Average expenditure was less than \$10 per month for other gambling forms.

**Table 15: Total typical monthly expenditure estimates for New Zealand adult population**

Gambling activity	Total typical monthly expenditure estimates for New Zealand adult population		
	Total \$	Proportion of total %	Proportion of total excl. short term investments %
Cards for money	10,000,219.50	3.3	6.1
Bets with friends/workmates for money/prizes	4,939,622.17	1.6	3.0
Text game or competition	409,047.33	0.1	0.2
New Zealand raffle/lottery	13,062,588.62	4.4	8.0
Lotto	46,907,447.90	15.7	28.6
Keno	902,003.34	0.3	0.5
Instant Kiwi tickets or other Scratch tickets	6,999,672.48	2.3	4.3
Housie or bingo	1,691,149.49	0.6	1.0
Horse/dog races <sup>#</sup>	22,621,145.80	7.6	13.8
Sports events	6,143,537.00	2.1	3.7
Casino table games or EGMs (NZ and overseas)	29,023,963.45	9.7	17.7
Casino table games (NZ) <sup>†</sup>	7,913,030.81	2.6	4.8
Casino EGMs (NZ) <sup>†</sup>	12,735,542.85	4.3	7.8
Non-casino EGMs	20,239,655.63	6.8	12.3
Short-term speculative investments	135,423,037.69	45.2	-
Overseas internet gambling for money/prizes	1,182,733.33	0.4	0.7
<i>Total</i>	<i>299,545,823.73</i>	<i>100</i>	<i>100</i>

<sup>#</sup> Estimation calculation excludes one response of \$40,000 at track and \$100,000 overseas (note, same person)

<sup>†</sup> Excluded from calculation of *Total* row as included in 'Casino tables games or EGMs (NZ and overseas)'

Average expenditures for all respondents are generally much lower than for past year participants. This is because, with the exception of Lotto, most respondents did not take part in the various activities.

**Table 16: Average typical monthly expenditure by gambling activity - past year participants and all respondents in each activity**

Gambling activity	Typical total monthly expenditure \$					
	Past year participants			All respondents		
	Mean	(SD)	Range	Mean	(SD)	Range
Cards for money	76.94	(285.68)	1 - 3,845	3.46	(59.43)	0 - 3,845
Bets with friends/workmates for money	11.21	(18.00)	1 - 200	1.71	(7.77)	0 - 200
Text game or competition	4.93	(14.52)	1 - 100	0.14	(2.37)	0 - 100
New Zealand raffle/lottery	9.62	(25.42)	1 - 1,610	4.53	(18.02)	0 - 1,610
Lotto	26.13	(33.26)	1 - 1,200	16.25	(29.34)	0 - 1,200
Keno	11.36	(15.43)	1 - 160	0.31	(3.47)	0 - 160
Instant Kiwi tickets or other Scratch tickets	7.30	(16.13)	1 - 410	2.42	(9.70)	0 - 410
Housie or bingo	35.46	(41.31)	1 - 480	0.59	(7.82)	0 - 480
Horse/dog race betting <sup>#</sup>	64.95	(152.50)	1 - 1,800	7.84	(53.57)	0 - 1,800
Sports betting	43.33	(145.13)	1 - 2,200	2.13	(29.60)	0 - 2,200
Casino table games or EGMs (NZ/overseas)	85.75	(211.46)	1 - 3,020	10.05	(73.37)	0 - 3,020
Casino table games (NZ)	70.75	(154.47)	1 - 1,200	2.74	(29.75)	0 - 1,200
Casino EGMs (NZ)	52.28	(99.21)	1 - 1,500	4.41	(31.07)	0 - 1,500
Non-casino EGMs	48.90	(171.14)	1 - 4,500	7.01	(64.97)	0 - 4,500
Short-term speculative investments	5,650.23	(9581.24)	10 - 50,000	46.91	(1,020.48)	0 - 50,000
Overseas internet gambling for money/prizes	62.35	(109.61)	1 - 600	0.41	(9.63)	0 - 600

<sup>#</sup> Excludes one response of \$40,000 at track and \$100,000 overseas (note, same person)

In Table 17 and Table 18, typical monthly expenditure on gambling activities for non-gamblers, infrequent gamblers, regular non-continuous gamblers and regular continuous gamblers are shown.

Table 18 excludes people who made short-term speculative investments.

Excluding people who made short-term speculative investments, 59.9% of regular continuous gamblers report typically spending over \$100 per month on gambling activities compared with 26.2% of regular non-continuous gamblers and 8.2% of infrequent gamblers. Only 4.7% of regular continuous gamblers spent \$20 or less on gambling per month. Corresponding estimates for regular non-continuous and infrequent gamblers are 12.7% and 52.0%.

**Table 17: Typical monthly expenditure by pattern of participation (includes short-term speculative investments)**

Expenditure	Pattern of participation %			
	Non-gambler	Infrequent	Regular non-continuous	Regular continuous
\$0	100.0	-	-	-
\$1 - \$10	-	26.6	5.1	1.2
\$11 - \$20	-	25.1	7.3	3.5
\$21 - \$30	-	14.1	9.7	5.8
\$31 - \$50	-	14.4	16.1	7.7
\$51 - \$100	-	10.7	34.0	21.4
\$101 - \$500	-	7.3	24.9	47.7
More than \$500	-	1.5	2.6	12.2
Don't know/refused/other	-	0.4	0.2	0.6
Total (n)	1,301	3,482	1,059	409
Mean		\$95.34	\$140.89	\$422.57
(SD)		(\$958.27)	(\$609.61)	(\$2773.41)
Range		\$1 - \$50,200	\$1 - \$15,040	\$2 - \$50,528

**Table 18: Typical monthly expenditure by pattern of participation (excludes short-term speculative investments)**

Expenditure	Pattern of participation %			
	Non-gambler	Infrequent	Regular non-continuous	Regular continuous
\$0	100.0	-	-	-
\$1 - \$10	-	26.8	5.2	1.2
\$11 - \$20	-	25.2	7.5	3.5
\$21 - \$30	-	14.2	10.1	5.8
\$31 - \$50	-	14.4	16.3	7.7
\$51 - \$100	-	10.6	34.2	21.4
\$101 - \$500	-	7.4	24.9	47.8
More than \$500	-	0.8	1.3	12.1
Don't know/refused/other	-	0.5	0.4	0.6
Total (n)	1,301	3,482	1,059	409
Mean		\$45.68	\$88.99	\$264.07
(SD)		(\$123.95)	(\$105.65)	(\$426.53)
Range		\$1 - \$3,040	\$1 - \$1,795	\$2 - \$4,732

Table 19 shows typical monthly gambling expenditure in relation to the number of different gambling activities adults participated in during the past year. Expenditure on short-term speculative investments is not included in this or subsequent expenditure tables. While there is quite wide variation within the different participation groups, average expenditure increases with rises in the number of activities engaged with. The more activities participated in, the more participants spent.

**Table 19: Typical monthly expenditure by number of gambling activities (excludes short-term speculative investments)**

Number of gambling activities in last year	Typical monthly expenditure \$		
	Mean	(SD)	Range
0	-	-	-
1	17.18	(40.09)	1 - 1,320
2	36.44	(70.06)	1 - 2,300
3	56.59	(122.63)	3 - 3,040
4 - 6	128.87	(223.47)	4 - 4,100
7 - 9	326.83	(439.86)	21 - 4,732
10+	509.08	(663.80)	80 - 4,258

Note: Excludes one response of \$40,000 at track and \$100,000 overseas (note, same person)

Table 20 shows typical monthly gambling expenditure for a number of socio-demographic groups. Most adults typically report spending small amounts.

The following groups are over-represented (total 15% or more) in the \$101 and over category:

- Males
- Māori and Pacific
- Age 25-34 years
- No formal qualifications and vocational and trade qualifications
- Other labour force status
- No religion and Catholic
- Personal income over \$40,000
- Household income over \$100,000
- Wellington residence.

The following groups are over-represented (total of 20% or more) in the lowest (\$1-\$10) expenditure category:

- Females
- Age 18-24 years and 65+ years
- Student, looking after children at home or retired, or Other labour force status
- Personal income \$20,000 or less
- Household income \$20,000 or less.

**Table 20: Typical monthly gambling expenditure by demographics (excludes short-term speculative investments)**

Demographic variables	Total typical monthly expenditure \$								Mean \$	SD (\$)	Range \$
	Not in last 12 mths	1-10	11-20	21-30	31-50	51-100	>100				
<b>Gender</b>											
Male	19.6	12.8	14.6	10.7	11.3	13.8	16.6	90.53	(219.00)	1 - 4,100	
Female	19.7	20.0	17.5	9.7	11.6	12.1	8.9	53.15	(137.69)	1 - 4,732	
<b>Ethnic group</b>											
European/Other	17.6	17.4	16.6	10.7	11.8	13.3	12.3	65.91	(169.80)	1 - 4,732	
Māori	15.0	11.9	14.6	10.2	12.2	14.8	21.1	115.57	(248.15)	1 - 4,732	
Pacific	25.5	13.2	12.5	6.7	11.0	13.3	17.9	102.31	(135.45)	1 - 2,460	
Asian	38.8	13.3	15.0	8.2	8.6	7.4	8.2	73.94	(168.06)	1 - 3,040	
<b>Age group</b>											
18 - 24 years	26.0	21.5	13.0	8.4	8.9	11.7	10.4	70.57	(282.64)	1 - 4,732	
25 - 34 years	19.2	15.1	13.6	11.1	12.8	10.7	16.7	88.48	(226.02)	1 - 4,100	
35 - 44 years	18.0	16.1	16.5	10.3	12.3	15.7	10.9	65.47	(166.05)	1 - 4,258	
45 - 54 years	17.5	12.5	19.7	12.3	11.7	12.6	13.2	69.63	(153.79)	1 - 1,860	
55 - 64 years	15.9	14.8	17.0	8.0	12.1	17.0	14.8	77.34	(157.16)	1 - 2,056	
65+ years	22.7	21.1	16.2	9.9	10.0	10.0	9.5	54.54	(108.83)	1 - 1,980	

Demographic variables	Total typical monthly expenditure \$							Mean \$	SD (\$)	Range \$
	Not in last 12 mths	1-10	11-20	21-30	31-50	51-100	>100			
<b>Country of birth</b>										
NZ	16.5	16.9	16.4	10.5	11.6	13.8	13.9	73.21	(180.31)	1 - 4,732
Elsewhere	28.1	15.7	15.6	9.4	11.0	10.5	9.2	64.37	(171.96)	1 - 4,100
<b>Arrival in NZ</b>										
2008 or later	41.9	15.1	14.0	6.8	8.4	6.8	5.8	49.84	(86.77)	1 - 624
Before 2008	25.1	15.8	15.9	9.9	11.5	11.3	10.0	66.73	(180.15)	1 - 4,100
<b>Highest qualification</b>										
No formal qual.	17.3	16.5	17.2	8.5	10.6	13.2	16.4	86.09	(197.51)	1 - 4,732
School qual.	21.7	16.9	13.0	9.3	12.2	14.4	12.1	75.53	(159.99)	1 - 2,460
Trade/voc. qual.	16.2	12.1	16.0	12.8	11.9	14.1	16.6	84.14	(212.46)	1 - 4,258
Degree/higher	21.2	19.0	17.8	9.9	11.0	11.2	9.2	54.09	(151.01)	1 - 4,100
<b>Labour force status</b>										
Employed	17.3	14.8	16.2	11.1	12.3	14.1	13.9	73.80	(169.16)	1 - 3,040
Unemployed	20.8	17.0	16.5	8.1	10.7	12.7	14.2	97.02	(282.71)	1 - 4,732
Student/Home/Retired	25.4	20.9	15.8	8.8	9.7	10.0	8.8	54.40	(138.83)	1 - 4,258
<b>Religion</b>										
No religion	15.8	16.7	16.8	11.2	10.7	13.4	15.1	76.19	(190.11)	1 - 4,258
Anglican	14.6	17.1	16.9	9.8	14.2	15.0	12.0	64.32	(155.13)	1 - 2,370
Presbyterian	17.8	19.0	18.3	9.1	11.0	14.2	10.1	56.15	(118.71)	1 - 1,980
Catholic	14.6	13.7	14.4	12.6	12.8	16.3	15.1	84.14	(202.41)	1 - 4,100
Other Christian	32.5	17.8	14.4	7.3	10.7	8.2	8.6	60.13	(134.00)	1 - 2,300
Other religion	33.9	14.0	15.5	9.3	9.6	9.2	8.1	73.19	(239.29)	1 - 4,732
<b>Household size</b>										
1	22.6	19.6	16.0	10.0	8.7	12.6	10.0	61.39	(104.29)	1 - 1,980
2	17.4	16.8	17.0	9.7	12.2	12.7	13.7	77.07	(199.52)	1 - 4,100
3	20.6	14.3	16.6	11.1	10.2	13.2	13.8	76.12	(218.85)	1 - 4,732
4	17.2	17.0	16.7	11.9	11.8	13.8	11.3	62.92	(147.41)	1 - 2,300
5+	24.2	16.3	13.6	8.5	12.2	12.1	12.4	68.80	(173.37)	1 - 4,258
<b>Personal income (\$)</b>										
Up to 20,000	26.3	20.9	14.4	8.4	9.9	10.6	9.3	60.51	(163.57)	1 - 4,732
20,001 - 40,000	18.9	16.9	15.5	11.2	11.4	14.1	11.2	66.20	(176.72)	1 - 4,258
40,001 - 60,000	14.1	13.7	17.8	11.3	12.7	14.3	16.1	85.54	(209.62)	1 - 2,370
60,001 - 80,000	15.6	13.1	19.1	10.9	10.3	14.9	15.6	71.42	(147.32)	1 - 1,860
80,001 - \$100,000	16.6	9.6	17.5	11.5	14.6	12.9	17.3	96.47	(244.86)	1 - 3,040
Over 100,000	11.5	13.2	14.3	10.7	14.4	17.6	17.7	77.18	(144.73)	1 - 1,683
<b>Household income (\$)</b>										
Up to 20,000	27.1	23.6	16.8	9.8	7.0	8.8	6.9	64.83	(211.40)	1 - 4,732
20,001 - 40,000	22.8	19.2	16.9	9.5	9.1	11.8	10.4	60.89	(148.67)	1 - 4,258
40,001 - 60,000	23.2	14.4	15.4	11.5	11.9	12.6	10.9	71.54	(204.51)	1 - 4,100
60,001 - 80,000	19.0	16.4	13.6	10.2	12.3	14.0	13.7	73.94	(151.94)	1 - 2,164
80,001 - 100,000	16.7	15.5	17.4	11.0	12.9	13.8	12.7	71.03	(171.47)	1 - 1,900
Over 100,000	14.6	14.6	16.4	10.2	12.6	15.0	15.9	77.65	(195.80)	1 - 3,040
<b>Location</b>										
Auckland	25.0	14.9	14.8	8.2	11.5	12.1	12.8	88.90	(238.47)	1 - 4,732
Wellington	19.4	18.6	13.4	9.4	11.1	11.7	16.3	75.54	(155.99)	1 - 1,900
Christchurch	17.5	18.9	17.5	10.1	9.7	12.6	12.3	69.60	(147.51)	1 - 1,075
Rest of NZ	17.0	16.8	17.3	11.5	11.7	13.7	11.8	61.50	(138.74)	1 - 4,100

Note: Excludes one response of \$40,000 at track and \$100,000 overseas (note, same person)

#### 4.1.11 Gambling preferences

Table 21 shows the forms of gambling that different categories of participants nominated as their most enjoyed (favourite) type. Most people (86.7%) who participated in one or more forms of gambling said that they had a most preferred activity. Lotto (17.2%) was mentioned most often in this regard, followed by raffles and lotteries (9.3%), Instant Kiwi or other scratch tickets (9.2%), betting on horse or dog races (6.0%), casino gambling (4.2%), non-casino EGMs (3.6%), and sports betting (1.3%). Other forms were each preferred by one percent or less people who had gambled in the past year.

Regular continuous gamblers most often preferred Instant Kiwi or other scratch tickets (24.7%), followed by non-casino EGMS (15.5%), betting on horse and dog racing (12.9%), Lotto (9.5%), casino gambling (6.8%), and card games (6.0%). Other activities were preferred by five percent or less. Only 8.5% either preferred all the same or had no preference.

Four out of ten (39.7%) regular non-continuous gamblers most enjoyed Lotto. Smaller percentages favoured raffles and lotteries (7.8%), betting on horse or dog racing (7.3%), and bets with friends or workmates (6.1%). Over a fifth (21.3%) did not indicate having a favourite form.

Infrequent gamblers also most often most enjoyed Lotto (17.8%) followed by raffles and lotteries (13.5%), Instant Kiwi or other scratch tickets (11.8%), betting on horse or dog racing (6.8%), bets with friends and workmates (6.2%) and casino gambling (5.3%). Over a quarter (26.9%) had no preference.

Males were more likely than females to favour card games and sports betting. Females more often favoured Instant Kiwi or other scratch tickets. Similar percentages had no preference.

All ethnic groups most often enjoyed Lotto, with Pacific people more likely to do so than European/Other. European/Other and Māori more often preferred betting on horse or dog races than did Pacific or Asian adults. Māori and Pacific people more often favoured housie or bingo than European/Other. Māori more often favoured non-casino EGMS than did people of the other three other ethnicities. Asians were less likely than the other ethnic groups to favour this form of gambling. This was also the case for raffles and lotteries. Asians less often favoured Instant Kiwi or other scratch tickets than European/Other and Māori adults. They more often favoured casino gambling than Māori did.

Lotto was the most preferred activity for all age groups other than those aged 18-24 years and 25-34 years. People in these groups were also more likely than older adults to prefer raffles and lotteries. Younger adults more often had a most preferred activity and, relative to other age groups, they more often preferred Instant Kiwi and other scratch tickets, card games, sports betting and non-casino EGMS.

People born outside New Zealand showed fairly similar preferences to those born in New Zealand other than that they were less likely to favour Instant Kiwi or other scratch tickets, horse and dog racing and non-casino EGMS. There were no differences in preference between migrants who arrived before 2008 and those who arrived in 2008 or later.

With respect to education, as with most previous comparisons, Lotto was again the most popular gambling activity for all qualification levels. While this was the case, people with no formal qualifications and those with vocational or trade qualifications more often reported this preference than people with school qualifications only. People in the two highest education groups, relative to those with no formal qualifications, more often mentioned a preference for betting with friends and workmates. Relative to those with school qualifications only, they less often indicated a preference for Instant Kiwi or other scratch tickets. People in the highest qualification group were less likely than those in the lowest group to favour housie or bingo.

Employed people more often reported a preference for making bets with friends and workmates than did unemployed people and people who were students, caring for children at home or retired. Employed people also more often said they preferred gambling at a casino and horse or dog race betting than did those in the latter group. More unemployed than employed people

preferred non-casino EGMs. While only very small numbers people overall said they preferred housie or bingo, more unemployed than employed people had this preference.

People in all of the religious groups most favoured Lotto, ranging from 21.4% for Catholics to 14.2% for Other Christians. Catholics and Anglicans had higher preferences for Lotto than people with no religion and Other Christians. Catholics more often had a preference for horse and dog race betting than people with no religion, Other Christians and Other Religions. Anglicans also more often preferred this form of gambling than people in the Other Christian and Other Religion groups. People with no religion indicated higher preferences for Instant Kiwi than those in all of the other groups. They also more often preferred card games than did Anglicans and Other Christians. People with no religion and Anglicans more frequently favoured making bets with friends and workmates than those of Other Religions. People in the latter group less often reported a preference for non-casino EGMs than those in the other groups.

People living alone (20%) indicated higher preferences for Lotto than people resident in households of five or more (14.6%). There were no differences between the other household size groups. Conversely, more people living in households of five or more than those living alone preferred card games. People living in four person households reported a higher preference for Instant Kiwi or other scratch tickets than people living alone. People in the latter group less often favoured casino gambling than those in two, three and four person households.

Lotto preferences varied somewhat in relation to personal income, ranging from 14.9% for persons earning up to \$20,000, to 22.3% for those earning \$60,001 to \$80,000. People in the lowest income group were less likely to prefer betting with friends and workmates. All of the other groups had higher preferences. Conversely the lowest and second lowest income groups had the highest preferences for Instant Kiwi. Those in the \$100,000+ group had higher preferences for horse or dog race betting than people in the three lowest income groups. People in the second highest income group also had higher preferences for this gambling activity than did those in the lowest group.

With regard to household income and Lotto preferences there was little variation between the groups (range from 16.7% - 19.8%). As with personal income, low household income was associated with lower preferences for betting with friends and workmates. More people in the top income group favoured horse and dog race betting (relative to those in the second lowest group) and casino gambling (relative to those in the lowest income group). While only small numbers of people were involved, those in the two lowest income groups favoured bingo or housie more often than those in the two highest income groups.

**Table 21: Most enjoyed gambling activity in the past 12 months by pattern of participation and demographics**

Demographic variables	Most enjoyed gambling activity % (95% CI)					
	Card games	Bets with friends/workmates	Text game or competition	Raffle/lottery (NZ and overseas)	Lotto	Keno
Total	2.1 (1.7 - 2.7)	4.8 (4.2 - 5.5)	0.3 (0.1 - 0.4)	9.3 (8.4 - 10.1)	17.2 (16.2 - 18.3)	0.3 (0.1 - 0.4)
<b>Pattern of participation</b>						
Infrequent gambler	2.5 (1.9 - 3.3)	6.2 (5.2 - 7.2)	0.3 (0.1 - 0.6)	13.5 (12.2 - 14.9)	17.8 (16.4 - 19.3)	0.1 (0.1 - 0.3)
Regular non-continuous	1.9 (1.0 - 3.3)	6.1 (4.5 - 7.9)	-	7.8 (6.0 - 9.9)	39.7 (36.3 - 43.3)	1.1 (0.5 - 2.1)
Regular continuous	6.0 (3.9 - 8.8)	4.4 (2.6 - 7.1)	1.0 (0.3 - 2.6)	1.9 (0.9 - 3.6)	9.5 (6.6 - 13.1)	0.2 (0.1 - 0.7)

Demographic variables	Most enjoyed gambling activity % (95% CI)					
	Card games	Bets with friends/workmates	Text game or competition	Raffle/lottery (NZ and overseas)	Lotto	Keno
<b>Gender</b>						
Male	3.4 (2.6 - 4.5)	5.6 (4.6 - 6.8)	0.2 (0.1 - 0.5)	7.4 (6.4 - 8.6)	18.2 (16.6 - 19.9)	0.3 (0.1 - 0.5)
Female	1.0 (0.6 - 1.3)	4.1 (3.4 - 4.9)	0.3 (0.1 - 0.5)	10.9 (9.7 - 12.2)	16.4 (15.0 - 17.8)	0.3 (0.1 - 0.5)
<b>Ethnic group</b>						
European/Other	2.0 (1.5 - 2.7)	5.2 (4.4 - 6.0)	0.2 (0.1 - 0.5)	9.8 (8.8 - 10.8)	16.8 (15.6 - 18.1)	0.2 (0.1 - 0.4)
Māori	4.6 (3.2 - 6.3)	4.7 (3.4 - 6.4)	0.3 (0.0 - 0.9)	9.8 (7.9 - 11.9)	17.5 (15.2 - 20.0)	0.3 (0.1 - 0.8)
Pacific	2.8 (1.6 - 4.4)	4.4 (2.9 - 6.5)	0.8 (0.2 - 2.0)	7.6 (5.8 - 9.7)	21.4 (18.2 - 24.7)	1.00 (0.5 - 1.7)
Asian	2.0 (1.1 - 3.2)	2.5 (1.4 - 4.0)	0.3 (0.1 - 0.9)	3.5 (2.3 - 4.9)	18.1 (15.4 - 21.1)	0.4 (0.1 - 1.2)
<b>Age group</b>						
18 - 24 years	4.8 (2.8 - 7.6)	5.9 (3.8 - 8.7)	0.9 (0.3 - 2.2)	4.4 (2.7 - 6.7)	4.6 (2.9 - 7.0)	- -
25 - 34 years	4.2 (2.8 - 5.9)	5.6 (4.1 - 7.5)	0.2 (0.1 - 0.6)	8.6 (6.6 - 10.9)	12.4 (10.1 - 14.9)	0.2 (0 - 0.5)
35 - 44 years	1.8 (1.0 - 2.9)	6.7 (5.0 - 8.6)	0.4 (0.1 - 1.0)	11.0 (9.0 - 13.3)	18.1 (15.6 - 20.8)	0.3 (0.1 - 1.0)
45 - 54 years	1.4 (0.8 - 2.4)	4.4 (3.2 - 5.9)	0.1 (0.0 - 0.5)	10.0 (8.0 - 12.3)	22.1 (19.5 - 24.9)	0.4 (0.1 - 1.0)
55 - 64 years	0.7 (0.2 - 1.7)	4.1 (2.8 - 5.9)	- -	8.7 (6.8 - 10.9)	23.8 (20.6 - 27.1)	0.3 (0.1 - 0.9)
65+ years	0.5 (0.2 - 1.1)	2.2 (1.4 - 3.3)	- -	11.4 (9.6 - 13.5)	20.1 (17.7 - 22.7)	0.3 (0.1 - 0.7)
<b>Country of birth</b>						
NZ	2.2 (1.7 - 2.9)	4.9 (4.1 - 5.7)	0.2 (0.1 - 0.5)	9.8 (8.8 - 10.9)	16.8 (15.6 - 18.1)	0.2 (0.1 - 0.4)
Elsewhere	1.9 (1.2 - 2.9)	4.7 (3.6 - 6.0)	0.3 (0.1 - 0.6)	7.8 (6.4 - 9.5)	18.3 (16.3 - 20.4)	0.4 (0.2 - 0.8)
<b>Arrival in NZ</b>						
2008 or later	1.7 (1.2 - 5.5)	4.4 (3.1 - 10.0)	0.2 (0.2 - 1.6)	8.6 (1.7 - 8.7)	19.1 (10.1 - 19.5)	0.4 (0.1 - 1.7)
Before 2008	2.8 (1.0 - 2.8)	5.9 (3.3 - 5.9)	0.6 (0.0 - 0.6)	4.2 (7.0 - 10.5)	14.4 (17.0 - 21.5)	0.4 (0.2 - 0.9)
<b>Highest qualification</b>						
No formal qual.	1.5 (0.8 - 2.5)	2.3 (1.4 - 3.6)	0.3 (0.1 - 0.8)	9.1 (7.3 - 11.2)	20.2 (17.4 - 23.2)	0.5 (0.2 - 1.2)
School qual.	2.8 (1.7 - 4.2)	4.1 (3.0 - 5.6)	0.3 (0.1 - 0.7)	6.8 (5.4 - 8.5)	14.2 (12.3 - 16.2)	0.4 (0.1 - 0.8)
Trade/voc. qual.	2.3 (1.4 - 3.5)	5.2 (3.8 - 6.8)	0.3 (0.0 - 1.0)	7.9 (6.3 - 9.8)	20.1 (17.6 - 22.8)	0.3 (0.1 - 0.9)
Degree/higher	1.9 (1.3 - 2.8)	6.0 (5.0 - 7.2)	0.2 (0.1 - 0.5)	11.6 (1.0 - 13.3)	16.3 (14.6 - 18.1)	0.1 (0.0 - 0.2)
<b>Labour force status</b>						
Employed	2.5 (1.9 - 3.2)	6.0 (5.1 - 7.0)	0.1 (0.0 - 0.4)	9.2 (8.1 - 10.4)	17.5 (16.2 - 19.0)	0.2 (0.1 - 0.5)
Unemployed	2.9 (1.1 - 3.6)	2.3 (1.1 - 4.8)	0.5 (0.1 - 1.1)	6.5 (6.0 - 10.6)	13.0 (11.7 - 18.3)	0.8 (0.3 - 1.8)
Student/Home/Retired	1.3 (0.8 - 2.1)	2.3 (1.6 - 3.3)	0.4 (0.2 - 0.9)	9.9 (8.3 - 11.6)	17.2 (15.3 - 19.3)	0.1 (0.1 - 0.3)
<b>Religion</b>						
No religion	3.3 (2.4 - 4.4)	5.6 (4.5 - 6.9)	0.2 (0.1 - 0.7)	9.1 (7.7 - 10.8)	15.4 (13.7 - 17.1)	0.3 (0.1 - 0.7)
Anglican	1.1 (0.4 - 2.3)	5.6 (4.0 - 7.6)	- -	10.0 (7.9 - 12.5)	20.7 (17.7 - 23.9)	- -

<b>Most enjoyed gambling activity % (95% CI)</b>						
<b>Demographic variables</b>	<b>Card games</b>	<b>Bets with friends/workmates</b>	<b>Text game or competition</b>	<b>Raffle/lottery (NZ and overseas)</b>	<b>Lotto</b>	<b>Keno</b>
Presbyterian	1.0 (0.3 - 2.6)	3.9 (2.4 - 6.0)	0.7 (0.2 - 1.8)	11.3 (8.7 - 14.4)	19.8 (16.4 - 23.6)	0.3 (0.1 - 0.9)
Catholic	2.2 (1.3 - 3.5)	5.0 (3.4 - 7.0)	0.1 (0.0 - 0.3)	9.5 (7.4 - 12.1)	21.4 (18.2 - 24.9)	0.2 (0.1 - 0.6)
Other Christian	1.0 (0.4 - 2.1)	3.8 (2.5 - 5.5)	0.2 (0.1 - 0.7)	9.0 (7.2 - 11.1)	14.2 (11.9 - 16.8)	0.3 (0.1 - 0.6)
Other religion	1.7 (0.7 - 3.7)	2.0 (0.9 - 3.8)	0.6 (0.1 - 1.7)	6.6 (4.5 - 9.3)	16.1 (13.1 - 19.6)	0.7 (0.3 - 1.7)
<b>Household size</b>						
1	0.9 (0.4 - 1.7)	4.3 (3.1 - 5.9)	0.1 (0.0 - 0.6)	9.4 (7.6 - 11.4)	20.0 (17.6 - 22.6)	0.4 (0.1 - 0.9)
2	1.9 (1.2 - 2.8)	5.3 (4.2 - 6.6)	0.1 (0.0 - 0.2)	9.3 (8.0 - 10.8)	18.5 (16.6 - 20.4)	0.2 (0.1 - 0.3)
3	1.9 (1.1 - 3.1)	4.5 (3.1 - 6.3)	0.4 (0.1 - 1.4)	8.1 (6.2 - 10.4)	17.4 (14.8 - 20.2)	0.6 (0.2 - 1.6)
4	2.3 (1.4 - 3.7)	5.9 (4.3 - 7.9)	0.4 (0.1 - 0.9)	9.9 (7.9 - 12.3)	16.3 (13.8 - 19.0)	0.2 (0.1 - 0.5)
5+	3.3 (1.9 - 5.2)	3.3 (2.2 - 4.8)	0.3 (0.1 - 0.8)	9.3 (7.2 - 11.8)	14.6 (12.2 - 17.3)	0.2 (0.1 - 0.4)
<b>Personal Income (\$)</b>						
Up to 20,000	2.2 (1.4 - 3.4)	2.5 (1.7 - 3.5)	0.6 (0.3 - 1.2)	8.0 (6.7 - 9.5)	14.9 (13.2 - 16.7)	0.4 (0.2 - 0.7)
20,001 - 40,000	2.0 (1.3 - 2.9)	4.9 (3.6 - 6.5)	0.2 (0.1 - 0.5)	9.7 (8.1 - 11.6)	17.5 (15.4 - 19.8)	0.3 (0.1 - 0.6)
40,001 - 60,000	1.7 (0.9 - 2.9)	6.2 (4.6 - 8.1)	-	9.6 (7.5 - 12.0)	17.6 (15 - 20.4)	-
60,001 - 80,000	2.3 (1.1 - 4.5)	7.4 (5.3 - 10.1)	0.2 (0.0 - 0.8)	9.2 (6.6 - 12.4)	22.3 (18.7 - 26.2)	0.3 (0.0 - 1.6)
80,001 - 100,000	3.8 (1.8 - 7.2)	9.0 (5.5 - 13.6)	-	7.6 (4.5 - 12.0)	18.6 (13.5 - 24.7)	0.9 (0.1 - 4.0)
Over 100,000	2.1 (0.8 - 4.7)	6.7 (4.1 - 10.2)	-	12.0 (8.2 - 16.6)	20.3 (15.4 - 25.9)	-
<b>Household Income (\$)</b>						
Up to 20,000	1.2 (0.3 - 3.6)	1.7 (0.9 - 3.0)	0.5 (0.1 - 1.7)	7.3 (5.2 - 9.9)	16.8 (13.8 - 20.2)	1.2 (0.5 - 2.4)
20,001 - 40,000	1.3 (0.7 - 2.2)	3.5 (2.4 - 5.0)	0.2 (0.1 - 0.5)	9.9 (8.0 - 12.0)	18.0 (15.6 - 20.5)	0.3 (0.1 - 0.6)
40,001 - 60,000	1.7 (0.9 - 3.1)	4.7 (3.1 - 6.7)	-	7.8 (6.0 - 9.9)	16.7 (14.2 - 19.6)	-
60,001 - 80,000	1.7 (0.9 - 3.0)	4.5 (3.0 - 6.4)	0.3 (0.1 - 1.0)	8.9 (6.8 - 11.3)	17.5 (14.7 - 20.6)	0.0 (0.0 - 0.2)
80,001 - 100,000	2.9 (1.7 - 4.8)	7.3 (5.2 - 10.0)	0.6 (0.1 - 1.9)	8.7 (6.5 - 11.3)	19.8 (16.7 - 23.2)	-
Over 100,000	3.0 (1.9 - 4.5)	6.1 (4.8 - 7.7)	0.1 (0.0 - 0.3)	10.6 (8.8 - 12.7)	17.0 (14.9 - 19.4)	0.4 (0.1 - 1.0)

<b>Most enjoyed gambling activity % (95% CI)</b>						
<b>Demographic variables</b>	<b>Bullseye</b>	<b>Instant Kiwi or scratch tickets</b>	<b>Housie or bingo</b>	<b>Horse/dog race betting</b>	<b>Sports betting</b>	<b>Casino table/EGM (NZ and overseas)</b>
Total	0.2 (0.1 - 0.3)	9.2 (8.3 - 10.2)	0.7 (0.5 - 0.9)	6.0 (5.2 - 6.8)	1.3 (0.9 - 1.7)	4.2 (3.5 - 4.9)
<b>Pattern of participation</b>						
Infrequent gambler	0.1 (0.0 - 0.2)	11.8 (10.5 - 13.2)	0.7 (0.5 - 1.0)	6.8 (5.7 - 8.1)	1.7 (1.1 - 2.4)	5.3 (4.4 - 6.5)

Most enjoyed gambling activity % (95% CI)						
Demographic variables	Bullseye	Instant Kiwi or scratch tickets	Housie or bingo	Horse/dog race betting	Sports betting	Casino table/EGM (NZ and overseas)
Regular non-continuous	0.4 (0.1 - 0.9)	5.0 (3.6 - 6.7)	0.4 (0.1 - 1.1)	7.3 (5.7 - 9.3)	0.9 (0.4 - 1.9)	4.0 (2.9 - 5.5)
Regular continuous	1.5 (0.5 - 3.7)	24.7 (19.4 - 30.6)	3.5 (2.3 - 5.3)	12.9 (9.5 - 17.0)	2.5 (1.1 - 5.0)	6.8 (3.9 - 10.9)
<b>Gender</b>						
Male	0.2 (0.1 - 0.5)	6.2 (5.1 - 7.5)	0.4 (0.2 - 0.8)	6.7 (5.6 - 8.0)	2.5 (1.7 - 3.4)	4.5 (3.5 - 5.7)
Female	0.2 (0.1 - 0.3)	12.0 (10.6 - 13.4)	1.0 (0.7 - 1.3)	5.2 (4.3 - 6.3)	0.2 (0.1 - 0.5)	3.9 (3.1 - 4.8)
<b>Ethnic group</b>						
European/Other	0.2 (0.1 - 0.3)	9.8 (8.7 - 10.9)	0.5 (0.3 - 0.8)	6.8 (5.9 - 7.8)	1.3 (0.9 - 1.9)	4.1 (3.4 - 5.0)
Māori	- -	12.1 (10.0 - 14.4)	2.0 (1.3 - 2.9)	5.2 (3.9 - 6.7)	1.4 (0.7 - 2.5)	2.4 (1.5 - 3.6)
Pacific	0.1 (0.0 - 0.3)	8.2 (6.0 - 10.8)	2.3 (1.3 - 3.7)	2.1 (1.2 - 3.5)	1.6 (0.5 - 4.1)	3.4 (2.2 - 5.0)
Asian	0.7 (0.2 - 1.9)	6.2 (4.4 - 8.4)	0.4 (0.1 - 1.4)	1.2 (0.5 - 2.5)	0.8 (0.3 - 1.6)	5.9 (4.3 - 7.9)
<b>Age group</b>						
18 - 24 years	0.2 (0.0 - 1.1)	21.4 (17.2 - 26.0)	1.2 (0.5 - 2.4)	5.2 (2.9 - 8.4)	3.3 (1.5 - 6.3)	5.7 (3.6 - 8.5)
25 - 34 years	- -	12.6 (10.2 - 15.3)	0.7 (0.3 - 1.4)	5.3 (3.7 - 7.4)	2.3 (1.4 - 3.6)	7.6 (5.5 - 10.1)
35 - 44 years	0.1 (0.0 - 0.3)	7.8 (6.2 - 9.7)	0.6 (0.3 - 1.1)	7.1 (5.5 - 9.0)	1.6 (0.9 - 2.7)	3.0 (2.0 - 4.2)
45 - 54 years	0.3 (0.1 - 0.8)	6.1 (4.6 - 7.8)	0.3 (0.1 - 0.5)	5.9 (4.5 - 7.6)	0.5 (0.1 - 1.1)	3.0 (.02 - 4.4)
55 - 64 years	0.3 (0.1 - 0.9)	5.1 (3.7 - 6.9)	0.8 (0.4 - 1.5)	6.6 (4.9 - 8.7)	0.2 (0.0 - 0.7)	3.9 (2.5 - 5.7)
65+ years	0.2 (0.0 - 0.6)	5.0 (3.8 - 6.5)	0.8 (0.4 - 1.3)	5.4 (4.2 - 6.8)	0.2 (0.0 - 0.5)	2.4 (1.5 - 3.5)
<b>Country of birth</b>						
NZ	0.2 (0.1 - 0.3)	10.6 (9.5 - 11.8)	0.7 (0.5 - 1.0)	6.9 (6 - 7.9)	1.4 (0.9 - 1.9)	4.1 (3.4 - 5.0)
Elsewhere	0.3 (0.1 - 0.7)	5.5 (4.3 - 6.9)	0.7 (0.4 - 1.2)	3.4 (2.4 - 4.8)	1.1 (0.5 - 2.0)	4.2 (3.1 - 5.6)
<b>Arrival in NZ</b>						
2008 or later	0.2 (0.1 - 2.9)	5.4 (3.1 - 9.8)	0.8 (0.0 - 0.5)	3.3 (1.3 - 9.3)	1.1 (0.3 - 3.3)	4.3 (1.9 - 7.7)
Before 2008	0.6 (0.1 - 0.6)	5.8 (4.1 - 7.0)	0.1 (0.5 - 1.4)	3.9 (2.4 - 4.5)	1.1 (0.5 - 2.1)	4.0 (3.1 - 5.8)
<b>Highest qualification</b>						
No formal qual.	0.1 (0.0 - 0.6)	9.0 (7.1 - 11.3)	1.3 (0.8 - 2.0)	5.4 (3.9 - 7.2)	0.5 (0.1 - 1.2)	5.0 (3.2 - 7.5)
School qual.	0.2 (0.1 - 0.7)	13.0 (10.8 - 15.5)	0.8 (0.4 - 1.3)	6.4 (4.9 - 8.3)	1.3 (0.6 - 2.7)	3.9 (2.7 - 5.5)
Trade/voc. qual.	0.1 (0.0 - 0.2)	8.3 (6.6 - 10.2)	0.8 (0.4 - 1.3)	6.4 (5.0 - 8.1)	1.9 (1.1 - 3.2)	4.1 (3.0 - 5.6)
Degree/higher	0.3 (0.1 - 0.6)	7.5 (6.2 - 9.0)	0.4 (0.2 - 0.7)	5.6 (4.5 - 6.9)	1.2 (0.7 - 1.9)	4.1 (3.0 - 5.3)
<b>Labour force status</b>						
Employed	0.2 (0.1 - 0.5)	9.4 (8.3 - 10.7)	0.5 (0.3 - 0.7)	6.6 (5.7 - 7.7)	1.3 (0.9 - 1.8)	5.0 (4.1 - 6.0)
Unemployed	- -	12.1 (7.3 - 13.5)	1.3 (0.8 - 2.5)	7.8 (4.2 - 10.3)	2.3 (0.5 - 3.3)	5.6 (2.0 - 6.7)

<b>Most enjoyed gambling activity % (95% CI)</b>						
<b>Demographic variables</b>	<b>Bullseye</b>	<b>Instant Kiwi or scratch tickets</b>	<b>Housie or bingo</b>	<b>Horse/dog race betting</b>	<b>Sports betting</b>	<b>Casino table/EGM (NZ and overseas)</b>
Student/Home/Retired	0.1 (0.0 - 0.4)	8.5 (7.0 - 10.3)	1.0 (0.6 - 1.7)	3.9 (2.8 - 5.3)	1.2 (0.4 - 2.6)	2.2 (1.5 - 3.2)
<b>Religion</b>						
No religion	0.1 (0.0 - 0.3)	11.7 (10.0 - 13.5)	0.4 (0.2 - 0.7)	5.6 (4.5 - 6.9)	1.7 (1.1 - 2.5)	4.6 (3.5 - 5.8)
Anglican	0.1 (0.0 - 0.4)	6.8 (5.0 - 9.0)	0.6 (0.2 - 1.2)	8.8 (6.6 - 11.4)	1.2 (0.4 - 3.2)	4.7 (2.8 - 7.4)
Presbyterian	0.2 (0.0 - 0.9)	7.2 (5.0 - 9.9)	1.0 (0.4 - 2.1)	5.7 (3.9 - 8.0)	0.4 (0.1 - 1.2)	2.8 (1.6 - 4.5)
Catholic	0.4 (0.1 - 1.2)	8.5 (6.4 - 11.1)	1.0 (0.5 - 1.9)	9.5 (7.0 - 12.5)	1.7 (0.7 - 3.6)	5.2 (3.5 - 7.4)
Other Christian	0.1 (0.0 - 0.3)	7.8 (6.0 - 10.1)	1.0 (0.5 - 1.8)	2.5 (1.6 - 3.8)	0.6 (0.2 - 1.5)	2.2 (1.3 - 3.5)
Other religion	0.7 (0.2 - 2.2)	7.4 (5.2 - 10.2)	1.0 (0.4 - 2.2)	3.1 (1.7 - 5.2)	1.1 (0.4 - 2.5)	5.0 (2.8 - 8.2)
<b>Household size</b>						
1	0.2 (0.1 - 0.8)	6.5 (4.9 - 8.3)	1.0 (0.5 - 1.7)	7.2 (5.5 - 9.2)	0.5 (0.2 - 1.2)	1.7 (1.0 - 2.7)
2	0.2 (0.1 - 0.6)	8.6 (7.3 - 10.0)	0.6 (0.3 - 1.1)	6.1 (5.0 - 7.3)	0.8 (0.4 - 1.3)	4.3 (3.3 - 5.4)
3	0.1 (0.0 - 0.4)	8.9 (6.7 - 11.4)	0.8 (0.4 - 1.4)	5.2 (3.7 - 7.2)	1.3 (0.6 - 2.4)	5.7 (4.0 - 7.8)
4	0.3 (0.1 - 0.9)	10.9 (8.6 - 13.7)	0.6 (0.2 - 1.1)	5.8 (4.3 - 7.7)	1.9 (1.0 - 3.2)	4.7 (3.3 - 6.6)
5+	- -	10.1 (7.8 - 13.0)	0.8 (0.4 - 1.4)	5.9 (4.0 - 8.4)	2.0 (0.9 - 4.0)	3.1 (1.8 - 5.0)
<b>Personal Income (\$)</b>						
Up to 20,000	0.2 (0.1 - 0.6)	11.1 (9.4 - 13.1)	1.2 (0.8 - 1.8)	4.6 (3.4 - 6.0)	1.3 (0.6 - 2.5)	3.4 (2.4 - 4.6)
20,001 - 40,000	0.1 (0.0 - 0.4)	10.4 (8.7 - 12.4)	0.6 (0.3 - 0.9)	5.5 (4.2 - 7.1)	0.9 (0.4 - 1.7)	4.5 (3.1 - 6.3)
40,001 - 60,000	0.5 (0.2 - 1.1)	8.8 (6.7 - 11.2)	0.5 (0.2 - 0.9)	5.3 (3.8 - 7.2)	1.7 (0.9 - 3.0)	5.9 (4.3 - 7.8)
60,001 - 80,000	0.1 (0.0 - 0.6)	6.0 (3.9 - 8.8)	0.5 (0.1 - 1.6)	7.0 (4.9 - 9.8)	1.9 (0.8 - 3.7)	3.5 (2.1 - 5.4)
80,001 - 100,000	- -	6.6 (3.8 - 10.5)	. -	9.8 (6.3 - 14.4)	1.0 (0.2 - 2.7)	2.9 (1.3 - 5.8)
Over 100,000	- -	3.7 (1.8 - 6.8)	0.1 (0.0 - 0.3)	12.8 (9.0 - 17.3)	1.3 (0.4 - 3.6)	3.3 (1.5 - 6.3)
<b>Household Income (\$)</b>						
Up to 20,000	- -	11.4 (7.8 - 16.0)	1.3 (0.7 - 2.3)	4.8 (3.1 - 7.0)	1.3 (0.3 - 4.2)	2.3 (1.2 - 4.0)
20,001 - 40,000	0.3 (0.1 - 0.8)	9.7 (7.9 - 11.7)	1.1 (0.6 - 1.8)	4.6 (3.4 - 6.1)	1.0 (0.3 - 2.7)	3.0 (1.8 - 4.7)
40,001 - 60,000	0.3 (0.1 - 0.9)	8.6 (6.4 - 11.3)	1.0 (0.5 - 1.7)	4.8 (3.4 - 6.6)	1.5 (0.6 - 3.1)	3.9 (2.6 - 5.7)
60,001 - 80,000	- -	9.6 (7.3 - 12.4)	0.6 (0.2 - 1.2)	7.0 (4.8 - 9.9)	0.5 (0.2 - 1.3)	4.0 (2.6 - 6.0)
80,001 - 100,000	0.2 (0.0 - 0.6)	8.6 (6.4 - 11.3)	0.2 (0.0 - 0.5)	5.5 (3.8 - 7.7)	1.8 (0.9 - 3.3)	4.1 (2.6 - 6.1)
Over 100,000	0.3 (0.1 - 0.7)	7.3 (5.7 - 9.3)	0.4 (0.1 - 1.0)	7.8 (6.2 - 9.6)	1.2 (0.7 - 2.0)	5.5 (4.1 - 7.2)

Most enjoyed gambling activity % (95% CI)						
Demographic variables	Non-casino EGMs	Short-term spec. investments	Overseas internet	Other activities	No preference/ enjoy all	No/None
Total	3.6 (3.1 - 4.3)	0.4 (0.2 - 0.7)	0.1 (0.0 - 0.2)	0.6 (0.4 - 0.8)	6.3 (5.5 - 7.1)	13.3 (12.3 - 14.4)
<b>Pattern of participation</b>						
Infrequent gambler	3.7 (3.0 - 4.7)	0.5 (0.2 - 1.0)	0.1 (0.0 - 0.3)	0.8 (0.5 - 1.3)	7.9 (6.7 - 9.1)	19.0 (17.4 - 20.6)
Regular non-continuous	3.1 (2.1 - 4.4)	0.7 (0.3 - 1.4)	- -	0.3 (0.1 - 0.8)	7.8 (6.1 - 9.9)	13.5 (11.2 - 16.0)
Regular continuous	15.5 (11.8 - 19.9)	- -	0.4 (0.1 - 1.1)	0.7 (0.1 - 2.5)	6.9 (4.0 - 10.9)	1.6 (0.7 - 3.2)
<b>Gender</b>						
Male	3.3 (2.5 - 4.2)	0.7 (0.3 - 1.2)	0.1 (0.0 - 0.4)	0.7 (0.4 - 1.1)	6.1 (5.1 - 7.4)	13.4 (11.9 - 15.1)
Female	4.0 (3.2 - 4.9)	0.2 (0.0 - 0.4)	0.0 (0.0 - 0.1)	0.4 (0.2 - 0.8)	6.4 (5.4 - 7.5)	13.2 (11.9 - 14.6)
<b>Ethnic group</b>						
European/Other	3.8 (3.1 - 4.5)	0.4 (0.2 - 0.7)	0.1 (0.0 - 0.2)	0.6 (0.4 - 0.9)	6.7 (5.8 - 7.7)	13.2 (12.0 - 14.5)
Māori	6.2 (4.8 - 7.9)	0.1 (0.0 - 0.4)	0.1 (0.0 - 0.4)	0.5 (0.2 - 1.1)	5.6 (4.2 - 7.3)	12.2 (10.2 - 14.4)
Pacific	3.0 (1.9 - 4.6)	- -	0.2 (0.0 - 1.1)	0.4 (0.1 - 1.0)	3.8 (2.4 - 5.6)	11.2 (8.9 - 13.8)
Asian	0.6 (0.2 - 1.4)	0.8 (0.2 - 2.1)	- -	0.4 (0.1 - 1.2)	3.3 (2.3 - 4.7)	13.9 (11.5 - 16.7)
<b>Age group</b>						
18 - 24 years	6.6 (4.6 - 9.3)	- -	- -	0.2 (0.0 - 0.8)	3.4 (1.7 - 6.1)	5.9 (3.7 - 8.8)
25 - 34 years	4.2 (2.8 - 6.2)	0.7 (0.1 - 2.1)	0.4 (0.1 - 1.1)	0.9 (0.4 - 1.8)	4.3 (2.9 - 6.1)	10.3 (8.1 - 12.8)
35 - 44 years	3.1 (2.0 - 4.4)	0.7 (0.2 - 1.5)	0.0 (0.0 - 0.2)	0.3 (0.1 - 0.8)	4.6 (3.4 - 6.1)	14.4 (12.2 - 16.9)
45 - 54 years	3.0 (2.0 - 4.3)	0.2 (0.0 - 0.7)	0.0 (0.0 - 0.1)	0.6 (0.2 - 1.6)	8.0 (6.3 - 10)	15.6 (13.2 - 18.2)
55 - 64 years	2.2 (1.3 - 3.4)	0.3 (0.1 - 0.9)	- -	0.6 (0.2 - 1.3)	9.4 (7.4 - 11.9)	16.4 (13.7 - 19.5)
65+ years	3.3 (2.3 - 4.5)	0.4 (0.1 - 1.0)	- -	0.8 (0.4 - 1.4)	7.8 (6.2 - 9.7)	15.7 (13.5 - 18.0)
<b>Country of birth</b>						
NZ	4.2 (3.5 - 5.0)	0.4 (0.2 - 0.7)	0.1 (0.0 - 0.3)	0.6 (0.3 - 0.9)	6.7 (5.7 - 7.7)	12.8 (11.6 - 14.0)
Elsewhere	2.1 (1.2 - 3.2)	0.5 (0.2 - 1.0)	0.0 (0.0 - 0.2)	0.6 (0.3 - 1.1)	5.2 (4.1 - 6.5)	14.7 (12.8 - 16.7)
<b>Arrival in NZ</b>						
2008 or later	2.4 (0.1 - 1.7)	0.4 (0.1 - 3.3)	0.1 -	0.6 (0.1 - 2.1)	5.8 (1.0 - 4.7)	15.7 (6.4 - 14.9)
Before 2008	0.5 (1.4 - 3.8)	0.8 (0.2 - 0.9)	- (0.0 - 0.2)	0.6 (0.3 - 1.1)	2.3 (4.5 - 7.4)	10.1 (13.6 - 18.0)
<b>Highest qualification</b>						
No formal qual.	5.3 (3.8 - 7.2)	- -	0.1 (0.0 - 0.4)	0.3 (0.0 - 1.1)	6.6 (5.1 - 8.4)	14.5 (12.2 - 17.1)
School qual.	4.4 (3.2 - 5.9)	0.1 (0.0 - 0.4)	- -	0.4 (0.2 - 0.9)	6.1 (4.7 - 7.7)	12.1 (10.0 - 14.5)
Trade/voc. qual.	5.0 (3.6 - 6.7)	0.3 (0.1 - 0.8)	- -	0.4 (0.1 - 0.7)	7.2 (5.6 - 9.1)	13.1 (11.1 - 15.3)
Degree/higher	1.7 (1.2 - 2.5)	0.8 (0.4 - 1.5)	0.2 (0.0 - 0.5)	0.9 (0.5 - 1.5)	5.7 (4.7 - 6.9)	13.7 (12.1 - 15.4)

Most enjoyed gambling activity % (95% CI)						
Demographic variables	Non-casino EGMs	Short-term spec. investments	Overseas internet	Other activities	No preference/ enjoy all	No/None
<b>Labour force status</b>						
Employed	3.0 (2.4 - 3.7)	0.4 (0.2 - 0.6)	0.1 (0.0 - 0.3)	0.7 (0.4 - 1.0)	6.6 (5.7 - 7.7)	12.8 (11.5 - 14.1)
Unemployed	5.3 (4.5 - 9.4)	- -	0.1 (0.1 - 0.8)	0.1 (0.0 - 0.1)	2.7 (2.2 - 5.9)	16.6 (12.0 - 20.1)
Student/Home/Retired	4.4 (3.3 - 5.8)	0.6 (0.2 - 1.6)	- -	0.5 (0.3 - 0.9)	6.0 (4.8 - 7.3)	13.7 (12.0 - 15.6)
<b>Religion</b>						
No religion	4.7 (3.6 - 6.1)	0.6 (0.3 - 1.3)	0.0 (0.0 - 0.1)	0.7 (0.4 - 1.2)	6.3 (5.1 - 7.8)	12.9 (11.3 - 14.7)
Anglican	2.9 (1.9 - 4.3)	0.3 (0.1 - 1.2)	- -	0.4 (0.2 - 0.9)	7.1 (5.2 - 9.4)	14.7 (12.2 - 17.4)
Presbyterian	3.5 (2.1 - 5.5)	0.2 (0.0 - 1.0)	0.4 (0.0 - 2.0)	0.4 (0.1 - 1.2)	8.5 (6.1 - 11.4)	14.0 (11.0 - 17.4)
Catholic	3.5 (2.3 - 5.2)	0.4 (0.1 - 1.2)	0.1 (0.0 - 0.3)	0.6 (0.1 - 2.2)	5.9 (4.2 - 8.0)	9.4 (7.5 - 11.6)
Other Christian	3.4 (2.3 - 4.7)	0.0 (0.0 - 0.1)	0.1 (0.0 - 0.4)	0.5 (0.2 - 1.1)	5.0 (3.7 - 6.6)	14.8 (12.3 - 17.5)
Other religion	0.6 (0.3 - 1.4)	0.1 (0.0 - 0.7)	- -	0.3 (0.1 - 1.0)	4.3 (2.7 - 6.6)	14.6 (11.2 - 18.4)
<b>Household size</b>						
1	3.0 (2.0 - 4.3)	0.4 (0.2 - 1.0)	0.0 (0.0 - 0.2)	1.0 (0.5 - 2.0)	7.0 (5.5 - 8.8)	13.3 (11.2 - 15.7)
2	3.7 (2.9 - 4.7)	0.3 (0.1 - 0.6)	- -	0.6 (0.3 - 1.0)	7.1 (5.8 - 8.6)	14.7 (13.0 - 16.4)
3	3.4 (2.2 - 4.9)	0.1 (0.0 - 0.3)	0.2 (0.0 - 1.1)	0.4 (0.1 - 1.0)	7.2 (5.4 - 9.4)	12.9 (10.6 - 15.5)
4	3.7 (2.4 - 5.5)	0.4 (0.1 - 0.9)	- -	0.6 (0.3 - 1.3)	5.9 (4.4 - 7.7)	12.3 (10.2 - 14.7)
5+	4.0 (2.6 - 5.8)	1.0 (0.3 - 2.4)	0.2 (0.0 - 0.5)	0.5 (0.1 - 1.6)	3.9 (2.5 - 5.7)	12.3 (9.7 - 15.3)
<b>Personal Income (\$)</b>						
Up to 20,000	4.2 (3.2 - 5.3)	0.1 (0.0 - 0.5)	0.0 (0.0 - 0.1)	0.2 (0.1 - 0.5)	5.8 (4.6 - 7.2)	12.2 (10.6 - 14.0)
20,001 - 40,000	4.6 (3.4 - 6.1)	0.5 (0.1 - 1.5)	0.2 (0.0 - 0.8)	0.6 (0.3 - 1.1)	5.0 (3.8 - 6.4)	12.6 (10.7 - 14.7)
40,001 - 60,000	3.8 (2.4 - 5.8)	0.2 (0.0 - 0.7)	0.1 (0.0 - 0.3)	1.2 (0.5 - 2.4)	8.3 (6.3 - 10.7)	14.2 (11.7 - 16.9)
60,001 - 80,000	1.3 (0.6 - 2.6)	0.4 (0.1 - 1.1)	- -	0.8 (0.2 - 2.1)	6.8 (4.8 - 9.3)	13.6 (10.8 - 16.9)
80,001 - 100,000	1.1 (0.3 - 2.9)	0.2 (0.0 - 1.0)	- -	- -	6.5 (3.8 - 10.4)	15.3 (11.0 - 20.5)
Over 100,000	2.6 (0.9 - 6.1)	1.7 (0.6 - 3.8)	- -	0.4 (0 - 1.8)	5.0 (3.0 - 8.0)	16.3 (12.0 - 21.5)
<b>Household Income (\$)</b>						
Up to 20,000	4.2 (2.7 - 6.3)	0.1 (0.0 - 0.2)	0.0 (0.0 - 0.2)	- -	6.4 (4.5 - 8.7)	12.2 (9.5 - 15.4)
20,001 - 40,000	4.0 (2.8 - 5.4)	. -	0.3 (0.0 - 1.1)	0.8 (0.4 - 1.5)	5.7 (4.3 - 7.3)	12.6 (10.6 - 14.8)
40,001 - 60,000	4.5 (3.1 - 6.3)	0.2 (0.0 - 0.7)	0.1 (0.0 - 0.4)	0.7 (0.2 - 1.6)	5.0 (3.6 - 6.9)	15.2 (12.6 - 18.0)
60,001 - 80,000	4.1 (2.5 - 6.3)	0.6 (0.2 - 1.3)	0.1 (0.0 - 0.4)	0.6 (0.2 - 1.3)	7.4 (5.3 - 10.0)	13.3 (10.6 - 16.4)
80,001 - 100,000	2.4 (1.2 - 4.2)	0.4 (0.1 - 1.3)	- -	0.8 (0.2 - 2.3)	6.0 (4.1 - 8.5)	13.1 (10.6 - 16.1)
Over 100,000	3.1 (2.1 - 4.4)	0.9 (0.4 - 1.8)	- -	0.4 (0.2 - 1.0)	6.8 (5.3 - 8.5)	13.6 (11.6 - 15.9)

Table 22 shows relationships between most enjoyed gambling activity, number of gambling activities engaged in during the past 12 months and expenditure.

Over a third of people who take part in just one type of gambling indicate that they do not have a most preferred activity. Over 20% of people who engage in two or three activities also report not having a preference. Those engaged in more forms more often said they have a preference.

People who prefer continuous forms of gambling are over-represented among those who take part in a large number of other gambling activities. For example, while less than one percent of people who prefer cards engage in only one activity, 17.6% who take part in 10 or more activities prefer cards. Higher participation in large numbers of gambling activities is also apparent for people who prefer bets with friends or workmates, housie or bingo, horse and dog race betting, sports betting, casino gambling and non-casino EGMs. In the case of non-continuous forms including Lotto and raffles or lotteries, the situation is the reverse. People who take part in only one or a few gambling activities are much more likely to favour these forms. Those who prefer Instant Kiwi or other scratch tickets show a different pattern. There are fairly similar percentages of people who prefer this gambling form across participation levels. The number of people who favour some forms, for example, short-term speculative investments and internet gambling, is too small to discern meaningful relationships.

Gambling preferences are also strongly associated with the overall gambling expenditure. Over a third of people who report spending \$20 or less a month do not have a favourite gambling activity. Those who spend larger sums are more likely to indicate a preference.

People who favour card games, betting on horse and dog racing, casino gambling, non-casino EGMs and short-term speculative investments make up relatively high percentages of people who report spending over \$100 per month. Conversely, people who prefer raffles and lotteries make up a quarter of those who spend only one to ten dollars a month and smaller percentages of those who spend more, especially of those who spend over \$30. People who prefer Lotto make up a smaller percentage (12.1%) of those who spend \$1-\$10 per month but over a quarter (25.9%-28.1%) of those in the next four higher expenditure groups. They make up smaller percentages of people who report spending more than this. People who favour betting with friends and workmates account for somewhat larger percentages in the mid-expenditure range than at the high and low ends. This is also the case for those who prefer Instant Kiwi and other scratch tickets, albeit that 8.1%-11.9% are also found in the \$1-\$10, \$11-\$20, \$51-\$100 and \$101-\$500 groups. While the number of people involved is not large, the percentages of people who prefer housie or bingo are relatively higher at the upper than at the lower expenditure level.

**Table 22: Most enjoyed gambling activity by number of activities participated in during the past 12 months and expenditure**

Number of gambling activities and expenditure	Most enjoyed gambling activities in past year % (95% CI)					
	Card games	Bets with friends/workmates	Text game or competition	Raffle/lottery (NZ and overseas)	Lotto	Keno
<b>Number of activities</b>						
1	0.8 (0.2 - 1.9)	2.9 (1.9 - 4.3)	0.8 (0.3 - 1.6)	15.4 (13.1 - 17.8)	26.9 (24.2 - 29.8)	- -
2	2.1 (1.1 - 3.6)	4.7 (3.3 - 6.4)	0.1 (0.0 - 0.3)	15.0 (12.9 - 17.4)	28.6 (25.7 - 31.6)	0.0 (0.0 - 0.2)
3	2.0 (1.1 - 3.3)	9.3 (7.3 - 11.6)	0.3 (0.1 - 1.0)	11.1 (8.9 - 13.7)	18.9 (16.3 - 21.8)	0.6 (0.2 - 1.3)
4 - 6	4.6 (3.2 - 6.4)	8.4 (6.6 - 10.6)	0.0 (0.0 - 0.2)	4.9 (3.4 - 6.7)	11.9 (9.9 - 14.1)	0.9 (0.4 - 1.7)

Most enjoyed gambling activities in past year % (95% CI)						
Number of gambling activities and expenditure	Card games	Bets with friends/workmates	Text game or competition	Raffle/lottery (NZ and overseas)		
				Lotto	Keno	
7 - 9	9.2 (4.9 - 15.4)	6.1 (2.9 - 11.0)	0.1 (0.0 - 0.7)	3.3 (1.0 - 8.0)	6.6 (3.8 - 10.6)	0.3 (0.1 - 0.9)
10+	17.6 (5.2 - 39.9)	7.0 (1.3 - 22.4)	- -	- -	3.4 (0.5 - 12.1)	- -
<b>Total monthly expenditure</b>						
\$1 - \$10	1.3 (0.5 - 2.8)	5.5 (3.9 - 7.4)	1.0 (0.4 - 2.1)	24.5 (21.4 - 27.8)	12.1 (9.9 - 14.5)	0.0 (0.0 - 0.2)
\$11 - \$20	0.2 (0.1 - 0.7)	4.7 (3.3 - 6.4)	0.3 (0.1 - 0.9)	11.0 (8.7 - 13.6)	27.8 (24.7 - 31.2)	0.1 (0.0 - 0.3)
\$21 - \$30	0.9 (0.2 - 3.0)	8.6 (6.0 - 12.0)	0.1 (0.0 - 0.4)	13.1 (10.1 - 16.5)	28.1 (24.1 - 32.3)	0.5 (0.1 - 1.6)
\$31 - \$50	3.8 (2.1 - 6.4)	7.3 (5.3 - 9.9)	0.1 (0.0 - 0.3)	7.1 (5.2 - 9.6)	26.3 (22.8 - 30.2)	0.2 (0.0 - 0.8)
\$51 - \$100	2.4 (1.4 - 4.0)	7.3 (5.4 - 9.6)	0.2 (0.0 - 0.6)	5.9 (4.2 - 8.0)	25.9 (22.5 - 29.6)	0.7 (0.3 - 1.5)
\$101 - \$500	7.0 (4.8 - 9.7)	4.7 (3.0 - 6.9)	- -	4.5 (2.8 - 6.9)	13.3 (10.5 - 16.5)	0.6 (0.1 - 1.8)
Over \$500	12.8 (7.1 - 20.9)	0.7 (0.1 - 2.3)	- -	2.2 (0.5 - 6.9)	5.0 (2.4 - 9.2)	0.6 (0.1 - 1.8)
Don't know/refused/other	- -	- -	- -	7.3 (1.3 - 23.1)	4.7 (0.5 - 21)	- -

Most enjoyed gambling activities in past year % (95% CI)						
Number of gambling activities and expenditure	Bullseye	Instant Kiwi or scratch ticket	Housie or bingo	Horse/dog race betting	Sports betting	Casino table/EGM (NZ and overseas)
<b>Number of activities</b>						
1	0.1 (0.0 - 0.2)	6.8 (5.1 - 8.9)	0.3 (0.1 - 0.8)	1.5 (0.7 - 2.8)	0.6 (0.2 - 1.6)	2.2 (1.4 - 3.4)
2	0.1 (0.0 - 0.4)	11.6 (9.6 - 13.8)	0.5 (0.2 - 1.0)	3.8 (2.7 - 5.2)	0.2 (0.0 - 0.4)	2.6 (1.6 - 3.9)
3	0.2 (0.0 - 0.8)	16.7 (14.0 - 19.8)	1.2 (0.6 - 2.0)	6.7 (5.0 - 8.8)	1.5 (0.7 - 3.0)	5.6 (3.5 - 8.4)
4 - 6	0.5 (0.2 - 1.2)	13.7 (11.1 - 16.6)	1.3 (0.8 - 1.9)	17.1 (14.3 - 20.3)	4.1 (2.6 - 6.2)	8.7 (6.8 - 10.9)
7 - 9	0.5 (0.1 - 2.5)	4.7 (2.0 - 9.4)	2.7 (1.0 - 6.1)	19.1 (13.2 - 26.3)	4.1 (1.6 - 8.5)	19.2 (13.0 - 26.7)
10+	- -	10.1 (2.0 - 29.6)	2.8 (0.3 - 12.7)	11.2 (2.8 - 28.9)	2.5 (0.2 - 11.5)	12.3 (2.9 - 32.6)
<b>Total monthly expenditure</b>						
\$1 - \$10	- -	11.1 (8.7 - 13.9)	0.4 (0.2 - 1.1)	1.7 (0.7 - 3.4)	0.2 (0.0 - 1.8)	1.7 (0.8 - 3.0)
\$11 - \$20	- -	11.9 (9.6 - 14.5)	0.5 (0.2 - 1.1)	2.5 (1.6 - 3.9)	0.3 (0.0 - 0.8)	2.3 (1.1 - 4.4)
\$21 - \$30	- -	15.3 (12.0 - 19.1)	0.5 (0.2 - 1.1)	4.9 (3.2 - 7.3)	0.6 (0.1 - 1.0)	1.9 (0.7 - 4.3)
\$31 - \$50	0.4 (0.1 - 1.2)	16.2 (12.7 - 20.3)	0.5 (0.2 - 1.1)	7.6 (5.1 - 10.9)	4.0 (0.2 - 1.5)	4.4 (2.7 - 6.8)
\$51 - \$100	0.5 (0.1 - 1.4)	9.0 (6.5 - 11.9)	1.1 (0.5 - 2.0)	11.7 (9.1 - 14.7)	4.7 (2.2 - 6.8)	7.7 (5.3 - 10.7)
\$101 - \$500	0.6 (0.2 - 1.5)	8.1 (6.0 - 10.8)	2.6 (1.7 - 4.0)	17.4 (14.2 - 21.0)	2.9 (3.0 - 7.1)	13.3 (10.3 - 16.7)
Over \$500	- -	1.0 (0.2 - 3.2)	0.5 (0.1 - 1.6)	20.5 (13.0 - 30.0)	- (0.9 - 7.4)	16.0 (9.7 - 24.3)
Don't know/refused/other	3.9 (0.4 - 17.3)	- -	- -	12.2 (1.2 - 47.0)	- -	9.8 (0.9 - 39.5)

Number of gambling activities and expenditure in past year	Most enjoyed gambling activities in past year % (95% CI)					
	Non-casino EGMs	Short-term spec. investments	Overseas internet	Other activities	No preference/enjoy all	No/None
<b>Number of activities</b>						
1	1.2 (0.6 - 2.2)	0.4 (0.1 - 1.6)	- -	0.2 (0.0 - 0.6)	- -	37.5 (34.4 - 40.7)
2	1.6 (1.0 - 2.5)	0.4 (0.1 - 0.9)	0.0 (0.0 - 0.1)	0.5 (0.2 - 1.0)	13.7 (11.6 - 16.0)	14.0 (12.0 - 16.3)
3	3.5 (2.2 - 5.2)	0.6 (0.2 - 1.5)	0.1 (0.0 - 0.4)	1.0 (0.5 - 2.0)	10.9 (8.7 - 13.5)	9.7 (7.4 - 12.5)
4 - 6	11.0 (8.7 - 13.6)	0.7 (0.3 - 1.5)	0.3 (0.1 - 1.1)	1.2 (0.5 - 2.4)	7.4 (5.7 - 9.5)	3.1 (2.2 - 4.3)
7 - 9	13.2 (8.2 - 19.8)	- -	- -	1.2 (0.2 - 4.5)	7.9 (3.6 - 14.8)	1.9 (0.5 - 5.0)
10+	13.8 (3.3 - 36.0)	- -	- -	- -	17.6 (1.6 - 61.9)	1.8 (0.2 - 8.2)
<b>Total monthly expenditure</b>						
\$1 - \$10	2.3 (1.2 - 3.9)	- -	- -	0.8 (0.3 - 1.6)	5.2 (3.7 - 7.0)	30.1 (26.6 - 33.7)
\$11 - \$20	1.3 (0.6 - 2.6)	- -	- -	0.4 (0.2 - 1.0)	10.0 (7.9 - 12.5)	25.3 (22.2 - 28.7)
\$21 - \$30	1.9 (0.9 - 3.5)	- -	- -	1.7 (0.6 - 3.9)	8.0 (5.8 - 10.7)	13.2 (10.5 - 16.3)
\$31 - \$50	5.2 (3.2 - 8.0)	- -	0.2 (0.0 - 0.6)	0.6 (0.2 - 1.6)	8.3 (6.1 - 10.9)	11.1 (8.2 - 14.7)
\$51 - \$100	7.4 (5.3 - 10.0)	0.3 (0.1 - 1.1)	- -	0.2 (0.1 - 0.5)	8.3 (6.4 - 10.6)	7.5 (5.6 - 9.8)
\$101 - \$500	9.8 (7.5 - 12.5)	0.3 (0.0 - 1.1)	0.5 (0.1 - 1.8)	0.4 (0.1 - 1.4)	7.7 (5.2 - 11.1)	4.5 (2.9 - 6.5)
Over \$500	11.2 (6.2 - 18.4)	15.6 (8.2 - 26.3)	- -	0.6 (0.1 - 2.6)	6.2 (2.4 - 13.1)	4.3 (1.4 - 10.2)
Don't know/refused/ other	- -	1.3 (0.1 - 5.9)	- -	14.9 (3.3 - 39.3)	- -	46.0 (21.3 - 72.4)

#### 4.1.12 Reasons for gambling

Table 23 shows the reasons participants gave for taking part in the various gambling activities. The most frequently mentioned reason was to win prizes or money, ranging from 39.4% for raffles or lotteries to 95.1% for short-term speculative investments. Over 80% gave this reason for taking part in Lotto, Keno and text games or competitions. Less than 50% gave this reason for participating in raffles or lotteries, card games and betting with friends or workmates. Percentages for other forms included in the table are between 50% and 80%.

Excitement and challenge, and entertainment were also frequently mentioned. Endorsement for excitement and challenge ranged from 7.0% for raffles and lotteries to 60.4% for casino table games. This reason was given by over 50% for casino table games, sports betting, overseas internet gambling, betting on horse and dog races, betting with friends and workmates and card games. Between 40% and 50% of participants gave this reason for casino and non-casino EGM participation. Lower percentages were noted for the other forms.

As entertainment ranged from 8.8% for short-term speculative investments to 72.2% for card games. In addition to card games, over half of participants mentioned entertainment in relation to casino table games, casino EGMs, internet gambling, horse and dog race betting, non-casino

EGMs, sports betting, and bets with friends and workmates. Less than 10% gave this reason for raffles and lotteries, short-term speculative investments and Lotto.

To be with people or to get out of the house was mentioned by moderate numbers of people in relation to some gambling forms. It was most often referred to with regard to card games (45.2%) and housie or bingo (36.8%) and least often with regard to Keno (0.3%) and Instant Kiwi or other scratch tickets (0.4%). Over 20%, additional to those already mentioned, gave this reason for horse or dog race betting, casino table games and casino EGMs.

Most participants (81.4%) said they purchased raffles or lotteries to support a worthy cause. This reason was also given by 23.8% of people who played housie or bingo. It was mentioned much less often in relation to other activities.

Moderate numbers of people reported taking part in some types of gambling because it was an interest or hobby. This was most often the case for short-term speculative investments (30.1%) sports betting (23.7%), betting on horse or dog races (22.0%) and card games (26.1%). It was mentioned by less than 20% in relation to other activities with low numbers giving this reason for raffles and lotteries (1.0%), Lotto (2.8%) and Instant Kiwi or other scratch tickets (2.4%).

Curiosity was mentioned by moderate numbers of participants across a variety of activities. It was most often mentioned in relation to short-term speculative investments (20.6%), overseas internet gambling (20.4%) and text games or competitions (18.2%). It was also referred to by over 10% of non-casino EGM and casino EGM participants. To oblige or please other people was mentioned as a reason by 15.1% of raffle or lottery participants, 15.0% of people who made bets with friends or workmates, 8.1% of people who bet on horse or dog races and 7.9% of people who played cards for money.

Twenty percent of people said they purchased Instant Kiwi or other scratch tickets as a gift for another person. This reason was also given by 15.8% of Lotto, 7.2% of raffle or lottery and 4.7% of Keno participants.

Reasons for participating in gambling activities by demographics is presented in Appendix 8.

**Table 23: Reasons for participating in gambling activities**

Reasons for participating	Reasons for participating % (95% CI)				
	Card games	Bets with friends/work	Text game or competition	Raffle/lottery (NZ)	Lotto
To win prizes/money	41.8 (34.0 - 49.9)	46.4 (42.1 - 50.7)	82.3 (73.9 - 88.8)	39.4 (37.1 - 41.8)	91.6 (90.4 - 92.6)
For excitement/for a challenge	52.8 (44.7 - 60.7)	53.2 (48.9 - 57.4)	25.8 (17.9 - 35.1)	7.0 (5.9 - 8.2)	15.4 (14.0 - 16.9)
To support worthy causes	8.7 (5.4 - 13.2)	8.0 (6.1 - 10.3)	8.9 (4.7 - 15.0)	81.4 (79.5 - 83.2)	10.0 (8.9 - 11.1)
Out of curiosity	9.7 (5.6 - 15.4)	8.5 (6.3 - 11.2)	18.2 (9.0 - 31.2)	2.9 (2.2 - 3.7)	4.3 (3.5 - 5.1)
To oblige or please other people	7.9 (3.7 - 14.7)	15.0 (12.3 - 18.0)	4.7 (1.7 - 10.6)	15.1 (13.5 - 16.8)	2.7 (2.2 - 3.3)
As a gift for another person	2.1 (0.5 - 6.5)	1.2 (0.6 - 2.2)	2.0 (0.7 - 4.7)	7.2 (6.1 - 8.4)	15.8 (14.5 - 17.3)
As an interest/or a hobby	26.1 (18.7 - 34.8)	9.8 (7.5 - 12.5)	3.9 (1.8 - 7.5)	1.0 (0.7 - 1.4)	2.8 (2.2 - 3.5)
To be with people/get out of the house	45.2 (37.1 - 53.5)	7.5 (5.5 - 10.0)	1.0 (0.3 - 2.3)	1.1 (0.7 - 1.6)	0.5 (0.3 - 0.8)
As entertainment	72.2 (65.1 - 78.5)	53.0 (48.8 - 57.2)	20.4 (13.8 - 28.4)	5.9 (4.9 - 7.1)	9.8 (8.7 - 11.1)
Other reasons	-	-	0.3 (0.0 - 1.2)	-	0.0 (0.0 - 0.1)

Reasons for participating % (95% CI)					
Reasons for participating	Instant Kiwi				
	Keno	or other scratch ticket	Housie or bingo	Horse/dog race betting	Sports betting
To win prizes/money	89.0 (83.8 - 93.0)	76.5 (74.0 - 78.8)	64.7 (54.4 - 74.1)	65.8 (61.3 - 70.2)	78.5 (71.7 - 84.3)
For excitement/for a challenge	21.3 (14.8 - 29.0)	29.9 (27.3 - 32.6)	33.9 (24.6 - 44.2)	55.8 (51.0 - 60.5)	59.7 (51.8 - 67.2)
To support worthy causes	7.7 (4.2 - 12.7)	3.3 (2.6 - 4.3)	23.8 (16.0 - 33.2)	2.2 (1.3 - 3.6)	1.3 (0.5 - 2.7)
Out of curiosity	9.6 (5.9 - 14.6)	8.8 (7.3 - 10.5)	7.1 (2.9 - 14.7)	7.7 (5.3 - 10.8)	6.7 (3.0 - 12.7)
To oblige or please other people	0.7 (0.1 - 2.3)	1.9 (1.3 - 2.6)	3.6 (1.7 - 6.7)	8.1 (5.7 - 11.0)	2.2 (0.7 - 5.3)
As a gift for another person	4.7 (2.1 - 9.1)	20.0 (17.8 - 22.3)	0.7 (0.1 - 3.1)	0.4 (0.1 - 0.8)	0.1 (0.0 - 0.6)
As an interest/or a hobby	3.9 (1.3 - 9.1)	2.4 (1.8 - 3.3)	10.5 (5.1 - 18.8)	22.0 (18.3 - 26.0)	23.7 (16.6 - 32.2)
To be with people/get out of the house	0.3 (0.0 - 1.3)	0.4 (0.2 - 0.8)	36.8 (27.3 - 47.2)	23.6 (19.6 - 28.0)	4.7 (2.3 - 8.5)
As entertainment	13.1 (7.6 - 20.6)	24.0 (21.6 - 26.5)	48.8 (38.7 - 59.0)	60.3 (55.5 - 64.9)	57.1 (49.4 - 64.5)
Other reasons	1.3 (0.2 - 4.5)	0.2 (0.1 - 0.6)	-	0.4 (0.1 - 0.9)	-

Reasons for participating % (95% CI)					
Reasons for participating	Instant Kiwi				
	Casino table games (NZ)	Casino EGMs (NZ)	Non-casino EGMs	Short-term spec. investments	Overseas internet gambling
To win prizes/money	70.9 (61.6 - 79.0)	65.5 (59.9 - 70.8)	66.5 (62.3 - 70.6)	95.1 (87.4 - 98.7)	66.3 (45.3 - 83.2)
For excitement/for a challenge	60.4 (51.7 - 68.6)	42.5 (37.0 - 48.1)	41.4 (37.2 - 45.8)	28.0 (13.8 - 46.9)	57.6 (36.7 - 76.5)
To support worthy causes	1.0 (0.1 - 3.7)	1.4 (0.5 - 3.2)	3.6 (2.4 - 5.3)	2.2 (0.2 - 9.9)	11.1 (3.6 - 25.1)
Out of curiosity	9.8 (5.8 - 15.4)	12.4 (9.2 - 16.3)	12.9 (10.2 - 16.0)	20.6 (7.7 - 41)	20.4 (8.6 - 38.1)
To oblige or please other people	6.0 (2.2 - 13.4)	4.2 (2.4 - 6.7)	5.1 (3.4 - 7.3)	0.9 (0.1 - 4.3)	3.5 (0.4 - 15.7)
As a gift for another person	0.2 (0.0 - 0.8)	1.7 (0.6 - 3.7)	0.7 (0.3 - 1.3)	-	3.5 (0.4 - 15.7)
As an interest/or a hobby	10.1 (4.7 - 18.6)	4.0 (2.2 - 6.9)	5.3 (3.7 - 7.3)	30.1 (17.4 - 45.7)	17.9 (6.6 - 36.3)
To be with people/get out of the house	23.9 (14.7 - 35.4)	20.4 (16.1 - 25.3)	16.3 (13.5 - 19.4)	-	5.9 (1.6 - 15.4)
As entertainment	69.0 (60.2 - 77.0)	62.7 (57.3 - 67.8)	58.1 (53.9 - 62.2)	8.8 (2.6 - 21.6)	65.0 (45.2 - 81.6)
Other reasons	0.2 (0.0 - 1.1)	0.4 (0.1 - 1.2)	0.3 (0.1 - 0.9)	7.4 (2.4 - 16.9)	-

Reasons people gave for not gambling in the past 12 months are summarised in Table 24. Moral and religious reasons are mentioned most often, followed by not being interested, regarding gambling as waste of money or having other priorities, and the chances of winning not being good. Each of the other reasons was mentioned by fewer than ten percent of people who had not gambled.

**Table 24: Reasons for not having gambled**

Reasons for not having gambled	Total % (95% CI)	
Moral/religious reasons/against gambling/don't believe in gambling	43.1	(39.0 - 47.4)
Not interested/no desire to gamble	31.3	(27.4 - 35.3)
Chances of winning aren't very good/too risky/lose more than win	14.4	(11.5 - 17.7)
Waste of money/other priorities	29.1	(25.5 - 33.0)
Too busy/waste of time	5.4	(4.1 - 7.0)
Can't afford it	9.4	(7.2 - 12.1)
It's addictive/seen people in trouble	7.9	(6.0 - 10.2)
Haven't thought about it/never done it	3.4	(2.2 - 5.1)
Don't know how to play/don't understand NZ gambling rules	0.6	(0.3 - 1.2)
Others	0.9	(0.4 - 1.8)

Reasons people gave for not gambling in the past 12 months by demographics are presented in Appendix 9. Over half of participants in each of the following groups gave moral or religious reasons for not gambling: Pacific, Asian, migrants, Other Christian, Other religion, and those with trade or vocational qualifications.

#### 4.1.13 Beliefs about gambling activities

Table 25 shows participants' perceptions about winning or losing by gambling activity. The great majority of people, on all gambling forms, provided an assessment of whether or not they had, overall, made money, lost money or broke even. On most forms, a substantially greater percentage considered that they had lost rather than won money. This was particularly so for raffles and lotteries, Lotto, Keno, text games or competitions and overseas internet gambling for money or prizes. Exceptions include short-term speculative investments (64.7% indicated that they had won money) and playing poker online. In some cases there was no difference between the percentages winning and losing, for example, with regard to betting on sports events in a variety of situations and playing casino table games.

Participants' perceptions about winning or losing by gambling activity by demographics are presented in Appendix 10.

**Table 25: Participants' perceptions on winning or losing by gambling activity**

Gambling activity	Perceptions of winning or losing % (95% CI)							
	Won money		Broke even		Lost money		Don't know	
Cards for money (not in casino)	19.9	(14.3 - 26.5)	40.7	(32.9 - 49.0)	38.2	(30.6 - 46.3)	1.2	(0.1 - 5.0)
Poker for money/prizes (commercial venue in NZ)	17.0	(8.7 - 29.0)	34.2	(22.4 - 47.7)	48.8	(35.5 - 62.2)	-	-
Poker for money/prizes (friends/ family private residence)	22.5	(15.6 - 30.8)	39.1	(29.8 - 49.1)	36.8	(27.6 - 46.8)	1.5	(0.2 - 7.0)
Poker for money/prizes online	32.7	(11.2 - 62.3)	38.5	(16.6 - 64.9)	28.0	(8.3 - 58.5)	0.8	(0.1 - 3.7)
Bets with friends/workmates for money/prizes	19.1	(16.0 - 22.5)	21.5	(18.2 - 25.0)	59.1	(55.1 - 63.1)	0.3	(0.0 - 1.5)
Text game or competition	12.0	(6.8 - 19.3)	17.4	(11.1 - 25.4)	69.5	(60.1 - 77.9)	1.1	(0.2 - 4.0)
New Zealand raffle/lottery	4.5	(3.7 - 5.4)	7.0	(5.9 - 8.2)	88.4	(86.9 - 89.8)	0.1	(0.0 - 0.2)
Lotto	4.2	(3.5 - 5.0)	7.0	(6.0 - 8.0)	88.7	(87.5 - 89.9)	0.1	(0.0 - 0.2)
Keno	9.6	(5.6 - 15.3)	18.1	(12.1 - 25.5)	72.0	(64.1 - 79.4)	-	-
Instant Kiwi tickets or other scratch tickets	10.6	(9.0 - 12.4)	29.8	(27.2 - 32.5)	59.6	(56.8 - 62.3)	-	-

Gambling activity	Perceptions of winning or losing % ( 95% CI)							
	Won money		Broke even		Lost money		Don't know	
Housie or bingo	22.9	(15.6 - 31.7)	20.4	(13.8 - 28.4)	56.7	(46.9 - 66.1)	-	-
Horse/dog race betting (at the track)	24.5	(19.8 - 29.7)	24.7	(20.2 - 29.6)	50.8	(45.2 - 56.4)	-	-
Horse/dog race betting (TAB in person)	22.4	(17.8 - 27.6)	19.8	(15.7 - 24.4)	57.2	(51.8 - 62.4)	0.6	(0.1 - 1.9)
Horse/dog race betting (TAB telephone, online, interactive TV)	20.6	(14.2 - 28.4)	28.4	(20.4 - 37.7)	51.0	(41.7 - 60.3)	-	-
Horse/dog race betting (overseas betting organisation or TAB)	10.4	(1.5 - 35.0)	26.5	(9.3 - 52.2)	63.1	(37.1 - 84.1)	-	-
Sports betting (TAB at event)	30.9	(22.3 - 40.7)	26.1	(17.3 - 36.7)	42.2	(32.5 - 52.4)	0.7	(0.1 - 3.4)
Sports betting (TAB in person)	29.2	(20.8 - 39.0)	24.3	(16.0 - 34.3)	45.7	(35.9 - 55.9)	0.7	(0.1 - 3.4)
Sports betting (TAB telephone, online or interactive TV)	25.2	(14.7 - 38.6)	36.8	(23.7 - 51.7)	38.0	(26.2 - 50.9)	-	-
Sports betting (overseas TAB, organisation/website)	38.4	(11.4 - 73.1)	24.2	(6.3 - 54.6)	37.4	(14.0 - 66.9)	-	-
Casino table games (NZ)	27.1	(19.3 - 36.3)	29.3	(21.2 - 38.4)	43.6	(35.3 - 52.2)	-	-
Casino EGMs (NZ)	18.0	(14.1 - 22.5)	17.9	(13.8 - 22.8)	64.0	(57.9 - 69.9)	-	-
Pub EGMs	22.3	(18.6 - 26.3)	25.1	(21.1 - 29.5)	52.6	(47.7 - 57.4)	-	-
Club EGMs	17.3	(12.5 - 22.9)	24.9	(19.5 - 31.0)	57.8	(51.0 - 64.4)	-	-
Short-term speculative investments	64.7	(50.9 - 81.2)	22.0	(10.7 - 38.0)	6.9	(2.4 - 15.4)	3.7	(0.4 - 16.4)
Overseas internet gambling for money/prizes	14.0	(4.0 - 33.3)	21.2	(8.5 - 40.5)	64.8	(43.6 - 82.3)	-	-

Table 26 provides information regarding participants' use of systems or special skills to improve their chances of winning in different forms of gambling. The percentages apply to people who participated in each form, not the total adult population or the adult population that participated in any gambling activity during the past 12 months. The large majority of participants in most forms of gambling do not report using systems or special skills. Their use is mentioned most frequently in relation to short-term speculative investments (48.1%), followed by casino table games (20.2%), sports betting and horse or dog race betting (both 17.1%) and card games (10%). Between five and ten percent of participants who played Lotto, Keno or non-casino EGMs or made bets with friends or workmates also said they used systems or special skills. While used less frequently when taking part in other gambling activities, in all cases at least one percent of participants indicated that they did so.

Information regarding participants' use of systems or special skills to improve their chances of winning in different forms of gambling by demographics is presented in Appendix 11.

**Table 26: Participants' use of systems or special skills to improve winning chances, by gambling activity**

Gambling activity	Use of systems or special skills % (95% CI)					
	Yes			No		
Card games	10.0	(6.1 - 15.4)	86.8	(80.9 - 91.4)	3.2	(1.2 - 6.7)
Bets with friends/workmates	6.2	(4.5 - 8.5)	92.0	(89.6 - 93.9)	1.8	(1.0 - 2.9)
Text game or competition	2.0	(0.6 - 5.0)	96.6	(92.3 - 98.8)	1.4	(0.2 - 5.5)
Raffle/lottery (NZ or overseas)	3.5	(2.7 - 4.4)	94.3	(93.0 - 95.3)	2.3	(1.6 - 3.1)
Lotto	6.4	(5.5 - 7.4)	92.4	(91.3 - 93.4)	1.2	(0.8 - 1.7)
Keno	5.6	(3.2 - 9.0)	92.7	(89.1 - 95.4)	1.7	(0.7 - 3.4)
Instant Kiwi or other scratch tickets	1.1	(0.7 - 1.8)	95.9	(94.6 - 96.9)	3.0	(2.1 - 4.1)
Housie or bingo	1.9	(0.5 - 5.2)	94.6	(88.2 - 98.0)	3.5	(0.8 - 9.9)
Horse/dog race betting	17.1	(13.6 - 21.0)	80.8	(76.7 - 84.4)	2.1	(1.0 - 3.8)
Sports betting	17.1	(11.2 - 24.7)	79.8	(71.9 - 86.3)	3.1	(0.6 - 9.5)
Casino table games (NZ)	20.2	(11.5 - 31.8)	79.1	(67.6 - 87.8)	0.7	(0.2 - 1.9)
Casino EGMs	1.7	(0.7 - 3.7)	95.7	(92.3 - 97.9)	2.6	(0.9 - 5.8)
Non-casino EGMs	5.2	(3.3 - 7.7)	93.0	(90.2 - 95.3)	1.8	(0.7 - 3.7)
Short-term speculative investments	48.1	(31.7 - 64.9)	49.7	(33.3 - 66.1)	2.2	(0.4 - 7.1)

In Table 27 the types of system or special skills referred to in Table 26 are described for each gambling activity. The frequency of their use, by people who reported using systems and special skills, is also indicated.

For most forms a number of systems and special skills are mentioned. For short-term speculative investments the most frequently mentioned system or special skill (79.3%) is following the stock market, own knowledge or skill or information from newspapers. For casino table games, using one's own skills, knowledge and tactics/strategy (60.2%) is reported most frequently. This was also mentioned by four out of ten (40.7%) people who reported using systems or special skills when playing cards for money. A somewhat similar percentage (46.4%) said they studied strategy books, television or the internet to improve their skills. Own knowledge of past performance and form was often mentioned with regard to betting on sports (87.0%), with friends or workmates (77.9%) and on horse or dog race betting (61.7%).

In the case of lottery activities (Lotto, raffles and lotteries, and Keno), choosing one's own special or lucky numbers such as birthdays was often mentioned (61.9%, 80.6%, 61.2% respectively). While only one percent of people who purchased Instant Kiwi or other scratch tickets said they used systems or special skills, a variety of systems or skills was reported. This was also the case for casino and non-casino EGMs, with choosing a special or lucky machine mentioned most often (34.9% and 23.9% respectively).

**Table 27: Nature of use of systems or special skills to improve winning chance, by gambling activity**

<b>Gambling activity</b>	<b>Nature of system/skill used to increase winning chance</b>	<b>%</b>	<b>(95% CI)</b>
Card games	Own skills/betting strategy/working out odds	40.7	(18.9 - 66.0)
	Watch the players/how they play/player's response and body language	20.4	(6.2 - 44.7)
	Study strategy books/internet/TV to improve skills/learning and practice	46.4	(22.1 - 72.2)
	Others	17.1	(6.4 - 34.7)
Bets with friends/ workmates	Own knowledge/information/own skills	77.9	(63.5 - 88.5)
	Special/lucky/favourite numbers/birthdays	10.5	(3.8 - 22.5)
	Back a name I like	6.1	(1.8 - 15.2)
	Other	16.7	(5.7 - 35.6)
New Zealand raffle or lottery	Choose own numbers/special/lucky numbers/birthdays	80.6	(71.0 - 88.0)
	Use same numbers every time	10.3	(5.1 - 18.2)
	Other	14.6	(8.2 - 23.5)
Lotto	Choose own numbers/special/lucky numbers/birthdays	61.9	(54.4 - 69.0)
	Use same numbers every time	36.1	(29.1 - 43.7)
	Buy Lucky Dips	1.2	(0.4 - 3.0)
	Other	15.5	(10.3 - 22.1)
Keno	Choose own numbers/special/lucky numbers/birthdays	61.2	(33.4 - 84.1)
	Use same numbers every time	23.6	(6.4 - 52.9)
	Other	27.3	(9.0 - 54.9)
Instant Kiwi tickets or other scratch tickets	Buy multiple tickets	18.1	(4.9 - 42.5)
	Check prize availability	16.0	(3.9 - 40.1)
	Buy favourite/preferred tickets/crossword tickets	26.0	(9.5 - 50.6)
	Other	50.1	(26.2 - 74.0)
Horse/dog race betting	Study the form/do research on horse, trainers, jockey/study past races/read form guide	61.7	(49.7 - 72.7)
	Tips/listen to owners/trainers/jockeys	12.3	(6.8 - 20.1)
	Back the favourites	9.8	(4.1 - 19.3)
	Back a name liked	21.3	(14.1 - 30.2)
	Use special numbers/lucky/favourite numbers	9.5	(4.9 - 16.5)
	Look at odds	4.2	(1.6 - 9.1)
	Other	12.5	(7.1 - 20.2)
Sports betting	Own knowledge of sport/team/past results	87.0	(73.7 - 94.9)
	Study the odds	15.3	(4.1 - 36.8)
	Other	13.6	(4.1 - 36.8)
Casino table games (NZ)	Own skills/knowledge/have own tactics/strategy	60.2	(30.9 - 84.6)
	Use lucky/favourite numbers/birthdays	17.2	(5.1 - 39.2)
	Other	23.0	(7.9 - 46.9)
	Refused	1.1	(0.1 - 5.2)
Casino EGMs (NZ)	Betting high/maximum bet/bet big to win big	6.2	(0.5 - 28.8)
	Watch machines/use a machine that hasn't paid out	10.6	(1.4 - 37.1)
	Choose my machine/use specific/lucky/favourite machine	34.9	(3.1 - 86.9)
	Other	48.3	(9.4 - 89.1)
Non-casino EGMs	Betting high/maximum bet/bet big to win big	9.7	(3.4 - 21.2)
	Watch machines/use a machine that hasn't paid out	12.5	(3.4 - 31.1)
	Choose machine/use specific/lucky/favourite machine	23.9	(5.9 - 55.3)
	Other	54.4	(30.9 - 76.4)
Short-term speculative investments	Rely on broker/liaise with broker/data analysis from broker	11.6	(1.5 - 39.9)
	Follow stock market/own knowledge and skill/information and skill/information from newspaper	79.3	(57.4 - 92.8)
	Other	16.2	(4.3 - 38.9)
	Refused	0.7	(0.1 - 3.3)

Note: Housie or bingo not detailed above as only three respondents detailed a strategy and each was unique.

#### 4.1.14 Methods used to moderate gambling expenditure and time spent gambling

All people who reported participating on one or more gambling activities during the past 12 months were asked if there is anything they do to stop themselves from spending too much money and/or time on gambling.

Table 28 lists the methods the participants reported using to moderate their gambling expenditure and time spent gambling. Information is also provided regarding how effective participants considered the different methods were in this regard. All methods were considered to be effective by the large majority of people who used them.

**Table 28: Participants' use of methods to stop gambling too much by self-ratings of efficacy**

Method used to stop gambling too much	Self-ratings of efficacy % (95% CI)					
	Effective		Neither effective nor ineffective		Ineffective	
Setting dollar figure before leaving home/ set a limit	94.7	(92.3 - 96.5)	2.4	(1.6 - 3.5)	3.0	(1.5 - 5.3)
Getting someone you trust to manage the money	90.1	(78.6 - 96.4)	7.7	(2.7 - 17.2)	2.2	(0.4 - 7.3)
Separating money for betting from other money, and stopping when it is used up	93.8	(87.6 - 97.4)	4.5	(1.5 - 10.7)	1.7	(0.4 - 4.9)
Leaving ATM and credit cards at home	92.8	(85.8 - 97.0)	3.5	(1.2 - 7.9)	3.7	(0.9 - 10.3)
Setting a time limit	88.2	(80.9 - 93.4)	5.1	(2.4 - 9.6)	6.6	(2.8 - 13.3)
Avoiding places that have betting or gambling as an attraction	89.0	(81.1 - 94.3)	8.0	(3.5 - 15.7)	3.0	(1.1 - 6.6)

Further information is provided in Table 29 relating to methods used to moderate gambling. Overall more than two-thirds (70.3%) of participants did not report using any methods for this purpose and over a fifth (22.3%) used only one. However, their use varied substantially in relation both to pattern of participation and average monthly gambling expenditure. Regular continuous gamblers (45.8%) used these methods more often than did regular non-continuous (33.8%) and infrequent gamblers (26.8%). Their use also increased progressively in association with average monthly gambling expenditure. They were used by only 17.7% of people who spent \$1-\$10 and by 59% of those who spent more than \$500.

Both regular continuous and regular non-continuous gamblers were more likely to use one method to stop gambling too much than were infrequent gamblers. Regular continuous gamblers were more likely to use two methods than people in the other two participation groups. Similar patterns were evident with respect to average expenditure. People in a number of the higher expenditure groups were more likely to use one or two methods than their counterparts in lower expenditure groups.

**Table 29: Number of methods used to stop gambling by pattern of participation and average monthly gambling expenditure**

Pattern of participation and expenditure	Number of methods used to stop gambling too much % (95% CI)					
	0		1		2	
Total	70.3	(68.6 - 72.1)	22.3	(20.8 - 23.9)	5.6	(4.8 - 6.4)
<b>Pattern of participation</b>						
Infrequent gambler	73.2	(71.2 - 75.2)	20.0	(18.3 - 21.8)	5.1	(4.2 - 6.2)
Regular non-continuous gambler	66.2	(62.5 - 69.8)	27.1	(23.9 - 30.5)	5.1	(3.7 - 6.8)
Regular continuous gambler	54.2	(48.4 - 60.0)	31.3	(26.2 - 36.8)	11.2	(7.8 - 15.3)
<b>Average monthly expenditure</b>						
\$0	100.0	-	-	-	-	-
\$1 - \$10	82.3	(78.9 - 85.2)	13.3	(10.8 - 16.1)	3.1	(2.0 - 4.8)
\$11 - \$20	80.2	(76.9 - 83.2)	16.3	(13.5 - 19.4)	3.3	(2.2 - 4.7)
\$21 - \$30	76.1	(71.8 - 80.0)	18.5	(15.2 - 22.1)	4.5	(2.5 - 7.2)
\$31 - \$50	71.4	(66.7 - 75.8)	24.0	(19.9 - 28.6)	3.5	(2.3 - 5.1)
\$51 - \$100	60.3	(55.7 - 64.8)	30.4	(26.1 - 34.9)	6.9	(4.8 - 9.5)
\$101 - \$500	49.7	(45.0 - 54.3)	34.5	(30.2 - 39.0)	11.5	(8.7 - 14.9)
More than \$500	41.0	(31.1 - 51.4)	33.2	(23.9 - 43.7)	18.0	(11.1 - 26.9)
Don't know/refused/other	75.2	(44.8 - 93.3)	12.7	(2.5 - 36.0)	12.2	(1.2 - 47.0)

Pattern of participation and expenditure	Number of methods used to stop gambling too much % (95% CI)							
	3		4		5		6	
Total	1.4	(1.0 - 1.9)	0.3	(0.1 - 0.4)	0.1	(0.0 - 0.2)	0.0	(0.0 - 0.1)
<b>Pattern of participation</b>								
Infrequent gambler	1.3	(0.8 - 1.9)	0.3	(0.1 - 0.5)	0.1	(0.0 - 0.3)	0.0	(0.0 - 0.1)
Regular non-continuous gambler	1.1	(0.6 - 1.9)	0.3	(0.1 - 0.8)	0.2	(0.0 - 0.6)	0.1	(0.0 - 0.3)
Regular continuous gambler	3.1	(1.7 - 5.3)	0.1	(0.0 - 0.4)	.	-	0.1	(0.0 - 0.4)
<b>Average monthly expenditure</b>								
\$0	-	-	-	-	-	-	-	-
\$1 - \$10	1.1	(0.5 - 2.2)	0.2	(0.0 - 0.6)	0.1	(0.0 - 0.4)	.	-
\$11 - \$20	0.2	(0.0 - 0.4)	0.1	(0.0 - 0.2)	.	-	.	-
\$21 - \$30	0.9	(0.2 - 2.6)	0.1	(0.0 - 0.3)	.	-	.	-
\$31 - \$50	1.0	(0.5 - 2.2)	0.1	(0.0 - 0.5)	.	-	.	-
\$51 - \$100	1.8	(0.8 - 3.5)	0.5	(0.2 - 1.2)	.	-	0.1	(0.0 - 0.4)
\$101 - \$500	3.0	(1.7 - 5.0)	0.7	(0.2 - 1.6)	0.5	(0.1 - 1.5)	0.1	(0.0 - 0.5)
More than \$500	6.9	(1.9 - 17.4)	0.4	(0.0 - 1.9)	0.3	(0.0 - 1.3)	0.2	(0.0 - 1.1)
Don't know/refused/other	-	-	-	-	-	-	-	-

Setting a money limit was the most frequently used method to stop gambling too much (Table 30). It was reported by over two-thirds of participants (69.1%) who reported using a method for this purpose. Next most frequently mentioned were separating betting money and stopping when it is used (14.9%), avoiding betting/gambling venues (7.7%), setting a time limit (6.3%), leaving ATM or credit cards at home (5.0%), can't afford it or only gamble when can afford it (4.9%), believe gambling wastes time or is against religious or other beliefs (4.3%), self-control of gambling and account limits (4.1%), prioritise spending for other things such as family (3.5%), believe that gambling is a waste of money (2.4%), and get a trusted person to manage money (2.3%). Other methods were mentioned by two percent or fewer participants.

The various methods used to stop gambling too much are also examined in relation to gambling type and expenditure in Table 30. While sample size was low for a number of comparisons, some possibly significant differences between groups are apparent.

Regular non-continuous gamblers are more likely than infrequent gamblers to set a money limit. Regular continuous gamblers and infrequent gamblers do not differ in this regard. Infrequent gamblers, more often than regular continuous gamblers, considered that gambling wastes time or is against their religious beliefs. They also more often than regular continuous gamblers reported awareness of gambling addiction as a means to help moderate gambling.

Participants who had higher monthly expenditure (over \$30 a month) were generally more likely to set money limits than those in the lower expenditure groups. Those in the highest expenditure group (over \$500) more often said, relative to their counterparts in the two lowest groups, they separated betting money and stopped when it was spent. People in the highest expenditure group also more often reported leaving ATM and credit cards at home and setting time limits than those in some of the lower expenditure groups. People in the second highest expenditure group (\$101-\$500) left ATM and credit cards at home more often than those in the \$21-\$30 group.

People in the lowest expenditure group more often than those in one or more of the higher groups considered gambling to be a waste of time or against religious or other beliefs, that they can't afford it or gamble only if they can, and that they prioritise spending for other things.

**Table 30: Participants' use of methods to stop gambling too much by pattern of participation and average monthly gambling expenditure**

Pattern of participation and expenditure	Use of methods to stop gambling too much % (95% CI) <sup>#</sup>					
	Set a money limit	Trusted person manages the money	Separate betting money and stopping when used	Leave ATM/credit cards at home	Set a time limit	Avoid betting/gambling places
Total	69.1 (66.2 - 71.9)	2.3 (1.6 - 3.4)	14.9 (12.7 - 17.4)	5.0 (3.8 - 6.5)	6.3 (4.9 - 8.1)	7.7 (6.3 - 9.4)
<b>Pattern of participation</b>						
Infrequent gambler	66.2 (62.3 - 70.0)	2.4 (1.4 - 3.9)	14.3 (11.5 - 17.4)	4.7 (3.2 - 6.8)	6.0 (4.1 - 8.3)	7.8 (6.1 - 10.0)
Regular non-continuous gambler	78.4 (73.5 - 82.8)	1.1 (0.4 - 2.6)	13.6 (10.1 - 17.9)	4.0 (2.3 - 6.4)	5.5 (3.4 - 8.5)	8.0 (5.3 - 11.6)
Regular continuous gambler	67.6 (59.2 - 75.3)	4.1 (1.9 - 7.6)	21.1 (14.8 - 28.6)	8.6 (4.5 - 14.8)	9.9 (5.5 - 16.2)	6.5 (3.5 - 11.0)
<b>Average monthly expenditure</b>						
\$1 - \$10	41.7 (32.6 - 51.4)	2.1 (0.7 - 4.9)	10.3 (5.5 - 17.4)	2.7 (1.1 - 5.6)	5.1 (2.3 - 9.8)	9.2 (5.5 - 14.4)
\$11 - \$20	56.0 (47.4 - 64.3)	2.8 (1.0 - 6.3)	10.0 (5.9 - 15.8)	2.2 (0.7 - 5.4)	3.1 (1.5 - 5.6)	8.6 (5.1 - 13.5)
\$21 - \$30	54.6 (44.6 - 64.2)	0.6 (0.1 - 2.0)	12.6 (6.1 - 22.4)	1.1 (0.2 - 3.2)	4.8 (1.8 - 10.5)	9.3 (4.5 - 16.6)
\$31 - \$50	74.6 (67.2 - 81.1)	1.7 (0.5 - 4.0)	11.7 (7.1 - 17.9)	2.5 (1.1 - 5.0)	3.8 (1.7 - 7.3)	7.4 (4.0 - 12.4)
\$51 - \$100	78.9 (72.8 - 84.2)	2.8 (1.3 - 5.3)	12.9 (9.0 - 17.9)	7.6 (4.5 - 12.0)	6.4 (3.3 - 11.3)	6.0 (3.2 - 10.1)
\$101 - \$500	83.8 (79.0 - 87.9)	3.0 (1.1 - 6.7)	20.4 (15.6 - 25.9)	7.2 (4.1 - 11.5)	8.4 (5.4 - 12.5)	7.6 (5.1 - 10.9)
More than \$500	73.1 (60.8 - 83.2)	1.9 (0.6 - 4.6)	31.7 (18.6 - 47.5)	12.2 (5.5 - 22.9)	18.0 (7.9 - 33.4)	6.6 (2.7 - 13.5)
Don't know/refused/other	49.0 (3.3 - 96.3)	-	76.1 (19.0 - 98.6)	.	-	23.9 (1.4 - 81.0)

Pattern of participation and expenditure	Use of methods to stop gambling too much % (95% CI) <sup>#</sup>					
	Gambling wastes time/against religious or other beliefs	Self-stopping control/account limits	Waste of/miserly with money	Too busy/doing other things	Only buy if the prize is big	Can't afford it/ only if I can afford it
Total	4.3 (3.2 - 5.6)	4.1 (3.0 - 5.6)	2.4 (1.6 - 3.4)	1.7 (1.0 - 2.8)	0.9 (0.4 - 1.9)	4.9 (3.6 - 6.5)
<b>Pattern of participation</b>						
Infrequent gambler	5.6 (4.1 - 7.5)	4.0 (2.5 - 5.9)	3.1 (2.0 - 4.6)	1.8 (0.9 - 3.3)	1.2 (0.4 - 2.7)	5.8 (4.1 - 8.1)
Regular non-continuous gambler	2.4 (1.1 - 4.7)	3.3 (1.6 - 6.0)	1.6 (0.6 - 3.8)	0.6 (0.1 - 1.8)	0.3 (0.0 - 1.5)	3.0 (1.5 - 5.2)

Pattern of participation and expenditure	Use of methods to stop gambling too much % (95% CI) <sup>#</sup>					
	Gambling wastes time/against religious or other beliefs	Self-stopping control/account limits	Waste of/miserly with money	Too busy/doing other things	Only buy if the prize is big	Can't afford it/ only if I can afford it
Regular continuous gambler	0.6 (0.1 - 2.0)	6.3 (3.2 - 11.1)	- -	3.4 (1.2 - 8.0)	0.6 (0.1 - 2.7)	3.3 (1.4 - 6.5)
<b>Average monthly expenditure</b>						
\$1 - \$10	14.9 (9.8 - 21.5)	3.9 (1.3 - 9.1)	8.2 (4.2 - 14.1)	2.6 (0.7 - 6.7)	3.0 (0.8 - 7.8)	12.9 (7.9 - 19.5)
\$11 - \$20	7.7 (4.3 - 12.7)	3.7 (1.1 - 9.4)	3.7 (1.6 - 7.5)	0.5 (0.1 - 1.5)	.	6.9 (3.8 - 11.5)
\$21 - \$30	5.4 (2.3 - 10.7)	7.3 (3.4 - 13.6)	5.1 (1.9 - 11.1)	1.5 (0.3 - 4.7)	.	9.1 (4.1 - 17.1)
\$31 - \$50	2.1 (0.7 - 5.1)	4.0 (1.8 - 7.9)	0.6 (0.1 - 2.5)	2.7 (0.5 - 9.4)	0.7 (0.2 - 2.1)	3.1 (1.3 - 6.4)
\$51 - \$100	2.1 (0.8 - 4.5)	2.9 (1.1 - 6.2)	1.1 (0.3 - 3.2)	0.0 (0.0 - 0.1)	1.8 (0.3 - 5.9)	3.1 (1.1 - 6.9)
\$101 - \$500	0.6 (0.2 - 1.8)	4.7 (2.5 - 7.9)	0.2 (0.0 - 1.0)	2.4 (1.1 - 4.6)	0.3 (0.0 - 1.4)	1.5 (0.5 - 3.7)
More than \$500	1.0 (0.1 - 4.8)	2.7 (0.6 - 8.1)	-	5.1 (1.0 - 15.5)	-	0.7 (0.1 - 2.8)
Don't know/refused/other	-	-	-	-	-	-

Pattern of participation and expenditure	Use of methods to stop gambling too much % (95% CI) <sup>#</sup>				
	Know chances of winning are low	Gambling addiction/problems awareness	Buy to support charity/good cause	Prioritise spending for other things/family	Other
Total	2.0 (1.3 - 3.0)	1.1 (0.6 - 1.8)	0.3 (0.1 - 0.8)	3.5 (2.5 - 4.6)	2.0 (1.3 - 2.9)
<b>Pattern of participation</b>					
Infrequent gambler	2.8 (1.7 - 4.2)	1.5 (0.8 - 2.6)	0.4 (0.1 - 1.2)	3.9 (2.7 - 5.5)	1.8 (1.0 - 3.0)
Regular non-continuous gambler	0.7 (0.1 - 2.2)	0.3 (0.1 - 1.1)	-	2.4 (1.1 - 4.6)	1.8 (0.8 - 3.5)
Regular continuous gambler	0.6 (0.1 - 3.0)	0.1 (0.0 - 0.6)	0.2 (0.0 - 1.2)	2.9 (1.0 - 6.5)	3.4 (1.3 - 7.5)
<b>Average monthly expenditure</b>					
\$1 - \$10	4.3 (1.5 - 9.7)	3.0 (1.0 - 7.2)	2.0 (0.5 - 6.2)	7.2 (3.6 - 12.8)	1.7 (0.3 - 5.3)
\$11 - \$20	5.6 (2.8 - 10.2)	1.0 (0.2 - 3.4)	0.3 (0.0 - 1.5)	4.5 (2.0 - 8.8)	2.3 (0.7 - 5.6)
\$21 - \$30	3.8 (1.3 - 8.7)	1.9 (0.4 - 5.9)	-	5.5 (2.3 - 11.1)	4.7 (1.9 - 9.7)
\$31 - \$50	1.0 (0.2 - 3.3)	1.4 (0.4 - 3.8)	-	1.7 (0.7 - 3.4)	1.0 (0.3 - 2.5)
\$51 - \$100	1.1 (0.3 - 3.0)	0.7 (0.1 - 2.4)	0.1 (0.0 - 0.6)	3.1 (1.5 - 5.6)	1.0 (0.3 - 2.6)
\$101 - \$500	0.1 (0 - 0.3)	0.3 (0.1 - 0.8)	-	1.9 (0.7 - 4.4)	1.6 (0.4 - 4.3)
More than \$500	-	-	-	1.6 (0.3 - 5.8)	5.2 (1.5 - 13.1)
Don't know/refused/other	-	-	-	-	-

<sup>#</sup> Data in this table relate to gamblers only

Table 31 examines methods used to stop gambling too much by socio-demographics. A number of the cells are too small to allow meaningful analysis. There do not appear to be gender differences.

People of European/Other ethnicity (70.7%) more often than Pacific participants (54.5%) said they set a money limit. Pacific participants, however, more often than European/Other, mentioned other methods including getting a trusted person to manage money (9.7% versus 1.8%), leaving ATM and credit cards at home (10.9% versus 4.3%), avoiding gambling venues (22.9% versus 6.5%). They also more often reported the latter method than Māori (8.8%).

Setting a money limit was the method most often used across all age groups (range of 61.1% to 74.1%). Participants aged 55-64 years (8.4%) were more likely than those aged 18-24 years (2.4%) and 25-34 years (2.2%) to say gambling is a waste of time or is against religious or other beliefs. People in the oldest age category (65+ years) more often than those in two of the younger groups said that they cannot afford to gamble and only do so when they can.

There were no differences between migrants and non-migrants or between recent and longer-term migrants.

There were minimal differences between educational groups. People with vocational trade qualifications more often than people with a degree said they used self-control or set account limits. People with no formal education more frequently indicated that they can't afford it or only gamble when they can than those with a degree. They were less likely to mention the chances of winning being too low than those in the latter group.

Unemployed participants, relative to students, people caring for others and retired people, more often said they got a trusted person to manage their money. They also said more frequently than those in both the former and employed groups that they left their ATM and credit cards at home. Relative to employed participants they additionally more often indicated not affording gambling and less often said they knew the chances of winning are low.

Differences with regard to religion were minimal. Participants living in single households more often reported self-control and account limits than those in four person households. They also more often reported not being able to afford gambling than participants from two and three person households.

Participants with personal incomes of \$40,001-\$60,000 more often reported separating betting money and stopping when it is used than those in the highest income group. However, they less often used self-control and account limits than participants in the lowest income group. Participants in the \$80,001-\$100,000 group used this method less than those in all other groups apart from those earning \$40,001-\$60,000.

With regard to household income, those in the two highest groups more frequently mentioned setting a money limit than those in the two lowest groups. Those in the lowest group, on the other hand, more often than those in the highest income groups referred to not being able to afford gambling.

**Table 31: Participants' use of methods to stop gambling too much by demographics**

Demographic variables	Use of methods to stop gambling too much % (95% CI)					
	Set a money limit	Trusted person manages the money	Separate betting money and stopping when used	Leave ATM/credit cards at home	Set a time limit	Avoid betting/gambling places
Total	69.1 (66.2 - 71.9)	2.3 (1.6 - 3.4)	14.9 (12.7 - 17.4)	5.0 (3.8 - 6.5)	6.3 (4.9 - 8.1)	7.7 (6.3 - 9.4)
<b>Gender</b>						
Male	70.7 (66.4 - 74.8)	2.1 (1.0 - 3.8)	16.3 (12.9 - 20.1)	4.9 (3.0 - 7.4)	6.9 (4.8 - 9.5)	5.9 (4.2 - 7.9)
Female	67.3 (63.2 - 71.2)	2.6 (1.6 - 4.0)	13.4 (10.7 - 16.6)	5.2 (3.7 - 7.2)	5.7 (3.8 - 8.2)	9.8 (7.5 - 12.5)
<b>Ethnic group</b>						
European/Other	70.7 (67.3 - 73.9)	1.8 (1.0 - 3.0)	14.4 (11.8 - 17.2)	4.3 (2.9 - 6.0)	5.5 (3.9 - 7.6)	6.5 (5.0 - 8.4)
Māori	66.0 (60.0 - 71.7)	4.0 (2.2 - 6.7)	14.5 (10.7 - 18.9)	8.2 (5.2 - 12.1)	11.0 (7.2 - 15.9)	8.8 (5.9 - 12.4)
Pacific	54.3 (45.3 - 63.1)	9.7 (5.3 - 16.1)	20.7 (14.4 - 28.2)	10.9 (6.8 - 16.2)	9.8 (5.7 - 15.7)	22.9 (16.0 - 31.1)
Asian	66.0 (56.1 - 74.9)	3.8 (1.5 - 7.8)	18.6 (11.6 - 27.6)	7.6 (3.6 - 14.0)	13.6 (8.6 - 20.1)	11.4 (6.2 - 19.0)
<b>Age group</b>						
18 - 24 years	74.1 (65.3 - 81.6)	4.4 (1.5 - 10.3)	15.8 (9.5 - 24.1)	10.8 (5.7 - 18.3)	10.9 (5.4 - 19.1)	4.8 (2.1 - 9.3)
25 - 34 years	71.4 (65.1 - 77.1)	2.1 (1.0 - 3.9)	20.6 (15.0 - 27.2)	5.5 (3.1 - 8.8)	6.8 (3.7 - 11.3)	6.7 (4.1 - 10.2)
35 - 44 years	68.1 (61.4 - 74.2)	2.9 (1.4 - 5.3)	13.6 (9.5 - 18.6)	3.7 (2.1 - 6.1)	4.2 (2.2 - 7.4)	8.0 (5.2 - 11.8)
45 - 54 years	69.9 (62.9 - 76.3)	2.3 (1.0 - 4.6)	12.8 (8.8 - 17.9)	3.8 (1.9 - 6.8)	7.6 (4.8 - 11.3)	10.6 (7.0 - 15.3)
55 - 64 years	66.8 (58.8 - 74.1)	1.5 (0.3 - 4.7)	10.7 (6.7 - 16.0)	3.5 (1.4 - 7.3)	3.7 (1.5 - 7.6)	5.8 (2.4 - 11.6)
65+ years	61.1 (53.2 - 68.5)	0.3 (0.0 - 1.4)	13.0 (7.9 - 19.7)	2.7 (0.9 - 6.7)	4.6 (2.1 - 8.7)	11.2 (6.8 - 17.1)
<b>Country of birth</b>						
NZ	70.0 (66.7 - 73.2)	2.3 (1.4 - 3.6)	15.3 (12.7 - 18.1)	4.9 (3.5 - 6.7)	5.0 (3.5 - 7)	6.7 (5.1 - 8.6)
Elsewhere	66.3 (60.2 - 72.0)	2.4 (1.2 - 4.2)	13.9 (10.1 - 18.4)	5.4 (3.4 - 8.2)	10.5 (7.0 - 15.0)	11.1 (8.0 - 14.9)
<b>Arrival in NZ</b>						
2008 or later	56.9 (38.2 - 74.2)	1.0 (0.1 - 4.6)	8.1 (2.2 - 20.7)	11.5 (4.4 - 23.8)	8.3 (2.7 - 19.2)	9.3 (3.2 - 20.6)
Before 2008	67.7 (61.2 - 73.8)	2.6 (1.3 - 4.7)	14.8 (10.7 - 19.8)	4.5 (2.5 - 7.3)	10.8 (7.0 - 15.9)	11.4 (8.1 - 15.4)
<b>Highest qualification</b>						
No formal qual.	66.0 (58.4 - 73.0)	1.6 (0.7 - 3.2)	12.6 (8.2 - 18.4)	8.3 (4.8 - 13.2)	5.0 (2.4 - 9.1)	6.3 (3.6 - 10.0)
School qual.	71.2 (64.7 - 77.1)	2.5 (1.4 - 4.2)	16.5 (11.9 - 22.1)	7.3 (4.0 - 12.1)	6.5 (3.9 - 10.1)	7.3 (4.3 - 11.6)
Trade/voc. qual.	66.5 (60.4 - 72.2)	1.4 (0.6 - 2.8)	14.0 (9.8 - 19.0)	2.9 (1.6 - 5.0)	6.1 (3.9 - 9.1)	6.4 (4.1 - 9.3)
Degree/higher	70.8 (66.2 - 75.0)	3.2 (1.6 - 5.8)	15.4 (11.9 - 19.5)	4.0 (2.4 - 6.1)	6.9 (4.2 - 10.6)	9.5 (7.0 - 12.5)
<b>Labour force status</b>						
Employed	71.4 (67.9 - 74.7)	2.1 (1.2 - 3.5)	14.9 (12.3 - 17.7)	4.4 (3.1 - 6.0)	6.5 (4.8 - 8.7)	7.1 (5.4 - 9.2)
Unemployed	61.0 (51.9 - 69.6)	6.0 (2.9 - 11.1)	13.9 (8.3 - 21.4)	10.6 (6.1 - 16.7)	5.2 (2.5 - 9.6)	8.1 (5.0 - 12.5)
Student/Home/Retired	64.4 (57.8 - 71.1)	1.2 (0.5 - 2.3)	16.2 (11 - 22.7)	2.8 (1.3 - 5.3)	6.4 (3.2 - 11.5)	9.9 (6.5 - 14.2)

Demographic variables	Use of methods to stop gambling too much % (95% CI)					
	Set a money limit	Trusted person manages the money	Separate betting money and stopping when used	Leave ATM/ credit cards at home	Set a time limit	Avoid betting/ gambling places
<b>Religion</b>						
No religion	73.3 (68.8 - 77.4)	2.3 (1.1 - 4.3)	14.0 (10.6 - 18.1)	5.4 (3.3 - 8.4)	7.2 (4.7 - 10.5)	6.1 (4.2 - 8.4)
Anglican	69.9 (61.5 - 76.9)	1.9 (0.6 - 4.6)	13.2 (8.6 - 19.1)	3.7 (1.8 - 6.6)	2.6 (1.0 - 5.5)	6.0 (3.0 - 10.7)
Presbyterian	71.1 (61.1 - 79.7)	2.2 (0.7 - 5.0)	17.7 (10.9 - 26.5)	3.2 (1 - 8.0)	4.8 (1.8 - 10.2)	13.1 (7.9 - 20.1)
Catholic	65.1 (56.3 - 73.1)	1.0 (0.4 - 2.2)	15.7 (10.5 - 22.1)	5.3 (2.8 - 9.2)	7.8 (4.4 - 12.8)	10.6 (6.0 - 17.1)
Other Christian	56.0 (48.0 - 63.8)	4.6 (2.3 - 8.3)	17.6 (12.3 - 24.1)	6.5 (3.6 - 10.7)	6.4 (3.6 - 10.3)	9.8 (6.1 - 14.8)
Other religion	68.6 (57.8 - 78.1)	2.2 (0.7 - 5.4)	16.7 (10.0 - 25.6)	6.3 (2.6 - 12.5)	7.4 (3.9 - 12.5)	8.6 (4.6 - 14.5)
<b>Household size</b>						
1	53.9 (51.5 - 66.7)	0.9 (0.2 - 2.8)	8.9 (5.3 - 13.8)	4.4 (1.9 - 8.4)	3.6 (1.5 - 7.4)	10.6 (6.6 - 16.0)
2	70.7 (65.6 - 75.3)	1.0 (0.4 - 1.8)	14.9 (11.5 - 18.8)	4.1 (2.5 - 6.3)	5.5 (3.7 - 7.8)	5.0 (3.3 - 7.3)
3	63.4 (56.0 - 70.5)	3.8 (1.8 - 7.1)	19.3 (13.4 - 26.5)	4.9 (2.5 - 8.6)	3.8 (1.9 - 6.9)	9.5 (5.7 - 14.6)
4	72.2 (65.5 - 78.1)	3.1 (1.2 - 6.8)	17.7 (12.8 - 23.6)	5.3 (2.9 - 9.0)	6.5 (3.5 - 10.9)	7.1 (4.6 - 10.6)
5+	72.1 (64.3 - 79.0)	3.0 (1.4 - 5.6)	10.0 (6.1 - 15.5)	6.6 (3.3 - 11.8)	11.0 (6.1 - 17.9)	10.4 (6.4 - 15.9)
<b>Personal Income (\$)</b>						
Up to 20,000	66.0 (60.2 - 71.4)	2.7 (1.4 - 4.5)	13.7 (10.0 - 18.3)	5.9 (3.9 - 8.6)	4.3 (2.6 - 6.5)	9.4 (6.7 - 12.8)
20,001 - 40,000	69.9 (63.7 - 75.6)	2.2 (1.1 - 3.8)	14.9 (10.5 - 20.3)	6.6 (3.6 - 11.0)	7.9 (4.4 - 13.1)	7.5 (4.8 - 11.3)
40,001 - 60,000	74.6 (68.4 - 80.1)	1.8 (0.8 - 3.7)	22.9 (17.2 - 29.5)	5.7 (3.3 - 9.0)	7.9 (4.8 - 12.3)	7.2 (4.2 - 11.4)
60,001 - 80,000	66.2 (56.3 - 75.2)	2.2 (0.6 - 6.0)	15.4 (9.5 - 23.2)	2.5 (0.7 - 6.6)	6.1 (3.3 - 10.2)	7.3 (3.6 - 13.1)
80,001 - \$100,000	78.9 (65.7 - 88.6)	- -	16.6 (8.5 - 28.2)	4.2 (0.8 - 13.4)	2.1 (0.4 - 6.9)	3.9 (1.3 - 9.3)
Over 100,000	67.4 (52.8 - 79.9)	1.7 (0.2 - 8.0)	6.4 (2.0 - 15.1)	0.9 (0.1 - 4.1)	6.2 (2.4 - 13.2)	2.4 (0.5 - 7.5)
<b>Household Income (\$)</b>						
Up to 20,000	54.9 (45.5 - 64)	3.4 (1.4 - 6.8)	10.8 (6.4 - 16.9)	8.1 (3.9 - 14.9)	8.1 (4.1 - 14.4)	11.3 (6.7 - 17.7)
20,001 - 40,000	63.0 (55.9 - 69.7)	2.6 (1.2 - 4.9)	15.8 (11.1 - 21.6)	5.7 (3.4 - 9.1)	4.5 (2.7 - 7.2)	9.0 (6.1 - 12.7)
40,001 - 60,000	68.1 (60.5 - 75.0)	2.5 (0.9 - 5.6)	16.6 (11.0 - 23.8)	8.3 (4.8 - 13.3)	4.6 (2.2 - 8.5)	6.9 (3.8 - 11.4)
60,001 - 80,000	67.5 (58.8 - 75.3)	1.7 (0.5 - 4.6)	21.0 (14.7 - 28.5)	6.3 (2.3 - 13.8)	8.2 (4.7 - 13.3)	8.0 (4.0 - 14.2)
80,001 - 100,000	78.2 (70.1 - 85.0)	0.8 (0.2 - 2.1)	15.9 (9.8 - 23.9)	3.0 (1.3 - 6.0)	5.0 (2.3 - 9.6)	4.3 (2.1 - 8.0)
Over 100,000	75.7 (70.4 - 80.6)	2.8 (1.1 - 5.8)	12.6 (8.8 - 17.4)	3.6 (1.7 - 6.7)	8.0 (4.6 - 12.8)	6.8 (4.3 - 10.2)

Demographic variables	Use of methods to stop gambling too much % (95% CI)					
	Gambling wastes time/ against religious or other beliefs	Self-stopping control/ account limits	Waste of/ miserly with money	Too busy/doing other things	Only buy if the prize is big	Can't afford it/ only if I can afford it
Total	4.3 (3.2 - 5.6)	4.1 (3.0 - 5.6)	2.4 (1.6 - 3.4)	1.7 (1.0 - 2.8)	0.9 (0.4 - 1.9)	4.9 (3.6 - 6.5)
<b>Gender</b>						
Male	3.3 (2.1 - 5.0)	5.5 (3.7 - 8.0)	2.2 (1.2 - 3.7)	1.8 (0.8 - 3.6)	0.9 (0.2 - 2.5)	4.3 (2.6 - 6.7)
Female	5.5 (3.8 - 7.6)	2.5 (1.5 - 3.9)	2.6 (1.5 - 4.3)	1.6 (0.8 - 2.9)	1.0 (0.3 - 2.2)	5.5 (3.9 - 7.6)
<b>Ethnic group</b>						
European/Other	4.6 (3.3 - 6.1)	4.3 (3.0 - 6.0)	2.7 (1.7 - 3.9)	1.3 (0.6 - 2.5)	0.7 (0.2 - 2.0)	5.2 (3.7 - 7.1)
Māori	3.7 (2.1 - 6.2)	4.1 (2.1 - 7.3)	0.4 (0.1 - 1.0)	3.8 (1.7 - 7.4)	0.9 (0.3 - 2.4)	3.1 (1.5 - 5.5)
Pacific	4.4 (2.1 - 8.1)	2.9 (0.9 - 7.2)	0.4 (0.0 - 1.6)	2.6 (0.7 - 7.0)	- -	2.4 (0.9 - 5.2)
Asian	4.0 (1.5 - 8.8)	2.0 (0.5 - 5.7)	- -	1.1 (0.2 - 3.4)	3.4 (1.1 - 8.2)	2.5 (0.7 - 6.2)
<b>Age group</b>						
18 - 24 years	2.4 (1.0 - 4.7)	5.9 (2.4 - 12.2)	0.9 (0.1 - 4.3)	0.8 (0.2 - 2.7)	2.4 (0.4 - 8.7)	4.9 (1.7 - 11.2)
25 - 34 years	2.2 (0.9 - 4.5)	4.3 (2.0 - 8.1)	2.1 (0.7 - 4.8)	2.1 (0.8 - 4.7)	0.4 (0.1 - 1.5)	3.2 (1.6 - 5.9)
35 - 44 years	5.3 (2.7 - 9.4)	1.9 (0.7 - 4.2)	1.6 (0.5 - 4.2)	1.0 (0.3 - 2.4)	1.6 (0.3 - 5.6)	4.7 (2.0 - 9.1)
45 - 54 years	3.6 (1.8 - 6.4)	2.2 (0.8 - 5.0)	3.4 (1.4 - 6.9)	2.2 (0.4 - 7.6)	0.2 (0.0 - 0.6)	4.6 (2.1 - 8.7)
55 - 64 years	8.4 (4.8 - 13.7)	4.4 (2.0 - 8.3)	3.2 (1.3 - 6.6)	2.3 (0.7 - 5.4)	0.3 (0.0 - 1.6)	2.7 (1.1 - 5.6)
65+ years	5.7 (2.9 - 9.8)	7.9 (4.4 - 13.0)	3.7 (1.5 - 7.9)	2.1 (0.5 - 5.9)	0.6 (0.1 - 2.9)	11.8 (7.4 - 17.7)
<b>Country of birth</b>						
NZ	4.1 (2.9 - 5.6)	4.5 (3.1 - 6.3)	2.7 (1.7 - 4.0)	1.9 (1.0 - 3.3)	0.7 (0.2 - 1.8)	5.1 (3.7 - 6.7)
Elsewhere	5.1 (3.0 - 7.9)	2.8 (1.4 - 5.1)	1.5 (0.5 - 3.6)	1.1 (0.4 - 2.6)	1.7 (0.5 - 4.2)	4.3 (2.1 - 7.8)
<b>Arrival in NZ</b>						
2008 or later	6.7 (1.2 - 21.1)	1.1 (0.1 - 4.9)	- -	- -	2.1 (0.2 - 9.8)	8.0 (0.8 - 33.1)
Before 2008	4.8 (2.8 - 7.7)	3.1 (1.4 - 5.7)	1.7 (0.6 - 4.1)	1.3 (0.5 - 3.0)	1.6 (0.4 - 4.5)	3.7 (1.9 - 6.5)
<b>Highest qualification</b>						
No formal qual.	4.2 (1.8 - 8.4)	6.7 (3.5 - 11.6)	2.2 (0.7 - 5.4)	1.8 (0.4 - 5.3)	0.9 (0.2 - 2.9)	8.4 (4.9 - 13.2)
School qual.	3.6 (1.8 - 6.4)	3.0 (1.2 - 6.3)	1.0 (0.2 - 3.0)	1.2 (0.4 - 2.9)	1.4 (0.2 - 5.3)	5.7 (3.0 - 9.8)
Trade/voc. qual.	3.9 (2.3 - 6.3)	6.8 (4.1 - 10.5)	4.0 (2.1 - 6.9)	3.1 (1.2 - 6.7)	0.3 (0.1 - 1.0)	5.2 (2.8 - 8.8)
Degree/higher	5.1 (3.2 - 7.8)	2.0 (1.0 - 3.7)	2.2 (1.1 - 4.1)	1.1 (0.5 - 2.2)	1.0 (0.3 - 2.7)	2.9 (1.6 - 4.7)
<b>Labour force status</b>						
Employed	3.8 (2.6 - 5.3)	3.1 (1.9 - 4.7)	2.6 (1.6 - 4.1)	2.0 (1.1 - 3.4)	0.6 (0.2 - 1.5)	3.3 (2.1 - 4.9)
Unemployed	2.2 (0.8 - 5.0)	9.0 (4.2 - 16.6)	1.5 (0.3 - 5.1)	0.7 (0.1 - 2.4)	1.1 (0.3 - 3.1)	9.3 (5.2 - 15.2)
Student/Home/Retired	7.5 (4.6 - 11.5)	5.3 (3.1 - 8.5)	2.0 (0.8 - 4.3)	1.5 (0.4 - 4.2)	1.8 (0.3 - 6.6)	8.1 (4.7 - 12.8)

Demographic variables	Use of methods to stop gambling too much % (95% CI)					
	Gambling wastes time/ against religious or other beliefs	Self-stopping control/ account limits	Waste of/ miserly with money	Too busy/doing other things	Only buy if the prize is big	Can't afford it/ only if I can afford it
<b>Religion</b>						
No religion	3.4 (2.1 - 5.3)	3.9 (2.2 - 6.4)	2.5 (1.3 - 4.2)	1.9 (1.0 - 3.5)	1.3 (0.5 - 3.2)	4.2 (2.5 - 6.6)
Anglican	4.2 (1.8 - 8.3)	6.7 (3.5 - 11.4)	1.7 (0.5 - 4.4)	3.0 (0.7 - 8.7)	0.1 (0.0 - 0.5)	5.5 (2.9 - 9.5)
Presbyterian	5.9 (2.5 - 11.5)	3.4 (1.0 - 8.8)	4.0 (1.3 - 9.5)	2.0 (0.4 - 6.9)	-	2.5 (0.7 - 6.7)
Catholic	4.8 (2.5 - 8.4)	6.5 (3.3 - 11.6)	2.9 (1.0 - 6.7)	0.4 (0.1 - 1.4)	-	7.9 (3.1 - 16.5)
Other Christian	5.4 (2.7 - 9.7)	2.9 (1.0 - 6.4)	2.4 (0.7 - 6.5)	1.0 (0.3 - 2.9)	0.4 (0.0 - 1.9)	5.5 (3.0 - 9.2)
Other religion	4.1 (1.0 - 11.4)	1.4 (0.4 - 3.7)	1.1 (0.1 - 5.2)	0.8 (0.1 - 3.9)	3.5 (0.5 - 13.2)	4.7 (1.9 - 9.6)
<b>Household size</b>						
1	4.1 (1.8 - 8.0)	7.6 (4.0 - 13.1)	3.5 (1.5 - 6.9)	1.5 (0.3 - 4.8)	1.0 (0.2 - 3.1)	8.0 (4.4 - 13.1)
2	4.9 (3.1 - 7.5)	5.5 (3.5 - 8.3)	2.4 (1.2 - 4.4)	0.6 (0.2 - 1.4)	1.2 (0.3 - 3.5)	6.7 (4.4 - 9.8)
3	5.0 (2.6 - 8.6)	3.7 (1.4 - 8.1)	1.6 (0.4 - 4.6)	1.4 (0.3 - 4.6)	-	1.7 (0.6 - 4.3)
4	4.3 (2.3 - 7.4)	1.8 (0.7 - 3.9)	3.9 (1.9 - 7.2)	2.7 (1.2 - 5.3)	1.2 (0.1 - 5.5)	5.9 (2.9 - 10.7)
5+	2.7 (1.1 - 5.5)	3.5 (1.3 - 7.9)	0.7 (0.1 - 2.7)	2.9 (0.8 - 7.6)	0.9 (0.2 - 2.6)	2.1 (0.7 - 4.9)
<b>Personal Income (\$)</b>						
Up to 20,000	4.5 (2.7 - 7.2)	6.3 (3.8 - 9.6)	1.2 (0.4 - 3.1)	1.8 (0.7 - 3.7)	1.7 (0.4 - 4.5)	7.5 (4.9 - 11.0)
20,001 - 40,000	2.9 (1.5 - 5.0)	4.4 (2.3 - 7.4)	2.7 (1.3 - 5.1)	2.4 (0.5 - 3.1)	1.0 (0.2 - 3.6)	5.2 (2.7 - 9.0)
40,001 - 60,000	2.7 (1.1 - 5.6)	1.3 (0.4 - 3.2)	2.2 (0.7 - 5.4)	1.3 (0.3 - 3.7)	0.6 (0.1 - 2.0)	2.3 (0.8 - 5.0)
60,001 - 80,000	6.5 (3.1 - 12)	7.9 (3.3 - 15.8)	2.3 (0.6 - 6.5)	0.7 (0.1 - 3.2)	0.1 (0.0 - 0.7)	2.6 (0.6 - 7.5)
80,001 - \$100,000	4.4 (1.0 - 13.0)	0.3 (0.0 - 1.4)	4.0 (0.8 - 12.6)	1.3 (0.1 - 6.1)	-	3.9 (0.7 - 12.5)
Over 100,000	7.8 (2.9 - 16.9)	-	4.9 (1.3 - 12.8)	5.7 (0.8 - 21.0)	-	-
<b>Household Income (\$)</b>						
Up to 20,000	5.2 (2.2 - 10.4)	7.6 (3.4 - 14.5)	1.4 (0.3 - 4.3)	2.1 (0.3 - 8.5)	5.9 (1.2 - 18.5)	18.2 (9.9 - 29.5)
20,001 - 40,000	3.5 (1.9 - 6.0)	4.7 (2.6 - 8.0)	2.4 (1.0 - 4.7)	0.5 (0.1 - 1.4)	0.6 (0.1 - 1.9)	9.0 (5.4 - 13.9)
40,001 - 60,000	6.3 (3.2 - 11.1)	4.3 (2.0 - 8.2)	1.3 (0.3 - 4.3)	2.9 (0.9 - 7.1)	-	5.9 (2.7 - 10.9)
60,001 - 80,000	3.0 (1.2 - 6.2)	1.8 (0.4 - 5.6)	3.9 (1.5 - 8.0)	2.5 (0.9 - 5.6)	2.0 (0.4 - 6.4)	3.6 (1.3 - 7.9)
80,001 - 100,000	4.4 (1.9 - 8.8)	6.8 (2.9 - 13.5)	1.8 (0.4 - 5.6)	1.7 (0.3 - 5.4)	0.3 (0.0 - 1.2)	2.7 (1.0 - 6.2)
Over 100,000	3.6 (1.9 - 6.2)	3.4 (1.6 - 6.4)	2.6 (1.1 - 5.1)	1.8 (0.5 - 4.8)	-	0.5 (0.1 - 2.4)

Demographic variables	Use of methods to stop gambling too much % (95% CI)				
	Know chances of winning are low	Gambling addiction awareness	Buy to support charity/good cause	Prioritise my spending for other things/family	Others
Total	2.0 (1.3 - 3.0)	1.1 (0.6 - 1.8)	0.3 (0.1 - 0.8)	3.5 (2.5 - 4.6)	2.0 (1.3 - 2.9)
<b>Gender</b>					
Male	2.4 (1.4 - 4.0)	0.9 (0.4 - 2.0)	0.5 (0.1 - 1.5)	3.2 (1.9 - 5.2)	1.9 (1.0 - 3.3)
Female	1.6 (0.8 - 3.0)	1.3 (0.6 - 2.5)	0.1 (0.0 - 0.4)	3.7 (2.5 - 5.2)	2.1 (1.1 - 3.5)
<b>Ethnic group</b>					
European/Other	2.2 (1.3 - 3.3)	1.2 (0.7 - 2.1)	0.4 (0.1 - 1.0)	3.5 (2.4 - 4.9)	2.1 (1.2 - 3.1)
Māori	0.6 (0.1 - 2.0)	1.3 (0.5 - 2.9)	0.4 (0.1 - 1.6)	5.2 (3.2 - 7.9)	2.1 (0.9 - 3.9)
Pacific	0.6 (0.1 - 2.1)	0.7 (0.1 - 3.2)	- -	3.7 (1.8 - 6.8)	4.1 (1.4 - 9.4)
Asian	1.5 (0.3 - 5.2)	0.7 (0.1 - 3.3)	0.5 (0.1 - 2.3)	3.4 (1.1 - 8.1)	- -
<b>Age group</b>					
18 - 24 years	1.9 (0.3 - 6.6)	0.5 (0.1 - 1.5)	- -	4.0 (1.5 - 8.8)	1.4 (0.3 - 4.1)
25 - 34 years	1.4 (0.5 - 3.2)	2.5 (1.0 - 5.0)	- -	4.3 (2.4 - 7.1)	1.7 (0.4 - 4.7)
35 - 44 years	1.7 (0.5 - 4.2)	0.8 (0.2 - 2.4)	0.5 (0.1 - 2.2)	5.7 (3.1 - 9.5)	2.5 (1.0 - 5.1)
45 - 54 years	3.8 (1.7 - 7.1)	1.1 (0.3 - 3.0)	0.2 (0.0 - 1.2)	1.8 (0.7 - 4.1)	2.1 (0.9 - 4.1)
55 - 64 years	2.3 (0.8 - 5.5)	- -	1.2 (0.2 - 4.7)	2.0 (0.7 - 4.6)	1.8 (0.5 - 5)
65+ years	1.3 (0.3 - 4.3)	1.0 (0.1 - 3.8)	0.1 (0.0 - 0.6)	1.4 (0.4 - 3.6)	2.4 (0.7 - 6.1)
<b>Country of birth</b>					
NZ	2.2 (1.4 - 3.4)	1.4 (0.8 - 2.3)	0.4 (0.1 - 1.0)	3.8 (2.6 - 5.2)	1.8 (1.1 - 2.9)
Elsewhere	1.5 (0.5 - 3.6)	0.2 (0.0 - 0.9)	0.1 (0.0 - 0.6)	2.5 (1.1 - 4.9)	2.5 (1.1 - 4.9)
<b>Arrival in NZ</b>					
2008 or later	- -	- -	- -	4.5 (0.5 - 19.7)	9.2 (2.4 - 23.9)
Before 2008	1.7 (0.6 - 4.1)	0.2 (0.0 - 1.0)	0.1 (0.0 - 0.7)	2.2 (0.9 - 4.4)	1.4 (0.5 - 3.4)
<b>Highest qualification</b>					
No formal qual.	0.1 (0.0 - 0.7)	0.9 (0.1 - 3.6)	- -	3.4 (1.6 - 6.4)	1.3 (0.3 - 4.3)
School qual.	2.1 (0.8 - 4.4)	1.3 (0.3 - 3.4)	0.1 (0.0 - 0.3)	2.5 (1.3 - 4.5)	1.3 (0.4 - 3.1)
Trade/voc. qual.	1.8 (0.8 - 3.6)	1.2 (0.4 - 3.0)	0.2 (0.0 - 0.8)	5.3 (3.0 - 8.8)	1.8 (0.8 - 3.5)
Degree/higher	2.9 (1.5 - 5.1)	1.0 (0.4 - 2.1)	0.7 (0.2 - 2.1)	2.8 (1.5 - 4.6)	2.8 (1.4 - 4.9)
<b>Labour force status</b>					
Employed	2.7 (1.7 - 4.1)	1.1 (0.6 - 2.1)	0.4 (0.1 - 1.2)	3.0 (1.9 - 4.4)	1.6 (0.9 - 2.7)
Unemployed	0.2 (0.0 - 0.9)	1.6 (0.4 - 5.0)	- -	7.2 (3.6 - 12.8)	1.8 (0.4 - 5.3)
Student/Home/Retired	0.7 (0.1 - 2.2)	0.7 (0.2 - 2.3)	0.1 (0.0 - 0.3)	3.1 (1.5 - 5.9)	3.5 (1.6 - 6.7)

Demographic variables	Use of methods to stop gambling too much % (95% CI)				
	Know chances of winning are low	Gambling addiction awareness	Buy to support charity/good cause	Prioritise my spending for other things/ family	Others
<b>Religion</b>					
No religion	1.4 (0.6 - 3.0)	1.2 (0.5 - 2.5)	0.1 (0.0 - 0.3)	3.4 (2.0 - 5.4)	2.2 (1.1 - 4.0)
Anglican	2.6 (0.9 - 5.7)	0.6 (0.1 - 2.8)	0.4 (0.1 - 1.3)	3.9 (1.9 - 7.1)	0.7 (0.2 - 1.9)
Presbyterian	2.1 (0.4 - 6.7)	-	-	2.6 (0.6 - 8.0)	1.2 (0.2 - 3.8)
Catholic	1.8 (0.5 - 4.7)	1.8 (0.5 - 5.1)	-	2.6 (0.9 - 6.0)	1.2 (0.4 - 2.9)
Other Christian	3.5 (1.2 - 7.6)	1.4 (0.4 - 3.9)	0.7 (0.1 - 3.5)	6.1 (3.1 - 10.6)	4.6 (2.1 - 8.6)
Other religion	4.5 (1.5 - 10.4)	0.7 (0.1 - 3.2)	2.2 (0.2 - 10.1)	1.8 (0.3 - 6.5)	2.3 (0.6 - 6.1)
<b>Household size</b>					
1	0.9 (0.1 - 4.0)	0.8 (0.1 - 2.7)	0.2 (0.0 - 0.8)	4.1 (1.8 - 8.1)	3.4 (1.4 - 7.0)
2	2.7 (1.4 - 4.7)	1.3 (0.5 - 3.0)	0.1 (0.0 - 0.4)	3.0 (1.6 - 5.1)	1.2 (0.5 - 2.7)
3	3.2 (1.1 - 7.2)	1.5 (0.5 - 3.7)	-	6.7 (3.7 - 11.3)	3.9 (1.6 - 8.1)
4	2.3 (1.0 - 4.7)	0.9 (0.2 - 2.6)	0.2 (0.0 - 0.9)	1.3 (0.4 - 3.4)	0.7 (0.1 - 2.5)
5+	-	0.6 (0.1 - 2.6)	1.3 (0.3 - 4.0)	3.6 (1.8 - 6.4)	2.5 (1.1 - 4.9)
<b>Personal Income (\$)</b>					
Up to 20,000	1.4 (0.4 - 3.6)	1.1 (0.3 - 2.8)	-	3.7 (2.0 - 6.2)	2.1 (1.0 - 3.9)
20,001 - 40,000	1.4 (0.5 - 3.1)	1.8 (0.7 - 3.8)	0.2 (0.0 - 0.8)	3.3 (1.8 - 5.5)	1.2 (0.4 - 2.9)
40,001 - 60,000	2.6 (1.0 - 5.5)	0.9 (0.2 - 2.6)	0.2 (0.0 - 0.8)	5.6 (2.9 - 9.8)	1.4 (0.5 - 3.4)
60,001 - 80,000	1.3 (0.2 - 4.5)	0.4 (0.0 - 1.9)	-	1.2 (0.2 - 4.3)	2.2 (0.5 - 6.3)
80,001 - \$100,000	4.7 (1.3 - 12.1)	-	2.4 (0.2 - 10.9)	3.8 (0.9 - 10.9)	0.9 (0.2 - 3.3)
Over 100,000	3.2 (0.7 - 10.0)	-	-	1.6 (0.2 - 7.2)	6.0 (1.4 - 16.9)
<b>Household Income (\$)</b>					
Up to 20,000	1.0 (0.2 - 3.8)	0.2 (0.0 - 1.1)	-	4.0 (2.1 - 7.0)	2.9 (1.1 - 6.5)
20,001 - 40,000	3.0 (1.1 - 6.5)	1.5 (0.5 - 3.5)	0.1 (0.0 - 0.3)	5.2 (2.9 - 8.5)	0.8 (0.2 - 2.1)
40,001 - 60,000	1.4 (0.3 - 4.0)	1.3 (0.3 - 4.0)	0.4 (0.0 - 1.7)	3.9 (1.8 - 7.4)	2.0 (0.7 - 4.4)
60,001 - 80,000	0.3 (0.0 - 1.5)	1.3 (0.2 - 4.8)	-	4.4 (1.8 - 9.1)	1.7 (0.4 - 4.6)
80,001 - 100,000	1.1 (0.2 - 3.6)	1.7 (0.4 - 4.7)	-	3.0 (0.7 - 8.7)	0.8 (0.1 - 2.9)
Over 100,000	2.9 (1.4 - 5.3)	0.4 (0.0 - 1.6)	0.6 (0.1 - 2.2)	2.4 (1.2 - 4.4)	2.8 (1.3 - 5.5)

Table 32 examines number of methods used to stop gambling too much by socio-demographics.

Males were more likely than females to use one or more methods to moderate their gambling. Approximately two thirds of males (67.5%) and three quarters (73.0%) of females reported

using none of these methods. Relative to European/Other, Māori also used these methods more often as did younger adults (age groups 18-24 years, 25-34 years) relative to adults in some of the older age groups. Younger adults also more often said they used two or three or more methods.

There were no differences between migrants and New Zealand born participants or between recent and longer term migrants. Education level was also unrelated to use of these methods. Employed and unemployed participants, relative to students, people looking after children at home and retired people used them more often. Unemployed participants more often reported using two methods than did their employed counterparts.

Participants with no religion employed these methods more often than Presbyterians. There were no other obvious differences between religious groups or with regard to the other variables examined, namely household size, personal income and household income.

**Table 32: Number of methods used to stop gambling too much by demographics**

Demographic variables	Number of methods used % (95% CI)						
	None	One	Two	Three	Four	Five	Six
Total	70.3 (68.6 - 72.1)	22.3 (20.8 - 23.9)	5.6 (4.8 - 6.4)	1.4 (1.0 - 1.9)	0.3 (0.1 - 0.4)	0.1 (0.0 - 0.2)	0.0 (0.0 - 0.1)
<b>Gender</b>							
Male	67.5 (64.8 - 70.1)	24.2 (21.8 - 26.6)	6.3 (5.1 - 7.7)	1.8 (1.1 - 2.8)	0.2 (0.1 - 0.4)	0.1 (0.0 - 0.3)	0.0 (0.0 - 0.1)
Female	73.0 (70.9 - 75.0)	20.6 (18.8 - 22.5)	4.9 (4.0 - 6.0)	1.0 (0.7 - 1.4)	0.3 (0.2 - 0.6)	0.1 (0.0 - 0.3)	0.1 (0.0 - 0.2)
<b>Ethnic group</b>							
European/Other	70.6 (68.6 - 72.6)	22.2 (20.5 - 24.0)	5.7 (4.8 - 6.7)	1.2 (0.8 - 1.8)	0.2 (0.1 - 0.3)	0.1 (0.0 - 0.3)	0.0 (0.0 - 0.1)
Māori	64.5 (61.0 - 67.9)	26.4 (23.2 - 29.9)	6.1 (4.5 - 8.1)	2.0 (1.2 - 3.2)	0.8 (0.3 - 1.6)	0.0 (0.0 - 0.2)	0.2 (0.0 - 0.6)
Pacific	68.6 (64.0 - 72.8)	21.8 (18.1 - 25.8)	5.8 (3.9 - 8.5)	2.5 (1.3 - 4.3)	0.7 (0.2 - 1.8)	0.3 (0.1 - 1.0)	0.3 (0.1 - 1.0)
Asian	70.7 (65.4 - 75.6)	21.3 (17.2 - 25.8)	5.0 (3.4 - 7.3)	2.2 (1.0 - 4.2)	0.8 (0.2 - 2.2)	-	-
<b>Age group</b>							
18 - 24 years	63.1 (56.7 - 69.1)	24.8 (19.5 - 30.8)	8.0 (5.0 - 12.1)	3.4 (1.6 - 6.6)	0.7 (0.2 - 1.7)	-	-
25 - 34 years	61.8 (57.5 - 66.0)	27.2 (23.3 - 31.3)	8.4 (6.2 - 11.2)	2.0 (1.0 - 3.8)	0.4 (0.2 - 0.8)	0.0 (0.0 - 0.2)	0.1 (0.0 - 0.3)
35 - 44 years	70.3 (66.4 - 73.9)	23.4 (20.0 - 27.0)	4.7 (3.3 - 6.4)	1.5 (0.9 - 2.5)	-	0.1 (0.0 - 0.4)	-
45 - 54 years	73.9 (70.5 - 77.1)	20.0 (17.1 - 23.1)	4.7 (3.4 - 6.4)	1.0 (0.5 - 1.7)	0.1 (0.0 - 0.4)	0.2 (0.0 - 0.6)	0.1 (0.0 - 0.4)
55 - 64 years	72.4 (68.5 - 76.1)	22.9 (19.4 - 26.7)	4.0 (2.6 - 5.9)	0.3 (0.1 - 0.9)	0.4 (0.1 - 1.0)	-	-
65+ years	79.1 (76.1 - 81.9)	15.9 (13.5 - 18.6)	4.1 (2.8 - 5.8)	0.5 (0.1 - 1.3)	0.2 (0.0 - 0.7)	0.2 (0.0 - 1.0)	-
<b>Country of birth</b>							
NZ	70.0 (68.1 - 71.9)	22.4 (20.8 - 24.2)	5.8 (4.9 - 6.8)	1.3 (0.9 - 2.0)	0.2 (0.1 - 0.4)	0.1 (0.0 - 0.3)	0.0 (0.0 - 0.1)
Elsewhere	71.3 (68.0 - 74.4)	21.9 (19.1 - 24.9)	4.8 (3.5 - 6.4)	1.5 (0.9 - 2.4)	0.4 (0.1 - 0.8)	0.0 (0.0 - 0.1)	0.1 (0.0 - 0.2)
<b>Arrival in NZ</b>							
2008 or later	72.6 (63.7 - 80.4)	22.5 (15.1 - 31.5)	3.0 (1.0 - 6.8)	1.3 (0.2 - 5.0)	0.5 (0.1 - 2.5)	-	-
Before 2008	71.1 (67.6 - 74.4)	21.8 (18.9 - 25.0)	5.1 (3.7 - 6.9)	1.5 (0.9 - 2.5)	0.3 (0.1 - 0.8)	0.0 (0.0 - 0.2)	0.1 (0.0 - 0.2)

Demographic variables	Number of methods used % (95% CI)						
	None	One	Two	Three	Four	Five	Six
<b>Highest qualification</b>							
No formal qual.	73.6 (69.7 - 77.1)	20.3 (17.1 - 23.8)	4.8 (3.3 - 6.8)	1.1 (0.4 - 2.1)	0.1 (0.0 - 0.7)	0.0 (0.0 - 0.1)	0.1 (0.0 - 0.3)
School qual.	70.0 (66.2 - 73.5)	22.4 (19.2 - 26.0)	5.4 (3.8 - 7.4)	1.9 (1.1 - 3.2)	0.2 (0.0 - 0.7)	0.1 (0.0 - 0.2)	0.0 (0.0 - 0.2)
Trade/voc. qual.	67.4 (63.9 - 70.7)	24.6 (21.5 - 27.9)	6.6 (5.0 - 8.5)	1.0 (0.5 - 1.7)	0.2 (0.1 - 0.6)	0.2 (0.0 - 0.7)	- -
Degree/higher	71.1 (68.3 - 73.8)	21.6 (19.2 - 24.1)	5.3 (4.2 - 6.8)	1.5 (0.8 - 2.5)	0.4 (0.2 - 0.7)	0.1 (0.0 - 0.3)	0.1 (0.0 - 0.2)
<b>Labour force status</b>							
Employed	69.6 (67.5 - 71.7)	23.4 (21.5 - 25.3)	5.3 (4.4 - 6.3)	1.4 (1.0 - 2.0)	0.2 (0.1 - 0.4)	0.1 (0.0 - 0.3)	0.0 (0.0 - 0.1)
Unemployed	60.9 (55.0 - 66.6)	27.4 (22.4 - 32.9)	9.5 (6.4 - 13.4)	1.1 (0.3 - 3.1)	0.6 (0.2 - 1.6)	0.2 (0.0 - 1.0)	0.2 (0.0 - 0.7)
Student/Home/Retired	75.6 (72.4 - 78.6)	17.8 (15.2 - 20.8)	4.8 (3.5 - 6.5)	1.5 (0.6 - 2.9)	0.3 (0.1 - 0.8)	0.0 (0.0 - 0.1)	- -
<b>Religion</b>							
No religion	67.6 (64.9 - 70.2)	24.0 (21.6 - 26.5)	6.3 (4.9 - 8.0)	1.8 (1.0 - 2.9)	0.2 (0.1 - 0.5)	0.1 (0.0 - 0.4)	- -
Anglican	72.2 (68.1 - 76.0)	22.5 (18.9 - 26.5)	4.0 (2.6 - 5.7)	0.9 (0.4 - 1.9)	0.4 (0.1 - 1.0)	-	0.1 (0.0 - 0.3)
Presbyterian	75.5 (70.9 - 79.7)	18.3 (14.5 - 22.5)	4.7 (2.9 - 7.0)	1.1 (0.4 - 2.5)	0.1 (0.0 - 0.4)	0.4 (0.0 - 1.7)	0.1 (0.0 - 0.3)
Catholic	71.7 (67.4 - 75.8)	20.4 (16.8 - 24.4)	6.3 (4.4 - 8.7)	1.1 (0.6 - 2.0)	0.5 (0.2 - 1.2)	-	-
Other Christian	71.8 (67.7 - 75.7)	20.8 (17.4 - 24.5)	5.6 (3.9 - 7.8)	1.5 (0.8 - 2.5)	0.2 (0.1 - 0.6)	0.1 (0.0 - 0.2)	0.1 (0.0 - 0.4)
Other religion	68.4 (62.1 - 74.2)	23.4 (18.3 - 29.2)	6.0 (3.4 - 9.5)	1.6 (0.6 - 3.7)	0.2 (0.1 - 0.8)	-	0.3 (0.1 - 1.2)
<b>Household size</b>							
1	74.2 (70.9 - 77.4)	21.0 (18.2 - 24.1)	4.3 (2.8 - 6.1)	0.2 (0.0 - 0.7)	0.1 (0.0 - 0.5)	-	0.2 (0.0 - 0.8)
2	71.9 (69.2 - 74.5)	20.9 (18.6 - 23.4)	6.1 (4.9 - 7.5)	0.8 (0.4 - 1.3)	0.3 (0.1 - 0.6)	0.1 (0.0 - 0.2)	-
3	70.2 (66.2 - 73.9)	23.1 (19.7 - 26.8)	4.2 (2.7 - 6.2)	2.1 (1.0 - 3.7)	0.1 (0.0 - 0.3)	0.4 (0.1 - 1.2)	-
4	68.8 (65.0 - 72.4)	23.0 (19.9 - 26.3)	5.5 (3.9 - 7.7)	2.2 (1.2 - 3.8)	0.4 (0.1 - 0.9)	0.0 (0.0 - 0.2)	0.1 (0.0 - 0.2)
5+	67.4 (62.3 - 72.2)	24.1 (19.9 - 28.6)	6.6 (4.5 - 9.4)	1.5 (0.6 - 3.1)	0.4 (0.1 - 0.9)	-	0.1 (0.0 - 0.3)
<b>Personal Income (\$)</b>							
Up to 20,000	68.5 (65.3 - 71.5)	23.9 (21.1 - 26.9)	5.5 (4.1 - 7.0)	1.6 (0.9 - 2.8)	0.4 (0.2 - 0.8)	0.1 (0.0 - 0.3)	0.1 (0.0 - 0.2)
20,001 - 40,000	71.2 (67.9 - 74.3)	21.2 (18.5 - 24.0)	5.8 (4.3 - 7.8)	1.4 (0.7 - 2.6)	0.3 (0.1 - 0.6)	-	0.1 (0.0 - 0.3)
40,001 - 60,000	70.7 (66.8 - 74.4)	20.7 (17.4 - 24.3)	6.4 (4.6 - 8.6)	1.5 (0.8 - 2.6)	0.3 (0.1 - 0.8)	0.4 (0.1 - 1.2)	-
60,001 - 80,000	70.7 (65.7 - 75.3)	22.5 (18.2 - 27.2)	6.3 (4.3 - 9.0)	0.5 (0.2 - 1.2)	-	-	-
80,001 - 100,000	65.9 (57.5 - 73.6)	25.4 (18.6 - 33.3)	7.0 (3.6 - 12.3)	1.4 (0.4 - 3.7)	0.3 (0.0 - 1.4)	-	-
Over 100,000	74.9 (68.0 - 80.9)	22.4 (16.7 - 29.0)	1.9 (0.8 - 4.0)	0.8 (0.2 - 2.7)	-	-	-
<b>Household Income</b>							
Up to 20,000	70.4 (65.3 - 75.3)	19.9 (16.0 - 24.3)	7.0 (4.6 - 10.2)	2.1 (0.5 - 5.9)	0.2 (0.0 - 0.7)	0.3 (0.0 - 1.2)	0.1 (0.0 - 0.4)
20,001 - 40,000	67.3 (63.4 - 71.0)	25.6 (22.1 - 29.4)	4.9 (3.5 - 6.7)	1.5 (0.7 - 3.0)	0.5 (0.2 - 1.1)	-	0.2 (0.1 - 0.5)

Demographic variables	Number of methods used % (95% CI)						
	None	One	Two	Three	Four	Five	Six
40,001 - 60,000	74.1 (70.3 - 77.6)	19.4 (16.2 - 22.9)	4.6 (3.1 - 6.6)	1.2 (0.6 - 2.2)	0.5 (0.1 - 1.4)	0.3 (0.0 - 1.2)	-
60,001 - 80,000	71.0 (66.6 - 75.1)	19.5 (16.0 - 23.2)	8.4 (5.9 - 11.4)	1.2 (0.5 - 2.4)	-	-	-
80,001 - 100,000	71.3 (66.6 - 75.6)	21.4 (17.6 - 25.7)	6.0 (3.9 - 8.8)	1.0 (0.4 - 2.0)	0.4 (0.1 - 1.1)	-	-
Over 100,000	69.7 (66.1 - 73.1)	23.5 (20.4 - 26.9)	4.7 (3.4 - 6.4)	1.8 (0.9 - 3.2)	0.1 (0.0 - 0.4)	0.1 (0.0 - 0.5)	-

#### 4.1.15 Recent gambling behaviour change

Gambling behaviour change is examined in relation to socio-demographics in Table 33.

Participants were asked to think about all of the gambling activities they had just been asked about in the interview and to indicate whether in the last 12 months their overall involvement in them increased a lot, increased a little, stayed much the same, decreased a little or decreased a lot. For the analyses, 'increased a lot' and 'increased' were collapsed into the category 'increased', and 'decreased a little' and 'decreased a lot' were collapsed into the category 'decreased'. Most people (79.0%) were of the view that their overall gambling involvement had stayed much the same. More (16.5%) thought it had decreased (10.4% decreased a little (9.5-11.3), 6.1% decreased a lot (5.4-6.8)) rather than increased (4.5%) (4.1% increased a little (3.4-4.8), 0.4% increased a lot (0.2-0.5)).

There is no difference between males and females with respect to change in gambling participation. Māori and Pacific participants (23.0% and 24.0% respectively) more often than European/Other and Asian (both 15.7%) reported a decrease in their gambling. The two latter groups more often than the former reported that their gambling had stayed much the same. The four groups did not differ with regard to increased gambling. There is an increase in gambling stability with age. The three youngest groups more often reduced their gambling than the oldest group. The two youngest groups also more often increased their gambling than the oldest group.

Gambling participation changes did not differ between migrants and New Zealand born, recent and other migrants or educational level. Employed participants more often said their gambling had increased than did those who were a student, looking after children at home or retired. Relative to participants in this latter group and employed people, unemployed participants more often reported decreased gambling. Unemployed participants were also less likely than students, people looking after children at home or retired to say their gambling had not changed.

More participants with no religion than Presbyterians or Other Christians reported increased gambling. Participants in four person households more often than those in two person households said their gambling increased. More people in the latter group than those in four or five or more person dwellings also said their gambling stayed much the same. Changes in gambling participation did not vary in relation to personal income and the only difference with respect to household income was that people in the lowest group more often indicated that their gambling had decreased than did those in the highest group.

In Table 34, gambling participation changes over the previous 12 months are examined in relation to pattern of participation, gambling expenditure and most preferred activity.

Relative to infrequent gamblers (4.6%) and regular non-continuous gamblers (6.3%), more regular continuous gamblers (12.8%) said they gambled more. A higher percentage of infrequent gamblers than of regular non-continuous gamblers considered that their participation decreased.

Participants who reported spending \$101-\$500 per month more often than those in lower expenditure groups said they had increased their participation. They also more often indicated that their gambling decreased and less often said it stayed much the same. Participants who spent more than \$500 or \$51-\$100 per month also less often reported gambling stability than those in one or more of the lower expenditure groups. People in the \$51-\$100 group said their gambling decreased more than was the case for those in the lowest (\$1-\$10) group.

**Table 33: Gambling behaviour change during the past 12 months by demographics**

Demographic variables	Gambling behaviour change % (95% CI)					
	Increased		Stayed same		Decreased	
Total	4.5	(3.8 - 5.3)	79.0	(77.6 - 80.4)	16.5	(15.3 - 17.7)
<b>Gender</b>						
Male	4.3	(3.4 - 5.4)	79.0	(76.0 - 80.0)	16.5	(15.9 - 19.5)
Female	4.7	(3.8 - 5.7)	79.9	(78.1 - 81.6)	15.4	(13.9 - 17.0)
<b>Ethnic Group</b>						
European/Other	4.4	(3.6 - 5.3)	79.9	(78.2 - 81.4)	15.7	(14.4 - 17.1)
Māori	5.1	(3.7 - 6.7)	72.0	(68.9 - 74.9)	23.0	(20.3 - 25.7)
Pacific	5.0	(3.4 - 7.0)	71.0	(66.4 - 75.2)	24.0	(20.1 - 28.4)
Asian	4.9	(3.4 - 6.9)	79.4	(76.2 - 82.3)	15.7	(13.0 - 18.6)
<b>Age</b>						
18 - 24 years	8.4	(5.6 - 11.9)	71.7	(66.7 - 76.4)	19.7	(15.6 - 24.4)
25 - 34 years	6.8	(3.6 - 6.6)	73.2	(69.6 - 76.6)	20.0	(16.9 - 23.3)
35 - 44 years	3.8	(2.7 - 5.2)	79.2	(76.5 - 81.7)	17.0	(14.7 - 19.4)
45 - 54 years	4.9	(3.6 - 6.6)	79.9	(77.1 - 82.5)	15.1	(12.9 - 17.6)
55 - 64 years	2.4	(1.5 - 3.7)	81.9	(78.9 - 84.6)	15.7	(13.2 - 18.6)
65+ years	0.9	(0.5 - 1.6)	87.3	(85.2 - 89.3)	11.7	(9.9 - 13.9)
<b>Country of birth</b>						
NZ	4.9	(4.1 - 5.8)	78.4	(76.8 - 80.0)	16.7	(15.3 - 18.1)
Elsewhere	3.3	(2.3 - 4.5)	80.6	(78.3 - 82.8)	16.0	(14.0 - 18.1)
<b>Arrival in NZ</b>						
2008 or later	5.0	(2.9 - 8.2)	83.3	(78.1 - 87.6)	11.7	(8.0 - 16.3)
Before 2008	2.9	(1.9 - 4.3)	80.1	(77.4 - 82.5)	16.9	(14.7 - 19.3)
<b>Highest qualification</b>						
No formal qual.	3.7	(2.4 - 5.5)	75.9	(72.6 - 79.0)	20.4	(17.5 - 23.5)
School qual.	5.2	(3.5 - 5.6)	78.6	(75.5 - 81.4)	16.2	(13.7 - 19.0)
Trade/voc. qual.	4.3	(3.0 - 5.9)	78.6	(75.8 - 81.2)	17.1	(14.7 - 19.6)
Degree/higher	4.5	(3.5 - 5.6)	80.7	(78.6 - 82.7)	14.8	(13.1 - 16.6)
<b>Labour force status</b>						
Employed	5.2	(4.4 - 6.1)	78.7	(77.0 - 80.3)	16.1	(14.7 - 17.6)
Unemployed	3.3	(2.2 - 4.8)	74.3	(69.7 - 78.5)	22.4	(18.3 - 26.9)
Student/Home/Retired	2.7	(1.8 - 3.8)	82.0	(79.4 - 84.4)	15.2	(13.0 - 17.7)
<b>Religion</b>						
No religion	6.1	(4.9 - 7.6)	76.8	(74.4 - 79.0)	17.1	(15.1 - 19.2)
Anglican	3.6	(2.1 - 5.7)	81.9	(78.5 - 85.0)	14.5	(11.8 - 17.6)
Presbyterian	2.0	(1.0 - 3.6)	80.4	(76.4 - 84.1)	17.6	(14.1 - 21.6)
Catholic	4.7	(3.2 - 6.7)	78.3	(74.7 - 81.6)	17.0	(14.1 - 20.1)
Other Christian	3.0	(2.0 - 4.3)	81.3	(78.5 - 83.9)	15.7	(13.3 - 18.5)
Other religion	3.4	(2.1 - 5.2)	80.0	(75.7 - 83.8)	16.3	(12.9 - 20.2)
<b>Household size</b>						
1	3.3	(2.2 - 4.6)	81.6	(78.8 - 84.1)	15.2	(12.9 - 17.7)
2	3.4	(2.6 - 4.3)	82.3	(80.4 - 84.0)	14.4	(12.7 - 16.1)
3	4.2	(2.9 - 5.8)	78.1	(74.8 - 81.2)	17.7	(14.9 - 20.7)
4	6.3	(4.6 - 8.3)	76.5	(73.4 - 79.4)	17.2	(14.7 - 19.9)
5+	5.3	(3.1 - 8.4)	75.6	(71.6 - 79.3)	19.0	(15.9 - 22.4)

Demographic variables	Gambling behaviour change % (95% CI)					
	Increased		Stayed same		Decreased	
<b>Personal income (\$)</b>						
Up to 20,000	3.9	(2.8 - 5.1)	77.7	(75.1 - 80.0)	18.4	(16.2 - 20.8)
20,001 - 40,000	5.1	(3.1 - 7.1)	78.5	(75.8 - 81.0)	16.4	(14.3 - 18.8)
40,001 - 60,000	4.7	(3.1 - 6.8)	77.0	(73.7 - 80.1)	18.3	(15.5 - 21.3)
60,001 - 80,000	4.8	(3.1 - 7.1)	84.6	(81.2 - 87.7)	10.6	(8.0 - 13.5)
80,001 - 100,000	4.6	(2.3 - 8.3)	78.4	(72.2 - 83.8)	16.9	(12.0 - 22.9)
Over 100,000	5.3	(3.1 - 8.4)	82.6	(77.9 - 86.7)	12.1	(8.5 - 16.5)
<b>Household Income (\$)</b>						
Up to 20,000	2.9	(1.8 - 4.5)	75.0	(70.5 - 79.1)	22.1	(18.1 - 26.5)
20,001 - 40,000	2.8	(1.9 - 4.1)	78.2	(75.1 - 81.0)	19.0	(16.3 - 22.0)
40,001 - 60,000	4.4	(3.0 - 6.2)	79.1	(76.1 - 82.0)	16.5	(13.9 - 19.3)
60,001 - 80,000	4.8	(3.2 - 7.0)	78.8	(75.3 - 82.1)	16.3	(13.5 - 19.6)
80,001 - 100,000	4.9	(3.2 - 7.2)	79.3	(75.5 - 82.7)	15.8	(12.8 - 19.2)
Over 100,000	5.2	(3.8 - 7.0)	81.5	(79.0 - 83.9)	13.2	(11.2 - 15.4)

Changes in gambling participation varied in relation to preferred gambling activity. For most preferences, the majority of participants said their overall gambling stayed much the same. It ranged from 81.5% for raffles or lotteries to 10.4% for overseas internet gambling. Reported increases ranged from 17.1% for Bullseye to 2.2% for Keno. The large majority (85.1%) of people who favoured overseas internet gambling reported decreased participation. Participants who preferred text games or competitions (11.5%) indicated the lowest decrease.

Given the small number of people in many of the cells and often wide confidence intervals, caution is required in interpreting the information presented. With regard to increases, participants with non-casino EGM preferences (10.0%) may differ in relation to those with preferences for raffles and lotteries (3.4%) and those with no preferred form (3.3%).

In the case of gambling stability (“stayed much the same”) the proportion of participants with a preference for overseas internet gambling was lower than for participants who favoured a number of other forms. Participants who favoured non-casino EGMs (56.9%) also had lower stability in that the percentage in this group is below percentages in a number of other preference groups including raffles and lotteries, Lotto, bets with friends and workmates and betting on horse or dog races. It was also below participants who had no preference.

Participants who favoured overseas internet gambling were more likely to report decreased gambling participation than people who preferred most other forms. Relative to people with some other preferences those preferring non-casino EGMs or card games also reported more decreased participation.

Participants who said their gambling had increased during the past 12 months were asked, from a presented list, to indicate what the main reasons for this increase were. They could select more than one reason and add additional reasons. Responses to this question are summarised in Table 35, by socio-demographic groups.

Over a third (34.6%) said their gambling had increased because of friends and family. Other reasons selected from the list presented during interviews included more money to spend now (27.6%), more opportunities to gamble (19.9%), wanted to or felt like gambling more (17.7%), became old enough to gamble (8.8%), having more time (7.6%), priorities have changed (4.3%) and there was a change in personal health (1.0%). Although not included in the list, 10.6% of people who increased their gambling added, unprompted, to win, or to win more money or prizes. A smaller number (2.9%) mentioned one or more other reasons.

There appear to be no major gender differences in reasons given for increased gambling. The only ethnic difference is with regard to changing priorities. Māori (9.9%) mentioned this more often than Pacific people (0.6%). Participants aged 18-24 years (35.4%) more often than those aged 25-34 years (1.5%) or other ages (0%) said they increased gambling because they became old enough to gamble. There were no differences in relation to migration status or duration of residence. Participants with a school qualification (21.3%) more often than those with a degree (0.7%) gave becoming old enough as a reason for increased gambling. Employed participants (22.0%) more often than those who were unemployed (5.4%) gave having more opportunities to gamble as a reason. With regard to religion, the only apparent difference was that Presbyterians (35.2%) more often indicated that having more time was a reason than did people with no religion (5.4%). Household size was not related to reasons for increasing gambling.

**Table 34: Gambling behaviour change by pattern of participation, average monthly gambling expenditure and most preferred form of gambling**

Pattern of participation, expenditure and preferred gambling activity	Gambling behaviour change % (95% CI)							
	Increased		Stayed much the same		Decreased		Don't know	
Total	4.5	(3.8 - 5.3)	79.0	(77.6 - 80.4)	16.5	(15.3 - 17.7)	0.0	(0.0 - 0.1)
<b>Pattern of participation</b>								
Infrequent gambler	4.6	(3.6 - 5.8)	74.4	(72.4 - 76.3)	20.9	(19.2 - 22.8)	0.0	(0.0 - 0.2)
Regular non-continuous gambler	6.3	(4.7 - 8.2)	79.4	(76.4 - 82.1)	14.4	(12.1 - 16.9)	-	-
Regular continuous gambler	12.8	(8.8 - 17.7)	67.8	(61.9 - 73.2)	19.5	(15.4 - 24.1)	-	-
<b>Average monthly expenditure</b>								
\$1 - \$10	3.0	(1.9 - 4.7)	81.5	(78.2 - 84.4)	15.3	(12.6 - 18.4)	0.1	(0.0 - 0.7)
\$11 - \$20	4.2	(2.7 - 6.3)	78.2	(75.1 - 81.0)	17.6	(15.2 - 20.3)	-	-
\$21 - \$30	5.2	(3.2 - 7.9)	76.6	(72.0 - 80.7)	18.3	(14.8 - 22.2)	-	-
\$31 - \$50	5.1	(3.3 - 7.4)	74.2	(70.1 - 78.1)	20.7	(17.2 - 24.6)	-	-
\$51 - \$100	5.5	(3.8 - 7.6)	72.1	(67.9 - 76.1)	22.4	(18.7 - 26.5)	-	-
\$101 - \$500	11.5	(8.6 - 15.1)	64.2	(59.5 - 68.7)	24.3	(20.5 - 28.4)	-	-
More than \$500	8.8	(4.7 - 14.6)	65.4	(55.4 - 74.5)	25.8	(17.6 - 35.5)	-	-
Don't know/refused/other	9.9	(2.1 - 28.4)	82.7	(58.9 - 95.3)	7.4	(0.7 - 31.1)	-	-
<b>Most preferred gambling activity</b>								
Card games	6.1	(2.8 - 11.5)	62.8	(50.6 - 73.9)	31.2	(20.4 - 43.8)	-	-
Bets with friends/workmates	4.7	(2.4 - 8.3)	76.9	(70.8 - 82.2)	18.4	(13.5 - 24.1)	-	-
Text game or competition	.	-	78.6	(50.2 - 94.5)	11.5	(2.7 - 30.7)	9.9	(0.9 - 40.3)
Raffle/lottery (NZ or overseas)	3.4	(2.0 - 5.4)	81.5	(77.5 - 85.1)	15.0	(11.8 - 18.7)	-	-
Lotto	5.5	(4.1 - 7.3)	79.1	(76.2 - 81.9)	15.3	(13.0 - 18.0)	-	-
Keno	2.2	(0.2 - 10.3)	77.5	(53.5 - 92.4)	20.3	(6.3 - 44.1)	-	-
Bullseye	17.1	(4.2 - 42.2)	65.5	(32.6 - 89.5)	17.4	(2.0 - 57.4)	-	-
Instant Kiwi tickets or other scratch tickets	7.8	(5.2 - 11.2)	68.0	(62.8 - 72.9)	24.2	(19.8 - 29.1)	-	-
Housie or bingo	3.9	(1.0 - 10.9)	73.7	(61.3 - 83.7)	22.4	(13.3 - 34.2)	-	-
Horse/dog race betting	4.4	(2.6 - 6.9)	73.8	(68.4 - 78.6)	21.9	(17.2 - 27.1)	-	-
Sports betting	4.6	(1.7 - 9.9)	64.4	(46.6 - 79.6)	31.0	(16.3 - 49.4)	-	-
Casino table games or EGMs (NZ and overseas)	9.2	(4.4 - 16.7)	63.9	(55.5 - 71.7)	26.9	(20.0 - 34.7)	-	-
Non-casino EGMs	10.0	(6.1 - 15.2)	56.9	(48.3 - 65.3)	33.1	(25.5 - 41.5)	-	-
Short-term speculative investments	13.7	(3.6 - 34.3)	70.8	(43.7 - 89.6)	15.5	(3.3 - 41.4)	-	-
Overseas internet gambling for money/prizes	4.5	(0.2 - 29.0)	10.4	(0.5 - 55.9)	85.1	(35.0 - 99.2)	-	-
Other activities	16.7	(3.6 - 44.0)	69.7	(45.3 - 87.6)	13.6	(3.9 - 32.4)	-	-
No preference	6.5	(3.1 - 11.8)	75.5	(69.3 - 81.0)	18.0	(13.8 - 23.0)	-	-
No/None	3.3	(2.0 - 5.2)	80.3	(77.0 - 83.3)	16.4	(13.6 - 19.5)	-	-
Refused/Don't Know	-	-	89.3	(68.4 - 98.0)	10.7	(2.0 - 31.6)	-	-

Participants in two personal income groups, \$20,001-\$40,000 (32.9%) and over \$100,000 (46.3%), relative to people in the \$60,001-\$80,000 (9.8%) group more often indicated that having more money to spend was a main reason for increased gambling. Participants in the lowest income group (4.0%) less often than those in the three immediately higher income groups (24.7%, 29.0% and 25.3% respectively) mentioned having more opportunities as a reason. Only 1.3% of participants earning \$80,001-\$100,000 mentioned friends and family, lower than those in all other income groups. Over half of people in the former group (52.3%) said they gambled more because they wanted to or felt like it.

Participants in the lowest household income category (35.8%) more often mentioned having more time as a reason than people in the higher \$60,001-\$80,000 (4.5%) and over \$100,000 (6.2%) categories. Those in the \$20,001-\$40,000 (11.2%) and \$60,001-\$80,000 (9.1%) groups more often said a change of priorities was a major reason than did participants in households with \$40,001-\$60,000 incomes (0.2%).

**Table 35: Main reasons for increased gambling during past 12 months by demographics**

Demographic variables	Reasons for increased gambling % (95% CI)				
	I have more money to spend now	I have more time now	I have more opportunities to gamble	Because of friends and family	I wanted to/felt like gambling more
Total	27.6 (21.4 - 34.6)	7.6 (5.0 - 11.1)	19.9 (14.6 - 26.3)	34.6 (26.3 - 43.7)	17.7 (12.3 - 24.5)
<b>Gender</b>					
Male	35.4 (24.2 - 47.9)	9.9 (5.7 - 15.8)	23.0 (13.5 - 35.2)	33.7 (22.6 - 46.3)	17.8 (9.6 - 29.1)
Female	21.1 (14.6 - 28.9)	5.7 (2.7 - 10.4)	17.4 (10.8 - 25.8)	35.4 (25.6 - 46.1)	17.7 (11.1 - 26.2)
<b>Ethnic Group</b>					
European/Other	28.4 (20.9 - 36.9)	6.1 (3.3 - 10.1)	19.4 (13.1 - 27.3)	35.1 (25.1 - 46.2)	18.1 (11.5 - 26.5)
Māori	42.2 (27.0 - 59.0)	21.1 (10.8 - 35.3)	16.0 (8.4 - 26.8)	31.2 (18.8 - 46.1)	24.4 (14.0 - 37.8)
Pacific	39.5 (24.2 - 56.6)	8.0 (2.1 - 20.6)	37.6 (20.6 - 57.3)	30.6 (15.3 - 50.2)	12.7 (4.6 - 26.8)
Asian	17.3 (7.6 - 32.1)	11.4 (4.1 - 24.6)	13.8 (5.1 - 28.5)	43.8 (26.2 - 62.8)	14.8 (6.1 - 28.9)
<b>Age</b>					
18 - 24 years	29.2 (12.2 - 52.6)	4.6 (1.5 - 11.2)	20.2 (7.3 - 41.0)	44.3 (26.2 - 63.7)	8.7 (1.3 - 29.8)
25 - 34 years	33.1 (20.8 - 47.4)	9.4 (4.4 - 17.5)	22.2 (11.8 - 36.1)	43.5 (28.5 - 59.6)	25.6 (14.6 - 39.6)
35 - 44 years	36.4 (21.5 - 53.6)	7.3 (2.0 - 18.5)	27.2 (14.1 - 44.2)	16.9 (7.1 - 32.2)	13.8 (6.0 - 26.3)
45 - 54 years	18.7 (9.3 - 32.2)	5.6 (1.7 - 14.0)	15.3 (7.3 - 27.4)	32.8 (18.7 - 49.9)	18.0 (8.6 - 31.8)
55 - 64 years	12.6 (2.7 - 34.7)	6.8 (0.7 - 28.7)	17.7 (5.3 - 40.1)	17.4 (5.4 - 38.7)	28.1 (10.8 - 52.7)
65+ years	21.2 (5.0 - 51.2)	29.8 (7.9 - 63.5)	-	30.4 (8.3 - 63.8)	6.3 (1.1 - 21.1)
<b>Country of birth</b>					
NZ	30.0 (22.0 - 39.0)	6.0 (3.4 - 9.7)	20.6 (13.9 - 28.8)	35.2 (27.0 - 44.3)	18.0 (11.8 - 25.7)
Elsewhere	18.3 (9.8 - 30.2)	14.1 (6.7 - 25.4)	17.3 (9.0 - 29.2)	32.0 (15.4 - 53.3)	16.8 (8.1 - 29.7)
<b>Arrival in NZ</b>					
2008 or later	21.8 (8.0 - 43.6)	3.1 (0.3 - 14.2)	9.2 (1.5 - 29.5)	42.3 (16.9 - 71.5)	17.7 (3.1 - 49.7)

Demographic variables	Reasons for increased gambling % (95% CI)				
	I have more money to spend now	I have more time now	I have more opportunities to gamble	Because of friends and family	I wanted to/felt like gambling more
Before 2008	17.0 (7.3 - 32.0)	18.0 (8.0 - 33.5)	20.3 (9.6 - 35.8)	28.3 (8.9 - 57.5)	16.5 (7.0 - 31.4)
<b>Highest qualification</b>					
No formal qual.	37.8 (18.5 - 60.8)	10.5 (3.4 - 24.3)	20.7 (7.8 - 41.2)	17.5 (6.9 - 34.5)	25.5 (10.9 - 46.4)
School qual.	31.0 (16.7 - 48.8)	8.0 (3.6 - 15.2)	24.3 (12.3 - 40.5)	39.9 (25.4 - 55.9)	10.6 (4.4 - 21.0)
Trade/voc. qual.	16.1 (7.0 - 30.1)	8.9 (3.5 - 18.2)	9.6 (3.4 - 21.3)	26.4 (14.4 - 41.8)	25.3 (11.8 - 43.9)
Degree/higher	28.5 (18.2 - 40.9)	5.7 (2.4 - 11.5)	22.5 (13.1 - 34.2)	40.8 (28.1 - 54.5)	16.2 (8.8 - 26.3)
<b>Labour force status</b>					
Employed	24.8 (17.8 - 33.0)	4.4 (2.3 - 7.7)	22.0 (15.5 - 29.7)	33.5 (24.9 - 43.0)	19.1 (12.7 - 27.1)
Unemployed	16.0 (5.6 - 33.8)	27.6 (12.5 - 48.2)	5.4 (1.4 - 14.6)	22.2 (8.6 - 42.9)	23.7 (10.3 - 43.1)
Student/Home/Retired	37.9 (21.4 - 56.9)	17.0 (6.8 - 33.2)	6.3 (1.5 - 17.3)	38.3 (21.2 - 58.0)	11.6 (4.3 - 24.5)
<b>Religion</b>					
No religion	26.1 (16.9 - 37.2)	5.4 (2.6 - 9.8)	21.8 (13.2 - 32.6)	33.5 (23.3 - 45.0)	18.6 (10.9 - 28.8)
Anglican	29.7 (11.1 - 56.0)	5.2 (1.3 - 14.6)	17.0 (4.1 - 42.4)	49.2 (23.2 - 75.6)	6.1 (1.0 - 21.1)
Presbyterian	47.7 (16.5 - 80.5)	35.2 (10.8 - 68.1)	12.0 (2.5 - 33.7)	6.4 (0.6 - 28.1)	20.9 (4.1 - 54.2)
Catholic	31.6 (17.3 - 49.1)	15.1 (5.3 - 32.0)	22.6 (10.2 - 40.3)	39.8 (21.6 - 60.4)	8.4 (3.2 - 17.8)
Other Christian	24.8 (12.1 - 42.0)	3.4 (0.6 - 11.2)	16.0 (6.4 - 31.4)	30.1 (14.1 - 51.0)	35.9 (18.4 - 57.0)
Other religion	19.3 (6.7 - 40.2)	3.1 (0.3 - 14.2)	18.3 (6.3 - 38.5)	28.6 (7.9 - 60.8)	19.4 (6.8 - 39.9)
<b>Household size</b>					
1	24.3 (11.4 - 42.4)	12.6 (4.1 - 28.3)	23.7 (10.0 - 43.6)	21.2 (9.0 - 39.4)	15.4 (6.4 - 29.9)
2	25.1 (15.1 - 37.8)	12.2 (5.9 - 21.9)	21.2 (11.9 - 33.6)	20.8 (11.6 - 33.0)	23.1 (13.0 - 36.2)
3	25.5 (12.9 - 42.3)	5.3 (1.0 - 16.8)	27.1 (13.8 - 44.7)	36.8 (21.0 - 55.2)	19.7 (8.1 - 37.6)
4	18.9 (9.1 - 33.0)	2.5 (0.8 - 6.3)	9.3 (3.4 - 19.8)	37.8 (24.2 - 53.2)	18.5 (8.3 - 33.7)
5+	45.7 (30.8 - 61.2)	9.5 (4.2 - 18.2)	26.7 (13.5 - 44.2)	48.9 (24.6 - 73.7)	9.6 (2.9 - 22.8)
<b>Personal income (\$)</b>					
Up to 20,000	27.3 (16.0 - 41.5)	11.7 (5.6 - 21.0)	4.0 (1.4 - 8.8)	29.2 (17.4 - 43.6)	16.1 (8.1 - 27.5)
20,001 - 40,000	32.9 (21.7 - 45.8)	6.2 (2.2 - 13.7)	24.7 (13.8 - 38.8)	48.1 (28.5 - 68.3)	11.7 (5.7 - 21.0)
40,001 - 60,000	22.2 (9.6 - 40.8)	8.0 (2.7 - 18.2)	29.0 (14.6 - 47.7)	37.3 (19.5 - 58.2)	14.6 (3.0 - 40.2)
60,001 - 80,000	9.8 (3.7 - 20.5)	4.8 (1.3 - 12.8)	25.3 (9.7 - 48.3)	36.0 (18.4 - 57.2)	21.7 (6.9 - 46.4)
80,001 - 100,000	45.9 (16.7 - 77.6)	- -	10.2 (1.0 - 41.1)	1.3 (0.1 - 6.3)	52.3 (21.2 - 82.0)
Over 100,000	46.3 (22.1 - 72.0)	8.1 (0.8 - 33.4)	24.2 (6.9 - 52.8)	22.2 (7.1 - 47.1)	24.3 (7.6 - 51.1)

Demographic variables	Reasons for increased gambling % (95% CI)				
	I have more money to spend now	I have more time now	I have more opportunities to gamble	Because of friends and family	I wanted to/felt like gambling more
<b>Household Income (\$)</b>					
Up to 20,000	22.6 (8.6 - 44.1)	35.8 (15.3 - 61.5)	12.7 (3.6 - 30.7)	19.8 (6.9 - 40.9)	17.8 (5.5 - 39.6)
20,001 - 40,000	17.2 (8.0 - 31.0)	8.0 (2.1 - 20.9)	10.0 (3.1 - 23.5)	31.6 (16.1 - 51.1)	15.6 (7.0 - 28.8)
40,001 - 60,001	17.8 (7.3 - 34.3)	10.0 (3.5 - 22.2)	21.4 (9.3 - 39.1)	47.1 (28.4 - 66.5)	15.0 (5.6 - 31.1)
60,001 - 80,000	29.9 (11.4 - 55.8)	4.5 (1.4 - 10.9)	19.7 (4.4 - 49.1)	41.8 (21.4 - 64.6)	8.5 (2.7 - 19.7)
80,001 - 100,000	36.7 (19.1 - 57.6)	4.7 (0.8 - 16.3)	26.3 (11.6 - 46.8)	37.3 (18.7 - 59.5)	17.1 (6.4 - 34.7)
Over 100,000	34.4 (22.0 - 48.4)	6.2 (2.2 - 13.6)	19.0 (9.8 - 31.9)	28.8 (16.1 - 44.7)	27.1 (14.6 - 43.2)

Demographic variables	Reasons for increased gambling % (95% CI)				
	My priorities have changed	There was a change in my health	I became old enough to gamble	To win money/prize/to win bigger prizes	Other reasons
<b>Total</b>	4.3 (2.1 - 7.9)	1.0 (0.3 - 2.9)	8.8 (4.7 - 14.9)	10.6 (6.9 - 15.5)	2.9 (0.9 - 7.3)
<b>Gender</b>					
Male	5.9 (2.2 - 12.8)	2.3 (0.6 - 6.3)	7.0 (2.1 - 17.0)	6.5 (3.0 - 12.1)	1.8 (0.4 - 5.9)
Female	2.9 (0.9 - 7.1)	-	10.4 (4.9 - 19.0)	14.1 (8.3 - 21.9)	3.8 (0.8 - 11.8)
<b>Ethnic Group</b>					
European/Other	3.8 (1.4 - 8.3)	0.7 (0.1 - 3.0)	10.0 (5.0 - 17.5)	11.1 (6.7 - 17.2)	3.6 (1.0 - 9.1)
Māori	9.9 (3.3 - 22.4)	0.0 (-)	10.2 (2.8 - 25.6)	4.3 (1.0 - 12.7)	3.4 (0.7 - 10.7)
Pacific	0.6 (0.1 - 2.6)	5.1 (0.5 - 22.4)	-	4.9 (1.0 - 15.5)	-
Asian	1.7 (0.2 - 8.0)	2.6 (0.3 - 11.9)	3.2 (0.3 - 14.4)	12.8 (4.9 - 26.3)	1.0 (0.1 - 4.7)
<b>Age</b>					
18 - 24 years	4.1 (0.8 - 13.0)	-	35.4 (19.4 - 54.5)	8.2 (1.8 - 23.3)	-
25 - 34 years	3.0 (0.6 - 9.9)	1.1 (0.1 - 5.0)	1.5 (0.2 - 7.0)	2.7 (0.7 - 7.5)	0.3 (0.0 - 1.6)
35 - 44 years	-	-	-	20.0 (9.5 - 35.1)	4.6 (0.8 - 15.6)
45 - 54 years	6.9 (2.1 - 17.1)	3.5 (0.6 - 11.8)	-	16.6 (8.4 - 28.5)	9.7 (2.0 - 28.4)
55 - 64 years	13.7 (2.2 - 42.5)	-	-	9.3 (1.6 - 29.0)	-
65+ years	-	-	-	12.4 (1.2 - 47.8)	-
<b>Country of birth</b>					
NZ	4.6 (2.0 - 8.8)	0.4 (0.0 - 1.7)	10.7 (5.6 - 18.1)	9.4 (5.5 - 15.0)	2.9 (0.7 - 8.4)
Elsewhere	3.3 (0.5 - 11.9)	3.7 (0.7 - 12.5)	1.4 (0.1 - 6.7)	15.2 (7.5 - 26.6)	2.9 (0.4 - 11.3)
<b>Arrival in NZ</b>					
2008 or later	-	-	-	12.0 (2.9 - 31.3)	1.7 (0.2 - 7.9)

Demographic variables	Reasons for increased gambling % (95% CI)				
	My priorities have changed	There was a change in my health	I became old enough to gamble	To win money/prize/to win bigger prizes	Other reasons
Before 2008	4.6 (0.7 - 16.2)	5.1 (0.9 - 17.0)	2.0 (0.2 - 9.1)	16.4 (6.9 - 31.3)	3.4 (0.3 - 15.3)
<b>Highest qualification</b>					
No formal qual.	7.2 (1.3 - 22.9)	- -	5.6 (0.6 - 24.5)	12.5 (4.0 - 28.1)	- -
School qual.	1.9 (0.2 - 8.5)	2.7 (0.5 - 9.2)	21.3 (10.3 - 36.7)	8.1 (3.3 - 16.4)	2.7 (0.4 - 9.5)
Trade/voc. qual.	12.6 (4.8 - 26.0)	1.4 (0.1 - 6.3)	9.2 (1.8 - 27.6)	12.0 (4.8 - 23.9)	0.9 (0.1 - 4.4)
Degree/higher	0.5 (0.1 - 1.9)	- -	0.7 (0.1 - 3.5)	11.0 (5.1 - 20.3)	5.1 (1.0 - 16.2)
<b>Labour force status</b>					
Employed	2.6 (0.8 - 6.3)	0.7 (0.1 - 2.3)	9.1 (4.2 - 16.9)	12.2 (7.7 - 18.2)	3.8 (1.2 - 9.5)
Unemployed	11.2 (2.1 - 33.2)	- -	4.7 (0.5 - 20.8)	9.4 (2.2 - 25.5)	- -
Student/Home/Retired	6.9 (1.4 - 20.8)	3.4 (0.3 - 15.0)	10.6 (2.6 - 27.9)	4.9 (1.1 - 14.2)	- -
<b>Religion</b>					
No religion	3.7 (1.3 - 8.2)	1.0 (0.2 - 3.1)	14.0 (7.0 - 24.4)	10.2 (5.8 - 16.6)	1.3 (0.2 - 4.4)
Anglican	8.8 (1.4 - 29.2)	- -	- -	16.9 (3.9 - 42.9)	4.5 (0.4 - 20.2)
Presbyterian	- -	- -	11.1 (1.0 - 44.6)	12.7 (1.2 - 49.7)	- -
Catholic	9.1 (2.2 - 24.5)	3.9 (0.4 - 17.2)	2.2 (0.2 - 10.0)	5.5 (1.4 - 14.6)	11.6 (1.5 - 40.5)
Other Christian	- -	- -	4.0 (0.4 - 17.9)	7.3 (1.5 - 21.4)	0.9 (0.1 - 4.1)
Other religion	- -	- -	- -	16.6 (5.2 - 36.9)	- -
<b>Household size</b>					
1	1.6 (0.3 - 5.6)	- -	- -	20.7 (9.0 - 38.1)	1.4 (0.1 - 6.3)
2	3.8 (0.9 - 10.7)	3.2 (0.6 - 10.4)	2.9 (0.3 - 13.2)	12.1 (5.4 - 22.6)	2.0 (0.2 - 9.0)
3	4.2 (0.6 - 15.7)	1.4 (0.1 - 6.6)	13.9 (4.0 - 33.0)	8.1 (2.6 - 18.7)	1.2 (0.1 - 5.7)
4	3.4 (0.6 - 12.1)	- -	15.3 (5.6 - 31.6)	12.4 (5.9 - 22.3)	1.8 (0.2 - 8.4)
5+	7.2 (1.7 - 19.8)	- -	5.5 (1.8 - 12.9)	5.2 (0.5 - 23.2)	7.3 (0.9 - 28.1)
<b>Personal income (\$)</b>					
Up to 20,000	5.6 (1.8 - 13.5)	0.9 (0.1 - 4.1)	21.0 (10.1 - 36.5)	3.9 (1.1 - 9.9)	0.7 (0.1 - 3.3)
20,001 - 40,000	2.5 (0.4 - 8.8)	0.0 -	11.3 (3.3 - 27.0)	14.9 (6.3 - 28.5)	- -
40,001 - 60,000	7.7 (1.5 - 23.1)	4.6 (0.9 - 15.0)	- -	5.0 (1.2 - 14.0)	9.0 (1.2 - 32.4)
60,001 - 80,000	5.4 (0.5 - 23.4)	- -	- -	15.3 (5.7 - 31.4)	5.4 (0.8 - 20.2)
80,001 - 100,000	- -	- -	- -	19.7 (3.7 - 52.6)	- -
Over 100,000	- -	- -	- -	11.1 (2.0 - 33.7)	7.4 (0.7 - 31.1)

Demographic variables	Reasons for increased gambling % (95% CI)				
	My priorities have changed	There was a change in my health	I became old enough to gamble	To win money/prize/to win bigger prizes	Other reasons
<b>Household Income (\$)</b>					
Up to 20,000	-	5.0 (0.5 - 21.9)	-	13.2 (3.3 - 33.8)	-
20,001 - 40,000	11.2 (3.4 - 26.4)	-	11.1 (1.1 - 43.6)	14.2 (4.2 - 33.2)	-
40,001 - 60,001	0.2 (0.0 - 1.1)	2.1 (0.2 - 9.7)	22.2 (7.0 - 47.4)	11.2 (3.9 - 24.5)	-
60,001 - 80,000	9.1 (1.8 - 27.2)	-	7.5 (1.2 - 25.2)	9.4 (3.1 - 21.3)	0.6 (0.1 - 2.9)
80,001 - 100,000	3.5 (0.4 - 15.8)	3.5 (0.4 - 15.8)	2.9 (0.3 - 13.1)	6.4 (1.6 - 17.4)	12.0 (1.9 - 37.9)
Over 100,000	1.7 (0.2 - 7.9)	-	3.9 (0.8 - 12.1)	7.8 (2.9 - 16.4)	3.3 (0.7 - 10.4)

Reasons for increased gambling during the past 12 months were also assessed in relation to pattern of participation, average monthly gambling expenditure and most preferred type of gambling activity (Table 36). Only one relationship may be significant. Participants with a preference for non-casino EGMs (26.3%) more often than those with a preference for casino gambling (2.0%) or without a favourite gambling form (2.0%) mentioned gambling because they had more time.

**Table 36: Main reasons for increased gambling during the past 12 months by pattern of participation, average monthly gambling expenditure and most preferred form of gambling**

Pattern of participation, expenditure, and preferred gambling activity	Main reasons for increased gambling % (95% CI)				
	I have more money to spend now	I have more time now	I have more opportunities to gamble	Because of friends and family	I wanted to/felt like gambling more
Total	27.6 (21.4 - 34.6)	7.6 (5.0 - 11.1)	19.9 (14.6 - 26.3)	34.6 (26.3 - 43.7)	17.7 (12.3 - 24.5)
<b>Pattern of participation</b>					
Infrequent gambler	27.2 (19.1 - 36.7)	27.2 (2.7 - 9.0)	20.8 (13.5 - 29.8)	41.6 (29.8 - 54.2)	15.4 (9.2 - 23.8)
Regular non-continuous gambler	25.3 (14.5 - 39.1)	25.3 (3.1 - 19.0)	14.1 (6.7 - 25.5)	21.2 (11.2 - 34.7)	16.6 (8.1 - 29.3)
Regular continuous gambler	32.1 (16.3 - 51.9)	32.1 (6.2 - 25.5)	24.4 (11.8 - 41.6)	27.7 (14.5 - 44.8)	27.2 (11.6 - 48.9)
<b>Average monthly expenditure</b>					
\$0	-	100.0	-	-	-
\$1 - \$10	19.4 (6.4 - 41.3)	4.2 (0.4 - 18.8)	14.8 (4.1 - 35.5)	32.0 (13.9 - 55.8)	6.5 (1.0 - 22.1)
\$11 - \$20	11.3 (2.3 - 32.4)	4.9 (1.2 - 13.3)	27.8 (11.4 - 50.9)	41.7 (19.6 - 66.8)	13.5 (3.7 - 32.7)
\$21 - \$30	23.6 (7.2 - 50.5)	9.5 (2.3 - 25.5)	9.8 (2.6 - 25.0)	42.3 (20.2 - 67.2)	17.0 (5.5 - 37.1)
\$31 - \$50	28.7 (13.1 - 49.8)	3.5 (0.6 - 12.2)	17.9 (5.3 - 40.7)	35.7 (17 - 58.6)	18.7 (7.5 - 36.3)
\$51 - \$100	25.9 (12.5 - 44.1)	13.3 (4.9 - 27.8)	11.0 (4.1 - 23.2)	24.5 (12.1 - 41.4)	13.7 (4.7 - 29.9)
\$101 - \$500	39.4 (25.0 - 55.2)	6.8 (2.8 - 13.7)	26.6 (14.3 - 42.7)	36.0 (21.8 - 52.4)	26.9 (14.7 - 42.5)
More than \$500	42.0 (16.8 - 71.0)	15.3 (3.6 - 39.5)	31.5 (8.6 - 65.3)	15.5 (4.3 - 37.3)	18.1 (5.2 - 41.5)
Don't know/refused/other	40.4	-	-	59.6	-

Pattern of participation, expenditure, and preferred gambling activity	Main reasons for increased gambling % (95% CI)				
	I have more money to spend now	I have more time now	I have more opportunities to gamble	Because of friends and family	I wanted to/felt like gambling more
	(1.3 - 96.8)	-	-	(3.2 - 98.7)	-
<b>Most preferred gambling activity</b>					
Card games	23.9 (2.0 - 74.7)	26.4 (5.8 - 61.9)	24.6 (4.4 - 63.1)	42.4 (12.2 - 78.2)	42.4 (4.7 - 75.8)
Bets with friends/workmates	20.0 (4.1 - 51.7)	5.2 (0.5 - 23.0)	24.8 (4.8 - 61.7)	50.7 (20.5 - 80.5)	50.7 (0.4 - 17.9)
Raffle/lottery (NZ or overseas)	13.9 (3.4 - 35.6)	-	24.8 (8.0 - 51.3)	37.0 (15.8 - 63.3)	37.0 (1.2 - 32.0)
Lotto	43.3 (29.1 - 58.4)	6.7 (1.9 - 17.1)	10.9 (3.6 - 24.3)	13.0 (5.8 - 24.5)	13.0 (13.1 - 39.9)
Keno	100.0 -	-	-	100.0 -	100.0 -
Bullseye	-	-	60.9 (7.9 - 97.2)	39.1 (2.8 - 92.1)	39.1 -
Instant Kiwi tickets or other scratch ticket	27.2 (11.3 - 49.7)	4.2 (0.7 - 14.1)	21.8 (9.0 - 40.8)	35.4 (17.4 - 57.2)	35.4 (5.5 - 32.6)
Housie or bingo	40.2 (2.1 - 94.6)	59.8 (5.4 - 97.9)	14.1 (0.9 - 60.4)	-	-
Horse/dog race betting	15.7 (4.7 - 36.0)	15.2 (4.7 - 34.2)	13.4 (2.5 - 38.6)	48.9 (25.3 - 73.0)	48.9 (7.7 - 44.4)
Sports betting	51.0 (13.1 - 88.0)	12.8 (1.1 - 49.9)	36.2 (5.7 - 81.2)	14.4 (1.3 - 54.8)	14.4 (1.7 - 69.0)
Casino table games or EGMs (NZ and overseas)	18.6 (3.9 - 48.5)	2.0 (0.2 - 9.7)	5.9 (0.5 - 26.5)	64.6 (29.8 - 90.1)	64.6 (6.0 - 58.3)
Non-casino EGMs	36.1 (16.9 - 59.6)	26.3 (10.1 - 49.8)	44.2 (21.7 - 68.7)	23.8 (8.2 - 48.3)	23.8 (3.8 - 26.2)
Short-term speculative investments	60.4 (8.4 - 96.9)	-	-	-	- (0.9 - 70.7)
Overseas internet gambling for money/prizes	-	-	-	-	-
Other activities	-	18.9 (0.4 - 88.1)	-	77.1 (8.6 - 99.4)	77.1 (0.1 - 35.2)
No preference/enjoyed all equally	30.3 (5.2 - 72.5)	-	23.7 (2.5 - 70.5)	46.0 (13.8 - 81.2)	46.0 (2.1 - 65.4)
No/none	14.4 (2.1 - 45.6)	2.0 (0.2 - 9.5)	24.6 (7.6 - 51.8)	30.8 (12.8 - 55.0)	30.8 (5.2 - 30.8)

Participants who reported that they had decreased their gambling during the past 12 months, as with participants who said their gambling had increased, were asked what the main reasons were. Again they were presented with a list of possible reasons, could indicate more than one and could add additional reasons. Reasons by socio-demographic groups are provided in Table 37.

Of the possible reasons presented to participants, those indicated most frequently were changing priorities (36.3%), wanting to save or spend money on other things (34.9%), having less money to spend (33.3%), lost interest in activities (24.4%), less time or too busy (24.0%) and having fewer opportunities to gamble (13.3%). Smaller percentages indicated that the final listed reason, that there was a change in their health (2.4%), applied to them. Small percentages also gave additional reasons, namely was not winning or lost money (2.7%), became aware of gambling addiction or problems (0.5%) and other reasons (0.8%).

European/Other (35.5%) and Māori (36.9%) more frequently than Asian participants (16.9%) gave having less money as a reason for gambling less. Asian participants (36.1%) more often than European/Other (22.5%) indicated that having less time or being too busy was a reason.

Half of people aged 18-24 years (49.9%) said they decreased gambling because they wanted to save money or spend money on other things, more than those aged 55-64 years (25.4%) and 65 years and older (18.4%). People in the 25-34 years (35.7%), 35-44 years (35.1%) and 45-54 years (38.4%) age groups also more often gave this reason than participants aged 65 years and older. Those in the three youngest age groups (range of 30.5%-31.8%) also more often said they have less time or are too busy than did adults aged 65 years and older (9.0%). Differences between two of the younger groups and people aged 55-64 years may be significant. Participants aged 18-24 years (20.3%) and 35-44 years (16.8%) more often said they had fewer opportunities to gamble than those aged 65 years and older (4.5%). A change of priorities was mentioned more often by participants aged 25-34 years (43.3) and 35-44 years (40.0) than those who were 60 years or older (22.2%). People in the latter group (8.7%) more often said a change in their health was a main reason than people in three of the younger age groups (range 0.6%-1.9%).

More New Zealand-born (36.3%) than overseas-born (24.9%) participants indicated that having less money was a main reason for the decrease in their gambling. These groups did not differ with respect to other reasons and there were no differences between recent and longer term migrants.

Participants with no formal educational qualifications (45.2%) and unemployed participants (60.4%) both more often mentioned not having enough money than did their counterparts in some of the other education and employment status groups. People with no formal qualifications (12.3%) relative to those in the other three qualification groups (range 25.4%-27.9%) less often referred to having less time or being too busy. Employed participants (27.1%) gave this reason more frequently than unemployed participants (12.2%) did. Participants in the former group (40.1%) also gave a change of priorities as a reason more often than was the case for students, people caring for children at home and retired people (24.5%).

There was only one difference between religious groups. People with no religion (18.1%) indicated more often than Catholics (7.7%) that they gambled less because they had fewer opportunities to gamble.

Participants in four person households (38.1%) more frequently than those living in one, two or three person households (range of 12.5%-20.7%) said they gambled less because they had less time or were too busy. Participants in five person households (27.6%) more often gave this reason than those in single person households (12.5%). People in four (0.8%) and five person (1.2%) households less often mentioned a change in health than did people who lived alone (6.5%).

With regard to personal income, participants in the two lowest groups (43.7%, 34.6%) more often than those in the higher \$60,001-\$80,000 (17.0%) and over \$100,000 groups (12.1%) gave having less money to spend as a reason. People who earned \$40,001-\$60,000 (48.0%) more frequently than those who earned up to \$20,000 (30.3%) mentioned a change of priorities.

Reasons given for decreased gambling varied considerably across household income groups. People in the three lower income groups (range 41.9%-50.0%) more often said having less money was a reason than did those in the highest (over \$100,000) group (21.2%). People in the lowest group (50.0%) also differed from people in the second highest (\$80,001-\$100,000) group

in this regard. People in the highest group (32.4%) relative to those in the lowest income group (11.1%) more often gave having less time or being too busy as a reason. Those in the highest three groups (range 15.7%-22.1%) more often than those in the second lowest (\$20,001-\$40,000) group mentioned having fewer opportunities to gamble. People in the highest household income group (36.0%) more frequently than those in the up to \$20,000 and \$40,001-\$60,000 gave having lost interest in things they used to do as a reason. A change in health was mentioned more often as a reason by people in the lowest three groups (range 3.0%-5.9%) than it was by those in the highest group (0.2%).

**Table 37: Main reasons for decreased gambling during the past 12 months by demographics**

Demographic variables	Reasons for decreased gambling % (95% CI)				
	I have less money to spend now	I want to save money/spend money on other things	I have less time/I'm too busy now	I have fewer opportunities to gamble	I have lost interest in the activities I used to do
Total	33.3 (29.8 - 36.9)	34.9 (31.3 - 38.6)	24.0 (20.8 - 27.4)	13.3 (10.8 - 16.2)	24.4 (21.1 - 27.9)
<b>Gender</b>					
Male	30.2 (25.4 - 35.5)	34.1 (28.8 - 39.6)	22.6 (18.2 - 27.4)	11.3 (8.0 - 15.5)	27.4 (22.5 - 32.7)
Female	36.5 (31.6 - 41.6)	35.7 (31.1 - 40.5)	25.5 (21.2 - 30.3)	15.4 (11.8 - 19.7)	21.1 (17.2 - 25.6)
<b>Ethnic Group</b>					
European/Other	35.5 (31.1 - 40.0)	32.9 (28.6 - 37.4)	22.5 (18.6 - 26.7)	14.7 (11.6 - 18.4)	23.5 (19.6 - 27.9)
Māori	36.9 (30.6 - 43.5)	37.8 (31.4 - 44.6)	26.2 (20.6 - 32.5)	13.2 (8.9 - 18.7)	25.5 (19.7 - 32.0)
Pacific	28.9 (21.7 - 37.1)	49.7 (41.7 - 57.8)	26.9 (19.4 - 35.6)	10.9 (6.6 - 16.7)	22.1 (15.8 - 29.7)
Asian	16.9 (11.0 - 24.5)	40.2 (31.2 - 49.8)	36.1 (27.3 - 45.6)	5.9 (2.2 - 12.9)	32.2 (23.9 - 41.5)
<b>Age</b>					
18 - 24 years	29.1 (18.7 - 41.6)	49.9 (38.3 - 61.5)	30.5 (20.8 - 41.7)	20.3 (11.1 - 32.7)	31.8 (21.5 - 43.7)
25 - 34 years	27.9 (21.1 - 35.6)	35.7 (27.4 - 44.7)	31.8 (24.0 - 40.5)	13.3 (8.2 - 20.1)	21.9 (15.3 - 29.7)
35 - 44 years	40.2 (32.9 - 47.8)	35.1 (27.9 - 42.8)	30.6 (23.9 - 38.1)	16.8 (11.4 - 23.6)	19.2 (14.0 - 25.4)
45 - 54 years	35.7 (28.5 - 43.4)	38.4 (30.4 - 47.1)	18.3 (12.3 - 25.8)	12.5 (7.7 - 18.8)	21.3 (14.9 - 28.9)
55 - 64 years	32.9 (24.5 - 42.3)	25.4 (18.3 - 33.6)	15.1 (9.2 - 22.9)	8.5 (4.2 - 15.1)	27.3 (19.7 - 36.0)
65+ years	33.3 (25.3 - 42.0)	18.4 (12.2 - 26.2)	9.0 (5.0 - 14.7)	4.5 (1.9 - 9.0)	29.4 (21.5 - 38.3)
<b>Country of birth</b>					
NZ	36.3 (32.1 - 40.7)	34.7 (30.4 - 39.2)	23.6 (19.9 - 27.7)	14.5 (11.4 - 18.0)	24.1 (20.1 - 28.5)
Elsewhere	24.9 (19.7 - 30.9)	35.2 (29.0 - 41.8)	25.0 (19.1 - 31.8)	10.1 (6.0 - 15.8)	25.1 (19.8 - 31.0)
<b>Arrival in NZ</b>					
2008 or later	16.9 (5.8 - 35.9)	43.0 (26.7 - 60.5)	38.0 (22.3 - 56.0)	6.0 (1.0 - 20.2)	31.7 (17.2 - 49.6)
Before 2008	26.1 (20.4 - 32.5)	34.1 (27.4 - 41.3)	23.1 (16.8 - 30.6)	10.7 (6.1 - 17.1)	24.1 (18.4 - 30.6)
<b>Highest qualification</b>					
No formal qual.	45.2 (37.4 - 53.3)	30.1 (22.2 - 38.9)	12.3 (8.0 - 17.8)	3.6 (1.9 - 6.1)	18.4 (12.9 - 25.0)
School qual.	27.7 (20.6 - 35.9)	40.2 (32.3 - 48.5)	27.9 (20.8 - 36.0)	15.1 (9.1 - 23.0)	28.3 (21.1 - 36.5)

Demographic variables	Reasons for decreased gambling % (95% CI)				
	I have less money to spend now	I want to save money/spend money on other things	I have less time/I'm too busy now	I have fewer opportunities to gamble	I have lost interest in the activities I used to do
Trade/voc. qual.	36.5 (29.4 - 44.1)	35.8 (28.8 - 43.3)	25.4 (18.6 - 33.2)	14.0 (9.0 - 20.5)	22.6 (16.7 - 29.6)
Degree/higher	28.7 (23.2 - 34.8)	33.1 (27.6 - 39.0)	26.5 (21.4 - 32.1)	16.7 (12.4 - 21.7)	25.9 (20.5 - 31.9)
<b>Labour force status</b>					
Employed	27.6 (23.4 - 32.1)	37.3 (32.6 - 42.1)	27.1 (22.9 - 31.6)	13.5 (10.4 - 17.1)	24.2 (20.2 - 28.6)
Unemployed	60.4 (49.8 - 70.3)	30.5 (21.8 - 40.4)	12.2 (5.9 - 22.0)	13.3 (7.1 - 22.2)	16.6 (9.7 - 26.0)
Student/Home/Retired	34.9 (27.7 - 42.6)	31.0 (24.2 - 38.6)	20.9 (15.0 - 27.7)	13.2 (7.8 - 20.4)	29.5 (22.8 - 36.8)
<b>Religion</b>					
No religion	32.9 (27.4 - 38.9)	37.4 (31.5 - 43.6)	26.5 (21.0 - 32.6)	18.1 (13.4 - 23.6)	24.4 (19.2 - 30.2)
Anglican	33.6 (23.9 - 44.4)	36.4 (25.0 - 49.1)	20.7 (13.2 - 30.3)	11.1 (5.6 - 19.4)	27.5 (18.2 - 38.6)
Presbyterian	32.7 (23.1 - 43.5)	27.8 (18.2 - 39.1)	20.0 (12.6 - 29.3)	10.3 (4.7 - 19.4)	21.1 (13.2 - 31.0)
Catholic	35.9 (27.7 - 44.7)	34.8 (26.5 - 43.8)	28.8 (20.9 - 37.8)	7.7 (4.1 - 13.1)	28.7 (20.0 - 38.8)
Other Christian	36.3 (27.9 - 45.4)	32.9 (24.8 - 41.8)	17.5 (11.5 - 25.1)	10.5 (5.7 - 17.4)	18.4 (12.5 - 25.8)
Other religion	29.1 (20.0 - 39.6)	31.4 (22.9 - 41.1)	25.9 (17.7 - 35.6)	9.5 (3.8 - 19.4)	26.5 (17.7 - 36.9)
<b>Household size</b>					
1	46.3 (38.2 - 54.4)	29.0 (21.9 - 37.1)	12.5 (7.5 - 19.3)	7.7 (4.0 - 13.3)	24.0 (16.9 - 32.4)
2	30.5 (24.8 - 36.7)	31.3 (25.0 - 38.2)	16.2 (12.0 - 21.2)	10.5 (7.2 - 14.6)	27.7 (22.3 - 33.7)
3	33.7 (25.6 - 42.6)	33.6 (25.4 - 42.5)	20.7 (14.3 - 28.4)	14.4 (8.9 - 21.7)	24.4 (17.2 - 32.8)
4	33.3 (25.9 - 41.3)	36.9 (29.4 - 45.0)	38.1 (30.0 - 46.7)	17.1 (11.1 - 24.8)	17.0 (11.3 - 24.2)
5+	31.2 (23.4 - 39.9)	40.9 (31.8 - 50.4)	27.6 (19.8 - 36.5)	14.1 (7.7 - 23.0)	27.8 (19.6 - 37.4)
<b>Personal income (\$)</b>					
Up to 20,000	43.7 (37.0 - 50.6)	34.2 (28.1 - 40.8)	23.4 (17.8 - 29.8)	13.4 (8.7 - 19.5)	22.3 (16.9 - 28.6)
20,001 - 40,000	34.6 (27.8 - 42.0)	41.0 (33.5 - 48.9)	17.6 (12.8 - 23.3)	15.2 (10.7 - 20.7)	21.6 (16.3 - 27.8)
40,001 - 60,000	29.0 (21.8 - 37.1)	39.9 (31.7 - 48.5)	29.0 (21.6 - 37.4)	16.4 (10.3 - 24.3)	28.0 (21.3 - 35.7)
60,001 - 80,000	17.0 (9.5 - 27.4)	27.1 (16.1 - 40.7)	30.1 (18.7 - 43.6)	6.2 (1.8 - 15.5)	19.8 (10.5 - 32.6)
80,001 - 100,000	24.8 (11.4 - 43.7)	27.8 (14.0 - 45.9)	37.2 (21.7 - 55.0)	11.0 (3.7 - 24.5)	25.6 (12.8 - 42.7)
Over 100,000	12.1 (3.8 - 27.7)	20.2 (9.0 - 36.8)	35.7 (20.5 - 53.4)	15.7 (5.7 - 31.1)	29.7 (15.8 - 47.4)
<b>Household Income (\$)</b>					
Up to 20,000	50.0 (39.2 - 60.7)	36.2 (25.6 - 47.8)	11.1 (6.1 - 18.2)	9.4 (4.9 - 15.9)	15.3 (9.6 - 22.7)
20,001 - 40,000	42.0 (33.7 - 50.7)	37.6 (29.7 - 46.0)	22.8 (16.8 - 29.8)	6.2 (3.6 - 9.8)	28.5 (21.5 - 36.3)
40,001 - 60,001	41.9 (33.1 - 51.0)	35.9 (27.6 - 44.8)	24.9 (17.9 - 33.2)	13.2 (7.4 - 21.5)	16.9 (11.4 - 23.7)

Demographic variables	Reasons for decreased gambling % (95% CI)				
	I have less money to spend now	I want to save money/spend money on other things	I have less time/I'm too busy now	I have fewer opportunities to gamble	I have lost interest in the activities I used to do
60,001 - 80,000	30.9 (22.5 - 40.5)	36.6 (27.3 - 45.9)	20.9 (13.1 - 30.7)	22.1 (13.2 - 33.6)	19.3 (12.8 - 27.5)
80,001 - 100,000	26.1 (17.6 - 36.2)	36.6 (26.9 - 47.1)	26.4 (18.0 - 36.4)	15.7 (9.8 - 23.4)	21.2 (14.0 - 30.1)
Over 100,000	21.2 (13.9 - 30.1)	31.7 (23.7 - 40.7)	32.4 (24.4 - 41.2)	16.4 (10.2 - 24.4)	36.0 (27.5 - 45.1)

Demographic variables	Reasons for decreased gambling % (95% CI)				
	My priorities have changed	There was a change in my health	Became aware of gambling addiction/problems	Wasn't winning/lost money	Other reasons
Total	36.3 (32.9 - 39.9)	2.4 (1.6 - 3.4)	0.5 (0.2 - 1.0)	2.7 (1.5 - 4.3)	0.8 (0.4 - 1.6)
<b>Gender</b>					
Male	36.7 (31.3 - 42.3)	1.2 (0.6 - 2.2)	0.3 (0.0 - 1.5)	3.2 (1.5 - 5.9)	0.8 (0.3 - 2.0)
Female	36.0 (31.4 - 40.8)	3.6 (2.3 - 5.5)	0.6 (0.2 - 1.3)	2.1 (0.9 - 4.4)	0.8 (0.3 - 2.0)
<b>Ethnic Group</b>					
European/Other	36.1 (31.9 - 40.6)	2.1 (1.2 - 3.2)	0.5 (0.1 - 1.2)	2.9 (1.5 - 5.0)	0.9 (0.4 - 1.9)
Māori	47.6 (40.8 - 54.4)	3.2 (1.5 - 6.1)	1.8 (0.4 - 5.6)	0.7 (0.2 - 1.9)	1.2 (0.2 - 4.0)
Pacific	32.9 (25.6 - 40.9)	2.9 (1.1 - 6.2)	0.3 (0.0 - 1.4)	1.7 (0.5 - 4.4)	- -
Asian	32.4 (22.8 - 43.1)	3.7 (1.1 - 9.3)	1.1 (0.2 - 3.8)	2.5 (0.7 - 6.7)	1.6 (0.3 - 5.3)
<b>Age</b>					
18 - 24 years	32.7 (22.2 - 44.6)	1.4 (0.2 - 4.9)	1.4 (0.2 - 5.1)	3.0 (0.6 - 9.7)	0.8 (0.1 - 3.5)
25 - 34 years	43.3 (34.9 - 52.0)	0.6 (0.1 - 2.0)	- -	3.1 (0.7 - 8.8)	0.2 (0.0 - 1.0)
35 - 44 years	40.0 (32.5 - 47.8)	1.9 (0.7 - 4.2)	0.1 (0.0 - 0.5)	2.7 (1.0 - 5.9)	0.2 (0.0 - 1.0)
45 - 54 years	36.4 (28.7 - 44.7)	2.3 (0.9 - 5.0)	1.3 (0.4 - 3.2)	1.8 (0.5 - 4.8)	1.5 (0.3 - 4.8)
55 - 64 years	35.6 (26.9 - 45.1)	1.6 (0.5 - 3.9)	- -	1.3 (0.2 - 4.3)	0.5 (0.1 - 2.5)
65+ years	22.2 (15.6 - 29.9)	8.7 (4.8 - 14.5)	- -	4.4 (1.1 - 12.2)	2.5 (0.7 - 6.6)
<b>Country of birth</b>					
NZ	37.9 (33.7 - 42.2)	2.3 (1.5 - 3.5)	0.5 (0.2 - 1.3)	1.8 (0.8 - 3.6)	0.7 (0.3 - 1.6)
Elsewhere	32.1 (26.4 - 38.3)	2.5 (1.2 - 4.6)	0.3 (0.1 - 1.1)	5.0 (2.2 - 9.6)	1.2 (0.4 - 3.1)
<b>Arrival in NZ</b>					
2008 or later	45.6 (27.5 - 64.7)	7.4 (1.8 - 19.8)	- -	4.4 (0.8 - 13.8)	- -
Before 2008	30.1 (24.3 - 36.5)	1.8 (0.7 - 3.7)	0.4 (0.1 - 1.3)	5.1 (2.1 - 10.3)	1.4 (0.4 - 3.5)
<b>Highest qualification</b>					
No formal qual.	35.8 (28.6 - 43.7)	3.8 (1.8 - 7.1)	0.7 (0.1 - 2.4)	1.0 (0.2 - 3.1)	1.4 (0.3 - 4.4)

Reasons for decreased gambling % (95% CI)					
Demographic variables	My priorities have changed	There was a change in my health	Became aware of gambling addiction/problems	Wasn't winning/lost money	Other reasons
School qual.	31.0 (23.7 - 39.1)	2.8 (1.3 - 5.3)	0.2 (0.0 - 1.0)	3.4 (1.0 - 8.4)	0.8 (0.2 - 2.7)
Trade/voc. qual.	40.0 (32.6 - 47.8)	2.0 (0.9 - 4.0)	0.2 (0.0 - 0.8)	2.4 (0.6 - 6.9)	0.4 (0.0 - 2.1)
Degree/higher	37.7 (32.0 - 43.7)	1.6 (0.7 - 3.4)	0.7 (0.1 - 2.3)	3.2 (1.5 - 6.2)	0.8 (0.2 - 2.1)
<b>Labour force status</b>					
Employed	40.1 (35.6 - 44.7)	1.0 (0.5 - 1.8)	0.4 (0.1 - 1.3)	2.6 (1.2 - 4.9)	0.7 (0.2 - 1.6)
Unemployed	39.1 (29.4 - 49.5)	5.5 (2.6 - 10.2)	1.2 (0.2 - 3.8)	4.9 (1.2 - 13.5)	- -
Student/Home/Retired	24.5 (18.6 - 31.3)	4.8 (2.6 - 8.2)	0.3 (0.1 - 1.0)	1.9 (0.7 - 4.1)	1.7 (0.6 - 4.2)
Other	42.7 (13.4 - 76.9)	- -	- -	- -	- -
<b>Religion</b>					
No religion	37.0 (31.2 - 43.0)	1.5 (0.7 - 3.1)	1.0 (0.3 - 2.3)	3.7 (1.7 - 7.2)	0.6 (0.1 - 2.0)
Anglican	31.5 (22.9 - 41.1)	2.0 (0.6 - 5.0)	- -	- -	0.8 (0.1 - 3.8)
Presbyterian	29.5 (20.7 - 39.6)	2.1 (0.4 - 6.7)	- -	4.5 (1.0 - 13.6)	1.0 (0.1 - 4.7)
Catholic	40.4 (31.3 - 50.0)	3.9 (1.6 - 7.9)	- -	2.1 (0.5 - 5.8)	1.3 (0.2 - 4.7)
Other Christian	40.5 (32.3 - 49.1)	1.5 (0.6 - 3.4)	- -	1.8 (0.5 - 4.7)	- -
Other religion	36.5 (26.0 - 48.0)	7.3 (3.1 - 14.3)	0.9 (0.1 - 4.1)	1.5 (0.3 - 5.0)	2.9 (0.8 - 7.7)
<b>Household size</b>					
1	35.4 (27.7 - 43.8)	6.5 (3.3 - 11.4)	1.6 (0.3 - 5.0)	1.6 (0.4 - 4.4)	2.2 (0.4 - 6.9)
2	33.3 (27.4 - 39.6)	3.8 (2.0 - 6.5)	0.3 (0.1 - 1.0)	2.6 (0.9 - 6.3)	1.3 (0.4 - 3.4)
3	35.6 (27.7 - 44.2)	1.6 (0.5 - 4.1)	0.3 (0.0 - 1.5)	3.0 (0.7 - 8.9)	0.3 (0 - 1.2)
4	35.7 (28.1 - 43.8)	0.8 (0.2 - 2.1)	0.8 (0.1 - 3.4)	4.6 (1.9 - 9.5)	0.2 (0.0 - 0.9)
5+	42.1 (33.4 - 51.1)	1.2 (0.3 - 3.2)	0.0 -	0.7 (0.2 - 2.0)	0.9 (0.2 - 3.1)
<b>Personal income (\$)</b>					
Up to 20,000	30.3 (24.6 - 36.6)	2.7 (1.4 - 4.8)	0.9 (0.2 - 2.5)	2.3 (0.7 - 5.4)	1.2 (0.4 - 2.8)
20,001 - 40,000	34.0 (27.5 - 41.1)	2.7 (1.4 - 4.9)	- -	3.6 (1.4 - 7.8)	0.2 (0.0 - 0.9)
40,001 - 60,000	48.0 (39.6 - 56.5)	1.6 (0.4 - 4.3)	0.3 (0.0 - 1.6)	2.3 (0.4 - 8.2)	1.3 (0.3 - 4.2)
60,001 - 80,000	45.1 (32.0 - 58.7)	1.3 (0.3 - 4.3)	0.6 (0.1 - 2.9)	2.6 (0.4 - 9.3)	- -
80,001 - 100,000	45.6 (27.6 - 64.5)	0.5 (0.0 - 2.2)	- -	0.5 (0.1 - 2.4)	- -
Over 100,000	33.2 (17.5 - 52.4)	- -	- -	3.2 (0.3 - 14.3)	2.8 (0.3 - 12.5)
<b>Household Income (\$)</b>					
Up to 20,000	27.1 (19.2 - 36.3)	5.9 (2.4 - 12.1)	1.4 (0.3 - 4.4)	2.5 (0.4 - 9.2)	2.3 (0.6 - 6.5)

Reasons for decreased gambling % (95% CI)					
Demographic variables	My priorities have changed	There was a change in my health	Became aware of gambling addiction/problems	Wasn't winning/lost money	Other reasons
20,001 - 40,000	33.3 (25.9 - 41.5)	3.1 (1.6 - 5.5)	0.2 (0.0 - 1.1)	3.8 (1.2 - 9.3)	- -
40,001 - 60,001	39.2 (30.6 - 48.3)	3.0 (1.1 - 6.6)	- -	1.1 (0.2 - 3.9)	1.0 (0.1 - 4.5)
60,001 - 80,000	42.3 (33.0 - 52.0)	2.1 (0.6 - 5.5)	0.3 (0.0 - 1.3)	0.9 (0.1 - 4.3)	0.3 (0.0 - 1.6)
80,001 - 100,000	42.0 (31.6 - 53.1)	0.8 (0.1 - 3.1)	1.8 (0.3 - 6.2)	4.0 (0.8 - 12.4)	0.8 (0.1 - 3.8)
Over 100,000	36.8 (28.5 - 45.7)	0.2 (0.0 - 1.0)	0.1 (0.0 - 0.5)	2.9 (0.9 - 7.3)	1.5 (0.4 - 4.0)

Reasons for decreased gambling by pattern of participation, average monthly gambling expenditure and most preferred gambling activity are provided in Table 38.

With regard to pattern of participation, the only difference is that regular non-continuous gamblers (40.5%) and infrequent gamblers (35.8%) more often gave wanting to save money or spend it on other things as a main reason than was the case for non-gamblers (13.2%). Non-gamblers are people who, while not reporting having gambled in the past 12 months, considered that their gambling had decreased during that period. Presumably they were comparing their gambling behaviour with the preceding year or years when they did gamble.

More participants who on average spent over \$500 (53.0%) or between \$51-\$100 per month gambling (43.8%) than those who reported zero expenditure (13.2%) gave wanting to save money or spend on other things as a main reason. People who spent more than \$500 (48.9%) relative to those who spent \$11-\$20 (18.8%) more often indicated having less time or being too busy. People in the former high expenditure group (63.5%) also more often mentioned a change of priorities than did people in the four groups that spent between \$1 and \$50 per month (range 29.1% to 32.2%). People who spent \$101-\$500 (50.6%) mentioned this reason more often than those in the three groups that spent between \$1 and \$30. While only a relatively small proportion of people overall indicated that not winning or losing money was a main reason why they reduced their gambling, somewhat more people who reported spending small amounts gambling (\$1-\$10, 6.5%; \$11-\$20, 4.0%) did so. These percentages are higher than the percentage for the \$101-\$500 group (0.2%).

Over two-thirds (69.3%) of people who most preferred housie or bingo said they decreased their gambling because they had less money to spend, more than those who gave this reason in relation to casino gambling (18.4%). It was also higher than it was for people who did not gamble in the past year (17.7%) and had equal (26.2%) or no preference (31.7%).

Although a moderate to high percentage of people who most preferred some activities indicated that they decreased gambling because they wanted to save or spend money on other things, many of these estimates have large confidence intervals and should be treated with caution. People with a preference for casino gambling (53.3%) more often gave this reason than did people who preferred other gambling activities (4.7%), did not gamble in the past year (13.2%), or had no preference (26.1%). Those who preferred Lotto (40.5%) also more often gave this reason more frequently than those who favoured other activities or did not gamble in the past year.

From inspection it is evident that many participation preference groups had substantially more people indicating that they had reduced gambling because they had less time or were too busy than was the case for the group that preferred Lotto (8.7%). This included the non-casino EGMs group (46.5%). This group also differed from the groups that most preferred raffles or lotteries (20.7%), Instant Kiwi or other scratch tickets (22.2%), or that had no preference (20.9%).

Only 2.6% of people who most preferred Lotto said they reduced their gambling because they had fewer opportunities to gamble. As with the reason mentioned in the preceding paragraph, people from many groups with preferences other than Lotto (range 11.2% to 39.7%) indicated that they reduced their gambling behaviour because they had fewer opportunities to gamble. This reason was given most often by people who preferred non-casino EGMs (39.7%), more often than by those who preferred a number of other activities (range 5.4% to 15.0%).

Over a half of participants (56.9%) who preferred card games said they gambled less because they had lost interest in things they used to do, more than people who preferred a number of other activities. People who favoured Keno (2.7%) did so less often than those with a number of other preferences (range from 22.7% to 56.9%).

There appear to be no other substantial differences between the preference groups with respect to the other reasons given.

**Table 38: Main reasons for decreased gambling during the past 12 months by pattern of participation, average monthly gambling expenditure and most preferred form of gambling**

Pattern of participation, expenditure, and preferred gambling activity	Main reasons for decreased gambling % (95% CI)				
	I have less money to spend now	I want to save money/spend money on other things	I have less time/I'm too busy now	I have fewer opportunities to gamble	I have lost interest in the activities I used to do
Total	33.3 (29.8 - 36.9)	34.9 (31.3 - 38.6)	24.0 (20.8 - 27.4)	13.3 (10.8 - 16.2)	24.4 (21.1 - 27.9)
<b>Pattern of participation</b>					
Non-gambler	17.7 (6.5 - 36.2)	13.2 (4.1 - 30.3)	20.8 (8.9 - 38.4)	19.7 (6.2 - 42.9)	18.8 (8.4 - 34.4)
Infrequent gambler	34.8 (30.5 - 39.3)	35.8 (31.5 - 40.3)	25.5 (21.7 - 29.6)	12.5 (9.6 - 15.9)	25.0 (21.1 - 29.2)
Regular non-continuous gambler	31.8 (23.9 - 40.7)	40.5 (31.8 - 49.6)	16.5 (10.3 - 24.5)	12.4 (7.2 - 19.4)	24.5 (16.9 - 33.6)
Regular continuous gambler	30.7 (19.9 - 43.4)	28.5 (18.3 - 40.7)	25.0 (14.4 - 38.4)	19.4 (10.3 - 31.9)	21.2 (12.7 - 32.2)
<b>Average monthly expenditure</b>					
\$0	17.7 (6.5 - 36.2)	13.2 (4.1 - 30.3)	20.8 (8.9 - 38.4)	19.7 (6.2 - 42.9)	18.8 (8.4 - 34.4)
\$1 - \$10	31.3 (22.6 - 41.1)	35.8 (26.1 - 46.5)	19.8 (12.3 - 29.4)	7.9 (4.0 - 13.9)	19.9 (13.3 - 28.0)
\$11 - \$20	38.4 (31.0 - 46.1)	34.5 (27.5 - 42.1)	18.8 (13.1 - 25.8)	7.9 (4.3 - 13.3)	25.8 (19.3 - 33.3)
\$21 - \$30	39.6 (29.8 - 50.1)	30.0 (20.1 - 41.7)	24.0 (16.0 - 33.7)	3.8 (1.1 - 9.5)	27.3 (18.7 - 37.5)
\$31 - \$50	33.3 (23.7 - 44.0)	27.9 (19.1 - 38.3)	26.4 (16.8 - 38.0)	20.8 (11.6 - 33.1)	27.4 (18.0 - 38.7)
\$51 - \$100	33.0 (24.3 - 42.7)	43.8 (34.7 - 53.3)	28.2 (20.9 - 36.5)	16.5 (10.7 - 24.0)	18.9 (12.3 - 27.3)
\$101 - \$500	32.7 (24.7 - 41.5)	37.0 (29.0 - 45.5)	22.2 (15.5 - 30.1)	17.9 (12.0 - 25.2)	31.6 (23.1 - 41.1)
More than \$500	22.4 (9.9 - 40.4)	53.0 (33.4 - 72.0)	48.9 (29.4 - 68.6)	18.2 (7.1 - 36.0)	11.3 (3.2 - 27.4)

Pattern of participation, expenditure, and preferred gambling activity	Main reasons for decreased gambling % (95% CI)				
	I have less money to spend now	I want to save money/spend money on other things	I have less time/I'm too busy now	I have fewer opportunities to gamble	I have lost interest in the activities I used to do
<b>Most preferred gambling activity</b>					
Not gambled in the last year	17.7 (6.5 - 36.2)	13.2 (4.1 - 30.3)	20.8 (8.9 - 38.4)	19.7 (6.2 - 42.9)	18.8 (8.4 - 34.4)
Card games	32.9 (12.4 - 60.4)	46.3 (23.2 - 70.8)	38.1 (15.9 - 65.1)	26.9 (8.1 - 56.5)	56.9 (33.9 - 77.8)
Bets with friends/workmates	46.2 (31.0 - 62.0)	28.7 (16.8 - 43.4)	33.3 (20.3 - 48.6)	24.3 (12.4 - 40.4)	36.0 (22.2 - 51.9)
Text game or competition	- -	29.5 (1.9 - 85.6)	72.3 (16.4 - 98.2)	- -	42.8 (3.0 - 94.0)
Raffle/lottery (NZ or overseas)	35.6 (24.5 - 48.1)	30.6 (19.8 - 43.2)	20.7 (12.0 - 32.0)	7.0 (2.9 - 14.0)	32.7 (21.5 - 45.7)
Lotto	37.3 (29.1 - 46.2)	40.5 (31.7 - 49.8)	8.7 (5.3 - 13.2)	2.6 (1.0 - 5.4)	20.0 (13.9 - 27.3)
Keno	24.9 (1.8 - 79.2)	22.4 (2.0 - 71.8)	61.3 (13.9 - 95.0)	- -	2.7 (0.2 - 13.5)
Bullseye	9.3 (0.1 - 99.0)	100.0 -	90.7 (1.0 - 99.9)	- -	90.7 (1.0 - 99.9)
Instant Kiwi tickets or other scratch tickets	39.7 (30.1 - 49.8)	41.7 (31.7 - 52.2)	22.2 (14.4 - 32.0)	9.4 (4.5 - 17.1)	19.4 (12.7 - 27.8)
Housie or bingo	69.3 (45.6 - 87.0)	32.6 (14.0 - 57.0)	16.4 (4.7 - 37.9)	10.4 (1.8 - 32.3)	4.6 (0.5 - 20.5)
Horse/dog race betting	42.5 (29.7 - 56.1)	25.1 (15.7 - 36.8)	33.8 (21.5 - 48.0)	15.0 (7.7 - 25.6)	23.2 (12.8 - 36.7)
Sports betting	19.5 (3.6 - 52.3)	32.2 (5.2 - 76.2)	11.8 (1.8 - 37.9)	12.6 (2.6 - 35.6)	36.9 (7.7 - 77.6)
Casino table games or EGMs (NZ and overseas)	18.4 (9.3 - 31.2)	53.3 (36.8 - 69.3)	22.6 (12.9 - 35.2)	18.1 (8.3 - 32.7)	18.7 (9.6 - 31.6)
Non-casino EGMs	32.4 (20.9 - 45.9)	28.6 (17.9 - 41.6)	46.5 (32.3 - 61.1)	39.7 (26.2 - 54.5)	12.4 (5.9 - 22.3)
Short-term speculative investments	- -	- -	66.8 (6.5 - 98.7)	33.2 (1.3 - 93.5)	- -
Overseas internet gambling for money/prizes	18.1 (0.5 - 84.2)	81.9 (15.8 - 99.5)	36.1 (0.9 - 96.8)	18.0 (0.5 - 84.1)	- -
Other activities	- -	4.7 (0.4 - 24.0)	27.5 (1.5 - 85.7)	- -	49.9 (4.9 - 95.0)
No preference/enjoyed all equally	26.2 (16.0 - 38.8)	42.3 (30.0 - 55.4)	24.9 (14.7 - 37.8)	4.8 (1.0 - 14.6)	22.7 (13.8 - 34.0)
No/none	31.7 (23.3 - 41.1)	26.1 (18.1 - 35.7)	20.9 (13.4 - 30.2)	11.2 (6.1 - 18.4)	27.4 (19.7 - 36.4)

Pattern of participation, expenditure, and preferred gambling activity	Main reasons for decreased gambling % (95% CI)				
	My priorities have changed	There was a change in my health	Became aware of gambling addiction/problems	Wasn't winning/lost money	Other
Total	36.3 (32.9 - 39.9)	2.4 (1.6 - 3.4)	0.5 (0.2 - 1.0)	2.7 (1.5 - 4.3)	0.8 (0.4 - 1.6)
<b>Pattern of participation</b>					
Non-gambler	37.8 (23.2 - 54.3)	- -	- -	- -	0.9 (0.1 - 4.3)
Infrequent gambler	35.4 (31.3 - 39.7)	2.2 (1.3 - 3.4)	0.6 (0.2 - 1.3)	3.3 (1.8 - 5.5)	0.8 (0.3 - 1.7)
Regular non-continuous gambler	36.2 (28.2 - 44.7)	3.1 (1.5 - 6.0)	- -	0.6 (0.1 - 2.0)	0.5 (0.1 - 2.5)

<b>Main reasons for decreased gambling % (95% CI)</b>					
<b>Pattern of participation, expenditure, and preferred gambling activity</b>	<b>My priorities have changed</b>	<b>There was a change in my health</b>	<b>Became aware of gambling addiction/problems</b>	<b>Wasn't winning/lost money</b>	<b>Other</b>
Regular continuous gambler	45.1 (32.6 - 58.2)	4.7 (1.7 - 10.1)	0.5 (0.1 - 2.5)	1.6 (0.2 - 7.3)	1.9 (0.2 - 8.5)
<b>Average monthly expenditure</b>					
\$0	37.8 (23.2 - 54.3)	-	-	-	0.9 (0.1 - 4.3)
\$1 - \$10	29.3 (20.8 - 38.9)	4.8 (2.2 - 9.2)	-	6.5 (2.2 - 14.7)	0.7 (0.1 - 3.2)
\$11 - \$20	32.2 (25.0 - 40.2)	1.0 (0.2 - 3.6)	0.4 (0.0 - 2.0)	4.0 (1.7 - 8.0)	0.4 (0.0 - 2.0)
\$21 - \$30	29.1 (20.2 - 39.5)	1.8 (0.5 - 4.8)	-	3.6 (0.7 - 11.7)	2.2 (0.6 - 6.1)
\$31 - \$50	31.9 (22.7 - 42.3)	1.3 (0.3 - 3.4)	0.8 (0.2 - 2.7)	1.5 (0.4 - 4.3)	1.7 (0.3 - 5.3)
\$51 - \$100	36.3 (27.3 - 46.1)	1.2 (0.3 - 3.5)	-	1.9 (0.3 - 7.2)	-
\$101 - \$500	50.6 (41.3 - 59.8)	3.7 (1.8 - 6.6)	1.4 (0.3 - 4.7)	0.2 (0.0 - 1.1)	0.8 (0.1 - 3.9)
More than \$500	63.5 (43.7 - 80.3)	8.3 (2.1 - 22.4)	1.2 (0.1 - 5.8)	-	-
<b>Most preferred gambling activity</b>					
Not gambled in the last year	37.8 (23.2 - 54.3)	-	-	-	0.9 (0.1 - 4.3)
Card games	44.8 (22.0 - 69.4)	-	4.1 (0.4 - 18.3)	-	-
Bets with friends/workmates	48.7 (33.2 - 64.5)	-	-	-	-
Text game or competition	57.2 (6.0 - 97.0)	-	-	-	-
Raffle/lottery (NZ or overseas)	33.3 (22.5 - 45.7)	2.5 (0.4 - 8.9)	-	7.4 (2.3 - 17.5)	1.5 (0.2 - 7.0)
Lotto	33.0 (25.2 - 41.5)	2.7 (1.1 - 5.6)	0.2 (0.0 - 1.2)	3.4 (1.3 - 7.6)	0.8 (0.2 - 2.7)
Keno	27.6 (2.3 - 80.0)	11.1 (0.8 - 47.8)	-	-	-
Bullseye	100.0 -	-	-	-	-
Instant Kiwi tickets or other scratch tickets	27.3 (19.4 - 36.4)	1.6 (0.4 - 4.6)	-	3.3 (0.7 - 9.8)	-
Housie or bingo	40.4 (18.8 - 65.4)	10.8 (1.7 - 34.8)	-	-	-
Horse/dog race betting	43.8 (31.1 - 57.2)	2.5 (0.6 - 7.0)	0.9 (0.1 - 4.4)	0.5 (0.1 - 2.3)	2.9 (0.6 - 9.0)
Sports betting	43.0 (13.9 - 76.8)	-	-	-	-
Casino table games or EGMs (NZ and overseas)	30.0 (17.9 - 44.7)	4.2 (1.1 - 11.5)	0.3 (0.0 - 1.6)	-	1.5 (0.2 - 7.1)
Non-casino EGMs	39.0 (25.1 - 54.5)	3.0 (0.6 - 9.4)	0.8 (0.1 - 3.6)	3.1 (0.4 - 12.1)	1.9 (0.2 - 8.6)
Short-term speculative investments	-	-	-	-	-
Overseas internet gambling for money/prizes	82.0 (15.9 - 99.5)	-	-	-	-
Other activities	62.8 (10.4 - 96.9)	-	-	-	-

Pattern of participation, expenditure, and preferred gambling activity	Main reasons for decreased gambling % (95% CI)				
	My priorities have changed	There was a change in my health	Became aware of gambling addiction/problems	Wasn't winning/lost money	Other
No preference/enjoyed all equally	44.2 (31.2 - 57.8)	3.2 (1 - 7.6)	- -	4.4 (0.4 - 19.1)	- -
No/none	30.9 (22.5 - 40.3)	3.5 (1.5 - 7.0)	0.8 (0.2 - 2.7)	3.7 (0.7 - 11.4)	0.5 (0.1 - 2.6)

Major life events were also examined in relation to participants' perceptions of changes in gambling involvement during the past 12 months. Approximately three-quarters of adults reported experiencing one or more major life event during the past year. The life events results are presented fully in the second report on the NGS ('Gambling-related Harm and Problem Gambling') where they are examined in relation to at-risk and problem gambling. For each of the events mentioned, participants were asked if that particular event had triggered an increase in gambling during the past 12 months. They were also asked, for each event, if it had triggered a decrease. The main findings for the adult population as a whole are summarised here.

A major change in financial situation was most often believed to have led to both increased (24.6%, 14.3-37.7) and decreased (22.8%, 18.3-27.8) gambling involvement. Other reasons for increased participation included troubles at work (15.8%, 6.9-29.6), the death of someone close (12.1%, 6.1-21.1), major illness or injury (10.2%, 3.8-21.3), an increase in arguments with someone close (8.8%, 2.9-20.0), an earthquake or other natural disaster (7.4%, 3.1-14.6) and moving to a new city or town (5.4%, 1.4-14.6). Some other events were mentioned in this regard by less than five percent of adults. Other events mentioned by five percent of more adults as reasons for decreased involvement were pregnancy or new family additions (11.7%, 8.6-15.4), a major change in living or work conditions (9.7%, 6.5-13.8), the death of someone close (8.8%, 5.3-13.5), major illness or injury (8.8%, 5.9-12.6), taking on a loan, mortgage or making a big purchase (7.7%, 5.0-11.4%), an earthquake or other natural disaster (6.7%, 4.2-10.1), moving house (6.4%, 4.0-9.7) and moving to a new town or city (5.5%, 2.9-9.3).

## 4.2 Changes over time and comparisons

### 4.2.1 Past year gambling participation

Table 39 provides participation rates (all population weighted) in major gambling activities obtained by national surveys since 1985. It includes the results from a series of surveys commissioned by the Department of Internal Affairs (DIA) (1985, 1990, 1995, 2000 and 2005). The participation data presented from this series relates to having taken part during the 12 months prior to the survey. Each of the five surveys was presented to potential participants as a gambling study and interviews were conducted face-to-face in residential dwellings. Results from national gambling and problem gambling studies conducted by Abbott and colleagues in 1991 and 1999 are included too. These surveys were also presented as gambling studies but differed in that interviews were conducted by telephone in the phases of the studies reported in Table 39. The sample sizes were considerably larger than those of the DIA survey series. Participation data in these two surveys relate to the past six months prior to the survey. Additionally, results are shown from surveys conducted in 2005 and 2010 for the Health Sponsorship Council (HSC). The 2005 survey was also presented as a gambling study. The 2010 survey was more general, covering wider health and lifestyle issues; however, potential participants were informed that the interview would include questions about gambling. Both

studies had sample sizes similar to the DIA surveys. Interviews were conducted face-to-face and questions were phrased in the past 12 months. Results are also provided from the New Zealand Health Surveys of 2002/03, 2006/07 and 2011/12. These were health surveys and no mention was made of gambling in the introduction and invitation to participate. Face-to-face interviews were conducted in household dwellings and participation questions were phrased in the past 12 months. The number of people interviewed in these surveys was large, two to three times as many as in the 1991 and 1999 national surveys (response rates of 59% and 75% respectively). Some forms of gambling were not included. Finally, the results of a postal survey of values, undertaken in 1998, are included. This was not presented as a gambling study and questions related to participation during the 12 months prior to the interviews.

Given the variation in methodology used in the participation surveys, some caution is required in interpreting Table 39. As mentioned earlier in this report, the way a survey is introduced, for example, as a gambling or general health study, and the way the survey is conducted (e.g. face-to-face or telephone) influences the results. Response rates, sample weighting and the time-frame, for example, 12 versus six months, also have an impact. Some of the studies included young people aged 15-17 years whereas others only involved people aged 18 years and older.

The DIA surveys conducted in 1985, 1990, 1995, 2000 and 2005 used very similar instrumentation and methodologies. They included people aged 15-17 years. Their sample sizes, response rates and sample weightings were also similar. The present survey incorporated questions used in this series of surveys, used a similar design, had a comparable response rate and sample weighting. It is reasonable to compare the results from these studies.

In 1985, 15% of adults did not report having taken part in any form of gambling during the past 12 months. Overall participation appears to have increased subsequent to that survey with 10% reporting not having gambled in each of the 1990 and 1995 surveys. Since then, participation has decreased with 20% in both the 2005 and present study saying they did not gamble during the past 12 months. Although they used different methodologies and time-frames, the participation rates for the 1991 and 1999 national surveys are the same or very similar to those of the 1990 and 2000 DIA surveys. The more recent HSC surveys (2005, 2010) also have participation rates that are similar to those of other surveys conducted within the same time period. The New Zealand Health Surveys in 2002/03, 2006/07 and 2011/12 all produced lower overall participation rates than any of the other surveys. This is probably a consequence of the former being presented as gambling studies and being of more interest to people who gamble, and the latter not asking about some of the more popular forms of gambling including raffles and lotteries, bets with friends and card games for money. However, the same trend of an increase in the percentage of adults who do not gamble is evident in the three health surveys.

Lotto continued to be the most popular gambling activity in terms of past year participation. In the decade following its introduction in the late 1980s, three-quarters or more adults participated. In subsequent surveys, annual participation reduced to around two-thirds or less. A similar pattern is evident for raffles and lotteries, with a reduction over time from a high point of around two-thirds to around a half in the more recent surveys. Instant Kiwi and other scratch tickets show a steady decline from the first time it was included in a survey in 1990, shortly after its introduction. Participation has dropped from around two-thirds to a third.

Bets with friends/workmates appear to have increased in popularity from 1985 to 1995 and decreased in subsequent years. Past 12 months participation in non-casino EGMs, like Instant Kiwi, reached a peak in 1990 shortly after their introduction and dropped fairly steadily since then. Past 12 months casino gambling participation was first assessed in 1995. Participation

overall, and casino EGM and table games participation separately, reduced from 2000 to 2005. Since then participation in these activities appears to have stayed fairly steady.

Betting on horse and dog races was most popular at the time of the first survey in 1985, stayed at around the same level until 1995 and declined in subsequent surveys. Both playing cards and housie for money were also more popular from 1985 to 1995. Participation in these activities declined in later surveys. Other less popular forms of gambling also declined in popularity a few years following their introduction. In the most recent surveys, around three percent reported past year involvement with text games or competitions. Since 1999, past year participation in internet gambling has never been more than one percent, apart from in 2010 when it was two percent.

**Table 39: Percentage participation in past 12 months gambling activities: 1985-2012**

Gambling activity	Participation %												
	1985	1990	1991	1995	1998	1999	2000	2002 / 03 <sup>#</sup>	2005	2006 / 07 <sup>#</sup>	2010	2011 / 12	2012
Lotto	-	78	78	80	78	73	75	61	66	59	60	45	62
New Zealand raffle/lottery	71	62	57	67	-	48	67	-	55	-	43 <sup>†</sup>	-	47
Instant Kiwi or other scratch tickets	-	66	51	58	49	36	48	29	41	27	33	13	33
Bets with friends/workmates	19	23	16	30	-	17	24	-	22	-	29	-	15
Non-casino EGMs	-	28	16	24	26	14	18	13	19	11	16	6	14
Horse/dog race betting	25	23	15	23	20	18	17	12	14	9	12	8	12
Casino table games or EGMs (NZ and overseas)	-	-	-	5	17	-	16	9	11	9	-	-	12
Casino EGMs (NZ)	-	-	-	-	-	11	14	-	10	8	10	4	8
Overseas raffle/lottery	-	-	-	-	-	-	10	-	5	-	-	-	3
'Casino' evening - fundraising	8	9	2	10	-	-	10	-	4	-	- <sup>†</sup>	-	-
Sports betting	-	-	-	-	8	5	8	4	4	5	4	-	5
Casino table games (NZ)	-	-	-	-	-	5	6	-	4	2	3	-	4
Card games for money	10	12	5	9	-	3	5	-	4	-	-	-	4
Keno	-	-	-	11	5	3	6	2	3	2	6 <sup>#</sup>	-	3
Bullseye	-	-	-	-	-	-	-	-	-	-	6 <sup>#</sup>	-	-
Housie for money	8	5	3	6	-	3	4	2	3	1	3	-	2
0900 games	-	-	-	4	6	3	3	-	<1	-	-	-	-
Dice games	3	4	1	3	-	<1	2	-	<1	-	-	-	-
Overseas internet gambling	-	-	-	-	-	<1	1	<1	<1	<1	2	-	<1
Text game or competition	-	-	-	-	-	-	-	-	-	-	1	-	3
None	15	10	10	10	12	14	13	30	20	35	19	48	20
Survey mode	Face	Face	Phone	Face	Postal	Phone	Face	Face	Face	Face	Face	Face	Face
N	1,500	1,200	4,033	1,200	1,201	6,422	1,500	12,929	1,672	12,488	1,740	9,821	6,251

<sup>†</sup> Raffle ticket or gone to a casino evening; <sup>#</sup> Keno or Bullseye, or both

<sup>#</sup> 18 years and older

In the five DIA surveys and the current survey, people were asked to indicate from a list of gambling activities which ones they participated in. In the more recent surveys, the list increased to include new forms of gambling that had been introduced. Table 40 shows the number of activities participated in during the past 12 months. Reference has previously been made to non-participation.

In 1985, the majority (70%) of adults participated in one to three gambling activities. This reduced to around half in the next four surveys and appears to have increased slightly to 58% in the current survey. The number of people who took part in four to six activities increased to around a third of adults in 1990 and 1995 and decreased subsequently to around a fifth (18%) in the current survey. The number participating in seven or more activities rose from one percent in 1985 to 10% in 2000 and declined in the two most recent surveys (5% and 4%).

**Table 40: Participation by number of activities in past 12 months: 1985-2012**

Number of activities	Participation %					
	1985	1990	1995	2000	2005	2012
None	15	10	10	13	20	20
1 - 3	70	51	49	49	53	58
4 - 6	14	34	34	27	23	18
7+	1	6	7	10	5	4

### Frequency of participation

Table 41 provides information regarding frequency of participation in a number of the more popular gambling activities. Rates are shown for weekly or more frequent participation, participation at least once a month but less than weekly, and participation less than monthly.

It is apparent that weekly Lotto participation decreased from around a third (35%) of adults in 1990 and 1995 to around a fifth (respectively 21% and 17%) in 2005 and 2012. At least once a month but less than weekly participation appears to have decreased slightly and less than monthly participation increased slightly. Non-participation increased from around a fifth in 1990 and 1995 to just under two-fifths in the present survey.

All levels of Keno participation appear to have decreased since 1995 and weekly and monthly but less than weekly Instant Kiwi involvement have both reduced markedly since 1990. Less than monthly involvement also appears to have reduced since 1995, but much less so. Participation in housie also appears to have reduced over time.

Weekly and monthly betting on horse and dog races has declined substantially since 1985. Less than monthly participation appears to have reduced from 1990 to 2005 but increased in 2012 to around what it was in 1985 and 2000. Very small numbers of adults (from <1%-2%) reported taking part weekly or monthly in sports betting or casino gambling. In the case of non-casino EGMs, substantial reductions are evident since 1990 in all participation categories. Weekly participation decreased from five percent to one percent.

**Table 41: Frequency of participation in gambling activities: 1985-2012**

Gambling activity	Frequency of participation %											
	At least once a week						At least once a month					
	1985	1990	1995	2000	2005	2012	1985	1990	1995	2000	2005	2012
Lotto		35	35	30	21	17		21	20	20	16	17
Keno	-	-	2	1	1	<1	-		2	2	1	1
Instant Kiwi or other scratch ticket	-	14	10	9	6	3	-	26	21	14	12	9
Housie	2	2	2	1	1	<1	1	1	1	1	1	<1
Horse/dog race betting	5	4	3	2	3	1	4	3	4	2	2	1
Sports betting				1	1	1		-	-	2	1	1
Casino gambling	-	-	<1	1	<1	<1 <sup>#</sup>	-	-	<1	1	1	1 <sup>#</sup>
Non-casino EGMs	-	5	3	3	3	1	-	8	6	4	5	3

<sup>#</sup> Casinos, NZ and overseas

Gambling activity	Frequency of participation %											
	Less often than monthly						Not participated					
	1985	1990	1995	2000	2005	2012	1985	1990	1995	2000	2005	2012
Lotto	-	23	25	25	28	28	-	22	20	25	34	38
Keno	-	-	6	3	2	1	-	-	89	94	97	97
Instant Kiwi or other scratch ticket	-	23	27	24	23	21	-	37	42	52	59	67
Housie	4	2	3	2	1	1	92	95	94	96	97	98
Horse/dog race betting	10	13	12	9	6	9	81	80	81	87	89	88
Sports betting	-	-	-	5	2	3	-	-	-	92	96	95
Casino gambling	-	-	5	14	10	11 <sup>#</sup>	-	-	95	84	89	88 <sup>#</sup>
Non-casino EGMs	-	16	15	11	11	10	-	72	76	82	81	86

<sup>#</sup> Casinos, NZ and overseas

In the 1991 and 1999 national gambling studies, for some analyses, participants were classified as non-gamblers (people who had never participated in any gambling activity), infrequent gamblers (people who participated in the past but not during the last six months), past six months gamblers (people who had participated during the past six months but not weekly or more often), regular non-continuous gamblers (people who gamble weekly or more often on non-continuous forms) and regular continuous gamblers (people who gamble weekly or more often on continuous forms). Regular continuous gamblers could also participate in non-continuous activities, weekly or less frequently. Regular non-continuous gamblers could participate in continuous activities but less often than weekly.

Table 42 provides information regarding these groups in 1991 and 1999. It also includes information for some of these groups in the current study. The two regular participation and non-gambler groups are defined in the same way. However a past 12 months rather than past six month time frame was used in the current study. This means that the other groups are not strictly comparable. It also needs to be recalled that while all three surveys were presented as gambling studies, the current survey involved face-to-face interviews whereas telephone interviews were used in the earlier surveys.

The most notable change is the reduction in the percentage of adults who participate weekly or more in continuous forms of gambling. It reduced from 18% in 1991 to 10% in 1999. In the current survey it is six percent. There was no change in the proportion of regular non-continuous gamblers from 1991 to 1999 (both 30%). However, it almost halved (16%) in 2012. Overall, in 1991 around 48% of adults gambled weekly or more frequently on one or more

gambling activities. In 2012 around 22% did. The other notable change is the increase in the number of people in the current study who said they had never gambled (14%).

While difficult to compare directly there has probably been little change in the proportion of adults who report having gambled at some time in their lives but not during the past six or 12 months. There appears to have been an increase in the proportion of people who gambled during the past six or 12 months but not weekly or more often.

**Table 42: Gambling participation in 1991, 1999 and 2012**

Gambling status/pattern of participation	Participation %		
	1991	1999	2012
Never gambled	5	6	14
Has not gambled in past 6 months	6	8	
Has not gambled in past 12 months			6
Past 6 months gambler (but not weekly)	41	46	
Past 12 months gambler (but not weekly)			58
Regular non-continuous gambler	30	30	16
Regular continuous gambler	18	10	6

Table 43 examines weekly participation in the different gambling activities in the 1991, 1999 and 2012 studies. Participants were not asked questions about some gambling activities in the earlier surveys because these activities were not available at that time.

It is evident that there are few gambling activities that are engaged in on a regular basis by more than a very small percentage of people. Lotto is the notable exception with 42% of adults taking part weekly or more in 1991, 35% in 1999 and 17% in 2012. This is a large reduction. There is also a large reduction in regular participation in the other forms of gambling that were more popular in 1991, namely raffles and lotteries, Instant Kiwi and betting on horse and dog racing.

**Table 43: Past week participation in gambling activities: 1991, 1999 and 2012**

Activity	Past week participation %		
	1991	1999	2012 <sup>#</sup>
Card games	1	0	0
Dice games	0	0	0
Bets with friends/workmates	2	1	1
Text game or competition	-	-	0
New Zealand raffle/lottery	7	3	3
Lotto	42	35	17
Keno	-	1	0
TeleBingo	-	1	-
Instant Kiwi tickets or other scratch tickets	13	6	3
Other instant scratch ticket <sup>†</sup>	1	-	-
Housie or bingo	1	1	0
Horse/dog race betting	4	3	1
Sports betting <sup>††</sup>	-	1	1
Football pools <sup>‡</sup>	0	-	-
Overseas casinos	0	-	0
Casino table games or EGMs (NZ and overseas)	-	-	0
Casino table games (NZ) <sup>‡‡</sup>	-	0	0
'Casino' evenings	0	-	-
Casino EGMs (NZ)	-	0	0
Non-casino EGMs	-	2	1
EGMs (NZ)	3	-	2
Short-term speculative investments	-	-	0
Overseas internet gambling for money/prizes	-	0	0

<sup>#</sup> 'At least once a week'; <sup>†</sup> Instant Kiwi and scratch tickets were combined in 2012; <sup>††</sup> 'Other sports betting' (1991, 1999); <sup>‡</sup> Data were not collected on 'football pools' in 2012; <sup>‡‡</sup> 'Casinos - other games' (1991, 1999)

A number of the surveys considered do not fully examine participation in different population groups. This omission, small sample size and methodological differences limit the information available regarding socio-demographic changes over time. There is major interest in changes since the 1999 National Gambling Survey. As mentioned previously, in 1999 non-gamblers were defined as people who did not report having taken part in any gambling activity during the past six months. In the present survey, they were defined as people who did not gamble during the past year. It is expected that the 12 month frame would include somewhat more people than the six month frame and that apparent participation reductions from 1999 to 2012 would be greater if both studies had used six month frames. While this seems logical, as mentioned, there were in fact minimal or no differences in overall participation estimates from surveys that used six and 12 month frames in the same or adjacent years. The surveys also differed in that the earlier one was conducted by telephone and the present survey was face-to-face. It has been suggested that the latter approach may produce more candid, accurate responding. However, again there was little, if any, difference in estimates from New Zealand gambling surveys that used these two different methods. Thus while these methodological differences may have some influence on the survey results, it appears that they are likely to be modest and that findings from the two surveys can be meaningfully compared.

In 1999 it was estimated that 14% of adults were non-gamblers. This increased to 20% in 2012 and may possibly have been slightly higher if the six rather than 12 month frame had been used and interviews had been conducted by telephone rather than face-to-face. While the statistical significance of potential differences were not assessed, the proportion of non-gamblers was higher in 2012 for almost every socio-demographic group considered (refer to Table 11 in this report and Abbott & Volberg, 2000, Table 9a). This included gender, age, ethnicity, country of birth, years since arrived in New Zealand, education, labour force status, religion, household size and income. Exceptions, where there appeared to be no or minimal increase in non-participation, included people who lacked a formal qualification and unemployed people. Regular continuous gamblers and regular non-continuous gamblers were defined the same way in 1999 and 2012. As mentioned, around one in ten adults (10.5%) were regular continuous gamblers in 1999. This reduced by almost half (to 6%) in 2012. Again, similar changes, in this case decreases, were found across almost all groups. Exceptions include Pacific Islanders and Asians, people aged 65 years and older, people with no formal qualification and unemployed people. Overall regular non-continuous gambling also decreased substantially, from 30% in 1999 to 16% in 2010. Reductions occurred across all groups and were particularly large for adults aged 34 years and younger.

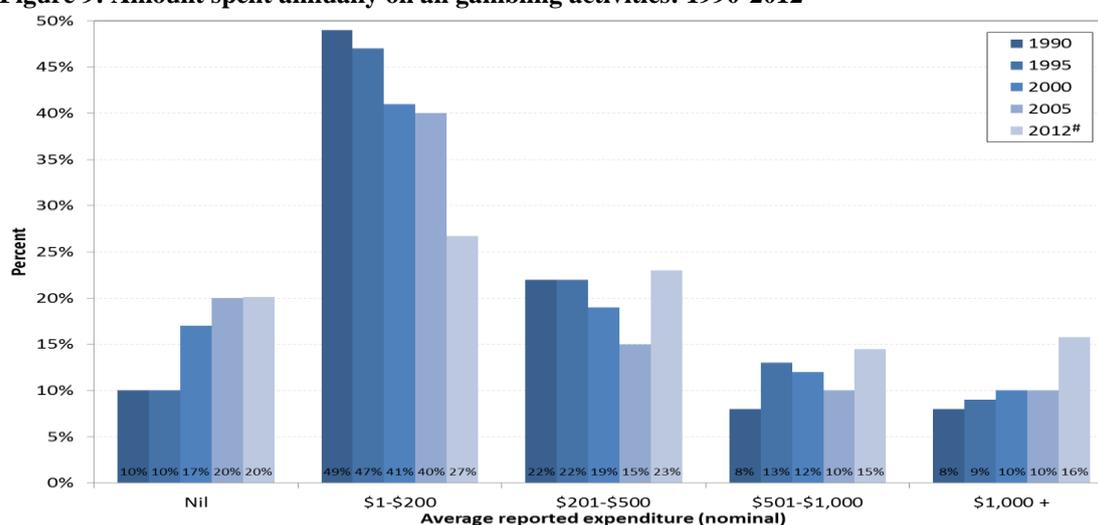
Some caution is required in interpreting the foregoing findings because, as mentioned, sample sizes are sometimes low and participation estimates may be unreliable as a consequence. However, it appears that overall gambling participation has changed markedly since 1999, with proportionately more people not participating and proportionately less taking part regularly, both in non-continuous and higher risk continuous activities. Furthermore, this has occurred across most sectors of society. However, a few groups have not changed or have changed less than others, which means that relative differences between groups have remained or increased over time. For example, in 2012 as in 1999, Māori had higher rates of regular continuous participation than European/Other and Asians. Relatively high proportions of people without a formal qualification were also regular continuous gamblers in both surveys. These findings are of interest in that they suggest that some groups that had elevated rates of problem and at-risk gambling in previous surveys continue to have high levels of regular involvement in forms of gambling that are strongly associated with gambling-related harms.

## Past year gambling expenditure

Figure 9 shows the amount of money participants report spending annually on all forms of gambling. This information comes from the 1990, 1995, 2000 and 2005 DIA surveys and the current study.

The 2005 and 2012 percentages for people who reported no gambling expenditure are double what they were in 1990 and 1995. The most notable change is the reduction, in successive surveys, in the percentage of adults who report spending \$200 or less per annum. It almost halved from 1990 to 2012. The next two higher expenditure categories also appear to have decreased in size from 1995 to 2005, albeit modestly. The highest (\$1,000+ category) may have increased modestly from 1990 to 2000. There was a more substantial increase in 2012 and the percentages of people in the \$201-500 and \$501-\$1,000 categories also increased. These 2005 to 2012 differences should, however, be treated with extreme caution as some forms of gambling were not included in the 2005 and earlier surveys, for example, expenditure on informal card games, raffles and betting with friends. Monthly expenditure was also calculated in somewhat different ways in the DIA survey.

**Figure 9: Amount spent annually on all gambling activities: 1990-2012**



# Excluding short-term investments; monthly expenditure multiplied by 12

The results shown in Figure 9 make no adjustment for inflation and the purchasing power of the dollar. Table 44 provides both the average amount reported (nominal expenditure) at the time of each survey and adjusted figures using the Consumer Price Index to account for inflation. The average nominal expenditure is fairly similar across the DIA surveys but is higher in 2012 than in the previous surveys. When adjusted, expenditure reduced from 1990 to 1995 and increased in 2012.

**Table 44: Reported annual average expenditure on gambling activities: 1990-2012**

Reported average annual expenditure	1990	1995	2000	2005	2012#
Amount spent in nominal terms	\$446	\$413	\$470	\$474	\$853
% change	-	-7.4	13.8	0.9	79.9
Amount spent (adjusted)	\$725	\$606	\$642	\$573	\$853
% change (adjusted)	-	-16.4	5.9	-10.8	48.9

# Excluding short-term investments, monthly expenditure multiplied by 12

In Table 45, reported annual expenditure is considered in relation to the number of gambling activities participated in. Across all surveys, the more activities participants took part in the more they spent overall on gambling. This trend was particularly strong in the 2005 and 2012 surveys. The adjusted average expenditures for people who took part in one to three and four to six activities appear to have been fairly stable from 1995 to 2005. This was also the case from 1995 to 2000 for those who participated in seven to nine activities. However, in 2005 average expenditure increased for people in the two highest participation categories. In 2012, it increased for all categories other than the highest.

**Table 45: Reported average annual expenditure by number of activities: 1995-2012**

Number of activities	Annual expenditure \$						
	1995 nominal	1995 adjusted	2000 nominal	2000 adjusted	2005 nominal	2005 adjusted	2012 <sup>#</sup>
1 - 3	206	302	184	251	231	279	414
4 - 6	653	958	627	856	918	1,109	1,547
7 - 9	1,121	1,644	1,204	1,644	2,285	2,761	3,922
10+	1,982	2,907	2,129	2,907	6,091	7,359	6,109

<sup>#</sup> Excluding short-term investments, monthly expenditure multiplied by 12

Table 46 provides reported average annual gambling expenditure, nominal and adjusted, for a number of different socio-demographic groups. Results from the 1999 national study are included, along with the results from the DIA surveys where expenditure questions were asked. In contrast to the other surveys, the 1999 study involved telephone interviews. However, the results from the 1999 study are similar to those of the 2000 DIA survey, suggesting that this methodological difference made little impact.

In adjusted terms, overall average annual expenditure appears to have been fairly similar over the years, apart from a possible increase from 2005 to 2012. In all surveys, males reported spending more than females. Māori also spent more than the general population, European and European/ Other. In three of the four surveys where relevant ethnic expenditure was provided, this was also the case for Pacific people. In the two DIA surveys where Asian results were provided, expenditure was lower than for the population as a whole. In contrast, in the 1999 and 2012 studies, Asian and European or European/Other expenditures were similar.

Reported expenditure by young adults aged 15-24 years has decreased over time. The most recent survey that used this category was conducted in 2005. The 1991 and 2012 studies did not include people aged 15-17 years. In the case of these two studies, expenditure was higher for people aged 18-24 years in 2012 than in 1999. Expenditure by the other age groups appears to have changed little overall over the years, although in some groups including people aged 25-34 years, 45-54 years and 65 years and older reported higher expenditure in 2012 than in 2005. However, as indicated, these differences may arise from methodological differences and thus may not be real.

**Table 46: Reported average annual expenditure by personal characteristics: 1990-2012**

Demographic variables	Average annual expenditure on gambling activities \$											
	1990 Nom.	1990 Adj.	1995 Nom.	1995 Adj.	1999 <sup>†</sup> Nom.	1999 <sup>†</sup> Adj.	2000 Nom.	2000 Adj.	2005 Nom.	2005 Adj.	2012 <sup>#</sup>	
<b>Gender</b>												
Male	528	858	507	744	635	889	532	726	634	766	1,086	
Female	367	597	322	472	365	512	412	563	327	395	638	
<b>Ethnic Group</b>												
General population	407	662	376	552	-	-	453	619	469	567	-	
European/Other	-	-	-	-	-	-	-	-	-	-	791	
European	-	-	-	-	476	667	-	-	-	-	-	
Other	-	-	-	-	312	437	-	-	-	-	-	
Māori	912	1,482	686	1,006	593	831	538	735	644	778	1,387	
Pacific	-	-	-	-	739	1,036	684	934	455	550	1,228	
Asian	-	-	-	-	460	645	311	425	243	294	887	
<b>Age</b>												
15 -24 years	448	728	339	497	-	-	342	467	242	292	-	
18 - 24 years	-	-	-	-	357	500	-	-	-	-	847	
25 - 34 years	418	679	470	689	529	741	533	728	460	556	1,062	
35 - 44 years	429	697	389	571	482	676	411	561	630	761	786	
45 - 54 years	508	826	529	776	696	976	707	965	521	629	836	
55 - 64 years	696	1,131	453	664	488	683	579	791	708	855	928	
65+ years	248	403	308	452	370	519	312	426	324	391	654	
<b>Highest qualification</b>												
No formal qual.	675	1,097	532	780	557	780	572	781	641	774	1,033	
NCEA 1	446	725	475	697	-	-	512	699	583	704	-	
NCEA 2-3 or equiv.	229	372	297	436	-	-	509	695	437	528	-	
School qual.	-	-	-	-	408	571	-	-	-	-	906	
Trade/voc. qual.	425	691	415	609	567	795	451	616	440	532	1,010	
Other tertiary qual.	177	288	291	427	-	-	352	481	412	498	-	
University graduate	231	375	312	458	-	-	280	382	183	221	-	
Degree/higher	-	-	-	-	319	447	-	-	-	-	649	

<sup>#</sup> Excluding short-term investments, monthly expenditure multiplied by 12

## Reasons for participating in gambling

In Table 47, participants' reasons for taking part in various gambling activities are provided. While reasons given for taking part in particular activities show some consistency over time, there are some notable changes. For example, the percentages of participants who report participating to win prizes or money has increased over time for Lotto, Keno, housie or bingo, sports betting, casino gambling and EGM gambling.

Shortly after new forms of gambling were introduced, respondents were often more likely to give "out of curiosity" as a reason, with lower percentages doing so in subsequent surveys. This is particularly evident for casinos and Keno in 1995, and non-casino EGMs and Instant Kiwi in 1990.

**Table 47: Reasons for participating in gambling activities by activity: 1985-2012**

Reasons for participating	Lotto %					Keno %				
	1990	1995	2000	2005	2012	1995	2000	2005	2012	
To win prizes/money	83	81	82	86	92	64	73	84	89	
As a gift for another person	13	15	21	25	16	2	6	4	5	
As entertainment	-	13	12	16	10	7	15	17	13	
For excitement/or a challenge	21	14	11	15	15	12	10	13	21	
To support worthy causes	8	7	9	11	10	2	2	7	8	
Out of curiosity	9	4	4	6	4	30	15	12	10	
As an interest/or a hobby	11	3	3	5	3	4	6	10	4	
To oblige or please other people	3	4	3	4	3	1	-	2	1	
To be with people/get out of the house	-	<1	<1	1	<1	-	-	-	<1	
Others	2	1	<1	1	0	-	-	-	1	

Reasons for participating	Instant Kiwi %					Housie or bingo %					
	1990	1995	2000	2005	2012	1985	1990	1995	2000	2005	2012
To win prizes/money	75	67	75	72	76	39	50	47	50	68	65
As a gift for another person	8	12	16	24	20	-	-	-	3	-	1
As entertainment	-	14	17	27	24	-	-	29	37	60	49
For excitement/or a challenge	24	19	21	25	30	28	33	24	36	42	34
To support worthy causes	3	2	4	4	3	19	22	19	15	24	24
Out of curiosity	18	9	8	12	9	-	3	1	6	3	7
As an interest/or a hobby	7	3	3	5	2	-	13	9	11	19	10
To oblige or please other people	2	3	3	2	2	9	4	6	4	6	4
To be with people/get out of the house	-	<1	<1	<1	<1	-	45	34	16	52	37
Others	3	1	2	3	<1	5	2	3	-	2	-

Reasons for participating	Horse/dog race betting %					Sports betting %					
	1985	1990	1995	2000	2005	2012	2000	2005	2012		
To win prizes/money			66	52	46	58	58	66	65	70	78
As a gift for another person			-	-	<1	<1	1	<1	<1	-	<1
As entertainment			-	-	40	40	50	60	35	44	57
For excitement/or a challenge			43	61	43	38	42	56	46	69	60
To support worthy causes			-	1	1	<1	3	2	<1	1	1
Out of curiosity			-	7	4	3	7	8	3	1	7
As an interest/or a hobby			36	22	11	12	27	22	12	29	24
To oblige or please other people			-	4	3	4	5	8	2	1	2
To be with people/get out of the house			-	14	10	10	10	24	-	9	5
Others			5	4	1	4	-	<1	1	-	-

Reasons for participating	Casino %				Casino EGMs %		Non-casino EGMs %				
	1995	2000	2005	2012	2005	2012	1990	1995	2000	2005	2012
To win prizes/money	38	45	58	68	57	65	49	46	57	57	66
As a gift for another person	-	<1	2	1	-	2	-	1	-	1	1
As entertainment	57	58	65	66	69	63	n/a	48	48	60	58
For excitement/or a challenge	37	32	38	50	39	42	50	33	30	35	41
To support worthy causes	-	<1	1	2	<1	1	4	4	3	3	4
Out of curiosity	44	15	13	14	13	12	21	11	11	14	13
As an interest/or a hobby	-	2	5	7	5	4	8	2	6	7	5
To oblige or please other people	2	7	10	6	10	4	1	2	3	5	5
To be with people/get out of the house	6	13	30	24	25	20	4	2	8	16	16
Others	-	1	-	<1	-	<1	7	2	2	2	<1

## Perception of winning and losing

Participants' perceptions of having lost or won money overall during the past 12 months when participating in some major forms of gambling are indicated in Table 48. Across the three surveys, most people who took part in Lotto (86%-89%), Keno (71%-72%) and Instant Kiwi or other scratch tickets (58%-65%) were of the view that they lost money overall. These perceptions appear to be fairly consistent across the three surveys. In most cases the majority of people who participated in other gambling activities considered in Table 48 were also of the view that they lost overall. However, relative to Lotto, Keno and Instant Kiwi or other scratch tickets, somewhat larger percentages considered that they won overall. These perceptions appear to be fairly consistent across the surveys, although more housie or bingo participants said they lost overall in 2012 (57%) than in 2000 (37%) and 2005 (45%).

**Table 48: Perceptions of winning or losing, by gambling activity: 2000-2012**

Gambling activity	Perceptions of winning or losing %											
	Won money			Broke even			Lost money			Don't know		
	2000	2005	2012	2000	2005	2012	2000	2005	2012	2000	2005	2012
Lotto	5	4	4	9	7	7	86	88	89	<1	1	<1
Keno	7	16	10	20	14	18	72	71	72	<1	-	0
Instant Kiwi/other scratch ticket	11	10	11	30	23	30	58	65	60	1	2	0
Housie or bingo	28	30	23	35	24	20	37	45	57	-	-	0
<b>Horse/dog race betting</b>	20	15		29	29		51	56		<1	<1	
At the track	-	-	24	-	-	25	-	-	51	-	-	0
TAB in person	-	-	22	-	-	20	-	-	57	-	-	<1
TAB online, etc	-	-	21	-	-	29	-	-	51	-	-	0
Overseas bet	-	-	10	-	-	26	-	-	63	-	-	0
<b>Sports betting</b>	29	20	-	16	24	-	56	55	-	-	1	-
At the event	-	-	31	-	-	26	-	-	42	-	-	<1
TAB in person	-	-	30	-	-	24	-	-	46	-	-	<1
TAB online, etc	-	-	25	-	-	37	-	-	38	-	-	0
Overseas bet	-	-	38	-	-	24	-	-	37	-	-	0
Casino EGMs	24	19	18	17	17	18	58	63	64	-	-	0
<b>Non-casino EGMs</b>	17	22	-	25	21	-	58	56	-	<1	-	-
In a pub	-	-	22	-	-	25	-	-	53	-	-	0
In a club	-	-	17	-	-	25	-	-	58	-	-	0

### Use of systems or special skills

In the 2000 and 2005 DIA surveys and the current study, participants were asked, for each gambling activity they reported taking part in during the past 12 months, whether they used any system or special skills to improve their chances of winning. The results are shown in Table 49 for some major gambling forms.

In 2000, 16% of Keno participants, nine percent of Lotto participants and eight percent of non-casino EGMs participants said they used systems or special skills. Much smaller percentages of Instant Kiwi or casino EGM participants reported doing so. There appears to have been a reduction in the use of systems and skills over time, particularly with regard to Keno.

**Table 49: Use of systems or special skills to improve wining chances, by activity: 2002-2012**

Gambling activity	Special skill or system used to win %								
	Yes			No			Don't know		
	2000	2005	2012	2000	2005	2012	2000	2005	2012
Lotto	9	7	6	91	93	92	<1	<1	1
Keno	16	9	6	84	86	93	<1	5	2
Instant Kiwi or other scratch ticket	2	2	1	97	97	96	1	2	3
Housie or bingo	-	-	2	100	95	95	<1	5	3
Casino EGMs	2	4	2	97	96	96	1	-	3
Non-casino EGMs	8	5	5	92	95	93	1	-	2

## 5. SUMMARY, DISCUSSION AND CONCLUSIONS

### Introduction

As mentioned at the beginning of this report, major aims of the first phase of the NGS include providing information about changes in gambling participation in New Zealand and epidemiological information on problem gambling including risk and resiliency factors. A further major aim is to provide a sampling frame for a longitudinal study.

While an important objective of the NGS is to advance scientific understanding of gambling and gambling-related harms in New Zealand and more widely, it is intended that this will contribute to an evidence base that informs gambling policy including the attainment of the objectives of the Ministry of Health's (2010) 'Preventing and Minimising Gambling Harm: Six-year strategic plan 2010/11-2015/16'.

### Gambling participation and expenditure

#### *Lifetime participation*

As outlined in Chapter Four, it is estimated that approximately 86% of adult New Zealanders participate in at least one type of gambling activity at some stage in their lives. Eighty percent indicated having done so during the 12 months prior to the survey.

The lifetime estimate is lower than estimates from the 1991 and 1999 national surveys (95% and 94% respectively). These percentages are similar to those found in Australian, Swedish, Canadian and some United States surveys conducted during the 1990s. Most United States surveys at this time had lower rates (Abbott & Volberg, 2000). The DIA surveys and NZHS do not report lifetime participation. This is also the case for many gambling surveys undertaken during the past decade internationally. Exceptions at the national level include the United States (Kessler et al, 2008) (78%), Finland (Aho & Turja, 2007) (87%), Germany (Buhringer et al., 2007) (71.5%), Hungary (Kun et al., 2011) (65%) and the Netherlands (Goudriaan, de Bruin & Koeter, 2009) (87%).

Caution is required when comparing gambling participation rates. In addition to the possible effects of sampling, study design and response rate differences, gambling questions vary. Some surveys ask people if they have ever taken part in gambling activities whereas others provide a detailed checklist for participants to respond to. A number of studies, including the majority of Australian surveys and the NZHS, exclude raffles and some forms of informal gambling.

While there is likely to be recall distortion when people are reflecting on their entire lives, the gambling questions were asked in a similar way in the 1991 and 1999 national surveys and in the NGS. All were presented as gambling studies. Response rates for the three studies are respectively 59%, 75% and 64%. The NGS differed in that it was face-to-face. It is difficult to know whether the mode of recruitment and interviewing played a part in accounting for the lower gambling participation rate in the NGS. However, given that face-to-face residential interviews generally elicit more candid responding than telephone interviews, it might be expected that the former would produce higher rather than lower rates. As mentioned, this has been demonstrated with regard to problem gambling (Williams & Volberg, 2009, 2010). Rates were 2.2 times higher in a face-to-face survey than in an identical telephone survey, in part

because the former recruited more young people, males and single people; groups that usually have higher rates of problem gambling. When the telephone sample was weighted to match general population age and gender distributions it reduced to 1.4 times higher, suggesting that more candid/honest reporting also played a role. At the time of the two previous New Zealand national surveys, landline telephone ownership was very high relative to now. However, similar sample weighting was applied in all studies. On balance, it seems highly probable that overall lifetime gambling participation rates have reduced somewhat in New Zealand since the 1990s.

### *Current participation*

The NGS past 12 month gambling participation rate of 80% in 2012 is the same as it was in the last (2005) DIA survey. While confidence intervals are not reported for the DIA surveys, they and the NGS all used very similar methodologies. They provide a unique series of comparable studies spanning nearly three decades. The 2010 Health Sponsorship Council survey also used similar methodology and obtained a rate (81%) virtually identical to those from the NGS and 2005 DIA survey. In contrast to the previous studies, the 1991 and 1999 national surveys were conducted predominantly by telephone and employed a past six month rather than a past 12 month frame to assess current gambling participation. Despite these differences, participation estimates were the same or almost the same as those from DIA surveys conducted around the same time (in 1990 and 2000). Much lower participation rates were obtained from the 2002/03, 2006/07 and 2011/12 NZHSs. As mentioned, these studies used a more restrictive definition of gambling and presented gambling questions in the context of a health survey rather than a gambling survey. Nevertheless, the results are consistent with the trend identified in the previous studies with respective gambling participation rates of 69%, 65% and 48%. Overall, it appears that participation increased slightly during the late 1980s, plateaued during the mid-1990s, declined during the late 1990s to mid-2000s and plateaued again since then at around 80%.

Albeit not as fully documented as in New Zealand, broadly similar findings have been found in a number of other jurisdictions including Australia (Productivity Commission, 2010). Past year participation has reduced in most Australian states since 1999. The most recent Swedish study (Abbott, Romild & Volberg, 2013) found 72% of adults reported gambling in the past year compared with 88% in 1998. From inspection of current gambling participation estimates provided in a recent comprehensive review of problem gambling surveys conducted worldwide during the past 30 years, it appears that since the 1980s gambling participation increased in many parts of the world, followed by a downward trend since the early 2000s (Williams, Volberg & Stevens, 2011).

Lotto, with 62% estimated to participate during the past 12 months, was the most popular activity in 2012, followed by raffles and other lotteries, Instant Kiwi or other scratch tickets, betting with friends or workmates, non-casino EGMs and betting on horse or dog races. Ten percent or fewer people reported taking part in any other particular gambling activity. Participation in most gambling activities increased following their introduction, levelled out for varied periods of time, then declined. In some cases these reductions have been substantial.

A similar pattern of change was apparent for the total number of gambling activities people reported participating in during the past 12 months, despite an increase over time in the range of activities available. In the 1985 DIA survey, 70% of adults participated in one to three activities, reducing to around half in the next four five-yearly surveys and rising again slightly (to 58%) in the NGS. From 1985 the percentage engaging in multiple (four or more) gambling activities initially increased then began to decrease around 2000.

The DIA surveys and the NGS also provide information about frequent participation in a number of more popular gambling activities. Weekly or more frequent participation has decreased for almost all forms of gambling. None increased. Activities that stayed much the same included casino gambling, sports betting, housie and Keno. These are all forms of gambling participated in this frequently by around one percent of adults. Weekly or more frequent gambling involvement is not included in many gambling surveys. However, similar trends have been found in some other studies. In Great Britain, between 1999 and 2007, weekly participation dropped from 53% to 41% (Wardle et al., 2007). The main reason for this was a reduction in National Lottery participation; however, most other activities covered in both surveys showed a small reduction or no change. During this period, there was increasing availability of new forms of gambling.

The Swedish study (Abbott, Romild & Volberg, 2013) compared past month participation in 2009 and 1998. Overall participation fell from 68% to 53%, with significant reductions in most activities other than horse and dog race betting which stayed the same, and EGM and poker participation which increased.

In the 1991 and 1999 national surveys, participants were classified as non-gamblers, infrequent gamblers, past six month gamblers, regular non-continuous gamblers and regular continuous gamblers. In the NGS, the non-gambler, regular continuous and regular non-continuous categories were retained. The other two categories were modified to take account of the past 12 month rather than past six month question framing.

In both the 1991 and 1999 national surveys, it was estimated that 30% of adults were regular non-continuous gamblers. People in this category gambled on Lotto and/or other non-continuous forms weekly or more often. It will be recalled that these people may also have engaged in continuous activities less frequently than weekly. In 2012, 16% were regular non-continuous gamblers, just over half the 1991 and 1999 estimates. In 1991, 18% of adults were regular continuous gamblers (people who gamble on continuous forms such as EGMs weekly or more often and who may have also participated this or less often in non-continuous gambling activities). In 1999, only 10% of adults were in this category and in 2012 the number fell further to six percent, a third of the 1991 estimate. This group is of particular interest because it includes the majority of people with gambling problems. People who participate in multiple gambling activities constitute another group at high risk for problem gambling.

In 2012, 14% of adults were estimated to be non-gamblers, defined as people who reported that they had never participated in any form of gambling. This was substantially higher than the 1991 (5%) and 1999 (6%) estimates. In 2012, 20% of adults did not gamble during the past 12 months. This means that most people (70%) in this category had never gambled and that a smaller percentage (30%) were people who had gambled in the past but not during the past year. In 1991 and 1999, of the much smaller number of people who had not gambled during the past six months (respectively 11% and 14%), more than a half were people who had gambled previously but not during the past six months. While the different timeframes and methodological variations might have had some influence on these results, it appears likely that the percentage of adults who have never gambled has increased substantially since 1999. The reasons for this are unclear and require further examination. It may, in part, reflect an increase in the proportions of recent migrants, Asians and Pacific Islanders in the population and a reduction in the number of younger adults who gamble. The percentage of adults who gambled in the past but not in the previous six to 12 months, on the other hand, appears to have remained much the same (6%-8%).

### ***Remote interactive gambling***

Remote interactive gambling includes participation in gambling activities via the internet using computers, smartphones and other wireless devices, interactive television and over the telephone, including text messaging. The New Zealand Gambling Act 2003 prohibits the provision of remote interactive gambling in this country, with the exception of gambling on sports and racing events provided by the New Zealand Racing Board, gambling conducted by the Lotteries Commission and sales promotions that are lotteries. It is not illegal for New Zealanders to engage in overseas gambling through the internet. Since 1995, when the first internet casino site was established, high-speed, low cost internet facilities have expanded globally. Access to the internet has increased markedly and New Zealanders, along with Australians and Scandinavians, are among the heaviest internet users.

Abbott & Volberg (1999) identified internet gambling and interactive gambling via television as key emerging factors driving the future evolution of commercial gambling internationally. Global internet gambling has grown rapidly, with estimated revenue of around US\$2.2 billion in 2000, increasing to US\$33 billion in 2011 (H2 Gambling Capital, 2011) and representing around eight percent of the total international gambling market. More rapid, sustained growth is likely as additional jurisdictions legalise online gambling, technology develops further, the internet becomes even more accessible, existing land-based gambling providers enter the market and consumer trust increases (Gainsbury, 2011).

Despite the expansion of remote interactive gambling this century, participation is surprisingly low. Past year participation appears to be highest in Scandinavian countries including Sweden (9% in 2008; 13% in 2009) (Abbott, Romild & Volberg, 2013; Svensson & Romild, 2011) and Denmark (11%) (Bonke, 2007), and in the United Kingdom. In the United Kingdom, the past year rate was six percent in 2007 and 14% in 2010 (Wardle et al., 2011). However, in the 2007 UK survey, the purchase of lottery tickets online was not included, whereas it was in the later study. Applying the 2007 definition to the 2010 results generated a participation rate of seven percent, a figure not significantly different to that from the earlier survey. A recent Australian survey obtained a rate of eight percent (Hing et al., 2014). In other countries studied, including Canada, United States of America, Germany, Singapore and New Zealand, rates ranged from only one percent to two percent (Svensson & Romild, 2011). Internet gambling research, and remote interactive gambling research more generally, is in an early stage of development (Hing et al., 2014). In the case of prevalence studies the use of different definitions compromises, among other things, valid comparisons being made across jurisdictions. The significant change in prevalence in Sweden from 2008 to 2009 suggests that internet gambling involvement may be accelerating in that country. Groups over-represented among those who took up internet gambling between 2008 and 2009 included males, younger adults and people who had lower levels of education, were Swedish born and were married or cohabiting with a partner.

Although off-shore internet gambling sites have been available for nearly 20 years and accessing them in New Zealand is legal, relatively few adult New Zealanders, less than one percent, contacted such sites during 2012. This has been the case since questions were first included in surveys 15 years ago. Of total self-reported gambling expenditure, again less than one percent was spent on off-shore sites. The large majority of people who said they most preferred this type of gambling also said that their overall gambling participation had decreased during the past 12 months. It is unclear what this means. It could be largely a consequence of people who prefer internet gambling being more likely to participate heavily in gambling activities generally and to be at-risk or problem gamblers. Heavy gamblers and at-risk gamblers more often decrease their gambling participation over relatively short timespans than both people who gamble less intensively and problem gamblers (Statens Folkhalsöinstitut, 2012). Less than a

fifth of past year internet gambling participants took part weekly or more often. It might be the case that a number are experimenting with this way of gambling and do not take it up on a regular basis. These and related matters will be explored more fully in the 12 month incidence study and future assessment waves. This extension of the study will provide repeat 12 monthly cross-sectional assessments of participation changes in the adult population. It will also enable prospective examination of change over time in individuals' participation and factors that influence change and stability.

While less than one percent of adults accessed overseas internet gambling sites in the past year, more used the internet to buy Lotto (5%) and Keno (0.7%) tickets. In addition, three percent of adults bet on horse or dog races via telephone, online or by interactive television and two percent used these methods to bet on sports events. In the 1999, 2000 and 2005 New Zealand studies all forms of internet gambling were combined for the overall estimate, which in all cases was around or less than one percent. The great majority of these people used the internet to access a New Zealand organisation. Indeed, in 2005, only one participant participated with an overseas organisation and that was to bet on sports events. This means that since 2005, while less than one percent of adults gambled online with overseas sites in 2012, the number has probably increased. It also means that there has been a substantial increase in the use of the internet, telephone and interactive television to engage in horse and dog race and sports betting and to purchase lottery products. Further analysis is required but it appears that if all forms of gambling are included, the past year estimate is around eight percent to nine percent, falling to around four percent to five percent if Lotto and Keno are excluded. This is somewhat lower than in Sweden and the United Kingdom and very similar to findings from the most recent Queensland, Australia gambling survey (Department of Justice and the Attorney-General, 2012). In that study, 7.5% of adults were estimated to have gambled using the internet during the past year. Just less than one percent was estimated to use the internet to play casino games or poker for money. These findings are very similar to those from the more recent Australian national study (Hing et al., 2014).

For most activities that are available online and offline, including Lotto, most participants took part offline. However, in case of Keno, poker, horse and dog race and sports betting, relatively large majorities engaged online. Many of these people will have accessed these activities offline as well as online. Further analysis is required to examine potential differences between people who exclusively take part online with those who take part online and offline and with those who take part entirely offline. Some research suggests that people who take part online and in other ways have higher intensity involvement and are more likely to be problem gamblers (Hing et al., 2014; Wardle et al, 2011).

Only a small number of studies have compared samples of internet and non-internet gamblers to identify potential differences (MacKay & Hodgins, 2012). From these studies, males, younger age and those with greater gambling frequency were more likely to participate online. The 2005 New Zealand survey also found males more often participated. In the present study, adults who gambled using overseas internet sites did not differ by gender, ethnicity or most other socio-demographic characteristics considered. They were, however, more likely to be aged less than 35 years than over 44 years, and reside in a household earning over \$80,000 per annum rather than in a household earning up to \$20,000 per annum.

### ***Gambling type games not for money***

This topic was included in the survey because there is growing involvement in gambling-type games on the internet that do not involve money or prizes. These include Fantasy Football and

Virtual Rugby, internet bingo, internet poker, online casino games and skill games such as mah-jong and backgammon, among others. The extent of this involvement was not known in New Zealand and is of further interest because participation in these activities is thought to play a role in recruiting participants into online gambling, and gambling in other settings, for money. Relative to the number of adults gambling on internet sites, a large number (17%) took part in activities of this type. Additionally, relative to all forms of gambling, a large proportion of people (nearly half) who took part in the past year did so weekly or more often. High participation rates were found for some socio-demographic groups including males, Māori, young adults and people with school qualifications or higher. People with no religion, Catholics and people living in households of five or more also had higher rates than one or more comparison groups in the same category. Previous studies have found that some of these groups have high rates of problem gambling. In the present study and its longitudinal extension, participation in gambling-type games will be examined further in relation to gambling, including at-risk and problem gambling.

### ***Participant changes in past year gambling participation***

The examination of changes in gambling involvement over time, including people who stop participating in particular or all forms of gambling, will be the major focus of the 12 month incidence study and its subsequent extension to 24 and 36 months. Understanding transitions between different gambling states including non-gambling, infrequent gambling, regular gambling, at-risk gambling and problem gambling is best investigated prospectively by reassessing the same people over time. Relevant information can be obtained by asking people about their past histories of gambling involvement, albeit that this information will be subject to recall and other forms of distortion, especially if the period of time extends to a number of years (Abbott, Williams & Volberg, 1999).

In the present study, participants were asked whether or not they thought their overall level of gambling involvement had changed during the past 12 months and, if so, why. Most people (79%) considered that their involvement had stayed much the same. Substantially more (16.5%) considered it had decreased rather than increased (4.5%). A similar question was asked in the second phase of the 1999 national survey involving in-depth face-to-face interviews with 256 of the 6,452 phase one participants (Abbott, 2001). It differed in that it related to self-assessed changes over five years rather than over one year.

In the 1999 study, 53% considered that they had maintained their previous level of participation, 28% considered that it had decreased and 19% considered that it had increased. The higher degree of change in the 1999 study is probably mainly due to the longer five-year time-frame. It is interesting that in both studies substantially more people believed that their gambling involvement had decreased than increased. In the 1999 study, there was no difference between males and females with respect to participation staying much the same. However, three times as many males as females reported a decrease than an increase whereas, in the case of females, the same numbers decreased and increased. At the time, it was considered that this finding was consistent with other information suggesting that during the 1990s, relative to males, females had increased their gambling involvement. This 'feminisation' of gambling was associated with the introduction of EGMs and casinos in New Zealand and a number of other jurisdictions (Abbott, Romild & Volberg, 2013; Delfabbro, 2008). In the present study, there is no difference between males and females, suggesting that they are now more similar in this regard.

In the present study, as in the 1999 study, patterns of participation were less stable for younger adults than for their older counterparts. While substantially more people reported decreases than

increases in all age categories, the relative difference increased with age. Compared to European/Other and Asian participants, Māori and Pacific people more often reported changes. The four ethnic categories did not differ with respect to increased gambling (range from 4.4% - 5.1%). The differences were with regard to larger numbers of Māori and Pacific people indicating that their gambling had decreased during the past year. Just under a quarter in both groups said their gambling had reduced. Māori also reported higher levels of change than Europeans and people of other ethnicities in 1999; however, in that study, they somewhat more often reported increased rather than decreased participation. The number of Asian and Pacific participants in the 1999 study was not large enough to meaningfully assess changes in these groups.

Changes in gambling involvement were also related to some of the other socio-demographic measures considered. Relative to people outside the paid workforce, employed participants more often reported increased participation and unemployed participants more often reported decreased involvement than those from other labour force status groups. People in the lowest household income group also more often reported decreased involvement than those in the highest group. Young adults, Māori and Pacific people, and unemployed people are also more likely than other groups to be on very low incomes and low income may be an important factor in reducing gambling involvement.

Reported changes in gambling involvement were also considered in relation to gambling participation, gambling expenditure and preferred gambling activity. Infrequent gamblers and regular non-continuous gamblers were the most stable groups, with around three-quarters reporting that their gambling involvement stayed the same. Regular continuous gamblers were somewhat less stable, with around two-thirds staying the same. While similar in terms of stability, infrequent gamblers were significantly more likely than regular non-continuous gamblers to say that their gambling had decreased. Similar percentages of infrequent and regular continuous gamblers reported decreased participation. In contrast to those in the other two categories, however, significantly more regular continuous gamblers reported increased participation. Of the regular continuous gamblers who reported changing, 40% increased their participation, compared to 10% of infrequent gamblers and 30% of regular non-continuous gamblers.

Low average monthly gambling expenditure was also associated with stability with around three-quarters or more of people in expenditure groups below \$50 staying much the same. This dropped to less than two-thirds for people in the two highest groups. Relatively more people in the latter groups than those in one or more of the lower income groups reported decreasing and increasing their participation.

People who did not have a gambling preference or who most preferred betting on horse or dog races, Lotto, raffles and lotteries, Keno, text games or competitions, housie or bingo, short-term speculative investments, or bets with friends or workmates had the most stable gambling patterns, with over 70% of people with these preferences reporting little or no change. Overseas internet gambling was associated with the most instability. Only 10% of people who most preferred this activity said that their gambling had stayed much the same during the past 12 months. Eighty-five percent said it decreased. It is unclear why the large majority of people who most preferred internet gambling decreased their overall gambling participation. This is an unexpected finding and given that the number of people with this preference was small it may be spurious. However, it is of interest given that one in six people who participated in internet gambling during the past year were problem or moderate-risk gamblers. It will be considered further when the 12 month follow-up data are analysed. Between 50% and 70% of people who

most preferred non-casino EGMs, casino table games or EGMs, sports betting, Bullseye, Instant Kiwi or other scratch tickets and Keno reported that their gambling had stayed much the same.

In 1999, people who said they most preferred betting on horse or dog races five years before they were interviewed had the most stability in their overall gambling participation over time. People with a preference for non-casino EGMs had the least stability, with the great majority who changed reporting that their participation had decreased. These findings are consistent with the hypothesis proposed by Abbott, Williams and Volberg (1999) that track (horse or dog race) betting may be more likely to persist over time, particularly for regular gamblers and problem gamblers, because of its diverse motivational base and the degree to which it is embedded in social networks. They also proposed that EGM participation is more likely to be transient. In the present study, people who preferred horse or dog race betting significantly more often than people with a preference for non-casino EGMs reported that their overall level of gambling had shown little or no change during the past 12 months. However, this referred to their gambling generally, not specifically to horse and dog race betting and EGM participation.

Overall, the findings suggest that more intensive gambling in terms of participation frequency and expenditure are transitory states for most people, even over relatively short periods of time. Patterns are more persistent for people who gamble less intensively. Most people who report changed participation indicate that their gambling has decreased. However, substantial numbers report increases, including some who are already participating at high levels of intensity. While it is unclear in behavioural terms what self-reported changes in gambling mean, the findings are broadly consistent with those from the more robust results from the Victorian and Swedish longitudinal studies. A major purpose of the present study including its longitudinal extension is to increase understanding of why some people progress to higher levels of intensity when others decrease their involvement and why some people who gamble heavily experience harm and become problem gamblers while others do not.

Some relevant information was provided by asking participants what they believed were the main reasons why their overall gambling participation had increased or decreased during the past 12 months. Just over a third said their gambling had increased because of friends and family. Other frequently mentioned reasons included having more money to spend and having more opportunities to gamble. The reasons most frequently given for decreased participation included change of priorities, wanted to save or spend money on other things, having less money to spend, lost interest and having less time or being too busy. Some of these reasons for increased or decreased gambling varied to some extent across socio-demographic groups. For example, unemployed participants and people without formal educational qualifications much more often said they had less money to spend than those in other groups. People in the latter group, as well as unemployed participants, less often reported having less time or being too busy as a reason.

Participants were also asked about life events during the past 12 months and whether they had led to increased or decreased gambling. Consistent with findings previously discussed, a major change in financial situation was most often mentioned in relation to both increased and decreased gambling. Troubles at work and the death of someone close were next most frequently mentioned as leading to increased gambling, followed by major illness to self or someone close, an earthquake or other natural disaster and moving to a new town or city. The death of someone close, major illness to self or someone close, an earthquake or other natural disaster and moving to a new town or city were also given as reasons for decreased gambling. Additional reasons included pregnancy or new family additions, a major change in living or work conditions, taking on a mortgage, loan or making a big purchase and moving house.

## **Gambling preferences and reasons for participation and non-participation**

Twenty percent of adults said they had not participated in any gambling activity during the past 12 months. As indicated, most of these people said they had never gambled. Groups with large percentages of non-gamblers included Asians, Pacific Islanders, migrants (especially recent migrants), Other Christians, Other religions, young adults, Auckland residents, people and households with low incomes, and students and others outside the paid workforce. Most of these groups also had relatively large percentages of non-gamblers in the 1999 national survey. However, in 1999 in contrast to 2012, the 65 years and older age group had significantly more non-gamblers than other groups including the youngest group. It appears that over time gambling has increased, relatively, among older people and decreased among younger adults. In the case of 18-24 year olds, non-gamblers increased from 13% to 26% and for those aged 25-34 years it increased from 11.5% to 19%. In contrast, for people aged 65 years and older there was a more modest increase from 20% to 23%. The increase in non-gamblers in Auckland is probably mainly due to changing demographics that include proportionately more Asians, recent migrants and young people.

Although some caution is required because of methodological differences, it appears that past 12 months participation has reduced across almost all socio-demographic groups. The major differences, namely face-to-face interviewing and a 12 month rather than six month frame for gambling participation in the present study, are likely to produce somewhat higher rates than the methodology used in 1999. Consequently, the actual decreases may have been greater than they appear. This type of reduction, across almost the entire socio-demographic spectrum, has also been found in Sweden (Abbott, Romild & Volberg, 2013). As in New Zealand, the largest decrease was among younger adults.

Moral or religious reasons were most often given for not gambling in the past 12 months. The next most often mentioned were not being interested or not having a desire to gamble, or considering it a waste of time or having other priorities, followed by believing that the chances of winning are not good or that you lose more than you win, and not being able to afford it. Religious or moral reasons were given more often by Other Christians, Other religions, recent migrants, Asians and Pacific people. Young adults less often gave this reason but more often said gambling was either a waste of money or that they had other priorities. Anglicans and people with high incomes also gave this reason more often.

In the 1985 to 2005 DIA surveys, 'not interested' was the reason most often given for not participating in gambling activities, followed by 'a waste of time/money'. The percentage of non-participants giving these reasons increased over time for almost all forms of gambling. Religious or moral reasons were next most often mentioned and stayed much the same over time. It is not possible to directly compare the DIA and current findings because in the DIA surveys non-participants in each gambling activity were asked about their reason for not taking part in that particular activity. In the present study, people who did not participate in any form of gambling during the past 12 months were asked why they did not gamble. In the DIA surveys, many of the non-participants in each activity would have taken part in one or more other forms of gambling. This may be why religious or moral reasons were mentioned more often in the current survey. Overall, it appears that attitudes towards gambling activities have changed somewhat and may be playing a part in reducing the number of people who take up gambling as well as contributing to decisions to reduce or stop gambling.

As mentioned, gambling activities are diverse and appeal to different people for a variety of reasons. Their potential to lead to at-risk and problem gambling also varies considerably. Most people who take part in gambling activities have a most preferred form of gambling. This is

especially so for problem gamblers, at-risk gamblers and regular gamblers, particularly regular continuous gamblers. Infrequent gamblers less often have a preferred form. Lotto was mentioned most often as the most preferred activity (17%), followed by raffles and lotteries, Instant Kiwi or other scratch tickets, betting on horse or dog races, casino gambling, non-casino EGMs and sports betting. Lotto was also the most preferred activity in 1999 when it was favoured by 26%. Other preferences were much the same in the two surveys other than an increase in preferences for other lotteries and raffles and a decrease in preferences for betting on horse and dog races.

Preferences varied quite a lot across the gambling intensity and socio-demographic groups. For example in the case of gender, males more often favoured card games and sports betting whereas females more often favoured Instant Kiwi or other scratch tickets. Their other preferences did not vary. Relative to non-problem gamblers, problem and moderate-risk gamblers much more often most preferred EGMs, casino gambling, card games and betting on horse and dog races. Not unexpectedly, gambling preference patterns are generally consistent with reported gambling participation.

As in previous gambling surveys, winning money or prizes was the predominant reason given for taking part in most gambling activities. This reason was given most often with regard to short-term speculative investments, Lotto, Keno, and text games or competitions. It was less often given with regard to raffles or lotteries, card games and betting with friends and workmates. In the DIA surveys, for most gambling activities there was a strong trend over time for this reason to be given more frequently. In some cases the change was large. For example, for casino gambling it increased from 38% in 1995 to 58% in 2005 and for Keno it increased from 64% in 1995 to 84% in 2005. This trend continued in the present study. Increases were evident for seven of the eight gambling activities considered in the 2005 DIA report. Some of the increases were substantial. The average for the eight gambling activities considered in the 2005 DIA report was 60%. The average for the same activities in the present survey is 75%. The 2005 DIA report does not provide confidence intervals so there is uncertainty about whether some of the apparent increases related to particular activities are significant or not. However, the current data predominantly show a continuation of a trend that runs across surveys conducted over a 27 year period and the average shift from 60% to 75% is likely to be highly significant.

A review of relevant surveys conducted in the United States since 1980 (Volberg, Toce & Gerstein, 1999) found that gambling to win money, as a reason for gambling, had increased significantly over time. The review also concluded that “Americans in the 1990s appear to be gambling less for entertainment value and more as though gambling were a non-salaried job like day trading or selling real estate” (p.10). While the validity of this interpretation is uncertain, the findings do suggest that gambling may be playing a different role in many peoples’ lives than it did previously.

Although the 2005 DIA and current survey findings are consistent with the conclusion that more people are gambling to make money than in the past, they do not show that people are gambling less for entertainment value. To the contrary, across all eight forms of gambling considered in the DIA surveys, the percentage of people giving this reason increased, in some instances markedly. Housie increased from 29% to 60% and non-casino EGMs increased from 48% to 60%. When we consider the first time that each activity is included in a survey, the average across the eight activities is 30%. The average increased to 45% in the 2005 survey. As with the increase in gambling to win money, this increase is likely to be highly significant. Relative to 2005, in 2012 for six of the eight activities there were reductions in the percentage of people who gave this reason, albeit that in some cases the changes are small and unlikely to be significant. There were increases for two activities, namely betting on horse and dog races and

sports betting. The average across the eight activities is 42%. Consequently, while there may have been some change in relation to particular activities, overall it appears that there has been little or no change since 2005 and that gambling for entertainment remains much more common than was the case during the 1980s and 1990s.

For six of the eight activities included in the 2005 DIA survey, winning money or prizes was the reason most often given for participating. The exceptions were casino and non-casino EGMs, where slightly more participants said they gambled for entertainment. In the current survey, winning money or prizes was the reason most frequently given for participating in all eight. Although there was little or no change in the proportion of people saying they played EGMs for entertainment, as mentioned, there were increases in the proportion who said they did so to win.

There are some forms of gambling mentioned in the current survey where reasons other than winning money or prizes were mentioned more often. For card games and bets with friends and workmates, entertainment and excitement or challenge were mentioned more than winning. In the case of card games, being with people/getting out of the house was also mentioned more often. While not mentioned quite as often as winning, in the case of housie or bingo, betting on horse and dog races, sports betting, casino table games, casino and non-casino EGMs and overseas internet gambling, substantial proportions mention entertainment and excitement and challenge. To be with people and/or get out of the house is quite often mentioned in relation to housie or bingo and playing cards for money. For raffles and lotteries supporting worthy causes was mentioned far more often than winning.

## **Expenditure**

In 2012, average reported annual gambling expenditure was \$853 and approximately half of adults said they spent \$500 or less. When adjusted for inflation, reported expenditure is higher in 2012 than in 2005 and previous surveys. Since 1995, there have been increases in those reporting no gambling expenditure and in 2012 there were increases in the percentages of people spending larger sums. In recent surveys there has also been an increase in expenditure by people who report participating in a large number (seven or more) of different types of gambling.

Considerable caution is required when interpreting self-reported gambling expenditure over time or across studies. In part this is because the way questions are phrased has a significant impact on the responses given and questions vary considerably across studies. In the present instance, similar questions were used in the DIA surveys and NGS, although there were some differences in the way expenditure was calculated and some forms of gambling were not included in the DIA surveys. It also needs to be noted that self-reports of expenditure generally do not correspond to actual, official gambling expenditure. In part this is because official expenditure includes expenditure by non-residents. This inflates the figures, considerably in the case of some gambling activities and in jurisdictions with large numbers of tourists and visitors. Furthermore, as Abbott & Volberg (2000) noted, the degree of correspondence between self-reported and actual expenditure varies for different types of gambling. In part, this difference probably occurs because people interpret questions differently, for example some respond by giving accounts of their net expenditure (losses) when others provide accounts of their total expenditure, without deducting winnings (Blaszczynski, Dumlao & Lange, 1997). In the case of Lotto and other lotteries for example, expenditure estimates are likely to be highly inflated because most respondents do not factor in winnings which occur rarely and are not 'captured' within the time frame of the question. The time frame used in the present and DIA surveys is more appropriate in this regard for most other forms of gambling. Participants are probably

much more likely to deduct session wins and report net expenditure. However, self-reported EGM and casino expenditure are still considerably under-reported in the present study.

As mentioned in the introduction, total official gambling expenditure has remained fairly constant since 2004 at around \$2 billion per annum. However, from 2004 to 2012 it reduced by about a fifth in inflation-adjusted terms. This appears to be at odds with the finding of higher inflation-adjusted self-reported expenditure in the present survey relative to 2005. However, as mentioned previously, expenditure self-reports and official expenditure (participant losses) are measuring somewhat different things and seldom coincide. Caution should be exercised in interpreting higher reported expenditure as an increase in expenditure over time. First, official expenditure includes expenditure by tourists and other non-residents. The extent of this and variations over time is unknown. Second, the proportion of official expenditure accounted for by the New Zealand Lotteries Commission products increased since 2004 (from 14% to 20%) and the proportion accounted for by non-casino EGMs decreased (from 51% to 43%). As indicated earlier, self-reported expenditure on Lotto and other lottery products is much higher and self-reported EGM expenditure is much lower than corresponding official expenditure. This changed could be expected to increase overall self-reported expenditure over time. Third, and probably most significantly, self-reported expenditure on a number of gambling activities was not included in the DIA surveys. While participation in informal card games, bets with friends and workmates, raffles and off-shore gambling is reported, expenditure on these activities does not appear to have been included in the calculation of overall self-reported expenditure. In the present survey these activities accounted for around a fifth of self-reported expenditure. Had they been included in the DIA surveys, overall expenditure would presumably have been increased by a similar amount. Given these considerations it is highly likely that the apparent increase in self-reported expenditure from 2005 to 2012 is a methodological artefact. 'Actual' gambling expenditure includes both official and unquantified informal and offshore gambling. Consequently it is not known what actual expenditure of adult New Zealanders was in 2012 or in previous years. However, if short-term speculative investments are excluded, the large majority of expenditure is almost certainly on the main gambling categories that are reported by the Department of Internal Affairs. The reality is that this form of expenditure, overall, has decreased steadily in inflation-adjusted terms throughout the past decade. This was especially the case for expenditure on non-casino EGMs. Spending on horse and dog race betting and casino gambling has remained much the same.

### **Gambling participation and expenditure differences within groups**

In the present survey, as in previous studies, there is considerable variation across different population sectors with regard to the particular gambling activities they take part in and the intensity of their participation, as measured by frequency of involvement and self-reported expenditure. These differences are of interest in their own right and also because involvement, especially high intensity involvement, in some forms of gambling is associated with loss of control and gambling-related harms including problem gambling. As mentioned previously, regular participation in continuous forms including EGMs, casino table games and horse and dog race betting is strongly associated with problem gambling. Problem gamblers, while more frequently having a most preferred form of gambling than non-problem gamblers, also much more often take part in multiple gambling activities.

Overall, males and females had similar levels of past year gambling participation. However, there were some differences with respect to participation in particular activities and males reported spending more. Males more often take part in a number of continuous gambling activities and females more often purchase raffle or lottery tickets, Instant Kiwi and play house

or bingo. In the earlier DIA surveys, slightly more males than females gambled. In the last 2005 survey there was no gender difference. The current findings with regard to particular activities engaged in, and expenditure, are similar to the 2005 findings.

People in the youngest and oldest age groups reported gambling somewhat less than those in other age groups and those in the oldest group also reported somewhat lower expenditure. Younger adults also took part more often than other adults in a number of continuous gambling activities including EGMs, casino table games, cards and sports betting. The youngest group had much lower levels of involvement in Lotto and raffle tickets and other lotteries.

Māori and European/Other ethnic groups had the highest level of past year participation, followed by Pacific Islanders and Asians with the lowest. A number of differences with respect to participation in particular gambling activities were found. Māori and Pacific Islanders had the highest expenditure and European/Other and Asians the lowest. In the 2005 DIA survey, Pacific Islanders had similar expenditure to the general population and Asians had lower expenditure. It appears that expenditure in both of these groups, in both absolute and relative terms, has increased substantially since 2005.

Most people who gamble take part in only one or a few activities and the majority of people who participate in a particular activity do so less than monthly. The exception is Lotto, where just over half of people who said they took part in the past year reported doing so monthly or more often. In the present study, regular continuous gamblers reported spending substantially more on gambling than infrequent and regular non-continuous gamblers. People who participated in multiple gambling activities, relative to those who participated in one or a few, also had very high expenditure. While gambling session lengths were not examined generally in the present study, this matter was considered in relation to EGMs. It is of interest that the large majority of regular casino EGM participants reported long session lengths whereas only a minority of regular pub and club EGM participants reported long sessions. Previous research has shown that long average session length is strongly associated with problem gambling (Abbott & Volberg, 2000). This finding might indicate that a higher proportion of regular casino EGM participants are problem gamblers.

Some groups had relatively higher percentages of regular continuous gamblers, for example Māori, Pacific Islanders, older adults, New Zealand born, people with no formal qualifications and unemployed people. With the exception of older adults, these groups also had relatively high overall gambling expenditure. With the exception of New Zealand-born and older people, these groups contain large proportions of people on low incomes. They are also more likely to reside in neighbourhoods with heavier concentrations of EGM venues and TABs. Other groups had much lower levels of regular involvement and expenditure. As in some previous New Zealand studies, Pacific Islanders had a bimodal distribution with relatively large proportions of people in the high and low participation/expenditure and non-gambling categories. In addition to Pacific Islanders, the youngest and oldest age groups, Asians, migrants (especially recent migrants), people outside the paid workforce other than unemployed people, Other Christians, Other religions and low income all had relatively large proportions of non-gamblers.

Pacific Islanders are of particular interest in that, along with Māori, they have high reported average gambling expenditure. They differ from Māori in that a much larger proportion does not gamble. This means that the subgroup of Pacific Islanders that gambles frequently has very high expenditure. While Asian reported gambling expenditure is comparable to European/Other expenditure and lower than Pacific Islander and Māori expenditure, a third of Asian adults do not gamble and, relative to other groups, less also do so regularly. This suggests that, as with

Pacific Islanders, there is a subgroup that gambles very intensively. This also appears to be the case, to varying degrees, for the other low participation groups.

Authors of the present report have completed a number of studies on gambling and problem gambling among Pacific Island adults and children. They are reported in a number of technical reports and articles and include accounts of findings from the ongoing Pacific Islands Families Study (PIF) (Bellringer et al., 2005, 2006, 2008, 2012, 2013; Perese et al., 2009; Schluter, Abbott & Bellringer, 2008; Schluter, Paterson & Feehan, 2007). This prospective multidisciplinary child and family health and development study has followed a birth cohort of over 1,000 children since 2000 and collected information, including gambling and related information, from mothers, fathers and, in recent years, the children (Paterson et al., 2006, 2008). These and related studies will be considered in relation to present and future NGS findings in subsequent reports and other publications.

### **Systems and special skills and methods to stop/reduce gambling**

Questions were included in the survey regarding the use of systems and special skills to improve chances of winning because of research showing that a variety of such methods are used by problem gamblers and it is considered likely that they play a role in sustaining intensive participation and contributing to loss of control and problem gambling (Blaszczynski & Nower, 2007; Hodgins & Holub, 2007; Mackay & Hodgins, 2012). They include erroneous beliefs about chance and cognitive distortions that are also implicated in problem gambling and are a target for some forms of therapy. The main value of this information will be in the prospective extension of the study. The 2000 and 2005 DIA surveys also obtained some information on this topic. While most people do not report using these methods, they are frequently reported in relation to short-term speculative investments and by about one in five people who participate in sports betting, horse and dog race betting and casino table games and by one in ten people who play cards for money. These are forms of gambling that can involve an element of skill. While less frequently reported, substantial numbers of participants use a variety of methods in relation to other gambling activities including those driven entirely by chance such as Lotto and EGMs. In the case of Keno and perhaps Lotto and other forms, it appears that their use has decreased since 2005. This requires further investigation. It may indicate increased public awareness that they cannot alter chance-driven activities by superstitious and other beliefs and actions.

Just less than a third of adults who had taken part in gambling activities during the past year said they had used one or more methods to regulate their gambling. Most used one method only, predominantly setting a money limit, and a large majority considered these methods to be effective in stopping them from spending too much money and/or time gambling. They were used more frequently by people who participated regularly in continuous forms of gambling and spent larger amounts of money. Adults in the lowest gambling expenditure group more often mentioned that their attitudes or financial situation constrained their gambling participation. These beliefs included regarding gambling as a waste of time or against their religious beliefs. They more often said they could not afford to gamble and that they give greater priority to other things. While it appears that people who participate more intensively in gambling activities that are associated with at-risk and problem gambling use these methods more often than other gamblers and believe that they are effective, it is not known to what extent this is actually the case and whether or not methods of this type can reduce the probability of losing control and experiencing gambling-related harms. These and related questions can be more adequately addressed in the longitudinal extension of the study.

## **Methodological considerations**

Given the importance of establishing reliable estimates of gambling participation, attitudes towards gambling, problem gambling and a variety of other attributes, it was essential that a sound national probability survey was conducted. This was also necessary to provide a base for the 12 month incidence study and longitudinal extension. To this end, a large nationally representative sample with a high response rate was sought. In addition, given the interest in gambling within major ethnic groups, there was a requirement to oversample these groups.

## **Sample size, survey design and reliability of estimates**

The majority of gambling and problem gambling prevalence studies conducted world-wide have used small samples, often between 1,000 and 2,000 participants. While studies with small samples may provide reasonable estimates for major forms of gambling participation and some other attributes of interest, estimates of less common phenomena including problem gambling have large errors of measurement and wide confidence intervals. Among other things, this means there is considerable uncertainty regarding the actual estimates and numbers of people involved in the total population. This deficiency is further amplified when estimates are sought for sectors of the population including particular socio-economic and ethnic groups. Furthermore, it can severely limit or preclude examination of relationships between variables, for example analyses to identify risk factors for problem gambling. Published accounts of these studies, including reports on some previous New Zealand gambling surveys, do not always provide confidence intervals. However, given their small sample sizes, it is highly probable that they will often be very wide and their findings unreliable.

A sample of approximately 6,000 was sought in the present survey. The attained sample was 6,251. While substantially larger than most gambling surveys, including those in the five-yearly DIA surveys from 1985-2005 (Department of Internal Affairs, 2007), it is not as large as samples in some recent surveys conducted in Australia and elsewhere. It is also somewhat smaller than the NZHS samples (Ministry of Health, 2006; 2009; 2012). However, the previous large gambling-specific surveys, including recent Australian studies and the 1991 and 1999 New Zealand national studies (Abbott & Volberg, 1992; 2000), have predominantly used telephone interviews. The NGS sample included 1,164 Māori, 830 Pacific and 827 Asian participants. This allowed aspects of gambling and problem gambling to be examined in greater detail in these groups than would have been the case if measures had not been taken to boost their numbers. The down-side to this, however, is that when considering attributes for the adult population as a whole, it was necessary to weight these inflated proportions back to their actual population proportions. This resulted in a reduction in overall statistical power.

Until relatively recently, many gambling surveys did not take sample complexity into account when calculating confidence intervals. Procedures that are appropriate for simple random samples were applied, indicating greater precision than was actually the case. Adjusting for sample complexity is important for a variety of reasons. For example, when comparing studies to see whether or not there have been changes in gambling participation or problem gambling over time, incorrect calculation of confidence intervals can lead to the conclusion that statistically significant changes have occurred when, in fact, they have not. Failure to take account of complexity also produces misleading results when statistical analyses are undertaken. In the present study, a variety of sample design features including the oversampling of major ethnic groups meant that the sample was highly complex. Additionally, when proportions approach zero, as is the case with problem gambling in the NGS and other general population

surveys, conventional ways of calculating confidence intervals are not adequate. In this study, appropriate procedures were used to account for both design complexity and small proportions.

### **Response rates**

The NGS response rate, conservatively defined, is 64%. The participation or consent rate, namely the percentage of eligible participants contacted who agreed to take part, is 71%. The response rate, in contrast to the participation rate, includes situations where interviewers were unable to contact prospective participants. This rate is high relative to most gambling surveys conducted globally during the past decade (Williams, Volberg & Stevens, 2011). For example, the response rate for the recent Swedish national survey was 54%. This study was conducted by the Swedish National Institute of Public Health in association with Statistics Sweden (Abbott, Romild & Volberg, 2013; Romild, Volberg & Abbott, in press). The 2008 Victorian state-wide gambling survey obtained response and participation rates of 43.5% and 59% respectively (Hare, 2009). Corresponding rates from more recent South Australian and Queensland surveys are 32% and 53% (The Social Research Centre, 2013) and 44% and 78% (Department of Justice & Attorney-General, 2012). These rates are all moderately high relative to those of many other recent gambling studies.

In the Swedish survey, names were selected from national registers and contact was made via telephone or, failing that, by mail. Most interviews were conducted by telephone. The Victorian study used random digit dialling of land-line telephones and all interviews were conducted by telephone. The South Australian survey employed a dual-frame sampling methodology using both landline and mobile telephone numbers. This approach was taken in recognition of the increasing number of people who are no longer contactable by residential landline telephones, approximately one in five South Australian adults, and that this group includes disproportionate numbers of people who are more likely to experience gambling problems. In the South Australian study, for example, the mobile telephone frame included a greater proportion of males, young people, people who mainly use a language other than English, people in financial stress, smokers and people who use alcohol and marijuana while gambling. Participation rates in most gambling activities were also higher in this frame. These findings suggest that only interviewing people contactable by landline telephones will result in biased survey estimates. However, conducting dual frame surveys incorporating mobile samples presents some significant challenges and, as in the South Australian case, response rates can be low. As previously discussed, reasons for using face-to-face recruitment and interviewing in the present study included the expectation that it would produce a higher response rate and a more representative sample than alternative methodologies would.

Abbott and Volberg (2000) noted that while gambling surveys with high response rates are more likely to produce samples that are representative of the populations they are drawn from and to produce more accurate results, paradoxically this also raises a potential problem. Are 'apples' being compared with 'apples' when findings from surveys with high response rates are being compared with those with low rates? Low response rates per se, arising from low contact and/or high refusal rates, are only important if they bias survey results. Bias will occur if people omitted from surveys differ in relevant ways from those who are included and if these differences are not corrected by weighting the sample to bring it more into line demographically with the population from which it was drawn. In the case of gambling and problem gambling surveys, a major issue is whether or not non-participants and participants differ with regard to patterns of gambling participation and rates of problem gambling. This is important both with regard to assessing the accuracy of estimates from a particular survey and when comparing findings across studies, especially when these studies have very different response rates.

It was long assumed that regular continuous gamblers, including those at high risk, and problem gamblers are over-represented among people who are not contacted and who decline to take part in gambling surveys. It now appears likely that both this group and people who do not gamble or gamble infrequently are typically under-represented in gambling surveys; the latter group perhaps more so when these surveys are presented as gambling rather than health or lifestyle studies. In the NGS pilot study, as in the earlier 1999 national survey (Abbott & Volberg, 2000), a number of people with little interest in gambling indicated that they did not want to take part. Subsequently, in both surveys, potential participants were advised by interviewers that their views were sought and important, irrespective of their level of gambling involvement or interest. As discussed previously, the use of face-to-face residential recruitment and interviewing in the NGS increased its comparability with the methodology used in the DIA gambling surveys and in the more recent New Zealand surveys including the NZHSs that included problem gambling measures.

### **Sample composition**

The NGS overall response rate is satisfactory and the achieved sample is comparable to that of recent high quality general population surveys conducted in New Zealand including the NZHS. As in these surveys, females and older adults are somewhat over-represented and younger adults under-represented. However, the under-representation of young adults is substantially less than in the 1999 national survey and in a number of more recent surveys, particularly those that used telephone recruitment and interviews.

The adjusted response rate is virtually the same as the unadjusted rate, indicating that there are minimal differences in rates across the major demographic groups. Examination of the achieved sample, taking into account the selection weights and expected sample based on Census data, indicate highly satisfactory coverage of the major non-European/Other ethnic groups. This was not the case in the 1999 national survey where response rates were lower for these groups.

Subsequent sample weighting, including substantial weighting up the European/Other group and weighting down of the Māori, Pacific and Asian groups, partially corrects for likely effects of sample departures from expected population proportions. However, as mentioned, it cannot correct for potential differences between the sample and the population that are unknown and not corrected for in the demographic weighting.

### **Conclusion**

Internationally it is widely believed, and numerous literature and official governmental reviews have concluded, that the increased availability of gambling activities, particularly EGMs and other continuous forms, has led to higher levels of participation and gambling-related harm including problem gambling. However, it has become increasingly clear that while there are links between availability, participation and harm, these relationships are complex and are influenced by many other factors (Abbott, 2006; 2007; Abbott et al., 2013). In New Zealand, gambling participation and expenditure increased markedly during the late 1980s and 1990s in association with the introduction of new forms of gambling including Lotto, Instant Kiwi, EGMs and casinos. Official gambling expenditure increased almost seven-fold from 1988 to 2004 and has since remained much the same, although during this period it has reduced by approximately a fifth in inflation-adjusted terms. While new forms and ways of accessing gambling activities have continued to be introduced and promoted, non-casino EGM numbers and venues have reduced to around the levels they were at in 2000. Initially some groups including males, young

adults, Māori and unemployed people had higher levels of involvement. Over time, participation reduced in some groups and increased relatively in others as gambling became more widely available and acceptable. While substantial participation and expenditure differences remain, differences between a number of groups, including males and females, have diminished.

Orford (2005, p.1,236) asserted “Complex and multifactorial though causation is, the more the product is supplied in accessible form, the greater the volume of consumption and the greater the incidence and harm. I doubt there would be many who would argue with that basic public health law when it comes to the supply of alcohol, tobacco and other drugs of various kinds. It would be very surprising indeed if that general rule was not also true for gambling.”

While a body of gambling research supports Orford’s assertion, others have noted that this is particularly the case during early years of increased exposure and that over time, adaptation typically occurs and participation and problems level out or decline, even in the face of increasing availability (Abbott, 2006; Abbott, Williams & Volberg, 1999; Shaffer et al., 2004). While relatively little studied, adaptation is thought to involve a variety of changes in individuals, groups and societies. This includes the novelty of new forms of gambling wearing off, greater knowledge and use of ways to moderate participation, increased understanding of the risks associated with various types of gambling and the increased availability of prevention and treatment services for problem gamblers. Regulatory and wider public health measures are also considered to play a role. The gambling legislation that took effect in 2004 was predicated on the belief that regulatory and public health measures could reduce the health, economic and social costs associated with gambling provision and participation. Many of the findings from the current and previous surveys outlined in this report are consistent with the adaptation hypothesis and advance understanding of adaptation in a national population. It is unclear, however, which of these various factors including new regulatory and public health measures were the most important.

Overall, past year adult gambling participation reached a peak during the mid-1990s, reduced until 2005 and remained about the same since. In the current survey, relative to surveys in 1991 and 1999, proportionately more adults reported that they have never gambled in their lives. The proportion of people who gambled in the past but who do not gamble currently has remained about the same. The main reason for the decrease in past year participation is an increase in the proportion that has never gambled. High proportions of Asians, Pacific Islanders and recent migrants are in this category, as well as Other Christians and people of other religions. In recent surveys, the proportion of young adults who have not gambled in the past 12 months has doubled since the 1990s, despite the greater variety and availability of gambling activities.

Since 1991 there has been a marked reduction in weekly or more frequent participation, especially in continuous gambling activities including horse and dog race betting and EGMs. In 2012, weekly or more frequent participation in continuous forms was a third of that in 1991. With the exception of unemployed people, lower rates were found across all demographic groups. Smaller and probably non-significant reductions were evident for Pacific Island and Māori adults, adults without formal education and people aged 65 years and older. Regular participation in these forms of gambling is strongly associated with gambling-related harm. These annual and past week reductions began during the 1990s when EGM numbers were increasing rapidly and casinos were being established. Since 2005, while past year and weekly participation continued to decrease for most of the more popular activities including non-casino EGMs, participation in casino EGMs and table games, horse and dog race betting, card games and sport betting either decreased slightly or remained much the same. Although internet access and overseas internet gambling sites have increased markedly, annual participation has remained

below one percent. However, overseas internet participation may be starting to increase and increased numbers have accessed local lottery, horse and dog race and sports betting online in recent years. Participation in multiple (four or more) activities also decreased considerably since the 1990s and moderately since 2005. As mentioned previously, participation in multiple gambling activities is also a risk factor for at-risk and problem gambling.

The foregoing findings are not consistent with the view that the more a product is supplied in an accessible form, the greater the volume of consumption. They suggest adaptation involving substantial reductions in regular participation in forms of gambling most strongly linked to problem gambling and somewhat more modest reductions in forms that have a weaker connection.

During the few years after the introduction of most new forms of gambling, moderate to high numbers of people said they participated out of curiosity. In subsequent years, at the same time that participation was decreasing, fewer people gave this reason for taking part. This suggests that novelty and its erosion over time may play a role in reduced participation. Over time there has also been some reduction in the use of systems or special skills to improve the chances of winning. Many of these methods involve erroneous beliefs, cognitive distortions and superstition. They have been shown to be associated with excessive and problematic gambling. A reduction in the use of such methods may indicate an increase in public understanding of gambling activities as predominantly chance-driven and might somewhat reduce the risk of participation leading to loss of control and excessive involvement. It is not known whether the methods that participants considered to be effective in moderating their participation are, in fact, effective. It is also not known whether or not their use has increased. This requires further investigation.

Substantially more people said that their overall gambling involvement had reduced during the past 12 months than said it had increased. Whether or not changes of this type and magnitude occur will be assessed further in the longitudinal extension of the study. However, the finding is consistent with those of some other studies which indicate high levels of change in gambling participation over time, even over relatively short intervals. Reported reductions were more common among gamblers who gambled frequently and had high expenditure. Reasons given included priorities changing, wanting to save money or spend it on other things, a loss of interest in gambling activities and having less time. Major changes in financial situation and other life events were implicated in both perceived reduced and increased involvement. Research has found that economic recessions can lead to reductions in some categories of gambling expenditure (Horváth & Paap, 2012). The New Zealand economy was affected by the global recession that commenced in 2008. While a number of people in the survey mentioned financial reasons for either decreasing or increasing their gambling participation during the past 12 months, the late 2000s depression does not appear to have had significant impact on overall official gambling expenditure in New Zealand. In inflation-adjusted terms, expenditure began to fall in 2005 and reduced at a similar rate during 2005-2008 and 2009-2012.

Participation has decreased, with more non-gamblers and substantially less regular gamblers in the population. While there has been some reduction in overall gambling expenditure, this means, among other things, that the smaller percentage of the population that participates regularly, particularly regular continuous gamblers, spends (loses) more than was the case in previous surveys. In part, this is reflected in the very large reported increase in expenditure on the part of people who participate in multiple gambling activities. Adults who participate weekly or more often on continuous forms are over-represented among Māori and Pacific Islanders, adults aged 65 years and older, and people who lack formal qualifications or are unemployed.

In the next two reports the gambling participation findings will be considered further in relation to gambling-related harm including problem gambling and public attitudes towards gambling.

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## APPENDICES

## Appendix 1: Sample design and respondent selection weights

### Sample design - sampling stages

#### *Primary sampling unit (PSU)*

The first level of sampling took place at the level of meshblock. The appropriate numbers of meshblocks were randomly sampled from each of the urban area strata from within each of the District Health Board (DHB) strata.

The number of meshblocks sampled from each DHB was weighted according to the dwelling incidence of Māori and Pacific People within the DHB. This reflects the approach taken in the 2006/07 New Zealand Health Survey. The intensity of this weighting is equal to the square root of the sum of the proportion of dwellings containing a person of either Māori or Pacific ethnicity.

The PSUs (meshblocks) sampled from each stratum were selected using a systematic procedure. Within each stratum the PSUs were sorted according to urban area classification. Each PSU was assigned a value ( $n_i$ ) equal to the running total of permanent, private, occupied dwellings within PSUs up to and including the PSU  $x_i$ , in that sorted order.

A skip step was calculated equal to  $N_s/m_s$ , where  $N_s$  is equal to the total number of permanent, private, occupied dwellings in the stratum and  $m_s$  is the total number of PSUs sampled from the stratum.

A random number was generated which lay between 0 and  $N_s/m_s$  (this is defined as  $rand_s$ ).

This number lay between  $n_{first-1}$  and  $n_{first}$ . It identifies  $x_{first}$  as being the first PSU sampled within the stratum. The remaining PSUs sampled ( $x_{second}, x_{third}, \dots, x_{final}$ ) are identified by repeatedly adding the constant  $N_s/m_s$  to the initial  $rand_s$ .

For example:

$$n_{second-1} < rand_s + N_s/m_s \leq n_{second}$$

$$n_{third-1} < rand_s + 2N_s/m_s \leq n_{third}$$

...

$$n_{final-1} < rand_s + (final - 1) N_s/m_s \leq n_{final}$$

The probability of selection for each meshblock was in direct proportion to the number of dwellings within the meshblock. This is described as PPS (probability proportional to size) sampling. This unequal probability of meshblock selection was necessary to compensate for the fixed cluster size of contacted dwellings carried out within each meshblock. The two factors ensured equal probability of selection for every dwelling within the DHB stratum.

Based on all 41,384 meshblocks, the average number of dwellings per meshblock was 35. Based on the two meshblock exclusions previously mentioned, and also the use of the PPS sampling method, the average number of dwellings in the meshblocks selected for the survey was expected to be larger, that is, approximately 57 dwellings per meshblock. Dwelling counts in

the meshblocks which could be selected for the survey varied from a minimum of nine, up to a maximum of 291.

### ***Secondary sampling unit***

Each meshblock is exactly described according to the streets, side of street and the portion of street which belong to the meshblock. The secondary sampling units are the private dwellings within the meshblock. There are two types of secondary sampling units.

1. Core dwellings: These are dwellings where all usual residents aged 18 years or older were eligible for selection. There were seven core dwellings sampled from each meshblock. The interval between each dwelling depended upon the total number of dwellings in the meshblock.

The number of core dwellings sampled in each meshblock varied somewhat, due to shrinkage or growth in the number of dwellings in each meshblock since the 2006 Census. In meshblocks with significant growth, a maximum of 10 dwellings was approached.

2. Screened dwellings: These are dwellings in addition to the core dwellings where a short 'screening interview' was conducted with a member of the household. This interview established the presence and/or absence of adults (i.e. residents aged 18 years or older) of Māori, Pacific or Asian ethnicities within each household. Any Māori, Pacific or Asian adults within these households were eligible to be interviewed. The Kish grid selection method described below in 'Respondent Sampling' was then used to randomly select an eligible respondent.

### ***Respondent sampling***

Within each dwelling all eligible respondents were identified. The names of all eligible respondents were listed in descending order of age onto a sampling (Kish) grid. The respondent or respondents who were asked for an interview were those whose name or names fell alongside predetermined indicators. The Kish grid selection method randomises the selection of an individual(s) for interview, from amongst those who are eligible within each dwelling.

### **Sample design - sample sizes**

#### ***Primary sampling units (PSUs)***

For the survey, 1,000 Statistics New Zealand meshblocks (PSUs) were sampled.

#### ***Secondary sampling units***

The number of core dwellings per meshblock was seven, as previously stated. The number of screened dwellings in each meshblock varied according to whether the DHB contained a higher or lower incidence of adults of Pacific ethnicity. Incidence is defined as the percentage of households in each DHB that contain at least one person aged 18 or over of Pacific ethnicity, according to Statistics New Zealand's 2006 Census data.

As the New Zealand average for this incidence is 5.0%, it was decided to use the high screening approach in DHBs where the incidence was higher than the New Zealand average. Five of the 21 DHBs have an incidence higher than the New Zealand average, and these ‘high screening’ DHBs are shown in the table below, along with the 16 DHBs in which the ‘low screening’ approach was implemented. The numbers of screened dwellings approached in each of the DHB areas is outlined in the table. In total, 430 meshblocks were selected in the five ‘high screening’ DHBs, and 570 meshblocks selected in the 16 ‘low screening’ DHBs.

Note the following distinctions in the table below:

- The total number of dwellings approached in each meshblock in the 16 “Low Screening” DHBs was 15. For example, in the Northland DHB, seven Core and eight Screened dwellings were approached. In these 16 DHBs, adults of Māori, Asian or Pacific ethnicity were eligible in the eight Screened dwellings. For clarity, note that this is not 24 (8 + 8 + 8) Screened dwellings.
- The total number of dwellings approached in each meshblock in the five “High Screening” DHBs was 33. For example, in the Counties Manukau DHB, seven Core and 26 Screened dwellings were approached. In these five DHBs, adults of Māori, Asian or Pacific ethnicity were eligible in the first eight Screened dwellings, and adults of Pacific ethnicity were eligible in the next 18 Screened dwellings (8 + 18 = 26). For clarity, note that this is not 42 (8 + 8 + 26) Screened dwellings.

### *Distribution of samples*

DHB No.	DHB name	Sampled mesh-blocks	Core dwellings	Screened dwellings			High/low screening
				For Māori	For Asian	For Pacific <sup>#</sup>	
01	Northland	48	7	8	8	8	Low
02	Waitemata	107	7	8	8	26	High
03	Auckland	102	7	8	8	26	High
04	Counties Manukau	116	7	8	8	26	High
05	Waikato	93	7	8	8	8	Low
06	Lakes	33	7	8	8	8	Low
07	Bay of Plenty	58	7	8	8	8	Low
08	Tairāwhiti	17	7	8	8	8	Low
09	Taranaki	25	7	8	8	8	Low
10	Hawke’s Bay	43	7	8	8	8	Low
11	Whanganui	18	7	8	8	8	Low
12	Midcentral	40	7	8	8	8	Low
13	Hutt	37	7	8	8	26	High
14	Capital and Coast	68	7	8	8	26	High
15	Wairarapa	10	7	8	8	8	Low
16	Nelson Marlborough	26	7	8	8	8	Low
17	West Coast	6	7	8	8	8	Low
18	Canterbury	88	7	8	8	8	Low
19	South Canterbury	9	7	8	8	8	Low
20	Otago	32	7	8	8	8	Low
21	Southland	24	7	8	8	8	Low
<i>TOTAL</i>		<i>1,000</i>					

<sup>#</sup> The final number of dwellings screened for Pacific respondents in the five high screening DHBs was determined by referring to custom statistics purchased from Statistics New Zealand. This number of screened dwellings is the same for all five DHBs.

Meshblocks in 22 of the 117 Statistics New Zealand Area Units in the Christchurch TLA (Territorial Local Authority) were not eligible for selection, due to the extent of damage in these Area Units caused by the Canterbury earthquakes. The meshblocks in these Area Units were excluded prior to the nationwide meshblock selection procedure. The extent of damage was

assessed by, and based on, a physical inspection of Area Units in the Christchurch TLA by NRB's Christchurch supervisor.

### Response rate calculations

As noted above, the response rate calculations use variables recorded on the sampling sheets by interviewers. The outcome of the final call to each sampled dwelling is the particular variable used in the response rate calculation. These outcomes are allocated to categories in the following manner for each of the PSUs in the sample,  $i = 1$  to 1,000.

Category	Outcomes
Interviews ( $a_i$ )	Interviews (I)
Not Eligible ( $b_i$ )	Not eligible (NE), Unavailable (U) <sup>#</sup>
Eligibility Not Established ( $c_i$ )	No reply (NR), Access Denied/No access (AD), <i>Household refusal (HR) in the screened sample</i> <sup>##</sup>
Eligible Non Response ( $d_i$ )	Respondent refusal (RR), Not available (NA) <sup>#</sup> , Appointment (APT), Language (L), Incapacitated (INC), Partial (P), Other (OTH), <i>Household refusal (HR) in the non-screened (core/main) sample</i> <sup>##</sup>

<sup>#</sup> The difference between these two outcomes (U and NA) is that Unavailable refers to usual residents who are living away from the household for the duration of the survey whereas Not Available refers to selected usual residents who are not available for the interview at the time of call by the interviewer.

<sup>##</sup> For non-screened (i.e. core/main) sample dwellings this outcome (HR) is categorised as Eligible Non Response ( $d_i$ ), and for screened dwellings this outcome is categorised as Eligibility Not Established ( $c_i$ ).

An estimate of the eligible households within the PSU is calculated.

$$a_i + d_i + \frac{c_i \cdot (a_i + d_i)}{(a_i + b_i + d_i)}$$

The response rate is the number of interviews achieved divided by the estimated eligible households. This is expressed by the following formula.

$$\frac{a_i}{a_i + d_i + \frac{c_i \cdot (a_i + d_i)}{(a_i + b_i + d_i)}}$$

This reduces, or simplifies, to the following:

$$\frac{a_i \cdot (a_i + b_i + d_i)}{(a_i + d_i)(a_i + b_i + c_i + d_i)}$$

The response rate for a group of PSUs is the average of the response rate for the individual PSUs, weighted by the estimated eligible households within each.

Weighted response rates are calculated by weighting the counts within each of the categories by the selection weights for dwellings within the PSU.

No.	Contact outcome	Code	Category	Frequency
1	Interview	I	A	6,251
2	Not Eligible	NE	B	11,223
3	Unavailable	U	B	244
4	No reply	NR	C	381
5	Access denied / No access	AD	C	571
6	Household refusal	HR	D or C	808
7	Respondent refusal	RR	D	1,590
8	Not available	NA	D	462
9	Appointment	APT	D	0
10	Language	L	D	177
11	Incapacitated (Infirm/Hospitalised)	INC	D	219
12	Partial	P	D	26
13	Other	OTH	D	19
	<b>Occupied Dwellings Visited<sup>#</sup></b>			<b>21,971</b>
	<b>Estimated Eligibles</b>			<b>9,807</b>
	<b>Response Rate (%)<sup>+</sup></b>			<b>63.7</b>
	Vacant <sup>##</sup>	V	**	1,211
	<b>Total Dwellings Visited</b>			<b>23,182</b>

<sup>+</sup> The response rate is calculated by dividing the number of interviews by the number of estimated eligibles.

<sup>#</sup> Occupied Dwellings Visited is the sum of the 13 contact outcomes listed above. Note that these are the occupied dwellings. The unoccupied dwellings (Vacant dwellings) have been listed separately - see the note below.

<sup>##</sup> Note that this contact outcome (V) is not included in either the response rate calculation or the calculation of (occupied) dwellings visited, but has been included in this table, for completeness.

Note that there is also one other potential contact outcome that can be recorded in surveys similar to the National Gambling Survey, called "out of frame" (OOF); this is also excluded from the response rate calculations. No households were recorded as OOF in the National Gambling Survey.

## Response rate - selection weights

The dwelling weights are calculated from the following variables.

$x_i$ : The Census 2006 of occupied dwellings.

$y_i$ : Estimate of the currently occupied dwellings, using the current enumeration count by the interviewer and the final outcomes from those dwellings approached for an interview.

$c_i$ : The number of dwellings approached for a core interview.

$s_i$ : The number of dwellings approached for a screened interview.

$n$ : The number of PSUs selected from each stratum.

$N$ : The number of PSUs within the stratum frame.

The selection weight for a dwelling within a stratum is the inverse of the probability of selection of that dwelling.

The probability of dwelling selection is calculated as follows:

$$\frac{n}{N} \cdot x_i \cdot \frac{c_i + s_i}{y_i}$$

The respondent selection weight uses two further variables to those required for the dwelling. They are as follows:

$e_c$ : The number of respondents eligible for the Core sample within the sampled dwelling.

$e_s$ : The number of respondents eligible for the Screened sample within the sampled dwelling.

The respondent selection weight is the inverse of the probability of selection of that respondent. The probability of respondent selection for respondents of non-screenable ethnicities is as follows:

$$\frac{n}{\sum_{i=1}^N x_i} = x_i = \frac{c_i}{y_i} = \frac{1}{e_c}$$

The probability of respondent selection for respondents of screenable ethnicities is as follows:

$$\frac{n}{\sum_{i=1}^N x_i} = x_i = \frac{1}{y_i} = \frac{c_i}{e_c} + \frac{s_i}{e_s}$$

#### ***Adjustment for response to provide population weight***

The response rate calculations use variables recorded on the sampling sheets by interviewers. The outcome of the final call to each sampled dwelling is the particular variable used in the response rate calculation. The raw selection weight for a respondent was multiplied by the inverse of the total response rate to provide a population weight.

## Appendix 2: Invitation letter



February 2012

Dear Householder

### RESEARCH WITH GAMBLERS AND NON-GAMBLERS

**The Ministry of Health invites you to take part in the 2012 National Survey of Lotteries, Gaming and Betting Activities.**

Your household has been selected by chance to participate in the 2012 National Survey of Lotteries, Gaming and Betting Activities. The survey collects information about the behaviour and attitudes of people who gamble often, and people who gamble infrequently or not at all. The information will be used to develop gambling and health policy and programmes to better meet the needs of New Zealanders.

One adult in your household will be invited to take part. While participation is voluntary, the Ministry of Health hopes you will consent to participate. Your participation is important, and will help to ensure that gambling policy and programmes are effective and appropriate.

This Ministry of Health survey is led by Professor Max Abbott, in conjunction with the National Research Bureau (NRB).

An interviewer from NRB will visit your house to speak with you further and answer any questions you may have. Interviewing for the survey will take place throughout New Zealand from February to September 2012.

Yours sincerely

Kevin Woods  
Director-General of Health  
New Zealand Ministry of Health

Your NRB interviewer's name is \_\_\_\_\_

Appointment Day \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

If you would like to change this appointment or request an interviewer of the same gender or ethnicity as yourself, please call the NRB on 0800 672 476.

## Appendix 3: Information brochure

**AUT** UNIVERSITY  
MINISTRY OF HEALTH  
AS-MA-CO-04-0004

### The National Survey of Lotteries, Gaming and Betting Activities

**Q** Where can I find the survey results?  
**A** The results will be published on the Ministry of Health's website: [www.moh.govt.nz](http://www.moh.govt.nz). It is expected the key findings will be released to the public in 2012 and 2013.

**Q** Where can I find out more information about this survey?  
**A** Contact options include:  
• You can ask the interviewer further questions about this survey.  
• You can ring the National Research Bureau, toll free, on 0800 672 476.  
• You can call Auckland University of Technology, on 09 921 9999, or toll free, on 0800 AUT UNI (0800 288 864).

**Q** Who can I call to find out about support services for people who may have a gambling problem?  
**A** You can call the Gambling Helpline number, on 0800 654 455. This is a 24 hour freephone service that you can call to receive immediate support, referral and information services for gambling problems, or you can free text this service on 8006. This service is available in over 40 different languages from 9am to 6pm (Monday to Friday), and 9am to 2pm (Saturday). You can also visit [www.gamblingproblem.co.nz](http://www.gamblingproblem.co.nz)

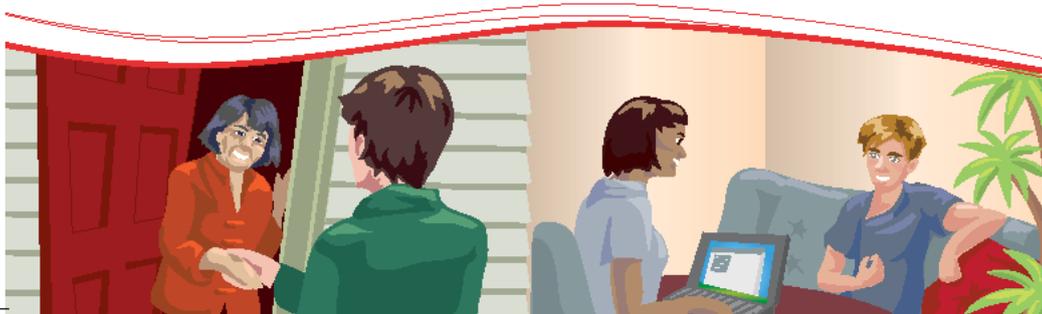
*Thank you very much for helping us with this survey.*

We'd like to find out more about New Zealanders who gamble often, and people who gamble infrequently or not at all. The information will be used to develop gambling and health policy and programmes to better meet the needs of New Zealanders.

**NRB**  
TAKA KŪKA, KŪKA

- Q** What is the National Survey of Lotteries, Gaming and Betting Activities?  
**A** The National Survey of Lotteries, Gaming and Betting Activities will collect information from 6,000 New Zealanders and will be conducted from February to September 2012. Similar nationwide gambling surveys have been conducted previously.
- Q** Who is carrying out the survey?  
**A** The survey is being carried out by the National Research Bureau (NRB) on behalf of the Ministry of Health and Auckland University of Technology. The NRB is an independent, New Zealand-based social research company.
- Q** What questions will be asked?  
**A** The questions are about:  
• what kinds of gambling people do, and how often people gamble,  
• how gambling might affect health and everyday life, and  
• how helpful any agencies were (if they were contacted).
- Q** Why was I asked to take part?  
**A** People have been randomly selected to take part in the survey. You don't need to have gambled to answer the questions. It is important that have a broad cross-section of the community involved.
- Q** Don't government agencies, such as the Department of Internal Affairs, already have this sort of information?  
**A** Some of this information is available, however, this survey will build a full, nationwide picture, or a "snapshot" of gambling in New Zealand from February to September 2012. This detailed information will help the Ministry of Health, and other government and non-government agencies to minimise the risks of some gambling activity, and to help those who are affected by gambling.

- Q** Where, when and how will the questions be asked?  
**A** The interview is usually conducted in your home, and at a time that suits you (or the member of your household who is eligible to be interviewed). Interviewers will use laptop computers to record your answers, rather than using paper questionnaires. You can stop the survey at any time if you wish.
- Q** How long will the interview take?  
**A** The interview length will vary depending on how often you have taken part in gambling. It is likely to be around 30 minutes if you gamble infrequently, or not at all. It will take longer if you gamble frequently. The interview can be done at a date and time that suits you.
- Q** How is my privacy protected?  
**A** The information you provide to the interviewer is confidential and protected by the Privacy Act 1993. This means the interviewer will not discuss your information with anyone else, and no one will know that you have taken part in this survey. The answers you give are added to other people's answers to create group statistics. The statistics, which are coded for computer analysis, will be kept and may only be used by approved researchers.
- Q** What will the information be used for?  
**A** The results from the survey will be used to develop gambling and health policy and programmes to better meet the needs of New Zealanders. Without the survey, there would be a big gap in the our knowledge about gambling behaviour and attitudes, and the affect that gambling has on some people's health.



## Appendix 4: Consent form



### 2012 National Survey of Lotteries, Gaming and Betting Activities

#### Request for interpreter

English	I wish to have an interpreter.	Yes	No
Māori	E hiahia ana ahau ki tētahi kaiwhakamāori korero.	Ae	Kao
Samoan	Ou te mana'o ia i ai se fa'amatala upu.	loe	Leai
Tongan	Oku ou fiema'u ha fakatonulea.	lo	Ikai
Cook Island	Ka inangaro au i tetai tangata uri reo.	Ae	Kare
Niuean	Fia manako au ke fakaaoga e taha tagat fakahokohoko kupu.	E	Nakai
Fijian	Au gadreva me dua e vakadewa vosa vei au.	lo	Sega
Chinese	我希望有口译员	是	否
Korean	통역사가 필요합니다.	예	아니오
Hindi	maujao duBaaiSayao ki AavaSyakta h0.	jaI	jaI

#### Consent form

Please read each bullet point carefully before signing below:

- I have read and I understand the brochure about the National Survey of Lotteries, Gaming and Betting Activities. I know I can ask questions at any time and I can contact the Ministry of Health, AUT or NRB if I want further information.
- I know that I can stop the interview at any time and I don't have to answer every question. There is no disadvantage to me if I don't want to take part or if I stop at any time.
- I know that my participation in the National Survey of Lotteries, Gaming and Betting Activities is confidential and any information that could identify me will never be used in any reports on this study. All my answers are protected by the Privacy Act of 1993.
- My signature below is my agreement to take part in the National Survey of Lotteries, Gaming and Betting Activities.

Name: [PLEASE PRINT] .....

Signed: ..... Date: ...../...../.....

Interviewer's signature..... PSU     Sampled home

## Appendix 5: Number of activities participated in past 12 months by demographics

Demographic variables	Past year participation % (95% CI)						Mean	SD
	0	1	2	3	4 - 6	7+		
Total	19.6	21.9	21.0	15.6	17.9	3.9	2.3	2.0
<b>Gender</b>								
Male	19.6	21.6	21.3	15.0	17.7	4.9	2.3	2.1
Female	19.7	22.1	20.8	16.2	18.2	3.1	2.2	1.9
<b>Ethnic group</b>								
European/Other	17.6	21.7	21.5	16.7	18.5	4.0	2.3	2.0
Māori	15.0	17.4	21.4	14.8	23.9	7.5	2.8	2.3
Pacific	25.5	19.9	18.9	13.9	16.3	5.5	2.2	2.2
Asian	38.8	24.3	16.9	8.9	10.0	1.1	1.4	1.7
<b>Age group</b>								
18 - 24 years	26.0	22.4	14.4	12.4	18.4	6.3	2.3	2.4
25 - 34 years	19.2	18.8	16.7	17.0	21.5	6.8	2.6	2.3
35 - 44 years	18.0	21.3	22.0	15.8	19.0	3.9	2.3	1.9
45 - 54 years	17.5	19.9	26.5	17.1	16.4	2.5	2.2	1.8
55 - 64 years	15.9	24.2	22.6	15.8	18.8	2.7	2.3	1.8
65+ years	22.7	25.7	22.0	14.4	13.3	1.9	1.9	1.7
<b>Country of birth</b>								
NZ	16.5	21.1	21.5	16.3	20.1	4.6	2.4	2.0
Elsewhere	28.1	23.9	19.6	13.9	12.2	2.3	1.8	1.8
<b>Arrival in NZ</b>								
2008 or later	41.9	23.8	12.6	12.5	7.2	2.0	1.3	1.7
Before 2008	25.1	24.0	21.1	14.2	13.2	2.3	1.9	1.8
<b>Highest qualification</b>								
No formal qual.	17.3	25.1	20.8	14.8	18.0	3.9	2.3	2.0
School qual.	21.7	19.4	19.8	14.0	19.4	5.6	2.4	2.2
Trade/voc. qual.	16.2	19.7	22.7	15.4	20.9	5.1	2.5	2.0
Degree/higher	21.2	23.4	20.8	17.1	15.2	2.3	2.1	1.8
<b>Labour force status</b>								
Employed	17.3	20.2	21.9	16.7	19.6	4.4	2.4	2.0
Unemployed	20.8	21.9	17.7	17.3	17.5	4.7	2.3	2.1
Student/Home/Retired	25.4	26.0	19.6	12.6	14.1	2.4	1.9	1.8
<b>Religion</b>								
No religion	15.8	22.2	20.5	16.1	19.9	5.5	2.5	2.1
Anglican	14.6	22.8	22.5	18.4	19.0	2.7	2.3	1.8
Presbyterian	17.8	20.9	23.9	18.4	17.6	1.4	2.2	1.7
Catholic	14.6	19.0	23.6	15.4	22.5	4.9	2.6	2.0
Other Christian	32.5	23.0	18.4	12.1	10.9	3.1	1.7	1.9
Other religion	33.9	22.6	18.2	11.8	12.1	1.4	1.6	1.7
<b>Household size</b>								
1	22.6	23.5	21.9	15.2	15.4	1.4	2.0	1.8
2	17.4	23.1	21.5	15.5	18.4	4.1	2.3	2.0
3	20.6	18.8	21.3	15.7	18.5	5.1	2.4	2.1
4	17.2	21.1	22.4	17.6	17.9	3.8	2.3	1.9
5+	24.2	22.7	17.7	13.8	17.7	4.0	2.2	2.1
<b>Personal Income (\$)</b>								
Up to 20,000	26.3	24.2	18.0	13.2	14.4	3.9	2.0	2.0
20,001 - 40,000	18.9	22.0	20.5	16.2	19.5	2.9	2.3	2.0
40,001 - 60,000	14.1	19.5	24.1	16.1	21.3	5.0	2.6	2.1
60,001 - 80,000	15.6	19.9	23.0	19.0	19.6	2.8	2.4	1.9
80,001 - 100,000	16.6	19.5	20.2	14.9	22.6	6.3	2.6	2.2
Over 100,000	11.5	22.5	26.8	17.0	17.2	5.1	2.5	1.9
<b>Household Income (\$)</b>								
Up to 20,000	27.1	26.8	18.2	12.8	13.6	1.5	1.8	1.7
20,001 - 40,000	22.8	22.3	19.3	16.9	15.9	2.8	2.1	1.9
40,001 - 60,000	23.2	21.9	18.2	16.8	16.0	3.9	2.1	2.0
60,001 - 80,000	19.0	21.5	21.7	14.1	19.6	4.2	2.3	2.1
80,001 - 100,000	16.7	21.0	24.6	14.4	19.6	3.6	2.3	2.0
Over 100,000	14.6	20.6	22.4	16.9	20.1	5.4	2.6	2.1

## Appendix 6: Past 12 months gambling participation by demographics

Demographic variables	Prevalence for total adults % (95% CI)											
	Card games				Bets with friends/workmates				Text game or competition			
	Yes		No		Yes		No		Yes		No	
Total	4.5	(3.9 - 5.2)	95.5	(94.8 - 96.1)	15.3	(14.1 - 16.5)	84.7	(83.5 - 85.9)	2.9	(2.3 - 3.5)	97.1	(96.5 - 97.7)
<b>Gender</b>												
Male	6.9	(5.7 - 8.3)	93.1	(91.7 - 94.3)	17.9	(16.1 - 19.9)	82.1	(80.1 - 83.9)	2.3	(1.6 - 3.1)	97.7	(96.9 - 98.4)
Female	2.3	(1.8 - 2.9)	97.7	(97.1 - 98.2)	12.8	(11.4 - 14.3)	87.2	(85.7 - 88.6)	3.5	(2.6 - 4.5)	96.5	(95.5 - 97.4)
<b>Ethnic group</b>												
European/Other	4.2	(3.4 - 5.0)	95.8	(95.0 - 96.6)	16.3	(14.9 - 17.7)	83.7	(82.3 - 85.1)	3.0	(2.4 - 3.8)	97.0	(96.2 - 97.6)
Māori	10.0	(8.0 - 12.3)	90.0	(87.7 - 92.0)	18.1	(15.5 - 20.9)	81.9	(79.1 - 84.5)	3.3	(2.3 - 4.7)	96.7	(95.3 - 97.7)
Pacific	7.0	(5.2 - 9.2)	93.0	(90.8 - 94.8)	14.1	(11.3 - 17.3)	85.9	(82.7 - 88.7)	2.7	(1.6 - 4.3)	97.3	(95.7 - 98.4)
Asian	3.4	(2.3 - 5.0)	96.6	(95.0 - 97.7)	6.1	(4.5 - 8.1)	93.9	(91.9 - 95.5)	1.6	(0.8 - 2.8)	98.4	(97.2 - 99.2)
<b>Age group</b>												
18 - 24 years	10.0	(7.0 - 13.7)	90.0	(86.3 - 93.0)	19.2	(15.1 - 23.8)	80.8	(76.2 - 84.9)	4.7	(2.8 - 7.3)	95.3	(92.7 - 97.2)
25 - 34 years	9.1	(7.0 - 11.5)	90.9	(88.5 - 93.0)	18.2	(15.4 - 21.3)	81.8	(78.7 - 84.6)	5.0	(3.2 - 7.3)	95.0	(92.7 - 96.8)
35 - 44 years	3.6	(2.5 - 5.1)	96.4	(94.9 - 97.5)	17.6	(15.2 - 20.3)	82.4	(79.7 - 84.8)	3.6	(2.6 - 5.0)	96.4	(95 - 97.4)
45 - 54 years	2.6	(1.8 - 3.8)	97.4	(96.2 - 98.2)	14.9	(12.6 - 17.5)	85.1	(82.5 - 87.4)	2.3	(1.5 - 3.5)	97.7	(96.5 - 98.5)
55 - 64 years	1.3	(0.6 - 2.3)	98.7	(97.7 - 99.4)	14.5	(12.0 - 17.4)	85.5	(82.6 - 88)	1.3	(0.6 - 2.6)	98.7	(97.4 - 99.4)
65+ years	1.3	(0.7 - 2.1)	98.7	(97.9 - 99.3)	7.2	(5.8 - 9.0)	92.8	(91.0 - 94.2)	0.4	(0.1 - 0.8)	99.6	(99.2 - 99.9)
<b>Country of birth</b>												
NZ	4.9	(4.1 - 5.8)	95.1	(94.2 - 95.9)	16.8	(15.4 - 18.3)	83.2	(81.7 - 84.6)	3.1	(2.5 - 3.8)	96.9	(96.2 - 97.5)
Elsewhere	3.4	(2.4 - 4.6)	96.6	(95.4 - 97.6)	11.2	(9.5 - 13.1)	88.8	(86.9 - 90.5)	2.3	(1.4 - 3.5)	97.7	(96.5 - 98.6)
<b>Arrival in NZ</b>												
2008 or later	4.0	(2.0 - 7.2)	96.0	(92.8 - 98.0)	10.6	(6.8 - 15.5)	89.4	(84.5 - 93.2)	3.6	(1.6 - 6.9)	96.4	(93.1 - 98.4)
Before 2008	3.2	(2.2 - 4.7)	96.8	(95.3 - 97.8)	11.4	(9.5 - 13.5)	88.6	(86.5 - 90.5)	2.0	(1.1 - 3.4)	98.0	(96.6 - 98.9)
<b>Highest qualification</b>												
No formal qual.	4.2	(3.0 - 5.7)	95.8	(94.3 - 97.0)	9.2	(7.4 - 11.4)	90.8	(88.6 - 92.6)	0.9	(0.4 - 1.7)	99.1	(98.3 - 99.6)
School qual.	6.1	(4.5 - 8.0)	93.9	(92.0 - 95.5)	16.6	(14.1 - 19.4)	83.4	(80.6 - 85.9)	4.4	(3.1 - 6.0)	95.6	(94.0 - 96.9)
Trade/voc. qual.	4.8	(3.4 - 6.5)	95.2	(93.5 - 96.6)	17.2	(14.8 - 19.8)	82.8	(80.2 - 85.2)	3.0	(2.0 - 4.4)	97.0	(95.6 - 98.0)
Degree/higher	3.5	(2.6 - 4.6)	96.5	(95.4 - 97.4)	15.6	(13.9 - 17.4)	84.4	(82.6 - 86.1)	2.6	(1.9 - 3.6)	97.4	(96.4 - 98.1)

Demographic variables	Prevalence for total adults % (95% CI)											
	Card games				Bets with friends/workmates				Text game or competition			
	Yes		No		Yes		No		Yes		No	
<b>Labour force status</b>												
Employed	4.9	(4.1 - 5.9)	95.1	(94.1 - 95.9)	18.7	(17.1 - 20.3)	81.3	(79.7 - 82.9)	3.3	(2.6 - 4.2)	96.7	(95.8 - 97.4)
Unemployed	6.3	(4.1 - 9.0)	93.7	(91.0 - 95.9)	8.1	(5.7 - 11.1)	91.9	(88.9 - 94.3)	1.6	(0.8 - 2.8)	98.4	(97.2 - 99.2)
Student/Home/Retired	2.6	(1.8 - 3.5)	97.4	(96.5 - 98.2)	8.5	(6.7 - 10.7)	91.5	(89.3 - 93.3)	2.2	(1.4 - 3.2)	97.8	(96.8 - 98.6)
<b>Religion</b>												
No religion	7.1	(5.7 - 8.7)	92.9	(91.3 - 94.3)	18.5	(16.6 - 20.6)	81.5	(79.4 - 83.4)	3.4	(2.5 - 4.5)	96.6	(95.5 - 97.5)
Anglican	1.8	(1.0 - 3.1)	98.2	(96.9 - 99.0)	17.8	(14.8 - 21.1)	82.2	(78.9 - 85.2)	2.5	(1.2 - 4.7)	97.5	(95.3 - 98.8)
Presbyterian	2.3	(1.1 - 4.1)	97.7	(95.9 - 98.9)	13.6	(10.5 - 17.2)	86.4	(82.8 - 89.5)	2.2	(1.1 - 3.7)	97.8	(96.3 - 98.9)
Catholic	4.3	(3.0 - 6.0)	95.7	(94.0 - 97.0)	15.7	(12.9 - 18.8)	84.3	(81.2 - 87.1)	2.3	(1.2 - 4.0)	97.7	(96.0 - 98.8)
Other Christian	2.4	(1.6 - 3.6)	97.6	(96.4 - 98.4)	9.3	(7.4 - 11.4)	90.7	(88.6 - 92.6)	2.8	(1.8 - 4.2)	97.2	(95.8 - 98.2)
Other religion	3.5	(1.9 - 5.9)	96.5	(94.1 - 98.1)	5.9	(4.0 - 8.5)	94.1	(91.5 - 96.0)	3.1	(1.6 - 5.4)	96.9	(94.6 - 98.4)
<b>Household size</b>												
1	2.4	(1.5 - 3.5)	97.6	(96.5 - 98.5)	13.9	(11.6 - 16.5)	86.1	(83.5 - 88.4)	0.5	(0.2 - 1.2)	99.5	(98.8 - 99.8)
2	3.4	(2.5 - 4.5)	96.6	(95.5 - 97.5)	15.8	(14.0 - 17.6)	84.2	(82.4 - 86.0)	2.1	(1.4 - 2.9)	97.9	(97.1 - 98.6)
3	5.9	(4.3 - 8.1)	94.1	(91.9 - 95.7)	16.6	(14.0 - 19.6)	83.4	(80.4 - 86.0)	3.5	(2.2 - 5.3)	96.5	(94.7 - 97.8)
4	4.6	(3.2 - 6.5)	95.4	(93.5 - 96.8)	14.9	(12.4 - 17.7)	85.1	(82.3 - 87.6)	4.2	(2.8 - 6.0)	95.8	(94.0 - 97.2)
5+	6.1	(4.2 - 8.5)	93.9	(91.5 - 95.8)	14.0	(11.2 - 17.1)	86.0	(82.9 - 88.8)	3.5	(2.1 - 5.3)	96.5	(94.7 - 97.9)
<b>Personal Income (\$)</b>												
Up to 20,000	4.3	(3.3 - 5.7)	95.7	(94.3 - 96.7)	9.7	(8.0 - 11.7)	90.3	(88.3 - 92.0)	3.1	(2.1 - 4.2)	96.9	(95.8 - 97.9)
20,001 - 40,000	4.7	(3.5 - 6.3)	95.3	(93.7 - 96.5)	13.5	(11.4 - 15.9)	86.5	(84.1 - 88.6)	3.2	(1.9 - 4.9)	96.8	(95.1 - 98.1)
40,001 - 60,000	4.7	(3.2 - 6.7)	95.3	(93.3 - 96.8)	20.3	(17.3 - 23.5)	79.7	(76.5 - 82.7)	3.3	(2.1 - 5.0)	96.7	(95.0 - 97.9)
60,001 - 80,000	4.1	(2.3 - 6.8)	95.9	(93.2 - 97.7)	20.7	(17.1 - 24.6)	79.3	(75.4 - 82.9)	2.5	(1.3 - 4.4)	97.5	(95.6 - 98.7)
80,001 - 100,000	6.0	(3.4 - 9.8)	94.0	(90.2 - 96.6)	27.1	(21.3 - 33.6)	72.9	(66.4 - 78.7)	1.5	(0.5 - 3.7)	98.5	(96.3 - 99.5)
Over 100,000	3.6	(1.7 - 6.7)	96.4	(93.3 - 98.3)	22.7	(17.6 - 28.6)	77.3	(71.4 - 82.4)	1.9	(0.8 - 3.9)	98.1	(96.1 - 99.2)
<b>Household Income (\$)</b>												
Up to 20,000	2.7	(1.3 - 5.0)	97.3	(95.0 - 98.7)	6.2	(4.0 - 9.1)	93.8	(90.9 - 96.0)	1.0	(0.4 - 2.1)	99.0	(97.9 - 99.6)
20,001 - 40,000	3.4	(2.3 - 4.7)	96.6	(95.3 - 97.7)	10.9	(8.6 - 13.5)	89.1	(86.5 - 91.4)	2.6	(1.6 - 4.0)	97.4	(96.0 - 98.4)
40,001 - 60,000	4.2	(2.8 - 6.1)	95.8	(93.9 - 97.2)	13.5	(11.0 - 16.5)	86.5	(83.5 - 89.0)	1.5	(0.8 - 2.6)	98.5	(97.4 - 99.2)
60,001 - 80,000	3.6	(2.1 - 5.7)	96.4	(94.3 - 97.9)	14.2	(11.4 - 17.5)	85.8	(82.5 - 88.6)	2.9	(1.7 - 4.6)	97.1	(95.4 - 98.3)

Demographic variables	Prevalence for total adults % (95% CI)											
	Card games				Bets with friends/workmates				Text game or competition			
	Yes		No		Yes		No		Yes		No	
80,001 - 100,000	5.5	(3.6 - 7.9)	94.5	(92.1 - 96.4)	19.4	(16.1 - 23.1)	80.6	(76.9 - 83.9)	4.7	(3.0 - 7.0)	95.3	(93.0 - 97.0)
Over 100,000	6.1	(4.5 - 7.9)	93.9	(92.1 - 95.5)	21.2	(18.7 - 23.9)	78.8	(76.1 - 81.3)	3.2	(2.0 - 4.9)	96.8	(95.1 - 98.0)

Demographic variables	Prevalence for total adults % (95% CI)											
	Raffle/lottery (NZ and overseas)				Lotto				Keno			
	Yes		No		Yes		No		Yes		No	
Total	48.1	(46.5 - 49.7)	51.9	(50.3 - 53.5)	62.2	(60.8 - 63.7)	37.8	(36.3 - 39.2)	2.8	(2.3 - 3.3)	97.2	(96.7 - 97.7)
<b>Gender</b>												
Male	44.4	(42.1 - 46.8)	55.6	(53.2 - 57.9)	64.1	(61.9 - 66.2)	35.9	(33.8 - 38.1)	3.0	(2.3 - 3.8)	97.0	(96.2 - 97.7)
Female	51.5	(49.4 - 53.6)	48.5	(46.4 - 50.6)	60.5	(58.5 - 62.5)	39.5	(37.5 - 41.5)	2.6	(2.0 - 3.2)	97.4	(96.8 - 98.0)
<b>Ethnic group</b>												
European/Other	50.6	(48.7 - 52.5)	49.4	(47.5 - 51.3)	63.9	(62.2 - 65.6)	36.1	(34.4 - 37.8)	2.1	(1.6 - 2.6)	97.9	(97.4 - 98.4)
Māori	52.6	(49.2 - 55.9)	47.4	(44.1 - 50.8)	67.7	(64.5 - 70.8)	32.3	(29.2 - 35.5)	5.8	(4.4 - 7.4)	94.2	(92.6 - 95.6)
Pacific	43.2	(39.0 - 47.4)	56.8	(52.6 - 61.0)	56.9	(52.9 - 60.9)	43.1	(39.1 - 47.1)	6.7	(5.0 - 8.8)	93.3	(91.2 - 95.0)
Asian	24.3	(21.4 - 27.5)	75.7	(72.5 - 78.6)	47.0	(43.1 - 51.0)	53.0	(49.0 - 56.9)	3.4	(2.3 - 5.0)	96.6	(95.0 - 97.7)
<b>Age group</b>												
18 - 24 years	27.9	(23.2 - 33.0)	72.1	(67.0 - 76.8)	33.8	(29.0 - 38.9)	66.2	(61.1 - 71.0)	1.8	(0.7 - 3.7)	98.2	(96.3 - 99.3)
25 - 34 years	44.9	(41.0 - 48.7)	55.1	(51.3 - 59.0)	60.8	(57.1 - 64.5)	39.2	(35.5 - 42.9)	3.0	(2.1 - 4.2)	97.0	(95.8 - 97.9)
35 - 44 years	53.7	(50.2 - 57.1)	46.3	(42.9 - 49.8)	68.0	(64.7 - 71.2)	32.0	(28.8 - 35.3)	3.6	(2.5 - 5.0)	96.4	(95.0 - 97.5)
45 - 54 years	51.6	(48.3 - 55.0)	48.4	(45.0 - 51.7)	70.5	(67.3 - 73.6)	29.5	(26.4 - 32.7)	2.7	(1.8 - 3.8)	97.3	(96.2 - 98.2)
55 - 64 years	55.6	(51.7 - 59.5)	44.4	(40.5 - 48.3)	71.3	(67.9 - 74.5)	28.7	(25.5 - 32.1)	3.0	(1.9 - 4.5)	97.0	(95.5 - 98.1)
65+ years	50.3	(47.1 - 53.5)	49.7	(46.5 - 52.9)	61.6	(58.5 - 64.6)	38.4	(35.4 - 41.5)	2.3	(1.6 - 3.3)	97.7	(96.7 - 98.4)
<b>Country of birth</b>												
NZ	52.0	(50.1 - 54.0)	48.0	(46.0 - 49.9)	64.4	(62.6 - 66.1)	35.6	(33.9 - 37.4)	2.4	(1.9 - 3.0)	97.6	(97.0 - 98.1)
Elsewhere	37.7	(35.1 - 40.5)	62.3	(59.5 - 64.9)	56.6	(53.7 - 59.5)	43.4	(40.5 - 46.3)	3.8	(2.9 - 4.9)	96.2	(95.1 - 97.1)
<b>Arrival in NZ</b>												
2008 or later	23.9	(18.3 - 30.4)	76.1	(69.6 - 81.7)	41.1	(33.9 - 48.6)	58.9	(51.4 - 66.1)	4.7	(2.6 - 7.9)	95.3	(92.1 - 97.4)
Before 2008	40.7	(37.7 - 43.7)	59.3	(56.3 - 62.3)	60.0	(56.9 - 62.9)	40.0	(37.1 - 43.1)	3.6	(2.7 - 4.7)	96.4	(95.3 - 97.3)
<b>Highest qualification</b>												
No formal qual.	46.8	(43.1 - 50.5)	53.2	(49.5 - 56.9)	64.6	(61.1 - 67.9)	35.4	(32.1 - 38.9)	4.1	(3.0 - 5.4)	95.9	(94.6 - 97.0)
School qual.	44.4	(41.0 - 47.8)	55.6	(52.2 - 59.0)	59.1	(55.8 - 62.4)	40.9	(37.6 - 44.2)	3.1	(2.2 - 4.3)	96.9	(95.7 - 97.8)
Trade/voc. qual.	49.2	(45.9 - 52.5)	50.8	(47.5 - 54.1)	68.4	(65.4 - 71.3)	31.6	(28.7 - 34.6)	2.8	(1.9 - 3.9)	97.2	(96.1 - 98.1)

Demographic variables	Prevalence for total adults % (95% CI)											
	Raffle/lottery (NZ and overseas)				Lotto				Keno			
	Yes	No	Yes	No	Yes	No	Yes	No				
Degree/higher	50.3	(47.8 - 52.8)	49.7	(47.2 - 52.2)	59.7	(57.2 - 62.1)	40.3	(37.9 - 42.8)	2.1	(1.4 - 2.9)	97.9	(97.1 - 98.6)
<b>Labour force status</b>												
Employed	50.7	(48.6 - 52.8)	49.3	(47.2 - 51.4)	65.6	(63.7 - 67.4)	34.4	(32.6 - 36.3)	2.7	(2.2 - 3.3)	97.3	(96.7 - 97.8)
Unemployed	42.1	(37.3 - 46.9)	57.9	(53.1 - 62.7)	57.1	(52.4 - 61.7)	42.9	(38.3 - 47.6)	5.0	(3.2 - 7.3)	95.0	(92.7 - 96.8)
Student/Home/Retired	43.5	(40.8 - 46.3)	56.5	(53.7 - 59.2)	55.4	(52.7 - 58.1)	44.6	(41.9 - 47.3)	2.3	(1.5 - 3.3)	97.7	(96.7 - 98.5)
<b>Religion</b>												
No religion	47.2	(44.5 - 49.9)	52.8	(50.1 - 55.5)	63.6	(61.1 - 66.1)	36.4	(33.9 - 38.9)	2.1	(1.5 - 2.9)	97.9	(97.1 - 98.5)
Anglican	55.3	(51.4 - 59.2)	44.7	(40.8 - 48.6)	69.8	(66.1 - 73.3)	30.2	(26.7 - 33.9)	2.2	(1.3 - 3.7)	97.8	(96.3 - 98.7)
Presbyterian	56.4	(51.7 - 61.0)	43.6	(39.0 - 48.3)	64.6	(60.0 - 69.1)	35.4	(30.9 - 40.0)	2.5	(1.5 - 3.9)	97.5	(96.1 - 98.5)
Catholic	54.3	(50.2 - 58.4)	45.7	(41.6 - 49.8)	70.3	(66.3 - 74.1)	29.7	(25.9 - 33.7)	3.8	(2.7 - 5.2)	96.2	(94.8 - 97.3)
Other Christian	41.1	(37.6 - 44.6)	58.9	(55.4 - 62.4)	48.7	(45.1 - 52.3)	51.3	(47.7 - 54.9)	3.6	(2.5 - 5.1)	96.4	(94.9 - 97.5)
Other religion	31.8	(27.4 - 36.6)	68.2	(63.4 - 72.6)	51.3	(46.0 - 56.6)	48.7	(43.4 - 54.0)	4.7	(2.8 - 7.4)	95.3	(92.6 - 97.2)
<b>Household size</b>												
1	47.7	(44.4 - 51.0)	52.3	(49.0 - 55.6)	61.2	(58.1 - 64.3)	38.8	(35.7 - 41.9)	1.8	(1.1 - 2.7)	98.2	(97.3 - 98.9)
2	50.7	(48.2 - 53.3)	49.3	(46.7 - 51.8)	66.7	(64.3 - 69.1)	33.3	(30.9 - 35.7)	2.6	(1.9 - 3.5)	97.4	(96.5 - 98.1)
3	45.7	(42.0 - 49.4)	54.3	(50.6 - 58.0)	61.9	(58.3 - 65.5)	38.1	(34.5 - 41.7)	3.2	(2.2 - 4.6)	96.8	(95.4 - 97.8)
4	50.8	(47.1 - 54.5)	49.2	(45.5 - 52.9)	63.2	(59.6 - 66.6)	36.8	(33.4 - 40.4)	3.2	(2.1 - 4.5)	96.8	(95.5 - 97.9)
5+	42.7	(38.7 - 46.7)	57.3	(53.3 - 61.3)	53.7	(49.6 - 57.8)	46.3	(42.2 - 50.4)	2.7	(1.8 - 3.8)	97.3	(96.2 - 98.2)
<b>Personal Income (\$)</b>												
Up to 20,000	40.0	(37.4 - 42.7)	60.0	(57.3 - 62.6)	52.0	(49.3 - 54.7)	48.0	(45.3 - 50.7)	2.8	(2.1 - 3.6)	97.2	(96.4 - 97.9)
20,001 - 40,000	47.2	(44.2 - 50.3)	52.8	(49.7 - 55.8)	60.5	(57.7 - 63.4)	39.5	(36.6 - 42.3)	3.6	(2.7 - 4.8)	96.4	(95.2 - 97.3)
40,001 - 60,000	52.2	(48.4 - 55.9)	47.8	(44.1 - 51.6)	70.7	(67.3 - 73.9)	29.3	(26.1 - 32.7)	2.3	(1.5 - 3.6)	97.7	(96.4 - 98.5)
60,001 - 80,000	55.7	(50.9 - 60.3)	44.3	(39.7 - 49.1)	71.9	(67.4 - 76.1)	28.1	(23.9 - 32.6)	2.6	(1.4 - 4.2)	97.4	(95.8 - 98.6)
80,001 - 100,000	54.6	(46.9 - 62.2)	45.4	(37.8 - 53.1)	74.8	(67.8 - 80.9)	25.2	(19.1 - 32.2)	3.5	(1.5 - 6.8)	96.5	(93.2 - 98.5)
Over 100,000	62.9	(56.4 - 69.0)	37.1	(31.0 - 43.6)	73.4	(67.5 - 78.8)	26.6	(21.2 - 32.5)	0.8	(0.2 - 2.5)	99.2	(97.5 - 99.8)
<b>Household Income (\$)</b>												
Up to 20,000	37.0	(32.4 - 41.7)	63.0	(58.3 - 67.6)	51.1	(46.2 - 55.9)	48.9	(44.1 - 53.8)	3.4	(2.2 - 4.9)	96.6	(95.1 - 97.8)
20,001 - 40,000	45.8	(42.5 - 49.0)	54.2	(51.0 - 57.5)	58.8	(55.6 - 61.9)	41.2	(38.1 - 44.4)	3.5	(2.6 - 4.6)	96.5	(95.4 - 97.4)
40,001 - 60,000	44.9	(41.1 - 48.8)	55.1	(51.2 - 58.9)	58.6	(54.7 - 62.5)	41.4	(37.5 - 45.3)	2.2	(1.4 - 3.4)	97.8	(96.6 - 98.6)
60,001 - 80,000	48.9	(44.7 - 53.1)	51.1	(46.9 - 55.3)	63.7	(59.5 - 67.7)	36.3	(32.3 - 40.5)	3.1	(2.0 - 4.5)	96.9	(95.5 - 98.0)
80,001 - 100,000	46.7	(42.3 - 51.1)	53.3	(48.9 - 57.7)	68.7	(64.4 - 72.8)	31.3	(27.2 - 35.6)	2.7	(1.5 - 4.5)	97.3	(95.5 - 98.5)
Over 100,000	57.0	(53.7 - 60.2)	43.0	(39.8 - 46.3)	68.3	(65.3 - 71.1)	31.7	(28.9 - 34.7)	2.2	(1.5 - 3.2)	97.8	(96.8 - 98.5)

Demographic variables	Prevalence for total adults % (95% CI)											
	Bullseye				Instant Kiwi tickets or scratch tickets				Housie or bingo			
	Yes		No		Yes		No		Yes		No	
Total	2.4	(2.0 - 2.8)	97.6	(97.2 - 98.0)	33.2	(31.7 - 34.8)	66.8	(65.2 - 68.3)	1.7	(1.3 - 2.0)	98.3	(98.0 - 98.7)
<b>Gender</b>												
Male	2.3	(1.7 - 3.0)	97.7	(97.0 - 98.3)	29.0	(26.8 - 31.2)	71.0	(68.8 - 73.2)	1.0	(0.6 - 1.5)	99.0	(98.5 - 99.4)
Female	2.4	(1.9 - 3.1)	97.6	(96.9 - 98.1)	37.1	(35.1 - 39.3)	62.8	(60.7 - 64.9)	2.3	(1.8 - 2.8)	97.7	(97.2 - 98.2)
<b>Ethnic group</b>												
European/Other	2.1	(1.6 - 2.6)	97.9	(97.4 - 98.4)	34.7	(33.0 - 36.5)	65.3	(63.5 - 67.0)	1.2	(0.9 - 1.6)	98.8	(98.4 - 99.1)
Māori	4.4	(3.3 - 5.7)	95.6	(94.3 - 96.7)	42.1	(38.8 - 45.5)	57.9	(54.5 - 61.2)	4.5	(3.3 - 5.9)	95.5	(94.1 - 96.7)
Pacific	3.7	(2.6 - 5.2)	96.3	(94.8 - 97.4)	31.3	(27.4 - 35.4)	68.7	(64.6 - 72.6)	6.1	(4.1 - 8.8)	93.9	(91.2 - 95.9)
Asian	2.6	(1.6 - 4.0)	97.4	(96.0 - 98.4)	20.1	(17.2 - 23.4)	79.9	(76.6 - 82.8)	0.9	(0.4 - 2.0)	99.1	(98.0 - 99.6)
<b>Age group</b>												
18 - 24 years	1.3	(0.4 - 2.9)	98.7	(97.1 - 99.6)	45.8	(40.4 - 51.2)	54.2	(48.8 - 59.6)	2.5	(1.4 - 4.1)	97.5	(95.9 - 98.6)
25 - 34 years	2.6	(1.6 - 4.2)	97.4	(95.8 - 98.4)	40.9	(37.2 - 44.8)	59.1	(55.2 - 62.8)	1.8	(1.2 - 2.8)	98.2	(97.2 - 98.8)
35 - 44 years	2.8	(1.9 - 3.9)	97.2	(96.1 - 98.1)	29.4	(26.5 - 32.5)	70.6	(67.5 - 73.5)	1.2	(0.7 - 2.0)	98.8	(98.0 - 99.3)
45 - 54 years	2.7	(1.9 - 3.8)	97.3	(96.2 - 98.1)	30.4	(27.5 - 33.5)	69.6	(66.5 - 72.5)	1.2	(0.7 - 1.8)	98.8	(98.2 - 99.3)
55 - 64 years	2.7	(1.7 - 4.0)	97.3	(96.0 - 98.3)	28.9	(25.7 - 32.6)	70.9	(67.4 - 74.3)	2.0	(1.2 - 3.2)	98.0	(96.8 - 98.8)
65+ years	1.8	(1.2 - 2.8)	98.2	(97.2 - 98.8)	26.4	(23.8 - 29.1)	73.6	(70.9 - 76.2)	1.5	(0.9 - 2.3)	98.5	(97.7 - 99.1)
<b>Country of birth</b>												
NZ	2.3	(1.8 - 2.8)	97.7	(97.2 - 98.2)	37.0	(35.3 - 38.8)	63.0	(61.2 - 64.7)	1.7	(1.4 - 2.2)	98.3	(97.8 - 98.6)
Elsewhere	2.7	(1.8 - 3.8)	97.3	(96.2 - 98.2)	23.1	(20.8 - 25.5)	76.9	(74.5 - 79.2)	1.4	(0.9 - 2.0)	98.6	(98 - 99.1)
<b>Arrival in NZ</b>												
2008 or later	2.6	(1.1 - 5.2)	97.4	(94.8 - 98.9)	15.4	(10.8 - 21.0)	84.6	(79.0 - 89.2)	0.6	(0.2 - 1.7)	99.4	(98.3 - 99.8)
Before 2008	2.7	(1.8 - 3.9)	97.3	(96.1 - 98.2)	24.8	(22.2 - 27.4)	75.2	(72.6 - 77.8)	1.6	(1.0 - 2.3)	98.4	(97.7 - 99.0)
<b>Highest qualification</b>												
No formal qual.	3.1	(2.1 - 4.2)	96.9	(95.8 - 97.9)	36.4	(33.0 - 39.9)	63.6	(60.1 - 67.0)	3.0	(2.1 - 4.2)	97.0	(95.8 - 97.9)
School qual.	3.0	(2.1 - 4.2)	97.0	(95.8 - 97.9)	39.1	(35.8 - 42.6)	60.9	(57.4 - 64.2)	1.7	(1.1 - 2.5)	98.3	(97.5 - 98.9)
Trade/voc. qual.	2.8	(1.9 - 4.0)	97.2	(96.0 - 98.1)	36.2	(33.0 - 39.5)	63.8	(60.5 - 67.0)	1.8	(1.2 - 2.7)	98.2	(97.3 - 98.8)
Degree/higher	1.4	(1.0 - 2.1)	98.6	(97.9 - 99.0)	26.6	(24.5 - 28.9)	73.3	(71.1 - 75.5)	1.0	(0.6 - 1.5)	99.0	(98.5 - 99.4)
<b>Labour force status</b>												
Employed	2.3	(1.8 - 2.8)	97.7	(97.2 - 98.2)	34.0	(32.2 - 35.9)	65.9	(64.1 - 67.8)	1.2	(0.9 - 1.5)	98.8	(98.5 - 99.1)
Unemployed	3.0	(1.8 - 4.6)	97.0	(95.4 - 98.2)	37.9	(32.8 - 43.2)	62.1	(56.8 - 67.2)	3.6	(2.2 - 5.7)	96.4	(94.3 - 97.8)
Student/Home/Retired	2.4	(1.6 - 3.6)	97.6	(96.4 - 98.4)	29.4	(26.7 - 32.2)	70.6	(67.8 - 73.3)	2.3	(1.6 - 3.2)	97.7	(96.8 - 98.4)
<b>Religion</b>												
No religion	2.4	(1.7 - 3.2)	97.6	(96.8 - 98.3)	37.7	(35.2 - 40.3)	62.3	(59.7 - 64.8)	1.5	(1.0 - 2.1)	98.5	(97.9 - 99.0)
Anglican	0.8	(0.4 - 1.6)	99.2	(98.4 - 99.6)	31.8	(28.3 - 35.5)	68.2	(64.5 - 71.7)	1.5	(0.8 - 2.6)	98.5	(97.4 - 99.2)

Demographic variables	Prevalence for total adults % (95% CI)											
	Bullseye				Instant Kiwi tickets or scratch tickets				Housie or bingo			
	Yes		No		Yes		No		Yes		No	
Presbyterian	2.1	(1.2 - 3.6)	97.9	(96.4 - 98.8)	32.2	(27.9 - 36.8)	67.8	(63.2 - 72.1)	1.7	(0.9 - 2.9)	98.3	(97.1 - 99.1)
Catholic	3.8	(2.6 - 5.4)	96.2	(94.6 - 97.4)	37.2	(33.1 - 41.5)	62.8	(58.5 - 66.9)	2.1	(1.3 - 3.1)	97.9	(96.9 - 98.7)
Other Christian	2.6	(1.7 - 3.9)	97.4	(96.1 - 98.3)	24.0	(21.2 - 27.1)	76.0	(72.9 - 78.8)	1.8	(1.1 - 2.8)	98.2	(97.2 - 98.9)
Other religion	3.4	(2.1 - 5.3)	96.6	(94.7 - 97.9)	25.6	(21.4 - 30.2)	74.4	(69.8 - 78.6)	1.6	(0.8 - 3.0)	98.4	(97.0 - 99.2)
<b>Household size</b>												
1	2.1	(1.4 - 3.2)	97.9	(96.8 - 98.6)	26.7	(24.1 - 29.6)	73.3	(70.4 - 75.9)	1.4	(0.8 - 2.2)	98.6	(97.8 - 99.2)
2	2.5	(1.9 - 3.3)	97.5	(96.7 - 98.1)	32.5	(30.3 - 34.9)	67.4	(65.1 - 69.7)	1.6	(1.1 - 2.3)	98.4	(97.7 - 98.9)
3	2.8	(1.9 - 4.1)	97.2	(95.9 - 98.1)	34.5	(31.0 - 38.1)	65.5	(61.9 - 69.0)	1.6	(1.0 - 2.6)	98.4	(97.4 - 99.0)
4	2.1	(1.2 - 3.4)	97.9	(96.6 - 98.8)	35.1	(31.7 - 38.6)	64.9	(61.4 - 68.3)	1.5	(0.9 - 2.5)	98.5	(97.5 - 99.1)
5+	2.2	(1.4 - 3.2)	97.8	(96.8 - 98.6)	34.3	(30.2 - 38.6)	65.7	(61.4 - 69.8)	2.0	(1.3 - 3.0)	98.0	(97.0 - 98.7)
<b>Personal Income (\$)</b>												
Up to 20,000	3.0	(2.3 - 3.9)	97.0	(96.1 - 97.7)	32.4	(29.8 - 35.2)	67.6	(64.8 - 70.2)	2.7	(2.0 - 3.6)	97.3	(96.4 - 98.0)
20,001 - 40,000	2.2	(1.5 - 3.0)	97.8	(97.0 - 98.5)	36.6	(33.5 - 39.8)	63.4	(60.2 - 66.5)	1.1	(0.8 - 1.7)	98.9	(98.3 - 99.2)
40,001 - 60,000	3.2	(1.9 - 4.8)	96.8	(95.2 - 98.1)	37.4	(34.0 - 41.0)	62.6	(59.0 - 66.0)	1.2	(0.7 - 1.9)	98.8	(98.1 - 99.3)
60,001 - 80,000	1.2	(0.6 - 2.0)	98.8	(98.0 - 99.4)	30.5	(26.1 - 35.1)	69.5	(64.9 - 73.9)	0.9	(0.3 - 2.1)	99.1	(97.9 - 99.7)
80,001 - 100,000	2.3	(0.9 - 5.1)	97.7	(94.9 - 99.1)	27.8	(21.7 - 34.5)	72.2	(65.5 - 78.3)	0.8	(0.2 - 2.3)	99.2	(97.7 - 99.8)
Over 100,000	0.2	(0.0 - 0.6)	99.8	(99.4 - 100.0)	22.7	(17.9 - 28.8)	77.0	(71.2 - 82.1)	1.1	(0.3 - 2.8)	98.9	(97.2 - 99.7)
<b>Household Income (\$)</b>												
Up to 20,000	3.0	(1.8 - 4.6)	97.0	(95.4 - 98.2)	31.4	(26.7 - 36.4)	68.6	(63.6 - 73.3)	2.1	(1.3 - 3.3)	97.9	(96.7 - 98.7)
20,001 - 40,000	2.9	(2.1 - 4.0)	97.1	(96.0 - 97.9)	33.7	(30.6 - 37.0)	66.3	(63.0 - 69.4)	2.4	(1.6 - 3.4)	97.6	(96.6 - 98.4)
40,001 - 60,000	2.1	(1.3 - 3.3)	97.9	(96.7 - 98.7)	32.5	(28.9 - 36.3)	67.5	(63.7 - 71.1)	1.5	(0.9 - 2.4)	98.5	(97.6 - 99.1)
60,001 - 80,000	3.0	(1.7 - 4.9)	97.0	(95.1 - 98.3)	36.3	(32.3 - 40.5)	63.7	(59.5 - 67.7)	2.3	(1.3 - 3.7)	97.7	(96.3 - 98.7)
80,001 - 100,000	2.2	(1.3 - 3.4)	97.8	(96.6 - 98.7)	33.5	(29.4 - 37.9)	66.5	(62.1 - 70.6)	0.7	(0.3 - 1.4)	99.3	(98.6 - 99.7)
Over 100,000	1.6	(1.0 - 2.4)	98.4	(97.6 - 99.0)	30.8	(27.9 - 33.9)	69.1	(66.1 - 72.1)	1.1	(0.6 - 1.9)	98.9	(98.1 - 99.4)

Demographic variables	Prevalence for total adults % (95% CI)											
	Horse/dog race betting				Sports betting				Casinos table games or EGMs ( NZ and overseas)			
	Yes	No	Yes	No	Yes	No	Yes	No				
Total	12.1	(11.0 - 13.2)	87.9	(86.8 - 89.0)	4.9	(4.2 - 5.7)	95.1	(94.3 - 95.8)	11.8	(10.8 - 12.9)	88.2	(87.1 - 89.2)
<b>Gender</b>												
Male	13.6	(12.0 - 15.4)	86.4	(84.6 - 88.0)	8.2	(6.8 - 9.8)	91.8	(90.2 - 93.2)	13.3	(11.7 - 15.2)	86.7	(84.8 - 88.3)
Female	10.6	(9.3 - 12.1)	89.4	(87.9 - 90.7)	1.9	(1.3 - 2.6)	98.1	(97.4 - 98.7)	10.4	(9.1 - 11.8)	89.6	(88.2 - 90.9)
<b>Ethnic group</b>												
European/Other	13.5	(12.3 - 14.9)	86.5	(85.1 - 87.7)	5.2	(4.4 - 6.2)	94.8	(93.8 - 95.6)	11.7	(10.5 - 13.0)	88.3	(87.0 - 89.5)
Māori	13.1	(11.0 - 15.5)	86.9	(84.5 - 89.0)	6.8	(5.1 - 8.7)	93.2	(91.3 - 94.9)	10.4	(8.7 - 12.8)	89.6	(87.2 - 91.3)
Pacific	6.5	(4.4 - 9.4)	93.5	(90.6 - 95.6)	5.5	(3.3 - 8.5)	94.5	(91.5 - 96.7)	13.8	(11.0 - 17.1)	86.2	(82.9 - 89.0)
Asian	2.8	(1.7 - 4.3)	97.2	(95.7 - 98.3)	2.7	(1.8 - 4.0)	97.3	(96.0 - 98.2)	13.6	(11.1 - 16.5)	86.4	(83.5 - 88.9)
<b>Age group</b>												
18 - 24 years	14.1	(10.5 - 18.3)	85.9	(81.7 - 89.5)	10.5	(7.1 - 14.9)	89.5	(85.1 - 92.9)	19.1	(15.3 - 23.4)	80.9	(76.6 - 84.7)
25 - 34 years	12.6	(10.0 - 15.5)	87.4	(84.5 - 90.0)	9.2	(7.0 - 11.8)	90.8	(88.2 - 93.0)	17.5	(14.8 - 20.8)	82.5	(79.2 - 85.2)
35 - 44 years	12.6	(10.4 - 15.0)	87.4	(85.0 - 89.6)	4.0	(2.8 - 5.6)	96.0	(94.4 - 97.2)	9.0	(7.3 - 11.0)	91.0	(89.0 - 92.7)
45 - 54 years	10.6	(8.7 - 12.8)	89.4	(87.2 - 91.3)	3.1	(2.1 - 4.3)	96.9	(95.7 - 97.9)	9.2	(7.4 - 11.2)	90.8	(88.8 - 92.6)
55 - 64 years	13.3	(10.8 - 16.1)	86.7	(83.9 - 89.2)	2.2	(1.3 - 3.6)	97.8	(96.4 - 98.7)	10.6	(8.1 - 13.4)	89.4	(86.6 - 91.9)
65+ years	10.0	(8.3 - 11.9)	90.0	(88.1 - 91.7)	1.4	(0.9 - 2.3)	98.6	(97.7 - 99.1)	7.2	(5.6 - 9.2)	92.8	(90.8 - 94.4)
<b>Country of birth</b>												
NZ	14.0	(12.7 - 15.4)	86.0	(84.6 - 87.3)	5.7	(4.8 - 6.7)	94.3	(93.3 - 95.2)	12.0	(10.8 - 13.4)	88.0	(86.6 - 89.2)
Elsewhere	6.9	(5.5 - 8.6)	93.1	(91.4 - 94.5)	2.9	(1.9 - 4.2)	97.1	(95.8 - 98.1)	11.2	(9.4 - 13.3)	88.8	(86.7 - 90.6)
<b>Arrival in NZ</b>												
2008 or later	4.7	(1.8 - 10.1)	95.3	(89.9 - 98.2)	2.0	(0.7 - 4.7)	98.0	(95.3 - 99.3)	9.6	(5.9 - 14.5)	90.4	(85.5 - 94.1)
Before 2008	7.4	(5.9 - 9.1)	92.6	(90.9 - 94.1)	3.0	(1.9 - 4.6)	97.0	(95.4 - 98.1)	11.6	(9.6 - 13.8)	88.4	(86.2 - 90.4)
<b>Highest qualification</b>												
No formal qual.	10.9	(8.8 - 13.2)	89.1	(86.8 - 91.2)	2.6	(1.6 - 4.0)	97.4	(96.0 - 98.4)	11.3	(8.9 - 14.3)	88.7	(85.7 - 91.1)
School qual.	14.2	(12.0 - 16.7)	85.8	(83.3 - 88.0)	4.9	(3.3 - 7.0)	95.1	(93.0 - 96.7)	12.9	(10.7 - 15.4)	87.1	(84.6 - 89.3)
Trade/voc. qual.	13.9	(11.7 - 16.3)	86.1	(83.7 - 88.3)	6.4	(4.8 - 8.4)	93.6	(91.6 - 95.2)	13.2	(11.1 - 15.7)	86.8	(84.3 - 88.9)
Degree/higher	10.1	(8.6 - 11.8)	89.9	(88.2 - 91.4)	4.9	(3.8 - 6.2)	95.1	(93.8 - 96.2)	10.4	(8.8 - 12.2)	89.6	(87.8 - 91.2)
<b>Labour force status</b>												
Employed	13.2	(11.9 - 14.6)	86.8	(85.4 - 88.1)	5.8	(4.8 - 6.8)	94.2	(93.2 - 95.2)	13.2	(11.9 - 14.7)	86.8	(85.3 - 88.1)
Unemployed	12.8	(9.4 - 16.9)	87.2	(83.1 - 90.6)	3.3	(1.7 - 5.8)	96.7	(94.2 - 98.3)	13.1	(9.7 - 17.3)	86.9	(82.7 - 90.3)
Student/Home/Retired	8.7	(7.0 - 10.6)	91.3	(89.4 - 93.0)	3.0	(1.7 - 4.9)	97.0	(95.1 - 98.3)	7.7	(6.2 - 9.4)	92.3	(90.6 - 93.8)
<b>Religion</b>												
No religion	13.6	(11.8 - 15.6)	86.4	(84.4 - 88.2)	7.5	(6.1 - 9.2)	92.5	(90.8 - 93.9)	14.1	(12.3 - 16.2)	85.9	(83.8 - 87.7)

Demographic variables	Prevalence for total adults % (95% CI)											
	Horse/dog race betting				Sports betting				Casinos table games or EGMs ( NZ and overseas)			
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No		
Anglican	13.0	(10.4 - 16.0)	87.0	(84.0 - 89.6)	3.2	(1.8 - 5.2)	96.8	(94.8 - 98.2)	10.6	(8.1 - 13.6)	89.4	(86.4 - 91.9)
Presbyterian	12.7	(9.9 - 15.9)	87.3	(84.1 - 90.1)	2.9	(1.6 - 4.8)	97.1	(95.2 - 98.4)	7.6	(5.4 - 10.2)	92.4	(89.8 - 94.6)
Catholic	16.5	(13.4 - 19.9)	83.5	(80.1 - 86.6)	4.8	(3.1 - 7.0)	95.2	(93.0 - 96.9)	14.1	(11.2 - 17.4)	85.9	(82.6 - 88.8)
Other Christian	6.6	(5.0 - 8.5)	93.4	(91.5 - 95.0)	2.2	(1.3 - 3.6)	97.8	(96.4 - 98.7)	8.0	(6.2 - 10.2)	92.0	(89.8 - 93.8)
Other religion	4.9	(3.2 - 7.2)	95.1	(92.8 - 96.8)	2.6	(1.4 - 4.3)	97.4	(95.7 - 98.6)	10.6	(7.7 - 14.2)	89.4	(85.8 - 92.3)
<b>Household size</b>												
1	11.6	(9.5 - 13.9)	88.4	(86.1 - 90.5)	3.4	(2.4 - 4.9)	96.6	(95.1 - 97.6)	6.4	(4.9 - 8.1)	93.6	(91.9 - 95.1)
2	12.1	(10.6 - 13.8)	87.9	(86.2 - 89.4)	4.1	(3.2 - 5.3)	95.9	(94.7 - 96.8)	11.5	(9.9 - 13.2)	88.5	(86.8 - 90.1)
3	12.0	(9.7 - 14.7)	88.0	(85.3 - 90.3)	5.1	(3.5 - 7.2)	94.9	(92.8 - 96.5)	15.4	(12.7 - 18.5)	84.6	(81.5 - 87.3)
4	12.7	(10.3 - 15.4)	87.3	(84.6 - 89.7)	5.3	(3.6 - 7.3)	94.7	(92.7 - 96.4)	11.5	(9.3 - 14.0)	88.5	(86.0 - 90.7)
5+	11.4	(8.8 - 14.5)	88.6	(85.5 - 91.2)	6.5	(4.4 - 9.2)	93.5	(90.8 - 95.6)	11.8	(9.0 - 15.5)	88.2	(84.5 - 91.0)
<b>Personal Income (\$)</b>												
Up to 20,000	10.1	(8.3 - 12.1)	89.9	(87.9 - 91.7)	4.0	(2.7 - 5.7)	96.0	(94.3 - 97.3)	10.4	(8.6 - 12.4)	89.6	(87.6 - 91.4)
20,001 - 40,000	10.5	(8.7 - 12.5)	89.5	(87.5 - 91.3)	3.7	(2.5 - 5.3)	96.3	(94.7 - 97.5)	12.2	(9.9 - 14.7)	87.8	(85.3 - 90.1)
40,001 - 60,000	14.1	(11.5 - 16.9)	85.9	(83.1 - 88.5)	6.7	(5.0 - 8.9)	93.3	(91.1 - 95.0)	15.1	(12.6 - 18.1)	84.9	(81.9 - 87.4)
60,001 - 80,000	11.9	(9.1 - 15.2)	88.1	(84.8 - 90.9)	5.6	(3.5 - 8.5)	94.4	(91.5 - 96.5)	10.0	(7.3 - 13.2)	90.0	(86.8 - 92.7)
80,001 - 100,000	19.2	(14.0 - 25.4)	80.8	(74.6 - 86.0)	10.3	(6.4 - 15.4)	89.7	(84.6 - 93.6)	11.9	(7.9 - 17.0)	88.1	(83.0 - 92.1)
Over 100,000	19.0	(14.5 - 24.2)	81.0	(75.8 - 85.5)	5.4	(3.0 - 8.9)	94.6	(91.1 - 97.0)	11.6	(8.0 - 16.2)	88.4	(83.8 - 92.0)
<b>Household Income (\$)</b>												
Up to 20,000	9.8	(7.0 - 13.2)	90.2	(86.8 - 93.0)	2.8	(1.3 - 5.4)	97.2	(94.6 - 98.7)	7.3	(5.1 - 10.0)	92.7	(90.0 - 94.9)
20,001 - 40,000	8.8	(7.1 - 10.7)	91.2	(89.3 - 92.9)	2.5	(1.1 - 5.0)	97.5	(95.0 - 98.9)	8.0	(6.3 - 10.1)	92.0	(89.9 - 93.7)
40,001 - 60,000	10.7	(8.5 - 13.3)	89.3	(86.7 - 91.5)	4.6	(3.1 - 6.7)	95.4	(93.3 - 96.9)	11.7	(9.3 - 14.4)	88.3	(85.6 - 90.7)
60,001 - 80,000	12.6	(9.7 - 16.0)	87.4	(84.0 - 90.3)	3.7	(2.2 - 5.9)	96.3	(94.1 - 97.8)	12.2	(9.6 - 15.3)	87.8	(84.7 - 90.4)
80,001 - 100,000	11.6	(9.0 - 14.6)	88.4	(85.4 - 91.0)	6.3	(4.3 - 8.9)	93.7	(91.1 - 95.7)	9.8	(7.4 - 12.6)	90.2	(87.4 - 92.6)
Over 100,000	15.8	(13.5 - 18.3)	84.2	(81.7 - 86.5)	7.1	(5.5 - 8.9)	92.9	(91.1 - 94.5)	16.2	(14.0 - 18.8)	83.8	(81.2 - 86.0)

Demographic variables	Prevalence for total adults % (95% CI)											
	Non-casino EGMs				Short-term speculative investments				Overseas internet gambling for money/prizes			
	Yes		No		Yes		No		Yes		No	
Total	14.4	(13.3 - 15.5)	85.6	(84.5 - 86.7)	0.9	(0.7 - 1.2)	99.1	(98.8 - 99.3)	0.7	(0.4 - 1.0)	99.3	(99.0 - 99.6)
<b>Gender</b>												
Male	15.0	(13.3 - 16.8)	85.0	(83.2 - 86.7)	1.3	(0.9 - 2.0)	98.7	(98.0 - 99.1)	0.7	(0.4 - 1.3)	99.3	(98.7 - 99.6)
Female	13.8	(12.5 - 15.3)	86.2	(84.7 - 87.5)	0.5	(0.3 - 0.8)	99.5	(99.2 - 99.7)	0.6	(0.3 - 1.1)	99.4	(98.9 - 99.7)
<b>Ethnic group</b>												
European/Other	14.5	(13.2 - 15.9)	85.5	(84.1 - 86.8)	0.9	(0.6 - 1.3)	99.1	(98.7 - 99.4)	0.7	(0.4 - 1.1)	99.3	(98.9 - 99.6)
Māori	26.4	(23.7 - 29.3)	73.6	(70.7 - 76.3)	0.7	(0.3 - 1.3)	99.3	(98.7 - 99.7)	1.3	(0.7 - 2.2)	98.7	(97.8 - 99.3)
Pacific	15.0	(12.1 - 18.3)	85.0	(81.7 - 87.9)	0.2	(0.0 - 0.7)	99.8	(99.3 - 100.0)	0.6	(0.2 - 1.6)	99.4	(98.4 - 99.8)
Asian	4.2	(2.9 - 5.9)	95.8	(94.1 - 97.1)	2.3	(1.3 - 3.8)	97.7	(96.2 - 98.7)	0.8	(0.3 - 1.7)	99.2	(98.3 - 99.7)
<b>Age group</b>												
18 - 24 years	27.8	(23.1 - 32.8)	72.2	(67.2 - 76.9)	0.3	(0.1 - 1.0)	99.7	(99.0 - 99.9)	1.1	(0.5 - 2.0)	98.9	(98.0 - 99.5)
25 - 34 years	21.0	(17.9 - 24.3)	79.0	(75.7 - 82.1)	1.3	(0.5 - 2.5)	98.7	(97.5 - 99.5)	1.9	(0.9 - 3.5)	98.1	(96.5 - 99.1)
35 - 44 years	12.0	(10.0 - 14.3)	88.0	(85.7 - 90.0)	1.0	(0.4 - 1.9)	99.0	(98.1 - 99.6)	0.7	(0.3 - 1.5)	99.3	(98.5 - 99.7)
45 - 54 years	9.9	(8.1 - 12.1)	90.1	(87.9 - 91.9)	0.8	(0.4 - 1.6)	99.2	(98.4 - 99.6)	0.1	(0.0 - 0.5)	99.9	(99.5 - 100.0)
55 - 64 years	10.3	(8.1 - 12.8)	89.7	(87.2 - 91.9)	1.0	(0.5 - 1.9)	99.0	(98.1 - 99.5)	0.2	(0.1 - 0.7)	99.8	(99.3 - 99.9)
65+ years	8.2	(6.6 - 10.1)	91.8	(89.9 - 93.4)	0.9	(0.4 - 1.8)	99.1	(98.2 - 99.6)	-	-	100.0	-
<b>Country of birth</b>												
NZ	16.8	(15.4 - 18.3)	83.2	(81.7 - 84.6)	0.7	(0.5 - 1.1)	99.3	(98.9 - 99.5)	0.7	(0.4 - 1.1)	99.3	(98.9 - 99.6)
Elsewhere	7.9	(6.5 - 9.7)	92.1	(90.3 - 93.5)	1.4	(0.9 - 2.1)	98.6	(97.9 - 99.1)	0.7	(0.3 - 1.3)	99.3	(98.7 - 99.7)
<b>Arrival in NZ</b>												
2008 or later	2.9	(1.1 - 6.1)	97.1	(93.9 - 98.9)	2.4	(0.8 - 5.6)	97.6	(94.4 - 99.2)	0.8	(0.2 - 2.7)	99.2	(97.3 - 99.8)
Before 2008	9.0	(7.3 - 11.0)	91.0	(89.0 - 92.7)	1.1	(0.7 - 1.8)	98.9	(98.2 - 99.3)	0.7	(0.3 - 1.4)	99.3	(98.6 - 99.7)
<b>Highest qualification</b>												
No formal qual.	19.2	(16.5 - 22.2)	80.8	(77.8 - 83.5)	0.3	(0.1 - 0.7)	99.7	(99.3 - 99.9)	1.0	(0.4 - 1.9)	99.0	(98.1 - 99.6)
School qual.	18.4	(15.7 - 21.4)	81.6	(78.6 - 84.3)	0.6	(0.3 - 1.1)	99.4	(98.9 - 99.7)	0.2	(0.1 - 0.5)	99.8	(99.5 - 99.9)
Trade/voc. qual.	17.6	(15.1 - 20.2)	82.4	(79.8 - 84.9)	0.8	(0.4 - 1.5)	99.2	(98.5 - 99.6)	0.7	(0.2 - 1.9)	99.3	(98.1 - 99.8)
Degree/higher	8.2	(6.8 - 9.7)	91.8	(90.3 - 93.2)	1.4	(0.9 - 2.1)	98.6	(97.9 - 99.1)	0.8	(0.4 - 1.4)	99.2	(98.6 - 99.6)
<b>Labour force status</b>												
Employed	14.3	(13 - 15.7)	85.7	(84.3 - 87.0)	0.9	(0.7 - 1.3)	99.1	(98.7 - 99.3)	0.7	(0.4 - 1.2)	99.3	(98.8 - 99.6)
Unemployed	24.2	(19.7 - 29.1)	75.8	(70.9 - 80.3)	0.5	(0.1 - 1.4)	99.5	(98.6 - 99.9)	1.9	(0.8 - 3.8)	98.1	(96.2 - 99.2)
Student/Home/Retired	11.4	(9.5 - 13.4)	88.6	(86.6 - 90.5)	1.0	(0.4 - 1.9)	99.0	(98.1 - 99.6)	0.1	(0.0 - 0.3)	99.9	(99.7 - 100.0)
<b>Religion</b>												
No religion	18.8	(16.8 - 21)	81.2	(79.0 - 83.2)	1.0	(0.6 - 1.7)	99.0	(98.3 - 99.4)	1.1	(0.6 - 1.9)	98.9	(98.1 - 99.4)

Demographic variables	Prevalence for total adults % (95% CI)											
	Non-casino EGMs				Short-term speculative investments				Overseas internet gambling for money/prizes			
	Yes		No		Yes		No		Yes		No	
Anglican	11.1	(8.6 - 14.0)	88.9	(86.0 - 91.4)	1.0	(0.4 - 2.1)	99.0	(97.9 - 99.6)	0.2	(0.0 - 0.6)	99.8	(99.4 - 100)
Presbyterian	10.1	(7.4 - 13.3)	89.9	(86.7 - 92.6)	0.7	(0.2 - 1.6)	99.3	(98.4 - 99.8)	0.5	(0.1 - 2.0)	99.5	(98.0 - 99.9)
Catholic	15.7	(12.8 - 19.0)	84.3	(81.0 - 87.2)	1.2	(0.5 - 2.3)	98.8	(97.7 - 99.5)	0.5	(0.2 - 1.1)	99.5	(98.9 - 99.8)
Other Christian	11.6	(9.5 - 14.1)	88.4	(85.9 - 90.5)	0.5	(0.2 - 1.1)	99.5	(98.9 - 99.8)	0.3	(0.1 - 0.7)	99.7	(99.3 - 99.9)
Other religion	5.8	(4.0 - 8.2)	94.2	(91.8 - 96.0)	0.7	(0.3 - 1.6)	99.3	(98.4 - 99.7)	0.5	(0.1 - 1.4)	99.5	(98.6 - 99.9)
<b>Household size</b>												
1	8.9	(7.2 - 10.9)	91.1	(89.1 - 92.8)	1.4	(0.8 - 2.3)	98.6	(97.7 - 99.2)	0.2	(0.1 - 0.6)	99.8	(99.4 - 99.9)
2	13.7	(12.0 - 15.5)	86.3	(84.5 - 88.0)	0.9	(0.5 - 1.4)	99.1	(98.6 - 99.5)	0.4	(0.2 - 0.8)	99.6	(99.2 - 99.8)
3	16.6	(13.9 - 19.6)	83.4	(80.4 - 86.1)	0.2	(0.1 - 0.6)	99.8	(99.4 - 99.9)	1.2	(0.5 - 2.4)	98.8	(97.6 - 99.5)
4	14.7	(12.3 - 17.4)	85.3	(82.6 - 87.7)	1.1	(0.6 - 1.9)	98.9	(98.1 - 99.4)	0.5	(0.2 - 1.1)	99.5	(98.9 - 99.8)
5+	15.8	(12.7 - 19.2)	84.2	(80.8 - 87.3)	1.1	(0.4 - 2.5)	98.9	(97.5 - 99.6)	1.0	(0.4 - 2.4)	99.0	(97.6 - 99.6)
<b>Personal Income (\$)</b>												
Up to 20,000	14.9	(12.9 - 17.1)	85.1	(82.9 - 87.1)	0.3	(0.1 - 0.7)	99.7	(99.3 - 99.9)	0.6	(0.2 - 1.3)	99.4	(98.7 - 99.8)
20,001 - 40,000	18.2	(15.8 - 20.9)	81.8	(79.1 - 84.2)	0.9	(0.3 - 1.8)	99.1	(98.2 - 99.7)	0.8	(0.4 - 1.6)	99.2	(98.4 - 99.6)
40,001 - 60,000	16.3	(13.6 - 19.2)	83.7	(80.8 - 86.4)	0.4	(0.1 - 0.8)	99.6	(99.2 - 99.9)	1.0	(0.4 - 2.0)	99.0	(98.0 - 99.6)
60,001 - 80,000	9.1	(6.5 - 12.3)	90.9	(87.7 - 93.5)	1.8	(1.0 - 3.1)	98.2	(96.9 - 99.0)	0.3	(0.1 - 1.2)	99.7	(98.8 - 99.9)
80,001 - \$100,000	8.7	(5.4 - 13.1)	91.3	(86.9 - 94.6)	1.0	(0.2 - 3.7)	99.0	(96.3 - 99.8)	0.1	(0.0 - 0.4)	99.9	(99.6 - 100.0)
Over 100,000	6.9	(3.9 - 11.3)	93.1	(88.7 - 96.1)	3.1	(1.5 - 5.7)	96.9	(94.3 - 98.5)	1.0	(0.2 - 2.9)	99.0	(97.1 - 99.8)
<b>Household Income (\$)</b>												
Up to 20,000	10.7	(8.3 - 13.4)	89.3	(86.6 - 91.7)	0.3	(0.1 - 0.8)	99.7	(99.2 - 99.9)	0.1	(0.0 - 0.3)	99.9	(99.7 - 100.0)
20,001 - 40,000	14.6	(12.5 - 16.9)	85.4	(83.1 - 87.5)	0.4	(0.1 - 0.8)	99.6	(99.2 - 99.9)	0.6	(0.2 - 1.3)	99.4	(98.7 - 99.8)
40,001 - 60,000	17.4	(14.5 - 20.6)	82.6	(79.4 - 85.5)	0.7	(0.3 - 1.4)	99.3	(98.6 - 99.7)	0.5	(0.2 - 1.3)	99.5	(98.7 - 99.8)
60,001 - 80,000	17.7	(14.3 - 21.6)	82.3	(78.4 - 85.7)	0.9	(0.5 - 1.7)	99.1	(98.3 - 99.5)	0.3	(0.1 - 0.9)	99.7	(99.1 - 99.9)
80,001 - 100,000	12.5	(9.6 - 15.9)	87.5	(84.1 - 90.4)	0.6	(0.2 - 1.6)	99.4	(98.4 - 99.8)	1.5	(0.5 - 3.5)	98.5	(96.5 - 99.5)
Over 100,000	12.1	(10.1 - 14.4)	87.9	(85.6 - 89.9)	1.8	(1.0 - 2.8)	98.2	(97.2 - 99.0)	0.7	(0.3 - 1.3)	99.3	(98.7 - 99.7)

## Appendix 7: Past 12 months participation in most frequently engaged in gambling activities by selected characteristics

Demographic variables	Prevalence for total adults %							Casino EGMs (NZ)
	Lotto	Raffle/lottery (NZ and overseas)	Instant Kiwi or scratch tickets	Bets with friends/workmates	Non-casino EGMs	Horse/dog race betting	Casino gambling (NZ and overseas)	
<b>Total</b>	62.2	48.1	33.2	15.3	14.4	12.1	11.8	8.4
<b>Gender</b>								
Male	64.1	44.4	29.0	17.9	15.0	13.6	13.3	9.3
Female	60.5	51.5	37.1	12.8	13.8	10.6	10.4	7.6
<b>Ethnic group</b>								
European/Other	63.9	50.6	34.7	16.3	14.5	13.5	11.7	8.2
Māori	67.7	52.6	42.1	18.1	26.4	13.1	10.4	7.5
Pacific	56.9	43.2	31.3	14.1	15.0	6.5	13.8	12.3
Asian	47.0	24.3	20.1	6.1	4.2	2.8	13.6	9.7
<b>Ethnic group - Male</b>								
European/Other	65.3	46.0	30.0	19.0	14.7	15.1	13.4	9.1
Māori	65.0	47.9	37.8	22.9	26.6	16.4	10.6	6.9
Pacific	60.0	44.4	28.9	18.9	18.5	9.3	13.4	11.7
Asian	53.0	23.7	18.4	7.2	4.8	3.1	15.4	11.4
<b>Ethnic group - Female</b>								
European/Other	62.6	54.9	39.2	13.8	14.3	12.0	10.1	7.4
Māori	70.2	56.7	45.9	13.7	26.3	10.2	10.2	8.0
Pacific	54.0	42.0	33.6	9.5	11.7	3.9	14.3	12.8
Asian	41.8	24.9	21.7	5.1	3.7	2.5	12.0	8.1
<b>Age group</b>								
18 - 24 years	33.8	27.9	45.8	19.2	27.8	14.1	19.1	10.8
25 - 34 years	60.8	44.9	40.9	18.2	21.0	12.6	17.5	12.3
35 - 44 years	68.0	53.7	29.4	17.6	12.0	12.6	9.0	5.6
45 - 54 years	70.5	51.6	30.4	14.9	9.9	10.6	9.2	6.4
55 - 64 years	71.3	55.6	28.9	14.5	10.3	13.3	10.6	6.5
65+ years	61.6	50.3	26.4	7.2	8.2	10.0	7.2	4.6
<b>Male - age group</b>								
18 - 24 years	35.1	24.0	42.7	25.5	28.3	15.7	18.4	10.7
25 - 34 years	63.5	40.5	36.6	24.3	24.3	13.9	24.0	17.0
35 - 44 years	72.0	50.6	26.9	17.4	13.8	13.9	10.4	6.9
45 - 54 years	72.1	46.3	25.2	17.0	9.1	11.7	10.4	7.8
55 - 64 years	71.1	51.7	20.7	14.5	7.3	14.2	10.0	7.3
65+ years	65.3	51.2	22.5	8.9	8.0	12.8	6.9	5.9
<b>Female - age group</b>								
18 - 24 years	32.3	32.4	49.4	11.9	27.2	12.2	19.9	13.9
25 - 34 years	58.5	48.7	44.7	12.8	18.1	11.4	11.9	9.1
35 - 44 years	64.4	56.4	31.7	17.8	10.5	11.4	7.8	5.6
45 - 54 years	69.1	56.6	35.3	13.0	10.7	9.6	8.0	6.1
55 - 64 years	71.5	59.3	36.7	14.6	13.1	12.4	11.1	8.0
65+ years	58.5	49.5	29.6	5.8	8.4	7.6	7.5	5.8
<b>Labour force status</b>								
Employed	65.6	50.7	34.0	18.7	14.3	13.2	13.2	9.2
Unemployed	57.1	42.1	37.9	8.1	24.2	12.8	13.1	9.7
Student/Home/Retired	55.4	43.5	29.4	8.5	11.4	8.7	7.7	6.1
<b>Labour force status - Male</b>								
Employed	66.6	47.1	29.4	19.9	14.7	13.3	14.7	9.7
Unemployed	57.9	35.5	33.8	11.3	24.6	15.2	12.9	10.0
Student/Home/Retired	56.5	37.9	24.7	12.5	11.4	13.4	7.7	6.8
<b>Labour force status - Female</b>								
Employed	64.3	54.8	39.4	17.3	13.9	13.0	11.5	8.5
Unemployed	56.5	47.7	41.3	5.4	23.8	10.7	13.4	9.5
Student/Home/Retired	54.8	46.5	32.0	6.4	11.3	6.1	7.7	5.7

## Appendix 8: Reasons for participating in gambling activities by demographics

Demo-graphic variables	Reasons for participating	Reasons for participating %														
		Card games	Bets with friends/workmates	Text game or comp.	NZ raffle or lottery	Lotto	Keno	Instant Kiwi/scratch ticket	Housie or bingo	Horse/dog race betting	Sports betting	Casino Table games (NZ)	Casino EGMS (NZ)	Non-casino EGMs	Short-term spec. invest.	Overseas internet
<b>Male</b>	To win prizes/money	46.8	46.2	79.4	43.5	92.7	90.3	78.9	68.8	70.1	82.1	74.0	70.9	73.7	96.6	66.2
	For excitement/or a challenge	55.5	54.2	31.0	7.1	14.2	21.8	27.9	43.2	55.5	63.9	65.6	43.4	41.2	37.4	53.3
	To support worthy causes	7.2	7.3	8.9	76.7	8.8	11.4	3.6	32.5	2.4	1.5	1.4	2.1	4.5	3.1	8.4
	Out of curiosity	5.8	8.3	22.6	3.1	4.2	5.2	7.8	4.1	7.9	5.4	7.2	10.6	11.7	21.5	22.4
	To oblige or please people	8.9	12.6	4.9	12.3	2.3	-	1.8	3.4	4.2	0.8	3.5	4.9	4.6	1.3	-
	As a gift for another person	2.8	0.6	1.1	6.0	11.6	4.4	15.5	-	0.1	0.1	0.2	1.5	0.4	-	-
	As an interest/or a hobby	31.2	12.5	6.0	0.9	2.8	6.2	3.0	13.1	24.7	23.9	11.9	3.5	5.0	34.6	26.5
	To be with other people/get out of the house	48.7	7.1	0.7	1.3	0.3	-	-	15.2	21.4	5.8	24.7	18.7	17.4	-	7.4
	As entertainment	73.2	56.4	26.3	7.8	10.3	17.2	25.4	53.6	64.5	59.1	72.1	60.8	58.6	7.1	60.5
	Other	-	-	0.7	-	-	-	0.2	-	0.3	-	0.3	0.4	0.3	6.1	-
<b>Female</b>	To win prizes/money	27.8	46.7	84.0	36.2	90.5	87.6	74.7	63.1	60.8	63.9	63.9	59.4	59.4	91.7	66.4
	For excitement/or a challenge	45.2	52.0	22.6	6.9	16.5	20.7	31.4	30.1	56.2	42.4	48.7	41.5	41.7	5.8	62.5
	To support worthy causes	13.1	8.8	8.9	85.2	11.1	3.6	3.2	20.3	2.0	0.4	-	0.6	2.7	-	14.2
	Out of curiosity	20.7	8.8	15.5	2.7	4.4	14.3	9.5	8.4	7.5	11.9	15.6	14.6	14.1	18.7	18.1
	To oblige or please people	5.0	18.1	4.7	17.3	3.2	1.5	1.9	3.6	12.7	7.7	11.7	3.3	5.7	-	7.5
	As a gift for another person	0.3	2.1	2.5	8.1	19.9	5.1	23.3	0.9	0.7	-	-	1.9	0.9	-	7.5
	As an interest/or a hobby	12.0	6.3	2.7	1.1	2.7	1.5	2.0	9.4	18.7	22.9	6.0	4.6	5.6	19.4	7.9
	To be with other people/get out of the house	35.5	8.1	1.1	0.9	0.7	0.6	0.7	45.5	26.2	-	22.0	22.3	15.2	-	4.3
	As entertainment	69.2	48.5	16.8	4.4	9.3	8.6	23.0	46.9	55.3	48.7	62.3	64.8	57.6	12.9	70.3
	Other	-	-	-	-	0.1	2.6	0.3	-	0.5	-	-	0.3	0.3	10.3	-
<b>18-24 years</b>	To win prizes/money	61.7	66.7	77.6	47.7	90.3	95.6	71.9	72.4	69.3	85.0	65.5	59.9	62.7	100.0	65.9
	For excitement/or a challenge	75.5	68.6	10.9	17.1	20.8	18.5	42.1	38.9	56.0	62.2	69.2	47.6	52.4	-	60.3
	To support worthy causes	8.4	8.4	1.3	71.5	3.5	-	1.6	18.6	1.4	1.3	-	1.5	3.5	-	29.2
	Out of curiosity	13.3	13.9	21.3	9.4	12.4	6.4	16.7	11.9	15.7	7.3	10.4	19.8	19.8	-	32.8
	To oblige or please people	12.8	3.7	1.3	9.4	0.8	0.0	1.3	2.4	1.7	3.6	-	1.6	8.1	-	17.3
	As gift for another person	3.8	0.3	1.3	6.1	12.7	-	12.7	-	0.7	-	-	0.9	0.8	-	17.3
	As an interest/or a hobby	41.1	13.7	9.0	1.8	3.5	-	1.5	7.1	19.4	30.7	13.0	4.7	6.7	33.7	6.0

Demo-graphic variables	Reasons for participating	Reasons for participating %														
		Card games	Bets with friends/workmates	Text game or comp.	NZ raffle or lottery	Lotto	Keno	Instant Kiwi/scratch ticket	Housie or bingo	Horse/dog race betting	Sports betting	Casino Table games (NZ)	Casino EGMS (NZ)	Non-casino EGMs	Short-term spec. invest.	Overseas internet
25-34 years	To be with other people/get out of the house	41.5	7.8	2.5	-	0.2	-	0.8	49.5	26.7	1.8	21.7	9.0	16.2	-	6.0
	As entertainment	79.9	63.8	16.7	12.7	17.9	34.3	32.0	79.7	67.1	58.5	73.1	79.3	55.7	-	72.1
	Other	-	-	-	-	-	3.8	0.8	-	-	-	-	0.6	0.6	-	-
	To win prizes/money	40.9	48.6	85.0	39.9	94.1	95.2	82.4	39.7	69.2	76.8	74.3	63.3	70.3	83.8	71.9
	For excitement/or a challenge	49.0	59.8	27.7	7.5	17.0	29.7	33.7	41.3	59.0	61.3	53.1	42.2	41.7	46.4	74.2
	To support worthy causes	7.1	10.1	11.4	81.0	6.2	4.2	1.8	19.1	2.7	1.8	2.5	0.4	2.5	-	1.4
	Out of curiosity	9.1	12.8	24.5	3.6	4.5	6.0	7.9	0.6	9.2	12.0	8.5	8.5	11.0	69.4	10.3
	To oblige or please people	2.7	17.2	0.4	12.2	2.6	1.6	1.3	7.7	15.6	0.5	14.8	6.6	5.0	-	-
	As a gift for another person	2.7	2.1	1.9	5.2	17.3	2.3	17.8	-	0.6	0.3	-	-	0.1	-	-
As an interest/or a hobby	17.4	9.6	3.7	1.1	1.3	7.6	2.8	5.0	23.9	26.2	8.5	1.9	3.7	39.2	32.6	
To be with other people/get out of the house	53.4	11.5	1.4	2.1	1.1	-	0.6	40.1	26.6	8.6	33.1	25.2	18.4	-	3.9	
As entertainment	74.3	47.2	23.9	8.3	11.4	13.7	28.5	37.1	62.8	54.5	71.2	59.0	58.3	25.2	76.2	
Other	-	-	-	-	-	-	-	-	0.2	-	0.7	0.2	0.1	18.5	-	
35-44 years	To win prizes/money	26.9	38.9	84.9	39.6	93.8	94.8	80.1	86.8	58.6	75.0	76.1	72.4	70.3	96.1	51.3
	For excitement/or a challenge	49.0	50.7	22.7	6.9	13.3	18.7	29.8	46.7	60.1	61.0	56.9	42.4	38.0	47.6	20.1
	To support worthy causes	18.1	4.6	6.7	83.5	9.6	10.7	2.2	53.1	2.5	0.8	1.4	-	2.6	-	-
	Out of curiosity	13.3	6.4	15.2	2.5	3.4	8.7	6.7	9.0	4.7	1.8	19.0	11.0	9.8	1.8	40.5
	To oblige or please people	3.6	18.9	7.6	16.7	1.6	1.6	3.2	-	7.3	4.1	6.0	2.0	4.0	-	-
	As a gift for another person	0.5	0.8	3.4	5.7	17.2	5.5	22.6	4.8	-	-	1.4	0.9	0.6	-	-
	As an interest/or a hobby	15.5	4.2	-	-	1.8	8.7	1.8	25.3	10.6	20.2	14.2	0.3	2.2	47.6	-
	To be with other people/get out of the house	42.0	6.1	-	0.7	0.3	1.1	0.2	33.6	26.5	1.4	27.9	26.4	14.3	-	13.9
	As entertainment	54.5	55.0	19.4	4.0	8.0	4.2	21.0	47.6	68.3	65.4	77.3	63.1	62.5	-	56.2
Other	-	-	1.1	-	0.0	3.8	0.1	-	1.1	-	-	-	-	-	-	
45-54 years	To win prizes/money	28.8	42.8	91.6	38.1	91.9	93.0	76.2	72.9	70.4	74.6	79.5	70.2	65.4	100.0	100.0
	For excitement/or a challenge	37.2	50.4	29.5	3.4	12.1	11.5	25.1	29.7	56.5	67.4	70.4	37.6	30.5	33.2	74.8
	To support worthy causes	8.2	10.7	18.4	80.6	11.0	10.0	3.9	33.1	1.2	2.0	-	4.2	5.1	-	-
	Out of curiosity	1.6	6.5	6.7	2.0	3.7	5.8	6.1	2.1	5.1	2.8	5.4	13.7	15.9	16.5	-

Demo-graphic variables	Reasons for participating	Reasons for participating %														
		Card games	Bets with friends/workmates	Text game or comp.	NZ raffle or lottery	Lotto	Keno	Instant Kiwi/scratch ticket	Housie or bingo	Horse/dog race betting	Sports betting	Casino Table games (NZ)	Casino EGMS (NZ)	Non-casino EGMS	Short-term spec. invest.	Overseas internet
55-64 years	To oblige or please people	18.2	16.0	4.6	16.8	4.2	-	1.4	6.0	6.5	-	-	2.9	7.0	-	-
	As a gift for another person	-	0.9	-	6.3	13.4	5.5	24.5	-	0.4	-	-	3.8	1.5	-	-
	As an interest/or a hobby	25.4	10.4	2.6	1.0	2.0	1.5	1.6	13.7	27.3	18.0	-	5.2	7.2	25.5	-
	To be with other people/get out of the house	38.9	2.9	-	0.7	0.5	-	0.4	27.8	23.7	8.5	16.3	25.3	14.7	-	-
	As entertainment	76.7	60.1	26.7	3.3	8.1	5.9	17.2	33.4	59.4	58.5	53.2	57.6	50.9	14.2	13.0
	Other	-	-	-	-	0.1	-	0.5	-	0.5	-	-	1.5	1.2	15.5	-
	To win prizes/money	8.8	41.0	61.6	42.9	89.7	77.4	72.9	74.3	69.4	62.3	79.7	70.4	69.0	100.0	43.3
	For excitement/or a challenge	13.9	41.6	67.1	6.7	18.1	36.3	24.4	30.4	55.7	31.3	60.1	48.9	41.8	-	11.2
	To support worthy causes	1.6	5.6	9.1	83.5	13.6	3.1	5.9	9.7	2.6	-	-	1.6	2.4	-	88.8
	Out of curiosity	9.7	3.3	10.9	2.2	2.5	8.3	7.6	11.1	7.7	0.5	9.7	14.5	10.2	-	11.2
	To oblige or please people	13.0	23.8	28.1	16.5	3.3	-	2.0	1.3	8.9	6.1	6.3	5.2	-	-	-
	As a gift for another person	-	2.8	1.8	10.4	15.0	7.7	24.5	-	-	-	-	1.9	1.2	-	-
	As an interest/or a hobby	40.5	11.9	-	1.3	3.3	-	3.4	5.5	24.8	9.7	4.1	10.7	8.0	10.0	-
	To be with other people/get out of the house	41.4	8.9	-	0.7	0.3	-	0.3	21.1	20.7	-	8.0	21.6	14.9	-	-
As entertainment	54.6	44.3	1.8	6.4	9.3	10.2	21.0	40.9	54.1	58.7	53.5	53.6	60.6	-	-	
Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
65+ years	To win prizes/money	36.3	37.8	51.3	33.9	88.1	73.7	71.4	49.5	57.8	96.1	33.5	59.5	58.2	100.0	.
	For excitement/or a challenge	27.5	39.1	25.9	6.8	15.9	12.1	19.4	13.3	44.9	48.4	29.2	34.5	33.3	5.3	.
	To support worthy causes	-	7.1	-	82.8	12.1	13.6	6.5	17.4	3.0	-	-	0.9	8.0	13.6	.
	Out of curiosity	-	6.0	35.2	1.5	4.3	24.4	7.2	8.0	4.7	-	-	7.9	4.3	-	.
	To oblige or please people	4.1	3.8	-	15.0	2.6	-	2.6	3.3	7.0	-	-	5.4	2.5	5.7	.
	As a gift for another person	-	-	10.5	9.0	17.7	5.2	20.0	-	0.6	-	-	4.7	-	-	.
	As an interest/or a hobby	28.3	13.3	25.9	1.5	6.0	-	4.2	11.3	29.2	11.1	24.0	3.7	5.8	19.3	.
	To be with other people/get out of the house	32.6	9.0	-	1.8	0.5	-	0.2	45.5	15.5	-	6.9	11.8	17.8	-	.
	As entertainment	70.5	40.8	25.9	5.9	10.0	28.2	21.5	49.7	46.8	34.2	63.2	61.5	63.1	-	.
	Other	-	-	-	-	-	-	-	-	0.5	-	-	-	-	-	.

Demo-graphic variables	Reasons for participating	Reasons for participating %														
		Card games	Bets with friends/workmates	Text game or comp.	NZ raffle or lottery	Lotto	Keno	Instant Kiwi/scratch ticket	Housie or bingo	Horse/dog race betting	Sports betting	Casino Table games (NZ)	Casino EGMS (NZ)	Non-casino EGMS	Short-term spec. invest.	Overseas internet
European/Other	To win prizes/money	42.3	46.0	83.6	38.5	91.2	87.0	75.8	56.5	64.7	79.6	71.0	63.8	64.7	96.8	68.4
	For excitement/or a challenge	54.3	52.9	24.8	6.7	15.0	22.9	30.2	36.0	56.7	58.0	62.2	43.9	42.2	33.4	62.5
	To support worthy causes	5.5	7.8	8.4	83.0	9.7	7.0	2.9	20.5	2.0	1.3	1.2	1.3	3.2	2.8	10.2
	Out of curiosity	10.1	8.3	18.6	2.6	3.7	11.7	8.3	9.3	7.5	6.6	9.8	12.6	13.1	16.4	16.4
	To oblige or please people	9.5	15.6	5.3	15.7	2.8	-	1.9	3.8	8.3	2.2	6.4	4.3	5.1	1.2	4.4
	As a gift for another person	2.7	1.1	1.7	7.2	16.8	4.5	21.5	-	0.3	0.1	0.2	1.7	0.5	-	4.4
	As an interest/or a hobby	29.1	10.2	1.6	0.9	2.7	5.5	2.1	7.6	23.0	25.4	11.6	3.4	4.8	25.4	21.5
	To be with other people/get out of the house	47.4	7.7	-	0.9	0.3	-	0.2	41.9	24.8	4.8	26.3	19.8	15.2	-	1.5
	As entertainment	73.8	52.5	17.6	5.8	9.8	16.6	24.1	53.0	61.9	60.1	72.5	64.7	60.1	5.3	66.8
Other	-	-	-	-	0.0	2.1	0.3	-	0.3	-	-	0.4	0.4	7.8	-	
Māori	To win prizes/money	40.7	51.4	79.9	40.9	95.3	92.5	79.1	69.4	71.9	74.5	58.2	62.6	70.8	79.3	67.5
	For excitement/or a challenge	52.6	51.7	32.7	10.7	17.7	23.9	33.4	32.4	57.0	67.3	58.4	39.6	45.2	10.0	57.2
	To support worthy causes	17.3	10.0	19.2	80.7	8.3	10.1	4.0	32.0	6.6	4.6	2.1	4.4	5.6	-	-
	Out of curiosity	8.9	6.0	19.3	5.8	5.5	12.7	11.3	2.4	7.5	1.6	17.6	19.1	14.2	-	28.4
	To oblige or please people	5.9	13.7	3.7	15.2	3.0	1.4	1.9	7.2	6.1	0.9	5.2	5.7	5.7	-	0.0
	As gift for another person	0.4	1.8	6.5	7.4	16.9	7.0	14.6	2.4	1.5	-	2.1	1.9	0.5	-	-
	As an interest/or a hobby	19.5	12.2	8.4	1.9	3.2	3.8	3.0	9.0	17.6	17.9	7.5	6.1	7.8	46.9	29.2
	To be with other people/get out of the house	37.1	7.7	2.4	1.1	1.2	1.3	0.6	30.5	17.7	1.9	15.6	19.9	22.4	-	26.0
	As entertainment	69.5	62.0	48.6	7.1	9.5	9.6	23.4	43.3	55.1	49.5	50.4	57.4	47.1	-	47.8
Other	-	-	-	0.1	-	1.5	0.2	-	1.0	-	3.0	1.6	0.5	10.8	-	
Pacific	To win prizes/money	40.6	53.8	62.2	57.7	95.0	94.9	81.4	82.7	82.8	76.7	69.5	74.8	84.4	30.5	75.8
	For excitement/or a challenge	37.8	60.3	51.9	7.2	18.2	19.3	29.2	40.4	37.7	78.8	52.2	42.7	37.6	-	61.4
	To support worthy causes	16.9	7.6	11.3	62.8	9.9	3.2	2.8	35.7	4.9	7.6	-	0.9	3.7	-	14.4
	Out of curiosity	7.0	17.5	22.7	4.2	7.5	3.6	9.7	5.3	3.1	8.1	5.4	16.6	12.8	30.5	24.9
	To oblige or please people	4.8	8.1	-	9.1	1.6	3.3	2.1	3.3	4.1	-	-	1.9	4.0	-	-
	As gift for another person	-	1.9	3.4	7.3	11.4	2.5	9.9	-	1.7	2.1	-	2.3	4.8	-	-
	As an interest/or a hobby	10.5	6.1	20.5	1.9	2.9	2.2	3.8	18.5	17.9	24.1	10.3	4.7	7.0	-	24.9
	To be with other people/get out of the house	41.3	7.1	9.1	3.3	1.5	-	2.7	30.8	15.0	11.4	19.6	30.3	25.0	-	39.2

Demo-graphic variables	Reasons for participating	Reasons for participating %														
		Card games	Bets with friends/workmates	Text game or comp.	NZ raffle or lottery	Lotto	Keno	Instant Kiwi/scratch ticket	Housie or bingo	Horse/dog race betting	Sports betting	Casino Table games (NZ)	Casino EGMS (NZ)	Non-casino EGMS	Short-term spec. invest.	Overseas internet
Asian	As entertainment	54.2	42.7	44.2	7.5	7.3	8.8	24.0	33.7	44.6	59.3	57.6	49.9	46.7	-	24.2
	Other	-	-	-	-	0.2	-	0.2	-	1.2	-	4.8	-	-	69.5	-
	To win prizes/money	25.5	37.4	86.7	46.2	89.8	84.6	80.8	44.2	63.2	70.5	73.3	76.2	55.9	88.5	45.6
	For excitement/or a challenge	36.0	56.2	29.1	9.0	18.1	16.8	27.0	12.5	61.2	59.4	48.5	34.3	30.3	18.5	-
	To support worthy causes	-	7.0	12.6	66.9	13.3	8.0	6.7	2.0	-	-	-	0.6	7.7	-	24.6
	Out of curiosity	12.3	15.0	21.9	4.2	8.8	5.1	10.8	-	29.8	17.0	11.4	5.9	16.2	46.3	42.4
	To oblige or please people	7.0	6.8	5.8	11.6	2.7	-	3.4	10.0	6.6	7.1	4.9	4.3	6.5	-	-
	As a gift for another person	-	3.2	5.8	5.5	8.7	-	10.6	-	3.4	-	-	-	-	-	-
	As an interest/or a hobby	17.0	7.5	41.5	0.8	3.6	3.0	6.4	-	26.6	13.9	3.7	6.4	9.5	49.5	-
To be with other people/get out of the house	37.9	10.3	11.7	2.0	1.0	-	0.9	23.5	22.3	5.8	18.5	20.2	19.3	-	-	
As entertainment	72.5	62.3	35.7	8.3	11.5	6.7	26.6	62.1	48.0	40.3	60.3	63.8	66.7	30.5	59.3	
Other	-	-	5.7	-	-	-	-	-	-	-	-	-	-	14.3	-	
NZ country of birth	To win prizes/money	45.3	47.0	83.0	38.5	91.3	87.7	76.3	65.6	66.8	76.5	71.0	66.6	66.4	95.8	72.3
	For excitement/or a challenge	60.0	56.0	24.8	7.1	15.3	24.5	31.1	36.1	57.1	62.3	64.4	46.4	43.9	34.8	55.6
	To support worthy causes	10.6	7.9	10.4	82.7	9.5	9.3	3.2	27.7	2.0	1.4	1.3	1.8	3.7	-	2.3
	Out of curiosity	11.6	8.2	16.7	3.0	3.9	11.7	9.1	6.8	7.2	6.3	10.5	12.8	12.8	17.2	17.8
	To oblige or please people	8.3	14.4	5.7	15.4	2.8	0.5	1.7	2.7	7.7	2.2	2.4	2.9	4.5	1.6	-
	As a gift for another person	2.7	1.4	2.0	7.2	17.9	6.2	21.3	0.9	0.3	0.1	0.2	2.0	0.7	-	-
	As an interest/or a hobby	27.8	11.0	1.8	1.2	2.9	3.7	2.0	12.6	23.5	25.6	11.2	2.6	5.3	23.7	25.0
	To be with other people/get out of the house	42.2	7.1	0.4	0.7	0.3	0.4	0.3	38.3	23.3	4.7	23.1	19.8	16.7	-	7.3
	As entertainment	75.2	53.7	20.4	5.6	9.7	16.0	24.0	48.7	62.0	60.3	67.0	67.0	59.0	2.7	62.0
Other	-	-	-	-	-	1.5	0.3	-	0.5	-	0.3	0.4	0.4	5.5	-	
Other country of birth	To win prizes/money	28.1	43.9	79.8	42.7	92.4	91.3	77.1	62.0	60.7	88.9	70.7	62.7	67.5	94.2	51.5
	For excitement/or a challenge	24.6	41.9	29.2	6.6	15.7	15.7	25.1	26.3	48.8	45.8	48.3	32.1	27.9	18.3	62.6
	To support worthy causes	1.5	8.2	3.3	76.9	11.4	5.0	4.1	10.8	3.4	0.8	-	0.2	3.4	5.3	33.3
	Out of curiosity	2.4	9.7	23.3	2.4	5.4	6.0	7.3	8.1	10.4	8.6	7.9	11.6	13.2	25.6	26.9
	To oblige or please people	6.3	17.1	1.2	13.8	2.6	1.1	2.7	6.4	10.0	2.0	17.0	7.5	8.8	-	12.3
	As gift for another person	-	0.7	1.9	6.8	9.7	2.4	14.7	-	0.4	-	-	0.9	0.4	-	12.3

Demo-graphic variables	Reasons for participating	Reasons for participating %														
		Card games	Bets with friends/workmates	Text game or comp.	NZ raffle or lottery	Lotto	Keno	Instant Kiwi/scratch ticket	Housie or bingo	Horse/dog race betting	Sports betting	Casino Table games (NZ)	Casino EGMS (NZ)	Non-casino EGMS	Short-term spec. invest.	Overseas internet
Arrival in NZ before 2008	As an interest/or a hobby	19.7	5.1	11.7	0.4	2.4	4.4	4.4	3.4	14.0	14.0	6.9	7.8	5.0	39.2	-
	To be with other people/get out of the house	56.8	9.1	3.1	2.5	1.0	-	0.8	31.8	25.3	4.6	26.3	21.9	13.9	-	2.5
	As entertainment	60.4	50.1	20.5	7.1	10.2	8.1	24.0	49.4	50.8	40.1	75.2	51.3	53.0	17.6	72.7
	Other	-	0.0	1.2	-	-	0.8	0.1	-	-	-	-	0.4	-	10.0	-
	To win prizes/money	27.9	46.3	72.3	42.9	92.5	88.8	76.7	60.2	64.4	89.6	69.6	61.8	66.2	91.6	48.6
	For excitement/or a challenge	26.6	42.5	32.0	6.5	16.3	14.8	25.1	27.1	51.0	49.0	48.4	32.2	25.7	23.3	62.7
	To support worthy causes	1.9	8.6	2.9	77.6	10.9	4.0	4.6	11.7	3.9	0.9	-	0.2	3.0	7.7	42.1
	Out of curiosity	3.1	10.4	25.8	2.2	5.2	5.8	7.4	8.8	11.4	5.5	3.5	10.6	13.3	23.6	24.1
	To oblige or please people	7.9	16.4	-	14.2	2.4	-	2.8	6.9	6.4	2.3	20.1	7.0	8.9	-	15.5
	As a gift for another person	-	0.5	1.0	7.2	10.4	0.5	14.0	-	0.5	-	-	1.0	0.4	-	15.5
Arrival in NZ after 2008	As an interest/or a hobby	20.9	5.0	8.0	0.4	2.6	2.0	3.9	3.7	14.1	11.8	8.1	7.4	5.4	41.8	-
	To be with other people/get out of the house	65.6	8.2	2.7	2.4	1.1	-	0.8	32.2	24.6	1.0	25.7	21.6	14.9	-	3.1
	As entertainment	56.7	47.0	18.2	6.6	9.5	9.3	23.1	47.0	51.0	43.6	77.0	50.4	52.3	12.1	65.5
	Other	-	-	1.6	-	-	1.1	0.1	-	-	-	-	0.4	-	14.5	-
Arrival in NZ after 2008	To win prizes/money	28.5	31.9	100.0	41.4	92.0	100.0	80.1	83.5	33.7	84.1	76.8	70.1	86.4	100.0	62.3
	For excitement/or a challenge	17.1	39.1	21.8	7.4	11.6	19.1	25.1	16.5	33.0	23.7	47.5	31.4	60.9	7.3	62.3
	To support worthy causes	-	6.3	4.3	70.2	14.8	8.9	-	-	-	-	-	-	8.7	-	-
	Out of curiosity	-	6.2	16.4	4.4	7.2	6.4	6.5	-	3.1	30.0	32.8	19.5	10.9	30.0	37.7
	To oblige or please people	-	20.4	4.3	9.6	4.0	5.0	1.5	-	36.2	-	-	11.6	7.3	-	-
	As gift for another person	-	1.7	4.3	3.9	4.2	8.9	19.6	-	-	-	-	-	-	-	-
	As an interest/or a hobby	15.2	5.8	21.8	0.8	1.4	12.9	7.8	-	12.9	30.0	-	11.6	-	33.5	-
	To be with other people/get out of the house	23.4	13.9	4.3	3.6	0.8	-	1.1	27.1	31.1	30.0	29.8	24.7	-	-	-
	As entertainment	74.4	65.9	26.7	11.8	15.1	3.8	30.9	77.8	49.2	15.4	65.0	59.4	63.4	30.0	100.0
Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Demo-graphic variables	Reasons for participating	Reasons for participating %														
		Card games	Bets with friends/workmates	Text game or comp.	NZ raffle or lottery	Lotto	Keno	Instant Kiwi/scratch ticket	Housie or bingo	Horse/dog race betting	Sports betting	Casino Table games (NZ)	Casino EGMS (NZ)	Non-casino EGMS	Short-term spec. invest.	Overseas internet
No formal Qualification	To win prizes/money	52.5	40.8	40.3	42.9	91.4	82.8	74.2	63.5	71.2	81.3	54.2	68.6	68.4	100.0	56.9
	For excitement/or a challenge	52.5	50.0	48.6	9.1	15.7	18.7	21.5	17.2	43.1	60.2	44.1	50.4	35.8	-	38.3
	To support worthy causes	20.9	5.7	14.7	77.6	10.5	11.2	4.3	28.1	6.1	8.2	-	6.5	4.5	-	-
	Out of curiosity	15.6	3.1	23.5	2.8	3.2	8.6	9.3	1.6	6.4	2.6	19.8	12.0	8.8	-	26.3
	To oblige or please people	4.6	9.5	3.2	9.5	1.2	-	1.2	0.9	2.6	-	-	3.9	1.4	-	-
	As a gift for another person	-	0.4	9.6	7.0	18.4	3.8	12.1	-	1.4	-	-	6.8	0.5	-	-
	As an interest/or a hobby	18.5	10.3	9.6	1.5	4.6	3.4	3.7	2.3	25.2	13.0	10.4	6.9	8.5	-	39.7
	To be with other people/get out of the house	28.7	6.5	-	1.5	0.9	1.3	0.3	39.0	11.5	17.0	6.8	12.9	20.6	-	18.4
	As entertainment	61.4	52.7	61.4	6.6	9.1	12.2	22.3	37.8	47.3	59.4	44.8	65.4	56.5	-	66.4
Other	-	-	-	-	-	-	0.6	-	0.8	-	2.6	1.8	1.0	-	-	
Secondary School Qualification	To win prizes/money	47.5	50.6	75.8	43.5	91.3	91.5	78.5	76.8	70.3	88.8	81.3	72.6	71.7	100.0	52.2
	For excitement/or a challenge	62.8	64.2	23.7	7.4	17.2	19.1	36.5	55.7	61.5	66.1	70.8	51.8	50.9	5.0	38.8
	To support worthy causes	11.8	8.5	5.6	79.4	9.5	4.1	3.7	21.5	0.7	0.5	0.5	1.4	3.7	12.8	29.1
	Out of curiosity	11.9	12.5	18.1	3.0	5.1	8.3	10.0	10.2	11.1	8.6	7.9	16.6	14.3	-	39.4
	To oblige or please people	9.0	11.5	11.1	15.4	3.4	1.5	1.4	6.2	5.3	2.2	1.4	4.5	2.4	-	-
	As a gift for another person	3.0	1.7	0.4	8.2	12.5	4.0	16.4	-	0.2	0.5	0.5	-	0.2	-	-
	As an interest/or a hobby	39.1	14.2	5.1	1.1	3.0	6.3	1.5	13.5	23.1	35.8	11.7	7.2	6.1	27.5	38.8
	To be with other people/get out of the house	44.1	6.0	0.4	1.0	0.9	-	0.4	47.9	26.9	5.4	27.1	22.8	18.2	-	23.9
	As entertainment	73.5	54.5	25.0	6.6	10.2	10.1	27.9	44.1	65.9	63.9	79.5	73.3	57.7	-	-
Other	-	-	-	-	-	1.1	0.4	-	1.1	-	-	0.4	0.2	-	-	
Vocational or Trade Qualification	To win prizes/money	31.7	50.8	91.6	42.4	93.2	86.3	78.3	69.3	67.6	73.0	75.7	70.1	64.3	95.9	73.7
	For excitement/or a challenge	43.0	48.8	23.0	8.5	13.0	32.1	27.3	35.2	56.3	49.3	41.6	37.8	35.5	2.1	66.0
	To support worthy causes	3.7	7.9	4.3	79.9	7.7	6.0	2.2	29.2	3.9	1.9	-	-	2.9	-	14.4
	Out of curiosity	5.2	10.8	13.4	4.0	3.0	12.9	9.3	13.7	6.3	11.0	4.0	10.8	8.9	14.8	38.2
	To oblige or please people	4.2	13.7	1.2	11.8	2.1	-	1.7	1.1	4.8	1.7	4.6	1.5	5.5	-	14.4
	As a gift for another person	-	1.2	-	6.3	14.9	10.5	23.7	-	-	-	-	1.6	0.8	0.0	14.4
	As an interest/or a hobby	19.4	11.6	2.2	1.5	2.7	6.7	2.5	20.3	23.7	24.5	-	2.8	3.6	2.1	-

Demo-graphic variables	Reasons for participating	Reasons for participating %														
		Card games	Bets with friends/workmates	Text game or comp.	NZ raffle or lottery	Lotto	Keno	Instant Kiwi/scratch ticket	Housie or bingo	Horse/dog race betting	Sports betting	Casino Table games (NZ)	Casino EGMS (NZ)	Non-casino EGMS	Short-term spec. invest.	Overseas internet
University Degree or higher	To be with other people/get out of the house	53.0	9.6	1.1	1.6	0.2	-	0.6	29.2	25.6	1.1	19.6	22.4	15.1	-	-
	As entertainment	79.1	54.1	14.4	6.2	11.0	17.7	23.9	61.6	61.9	51.8	65.4	55.2	56.0	12.7	68.5
	Other	-	-	-	-	-	4.2	0.2	-	-	-	-	-	0.3	4.1	-
	To win prizes/money	38.8	41.9	87.8	34.3	90.7	93.5	74.3	47.8	58.4	75.8	63.8	55.4	60.5	93.2	69.4
	For excitement/or a challenge	49.9	49.4	27.0	5.1	15.7	16.7	30.4	27.7	55.6	63.6	67.2	35.5	40.7	45.3	65.5
	To support worthy causes	4.0	8.2	14.7	84.8	11.5	9.9	3.4	15.5	0.6	-	2.1	-	3.6	-	11.5
	Out of curiosity	8.3	5.6	20.8	2.2	5.0	8.9	7.0	3.0	6.5	3.0	12.6	10.9	19.5	30.0	4.9
	To oblige or please people	11.1	19.3	0.7	18.7	3.3	1.1	2.8	6.4	15.4	2.9	11.9	6.0	11.7	1.5	-
	As a gift for another person	3.9	1.1	4.0	7.1	17.4	1.6	24.4	3.0	0.4	-	-	0.5	1.2	-	-
	As an interest/or a hobby	21.0	5.6	3.2	0.5	2.0	-	2.5	6.0	18.3	17.9	14.8	1.3	3.6	42.2	13.3
Employed	To be with other people/get out of the house	47.5	7.4	1.5	0.7	0.3	-	0.3	30.3	24.1	4.4	27.8	20.7	11.3	-	-
	As entertainment	70.0	51.4	14.7	5.1	9.2	12.8	21.4	53.0	59.3	56.4	68.7	59.3	62.7	10.7	73.9
	Other	-	-	0.7	-	0.1	-	-	-	-	-	-	-	-	11.1	-
	To win prizes/money	41.9	45.0	83.0	39.4	92.4	90.7	76.8	63.5	76.3	70.8	67.2	65.7	92.9	78.7	65.7
	For excitement/or a challenge	52.3	51.6	24.1	5.9	14.3	16.7	30.3	36.8	57.8	57.5	41.0	40.5	25.4	52.8	57.8
	To support worthy causes	8.9	8.5	9.1	81.8	9.7	9.3	3.3	30.1	1.3	1.2	0.9	3.6	-	15.2	2.5
	Out of curiosity	10.3	8.5	22.5	2.9	3.6	7.1	9.0	10.7	6.9	9.0	11.7	14.6	18.3	16.7	7.5
	To oblige or please people	9.7	17.3	2.4	14.5	2.5	1.1	1.6	2.7	2.8	5.4	3.6	5.9	1.3	4.8	9.4
	As a gift for another person	1.5	1.3	2.3	7.7	14.8	5.0	20.8	-	0.2	0.2	0.8	0.8	-	4.8	0.2
	As an interest/or a hobby	24.4	9.2	3.8	0.9	2.3	5.5	2.2	10.5	24.8	7.5	4.5	6.2	35.2	19.4	20.9
Other	To be with other people/get out of the house	47.2	7.0	0.9	1.0	0.5	-	0.3	41.0	5.5	23.4	22.1	13.8	-	2.6	24.7
	As entertainment	78.0	52.9	18.3	5.6	9.7	8.7	24.4	43.0	56.8	68.7	61.9	57.2	13.0	63.9	62.1
	Other	-	-	0.3	-	0.1	0.5	0.2	-	-	0.3	0.5	0.4	10.8	-	0.5

Demo-graphic variables	Reasons for participating	Reasons for participating %														
		Card games	Bets with friends/workmates	Text game or comp.	NZ raffle or lottery	Lotto	Keno	Instant Kiwi/scratch ticket	Housie or bingo	Horse/dog race betting	Sports betting	Casino Table games (NZ)	Casino EGMS (NZ)	Non-casino EGMs	Short-term spec. invest.	Overseas internet
Unemployed	To win prizes/money	60.6	61.1	35.0	46.9	88.3	100.0	72.7	56.5	83.5	38.8	32.1	75.2	100.0	24.3	58.4
	For excitement/or a challenge	63.0	45.8	92.2	11.2	19.0	57.1	35.2	6.6	48.1	68.7	44.0	46.7	-	88.4	56.1
	To support worthy causes	14.9	2.4	27.2	79.9	11.4	8.0	3.3	26.9	2.4	-	13.5	2.5	-	-	2.8
	Out of curiosity	-	6.2	16.3	2.1	5.2	10.2	7.4	-	0.9	9.6	27.7	15.6	-	21.0	2.4
	To oblige or please people	-	21.4	-	14.5	1.8	-	0.5	-	-	52.8	15.4	5.2	-	-	-
	As gift for another person	14.3	6.3	-	7.2	19.7	8.0	17.8	-	-	-	13.5	-	-	-	-
	As an interest/or a hobby	24.9	6.8	-	-	4.5	-	2.2	8.0	0.9	-	-	4.6	100.0	-	25.4
	To be with other people/get out of the house	73.9	3.9	-	0.4	0.8	-	-	55.1	-	-	8.5	15.1	-	25.6	19.7
	As entertainment	42.5	79.8	59.1	6.3	13.6	31.6	31.7	61.4	0.9	67.9	64.0	47.3	-	96.4	38.5
Other	-	-	-	-	-	-	1.7	-	-	-	-	-	-	-	-	
Student/Homemaker/Retired	To win prizes/money	29.9	46.7	82.1	36.5	89.6	86.9	74.9	61.7	91.0	69.1	62.1	62.5	100.0	-	65.9
	For excitement/or a challenge	45.8	62.8	23.8	8.7	17.6	23.3	30.0	38.0	64.8	68.9	42.5	44.6	39.3	49.4	50.4
	To support worthy causes	6.0	6.1	7.5	82.0	11.0	2.9	3.9	18.6	-	-	0.9	3.9	8.0	-	1.3
	Out of curiosity	6.6	9.5	4.4	2.4	6.1	13.4	8.4	5.3	8.5	7.7	12.0	7.4	30.0	50.6	10.0
	To oblige or please people	3.8	2.8	14.3	16.8	3.5	-	2.8	4.1	-	3.8	4.1	3.4	-	-	5.8
	As gift for another person	-	0.3	1.3	6.0	18.2	4.2	19.6	1.9	-	-	2.9	0.6	-	-	0.8
	As an interest/or a hobby	24.3	10.8	4.2	1.3	4.1	0.7	2.9	13.7	18.1	14.3	3.5	2.3	17.3	49.4	21.0
	To be with other people/get out of the house	34.4	12.3	1.3	1.6	0.5	-	0.7	29.9	0.8	16.1	17.5	19.3	-	-	18.7
	As entertainment	62.2	52.8	17.0	6.4	10.1	22.3	21.9	54.1	69.6	72.1	67.4	60.5	-	-	56.5
Other	-	-	-	-	-	4.5	0.1	-	-	-	-	0.3	-	-	0.4	
No Religion	To win prizes/money	48.4	49.3	90.6	37.1	92.4	94.8	76.6	55.2	70.6	80.0	71.4	66.9	65.7	96.4	65.5
	For excitement/or a challenge	57.8	55.6	17.8	7.7	14.3	24.5	30.1	23.2	60.0	58.6	65.6	41.2	43.7	40.6	63.5
	To support worthy causes	8.0	7.3	10.6	81.9	7.7	4.6	1.9	19.6	2.8	1.1	1.7	0.2	2.8	-	5.2
	Out of curiosity	12.9	10.1	10.7	3.2	3.9	7.2	8.8	1.8	10.3	8.1	12.0	11.8	13.9	35.6	19.1
	To oblige or please people	8.7	15.2	1.8	14.8	3.2	-	1.6	4.5	6.6	2.6	4.3	4.5	5.8	-	5.2
	As gift for another person	3.3	0.8	1.4	6.5	15.6	2.8	18.6	1.8	0.2	0.2	0.3	0.3	0.2	-	5.2
	As an interest/or a hobby	31.7	11.0	2.2	0.7	2.1	11.0	1.4	5.8	23.9	28.4	12.5	3.1	4.4	34.6	25.1
	To be with other people/get out of the house	45.1	7.9	-	0.9	0.3	-	0.6	37.2	27.6	4.6	24.6	22.1	16.2	-	3.7
	As entertainment	72.8	55.5	10.5	5.5	9.6	17.0	26.6	46.5	62.8	58.8	75.5	65.3	57.6	13.8	70.4
Other	-	-	-	-	-	-	0.2	-	-	-	-	-	0.4	10.8	-	

Demo-graphic variables	Reasons for participating	Reasons for participating %														
		Card games	Bets with friends/workmates	Text game or comp.	NZ raffle or lottery	Lotto	Keno	Instant Kiwi/scratch ticket	Housie or bingo	Horse/dog race betting	Sports betting	Casino Table games (NZ)	Casino EGMS (NZ)	Non-casino EGMS	Short-term spec. invest.	Overseas internet
Anglican	To win prizes/money	22.8	37.0	81.5	40.5	91.4	77.7	77.4	67.7	58.2	70.0	77.9	48.0	63.4	100.0	50.2
	For excitement/or a challenge	28.2	49.5	38.5	4.7	17.1	19.8	33.1	18.7	60.3	61.0	38.2	48.1	34.4	21.7	-
	To support worthy causes	4.4	6.1	8.4	86.6	12.9	15.9	3.9	8.8	1.8	-	-	4.3	4.5	12.6	36.1
	Out of curiosity	4.4	2.3	39.0	1.0	2.6	14.7	6.5	8.3	1.5	0.9	8.1	13.7	4.8	-	49.8
	To oblige or please people	3.1	15.0	15.4	12.4	3.1	-	1.7	3.5	8.1	-	22.7	5.2	6.5	5.3	-
	As gift for another person	-	1.7	-	7.9	17.2	-	22.4	-	-	-	-	6.3	-	-	-
	As an interest/or a hobby	9.3	8.0	-	0.4	3.9	-	3.1	3.5	24.7	18.0	15.3	3.3	2.6	39.7	-
	To be with other people/get out of the house	52.9	6.6	-	1.4	0.7	-	-	36.9	25.2	1.0	53.8	19.7	11.5	-	-
	As entertainment	78.3	54.0	-	5.9	7.7	5.5	18.9	56.4	67.5	64.3	69.4	60.3	72.4	-	49.8
Other	-	-	-	-	0.2	-	1.0	-	0.4	-	-	-	0.7	-	-	
Presbyterian	To win prizes/money	33.9	46.5	82.5	37.7	91.3	95.6	75.6	78.0	82.5	77.7	76.8	76.4	100.0	87.0	64.1
	For excitement/or a challenge	43.2	52.5	47.6	5.6	13.5	12.4	33.3	33.3	73.0	55.5	30.9	32.8	-	87.0	40.9
	To support worthy causes	16.0	9.1	1.5	81.9	8.8	3.8	4.4	45.7	-	-	-	4.6	-	-	-
	Out of curiosity	-	5.2	11.3	0.7	3.4	6.9	5.8	7.6	0.6	14.8	8.2	7.6	-	-	2.9
	To oblige or please people	28.2	10.1	-	18.1	1.0	-	3.3	1.2	6.8	-	3.5	5.6	-	-	3.2
	As gift for another person	-	3.1	11.3	7.7	14.4	-	17.1	-	-	-	-	4.4	-	-	-
	As an interest/or a hobby	32.2	10.0	5.7	2.5	2.4	-	2.4	7.6	13.7	17.0	1.2	7.0	6.3	13.0	17.3
	To be with other people/get out of the house	31.9	3.5	-	1.9	0.1	-	-	24.2	13.9	-	4.4	14.4	-	-	14.1
	As entertainment	68.2	46.1	42.2	5.5	10.7	19.7	21.0	52.0	36.4	80.3	64.5	49.1	-	87.0	50.4
Other	-	-	-	-	-	10.7	-	-	-	-	3.2	-	-	-	2.0	
Catholic	To win prizes/money	33.0	45.6	75.6	45.0	92.5	81.9	79.5	63.9	64.1	81.4	81.9	81.6	70.6	85.3	53.9
	For excitement/or a challenge	47.6	54.0	20.4	7.9	17.5	21.6	29.9	48.5	56.3	60.2	56.3	52.9	39.1	13.7	41.0
	To support worthy causes	6.7	10.3	2.8	79.5	12.1	3.5	6.1	29.5	1.7	3.2	-	3.6	3.8	-	25.8
	Out of curiosity	4.3	13.9	34.7	3.6	5.6	14.6	5.9	3.6	5.9	7.3	9.9	13.4	11.4	16.9	26.7
	To oblige or please people	3.0	11.6	-	15.8	2.0	-	2.1	1.8	17.0	1.3	6.7	0.6	1.6	-	-
	As gift for another person	-	1.0	-	6.6	15.7	7.7	21.4	-	0.4	-	-	-	0.9	-	-
	As an interest/or a hobby	23.4	10.3	5.3	1.3	2.5	0.9	2.8	8.9	21.2	23.4	1.5	9.1	10.6	30.1	-
	To be with other people/get out of the house	37.7	9.2	2.8	0.9	0.7	-	0.1	41.0	21.3	3.9	27.4	28.4	20.7	-	-
	As entertainment	83.8	47.2	21.5	9.1	10.3	12.2	23.5	35.0	55.3	55.6	70.8	61.1	53.7	-	60.4
Other	-	-	2.5	-	-	1.8	-	-	0.2	-	1.9	0.7	-	-	-	

Demo-graphic variables	Reasons for participating	Reasons for participating %														
		Card games	Bets with friends/workmates	Text game or comp.	NZ raffle or lottery	Lotto	Keno	Instant Kiwi/scratch ticket	Housie or bingo	Horse/dog race betting	Sports betting	Casino Table games (NZ)	Casino EGMS (NZ)	Non-casino EGMS	Short-term spec. invest.	Overseas internet
Other Christian	To win prizes/money	32.5	47.6	67.5	38.5	90.3	92.7	74.5	79.8	67.5	78.0	52.6	53.0	69.2	89.9	100.0
	For excitement/or a challenge	43.9	48.3	35.3	7.7	17.1	32.2	25.3	60.0	43.1	60.7	68.4	42.7	46.7	11.5	71.5
	To support worthy causes	21.3	11.7	13.9	77.9	9.8	12.5	3.7	29.7	3.2	-	-	0.6	4.2	-	11.1
	Out of curiosity	5.2	8.7	19.6	5.6	4.8	9.7	17.5	22.8	8.8	-	-	18.6	17.8	-	43.2
	To oblige or please people	5.9	24.8	5.3	17.4	2.4	3.4	2.9	2.7	3.7	-	-	5.2	4.0	-	-
	As gift for another person	1.0	1.1	1.8	8.8	16.3	11.6	22.4	-	0.9	-	-	5.3	1.0	-	-
	As an interest/or a hobby	13.5	7.6	2.8	1.1	4.0	0.5	3.7	30.2	12.4	9.9	-	1.0	5.4	5.6	-
	To be with other people/get out of the house	42.6	7.2	1.0	0.4	0.6	-	0.9	48.2	16.7	3.9	3.7	16.6	18.8	-	54.3
	As entertainment	55.0	49.1	38.4	3.4	11.0	13.8	22.7	53.1	53.9	61.5	46.1	63.7	52.2	-	51.5
	Other	-	-	-	-	-	-	0.1	-	1.2	-	-	0.4	0.2	10.1	-
Other religion	To win prizes/money	29.8	47.5	73.0	47.9	86.4	86.8	70.8	59.0	51.6	62.4	52.0	73.8	54.3	100.0	41.9
	For excitement/or a challenge	58.4	50.1	17.0	9.9	12.5	6.4	24.4	33.2	44.5	51.7	53.1	29.2	34.3	45.0	-
	To support worthy causes	-	5.3	11.0	70.6	14.8	6.3	4.6	14.7	3.5	6.2	-	0.8	12.0	-	58.1
	Out of curiosity	9.0	5.0	14.8	2.9	8.2	3.7	8.5	-	25.8	18.1	2.2	6.1	25.1	28.7	-
	To oblige or please people	-	11.6	12.9	11.6	2.7	-	-	7.6	6.9	-	3.8	5.2	12.1	-	-
	As gift for another person	-	1.8	3.4	6.8	13.9	1.3	20.6	-	3.5	-	-	-	-	-	-
	As an interest/or a hobby	9.1	3.0	20.4	0.7	3.3	2.5	5.0	7.1	28.1	4.7	3.8	10.3	4.8	28.7	-
	To be with other people/get out of the house	65.1	13.0	6.8	1.5	1.4	2.3	0.8	23.4	15.2	4.3	1.6	16.8	13.4	-	-
	As entertainment	62.5	66.8	57.3	8.6	12.4	4.1	25.7	54.8	52.0	38.8	28.9	46.3	61.4	45.0	-
	Other	-	-	-	-	-	-	-	-	-	-	-	-	-	28.7	-
Household Size 1	To win prizes/money	37.0	45.2	54.0	34.1	89.1	83.2	71.9	45.9	67.9	78.2	75.1	76.9	63.8	100.0	100.0
	For excitement/or a challenge	32.6	42.8	21.0	5.9	16.9	21.5	24.7	20.5	53.4	62.0	57.2	46.8	36.2	15.6	17.7
	To support worthy causes	1.3	7.0	-	82.2	14.3	5.1	7.3	19.0	4.4	5.7	4.2	3.0	8.1	-	50.7
	Out of curiosity	2.9	8.0	6.9	2.9	5.8	13.3	7.7	9.9	6.0	7.1	30.9	15.0	11.5	-	17.7
	To oblige or please people	9.0	20.9	-	18.1	3.1	-	1.9	9.4	9.8	7.5	19.4	7.4	4.2	6.4	-
	As gift for another person	-	0.3	6.9	6.3	14.7	-	17.4	-	0.9	-	4.2	2.1	0.8	-	-
	As an interest/or a hobby	33.2	11.2	-	3.2	4.4	3.9	2.8	19.0	28.5	17.3	6.9	3.8	7.9	12.7	-
	To be with other people/get out of the house	37.3	11.2	-	1.4	0.5	-	0.4	37.2	23.0	4.3	25.4	14.1	24.4	-	-
	As entertainment	67.0	37.8	40.8	6.5	11.2	20.9	24.8	55.0	63.4	38.5	48.1	47.1	49.0	-	16.3
	Other	-	-	-	-	-	-	-	-	3.1	-	-	-	-	-	-

Demo-graphic variables	Reasons for participating	Reasons for participating %														
		Card games	Bets with friends/workmates	Text game or comp.	NZ raffle or lottery	Lotto	Keno	Instant Kiwi/scratch ticket	Housie or bingo	Horse/dog race betting	Sports betting	Casino Table games (NZ)	Casino EGMS (NZ)	Non-casino EGMs	Short-term spec. invest.	Overseas internet
Household Size 2	To win prizes/money	40.4	43.6	79.4	38.0	91.0	81.8	74.4	64.5	63.4	83.1	72.4	63.0	66.8	97.3	79.3
	For excitement/or a challenge	41.8	48.2	34.3	6.9	16.1	27.6	23.8	35.6	54.9	55.1	66.0	36.2	36.9	4.1	63.7
	To support worthy causes	8.8	9.1	17.9	82.0	11.1	10.3	4.2	20.9	2.8	0.9	2.8	1.2	4.6	6.7	17.8
	Out of curiosity	5.5	8.1	17.0	2.4	2.6	10.7	6.3	3.6	5.1	3.4	11.5	11.4	8.9	9.0	-
	To oblige or please people	5.1	16.2	8.6	15.6	3.3	-	1.7	2.1	9.7	2.5	3.8	6.6	5.1	-	-
	As gift for another person	0.3	2.4	4.4	8.4	17.4	7.6	23.1	-	0.2	-	-	0.9	0.7	-	-
	As an interest/or a hobby	27.0	11.5	9.7	1.3	3.5	5.1	3.6	2.0	22.6	22.5	9.5	3.4	6.8	12.9	34.9
	To be with other people/get out of the house	46.1	6.6	4.0	1.5	0.3	0.9	0.3	27.5	23.4	7.4	21.9	20.9	16.0	-	9.9
	As entertainment	76.4	49.8	18.8	6.7	9.9	17.0	21.7	48.8	59.3	60.1	66.3	67.5	60.0	7.8	70.1
	Other	-	-	1.1	-	0.1	-	0.7	-	0.3	-	-	0.8	1.0	2.7	-
Household Size 3	To win prizes/money	48.8	49.2	85.0	39.6	94.0	84.5	83.4	63.0	71.6	66.5	70.6	64.2	65.3	100.0	57.5
	For excitement/or a challenge	67.2	61.3	21.1	4.7	16.0	31.6	31.9	27.2	50.1	50.6	51.0	45.5	41.1	18.6	72.7
	To support worthy causes	10.8	8.7	11.2	83.2	8.5	1.7	1.8	25.2	3.7	1.5	-	-	1.6	-	10.9
	Out of curiosity	17.8	6.3	17.1	2.5	3.3	16.5	8.8	6.9	12.8	6.0	7.8	12.2	12.3	7.4	10.9
	To oblige or please people	7.3	19.4	3.3	13.3	2.6	-	1.4	4.4	3.8	-	4.8	5.6	2.5	-	10.9
	As gift for another person	8.7	-	3.8	6.2	11.5	4.2	19.9	-	0.8	0.6	-	-	-	-	10.9
	As an interest/or a hobby	22.8	9.5	1.3	0.9	2.9	8.8	1.9	18.0	27.9	21.0	2.8	5.1	4.7	28.7	15.6
	To be with other people/get out of the house	55.9	7.0	-	0.6	0.9	-	0.5	47.0	24.2	6.1	16.8	17.6	17.0	-	-
	As entertainment	68.6	56.3	11.5	2.4	7.8	14.9	25.8	51.0	62.4	52.6	74.0	58.4	60.4	18.6	73.1
	Other	-	-	-	0.1	-	1.5	0.1	-	0.2	-	-	0.5	-	-	-
Household Size 4	To win prizes/money	39.5	49.8	84.2	40.9	90.6	96.9	79.0	58.8	70.5	87.1	69.2	67.4	63.5	100.0	38.1
	For excitement/or a challenge	56.1	54.0	18.7	8.4	12.9	10.4	32.2	51.0	60.1	71.4	67.3	45.3	46.2	31.3	23.6
	To support worthy causes	8.8	9.3	4.2	82.1	8.7	10.4	2.5	19.0	0.5	-	-	2.6	3.3	-	14.5
	Out of curiosity	15.6	9.7	11.4	2.2	5.6	3.4	11.7	12.1	9.8	8.1	11.9	11.9	18.9	11.2	79.9
	To oblige or please people	9.2	13.3	4.0	17.5	1.9	2.9	2.1	-	3.3	4.2	1.4	1.0	5.6	-	-
	As gift for another person	-	0.3	-	7.0	17.8	5.4	18.0	-	0.3	-	-	4.6	1.2	-	-
	As an interest/or a hobby	21.0	8.2	3.3	0.2	2.1	-	1.1	9.0	13.9	35.2	16.8	5.3	5.4	35.6	12.9
	To be with other people/get out of the house	42.7	6.9	-	0.5	0.7	-	0.1	65.5	23.4	-	28.6	21.3	12.9	-	23.6
	As entertainment	77.4	53.3	22.6	6.6	10.5	11.9	22.8	63.0	62.1	60.3	59.7	67.1	55.6	6.0	44.2
	Other	-	-	-	-	-	3.8	-	-	-	-	1.0	-	-	21.7	-

Demo-graphic variables	Reasons for participating	Reasons for participating %														
		Card games	Bets with friends/workmates	Text game or comp.	NZ raffle or lottery	Lotto	Keno	Instant Kiwi/scratch ticket	Housie or bingo	Horse/dog race betting	Sports betting	Casino Table games (NZ)	Casino EGMS (NZ)	Non-casino EGMS	Short-term spec. invest.	Overseas internet
Household Size 5+	To win prizes/money	39.4	45.2	82.1	43.4	92.8	98.3	72.0	78.4	57.1	74.2	69.9	65.9	71.5	82.1	80.3
	For excitement/or a challenge	51.1	59.2	31.5	8.2	15.7	12.5	38.2	25.7	59.8	60.2	55.6	45.6	45.6	68.6	60.6
	To support worthy causes	8.2	2.9	4.1	76.9	8.3	7.1	2.8	33.2	0.8	1.8	-	1.6	3.2	-	-
	Out of curiosity	2.2	10.8	31.0	5.2	6.3	6.9	10.1	7.1	5.8	9.6	3.5	14.8	13.8	64.4	10.8
	To oblige or please people	10.1	6.5	3.3	10.8	2.6	-	2.4	6.2	15.0	-	13.9	0.5	7.7	-	-
	As gift for another person	-	1.9	-	6.1	15.1	0.9	18.2	3.1	-	-	-	1.7	0.7	-	-
	As an interest/or a hobby	31.9	8.1	1.4	0.4	1.1	1.6	2.5	15.5	22.4	18.0	12.6	2.6	2.6	59.7	13.3
	To be with other people/get out of the house	37.7	9.2	-	1.3	0.4	-	0.9	16.3	24.3	4.8	29.6	23.9	17.7	-	-
	As entertainment	67.3	63.9	26.2	6.6	10.4	2.6	27.5	32.1	56.4	58.8	83.0	58.9	57.6	17.1	70.3
Other	-	-	-	-	-	-	0.1	-	-	-	-	-	-	3.6	-	
Personal Income less than \$2,000	To win prizes/money	53.0	51.9	85.4	42.0	91.0	85.2	74.4	65.1	79.9	73.7	63.2	67.9	100.0	78.8	66.4
	For excitement/or a challenge	56.2	64.1	23.4	9.0	18.0	16.5	32.5	27.3	58.1	74.3	40.2	40.3	9.3	79.2	52.9
	To support worthy causes	11.4	10.0	2.5	81.4	9.6	5.3	4.4	21.6	1.4	-	3.6	3.7	-	13.4	1.9
	Out of curiosity	12.3	9.8	12.2	4.0	5.8	17.8	11.3	7.5	11.8	15.0	13.6	10.1	38.2	40.6	7.7
	To oblige or please people	12.1	9.7	3.4	15.1	3.1	-	1.9	4.3	5.4	-	2.1	3.9	-	13.4	5.6
	As gift for another person	3.9	3.0	3.6	6.4	17.3	5.0	20.7	-	-	-	2.8	1.1	-	13.4	0.6
	As an interest/or a hobby	27.5	8.1	5.7	0.9	3.1	0.5	2.1	8.0	23.4	5.6	3.0	5.1	52.0	4.7	22.2
	To be with other people/get out of the house	40.2	8.0	0.8	0.6	1.3	0.9	0.7	34.1	1.6	16.1	12.6	19.2	-	15.1	21.7
	As entertainment	65.0	56.7	22.9	5.6	10.9	17.5	23.7	48.9	58.5	70.5	63.7	63.2	38.2	81.0	56.7
Other	-	-	-	-	-	4.1	0.4	-	-	1.0	0.4	-	-	-	0.8	
Personal Income \$20,000-\$40,000	To win prizes/money	40.4	53.9	77.0	42.1	90.5	92.4	76.3	67.7	72.5	63.1	57.5	63.4	100.0	55.8	65.3
	For excitement/or a challenge	59.6	54.3	37.9	8.8	15.2	29.0	30.5	28.6	60.3	40.8	44.8	46.8	51.7	80.1	52.2
	To support worthy causes	13.7	6.6	14.0	80.1	9.8	8.4	3.2	33.5	1.3	-	0.4	4.6	-	7.3	3.1
	Out of curiosity	15.5	11.1	34.1	2.7	4.3	4.6	9.2	7.9	3.3	6.0	11.3	15.2	46.1	7.0	8.0
	To oblige or please people	5.7	9.2	9.0	16.6	2.4	1.2	1.2	4.9	2.7	17.5	4.3	4.6	-	-	12.5
	As gift for another person	3.6	0.3	2.1	8.6	17.2	4.1	18.3	3.8	-	-	0.4	0.1	-	-	0.4
	As an interest/or a hobby	28.5	11.7	6.5	1.2	3.1	3.0	2.9	11.1	21.1	11.4	1.8	5.1	22.5	5.7	23.2
	To be with other people/get out of the house	39.3	4.9	1.6	1.0	0.4	-	0.7	43.1	1.2	28.5	22.1	15.1	-	6.2	21.4
	As entertainment	71.4	50.9	30.2	5.8	11.1	9.7	25.7	58.0	51.5	81.3	64.1	51.5	6.5	76.2	56.6
Other	-	-	-	-	-	-	0.1	-	-	-	0.2	0.4	23.5	-	0.6	

Demo-graphic variables	Reasons for participating	Reasons for participating %														
		Card games	Bets with friends/workmates	Text game or comp.	NZ raffle or lottery	Lotto	Keno	Instant Kiwi/scratch ticket	Housie or bingo	Horse/dog race betting	Sports betting	Casino Table games (NZ)	Casino EGMS (NZ)	Non-casino EGMS	Short-term spec. invest.	Overseas internet
Personal Income \$40,000-\$60,000	To win prizes/money	36.8	50.4	84.1	39.2	92.4	89.9	82.6	77.6	79.8	79.2	72.3	65.7	100.0	66.2	63.7
	For excitement/or a challenge	56.3	49.7	9.2	6.3	15.3	17.4	29.9	59.7	59.6	70.6	45.2	36.3	58.6	21.1	55.9
	To support worthy causes	8.1	8.2	12.0	81.7	10.9	12.3	2.1	34.2	2.1	4.6	0.3	2.0	-	9.8	4.0
	Out of curiosity	3.0	11.4	9.1	2.4	4.0	3.7	5.9	6.4	3.6	11.6	12.6	13.4	6.2	28.5	10.7
	To oblige or please people	2.5	15.8	5.8	15.0	2.2	-	0.8	4.5	1.3	0.8	4.8	6.0	-	-	8.3
	As gift for another person	-	2.1	-	9.2	16.4	5.2	18.1	-	-	0.8	2.4	1.2	-	-	-
	As an interest/or a hobby	19.4	9.7	1.4	1.2	2.4	1.6	1.3	27.2	32.6	14.7	2.7	3.2	68.9	48.8	14.7
	To be with other people/get out of the house	52.7	10.4	1.4	1.4	0.1	-	0.1	52.1	1.3	28.3	19.1	12.3	-	-	26.8
	As entertainment	78.3	53.3	15.3	8.3	8.9	13.7	26.2	48.8	57.8	53.9	66.0	59.2	13.7	43.5	67.1
Other	-	-	1.3	-	0.2	-	-	-	-	-	1.1	0.8	-	-	-	
Personal Income \$60,000-\$80,000	To win prizes/money	29.7	39.0	97.0	35.2	93.8	78.0	77.6	37.7	81.0	80.6	73.8	72.9	76.2	100.0	68.4
	For excitement/or a challenge	26.0	52.5	15.8	3.9	13.2	24.5	28.2	71.0	63.9	51.0	37.8	27.3	8.1	70.1	58.6
	To support worthy causes	0.9	6.6	15.6	82.3	8.8	3.2	1.9	3.9	2.1	-	-	-	-	-	1.0
	Out of curiosity	-	3.6	15.8	3.8	3.0	17.6	4.8	22.7	6.7	1.9	20.7	18.2	11.7	-	6.1
	To oblige or please people	2.9	23.8	-	15.2	2.1	3.2	4.4	-	-	7.9	6.7	11.1	-	-	8.3
	As gift for another person	-	0.4	2.4	6.4	13.4	11.8	25.2	-	1.0	-	2.7	0.9	-	-	1.1
	As an interest/or a hobby	6.3	7.3	-	0.2	2.1	-	2.8	-	13.3	2.8	5.1	8.3	20.0	-	30.3
	To be with other people/get out of the house	43.9	8.2	-	1.2	0.2	-	-	-	-	19.7	5.8	22.8	15.6	-	29.6
	As entertainment	66.2	42.0	5.5	5.6	7.9	22.4	16.4	35.4	64.5	69.9	49.7	57.7	-	70.1	71.5
Other	-	-	-	-	-	-	1.0	-	-	-	-	-	8.2	-	0.7	
Personal Income \$80,000-\$100,000	To win prizes/money	42.5	37.7	27.0	36.8	88.1	100.0	67.9	79.1	84.0	75.5	65.9	65.9	100.0	100.0	69.0
	For excitement/or a challenge	60.7	45.1	73.0	3.8	11.2	25.1	20.1	23.3	46.1	47.2	23.1	36.5	-	100.0	63.6
	To support worthy causes	2.7	8.2	-	87.6	11.8	-	2.1	-	-	-	-	7.5	-	-	2.5
	Out of curiosity	20.9	3.6	-	0.5	2.8	-	7.7	-	9.0	30.5	-	11.7	-	100.0	9.8
	To oblige or please people	6.7	17.3	-	11.3	5.6	-	1.7	-	-	4.5	7.3	7.3	-	-	2.6
	As gift for another person	-	-	-	4.1	12.3	-	27.5	-	-	-	-	-	-	-	-
	As an interest/or a hobby	36.1	11.6	-	1.0	4.1	25.1	5.4	23.3	11.4	12.1	1.0	2.1	-	-	24.4
	To be with other people/get out of the house	64.0	9.3	-	2.2	0.1	-	-	20.9	6.8	40.2	28.5	15.5	-	-	33.1
	As entertainment	85.1	49.6	-	2.8	11.6	7.0	29.2	100.0	56.0	55.4	73.9	82.3	-	-	61.8
Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Demo-graphic variables	Reasons for participating	Reasons for participating %														
		Card games	Bets with friends/workmates	Text game or comp.	NZ raffle or lottery	Lotto	Keno	Instant Kiwi/scratch ticket	Housie or bingo	Horse/dog race betting	Sports betting	Casino Table games (NZ)	Casino EGMS (NZ)	Non-casino EGMS	Short-term spec. invest.	Overseas internet
Personal Income \$100,000+	To win prizes/money	1.6	27.9	85.9	36.4	95.6	100.0	75.2	48.9	60.9	62.8	73.7	72.3	100.0	57.6	59.2
	For excitement/or a challenge	25.3	51.7	58.3	5.9	16.2	13.4	26.3	20.0	73.3	65.5	41.6	49.5	42.1	-	59.4
	To support worthy causes	-	6.7	11.0	81.2	10.6	70.4	7.5	20.0	-	-	-	6.9	-	31.9	-
	Out of curiosity	-	1.4	18.3	2.3	3.0	-	10.4	-	-	3.6	6.8	6.9	11.7	-	5.2
	To oblige or please people	32.1	23.9	-	15.2	2.5	-	4.5	-	-	3.6	-	6.9	4.2	-	7.6
	As gift for another person	-	0.5	-	5.5	13.3	-	33.7	-	-	-	-	-	-	-	-
	As an interest/or a hobby	32.1	10.1	-	0.7	1.3	-	3.9	-	22.9	-	4.4	12.5	40.0	10.5	18.9
	To be with other people/get out of the house	45.7	3.4	-	0.8	0.1	-	-	41.0	2.3	16.3	31.6	12.2	-	-	15.0
	As entertainment	83.5	64.8	24.0	7.7	9.2	-	17.7	43.3	58.8	74.7	78.9	69.9	11.7	57.6	63.5
Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Household Income \$0-\$20,000	To win prizes/money	22.5	50.0	73.9	41.6	93.8	88.2	73.4	78.7	83.4	27.8	67.0	70.4	100.0	100.0	75.0
	For excitement/or a challenge	19.2	71.3	65.7	10.3	18.8	21.1	31.7	22.8	56.1	28.0	27.3	37.9	-	-	51.9
	To support worthy causes	13.3	8.3	13.3	75.4	9.9	4.0	3.5	23.6	8.7	-	3.1	3.8	-	-	4.9
	Out of curiosity	15.5	7.7	18.0	5.4	8.7	6.6	12.4	-	32.5	23.3	13.5	18.6	15.4	-	19.5
	To oblige or please people	6.7	5.9	5.6	15.2	2.1	-	1.0	5.0	-	-	5.3	9.6	-	-	4.9
	As gift for another person	1.9	3.0	4.7	5.9	13.1	-	10.7	-	-	-	-	-	-	-	1.7
	As an interest/or a hobby	46.6	8.9	-	1.2	3.5	-	1.9	2.2	4.6	-	7.7	10.0	-	-	20.5
	To be with other people/get out of the house	56.2	9.5	-	1.6	0.6	3.2	0.7	32.8	6.6	12.1	15.2	31.9	-	-	9.8
	As entertainment	60.4	26.1	50.0	6.5	10.9	1.4	18.0	51.9	61.3	33.1	47.2	55.8	-	47.9	61.3
Other	-	-	-	0.2	-	-	-	-	-	-	-	-	-	-	3.7	
Household Income \$20,000-\$40,000	To win prizes/money	67.0	60.2	76.7	44.6	88.7	82.1	74.6	47.9	89.1	82.0	66.8	67.3	100.0	76.2	63.5
	For excitement/or a challenge	66.0	59.0	30.2	7.4	18.0	28.2	27.9	24.0	61.2	77.7	54.3	42.7	12.6	66.2	57.4
	To support worthy causes	16.6	8.4	3.0	80.5	12.4	12.8	6.7	18.4	-	-	0.9	6.6	-	10.5	2.8
	Out of curiosity	13.9	13.0	8.6	2.7	3.9	12.7	8.2	5.2	5.3	12.7	10.9	14.8	18.6	25.3	6.2
	To oblige or please people	15.5	6.6	17.3	12.5	2.7	-	2.2	5.1	3.9	6.3	3.7	1.7	-	-	7.1
	As gift for another person	8.1	2.3	1.6	8.5	17.9	11.4	20.3	-	-	-	2.5	0.7	-	-	0.6
	As an interest/or a hobby	32.6	9.9	7.4	1.4	4.2	3.2	2.3	11.2	2.8	3.2	-	4.0	-	-	15.9
	To be with other people/get out of the house	20.3	5.4	1.6	1.0	0.9	-	0.9	50.4	0.5	9.1	16.9	17.7	-	25.9	18.6
	As entertainment	67.6	55.2	18.9	6.3	10.4	15.4	21.3	52.8	46.3	73.8	57.8	56.3	-	74.5	47.6
Other	-	-	-	-	-	1.4	0.3	-	-	-	0.7	0.8	18.6	-	0.7	

Demo-graphic variables	Reasons for participating	Reasons for participating %														
		Card games	Bets with friends/workmates	Text game or comp.	NZ raffle or lottery	Lotto	Keno	Instant Kiwi/scratch ticket	Housie or bingo	Horse/dog race betting	Sports betting	Casino Table games (NZ)	Casino EGMS (NZ)	Non-casino EGMS	Short-term spec. invest.	Overseas internet
Household Income \$40,000-\$60,000	To win prizes/money	42.5	52.8	76.4	38.6	92.9	82.9	78.8	89.9	68.4	58.0	65.1	65.2	100.0	83.2	61.7
	For excitement/or a challenge	55.9	51.5	22.3	7.8	14.2	21.6	25.5	44.4	53.7	65.9	51.4	41.6	3.6	18.0	47.6
	To support worthy causes	16.5	11.3	22.1	80.9	10.4	10.1	2.3	34.2	3.6	1.6	5.4	7.1	-	6.1	6.8
	Out of curiosity	8.2	10.0	26.2	3.4	4.2	10.9	8.9	13.4	3.3	22.9	15.6	11.6	3.6	32.4	10.1
	To oblige or please people	-	8.3	-	16.7	1.9	-	1.5	1.7	1.0	1.6	1.5	8.5	-	-	8.9
	As gift for another person	-	1.5	13.3	5.4	15.5	-	20.1	5.3	-	1.6	3.6	1.2	-	-	-
	As an interest/or a hobby	18.1	6.1	13.4	2.1	3.2	2.0	2.5	8.2	25.6	4.6	3.2	6.3	15.9	59.1	20.8
	To be with other people/get out of the house	44.0	6.5	9.5	1.7	0.9	-	0.1	17.9	0.8	13.5	19.8	14.7	-	6.1	26.2
	As entertainment	73.8	58.0	26.5	6.8	9.4	14.5	23.2	53.1	39.1	40.0	51.4	50.6	-	18.0	56.4
Other	-	-	3.4	-	-	-	0.8	-	-	2.2	-	0.9	-	-	-	
Household Income \$60,000-\$80,000	To win prizes/money	46.5	55.4	100.0	40.6	93.2	89.6	80.1	55.8	87.3	88.2	69.6	64.4	100.0	81.7	67.2
	For excitement/or a challenge	61.4	51.5	15.6	8.6	16.7	8.8	27.2	24.2	67.0	69.7	40.0	46.1	23.8	81.7	55.7
	To support worthy causes	11.6	3.8	18.9	81.6	7.6	-	2.5	19.2	2.2	-	-	1.1	15.2	54.1	1.8
	Out of curiosity	7.8	9.3	15.2	3.6	4.1	9.8	6.9	7.8	2.2	-	12.4	8.0	-	54.1	6.4
	To oblige or please people	-	12.6	7.0	18.3	2.4	-	0.8	2.7	-	-	4.6	2.0	-	54.1	12.4
	As gift for another person	-	1.1	-	8.5	17.1	-	18.6	-	-	-	-	-	-	54.1	-
	As an interest/or a hobby	49.5	14.5	2.1	0.8	1.1	-	1.0	-	26.8	16.0	-	2.7	45.0	-	26.1
	To be with other people/get out of the house	26.9	4.6	-	0.5	0.2	-	0.6	30.6	3.9	25.2	13.4	16.6	-	-	27.0
	As entertainment	72.6	51.8	11.2	5.9	9.3	5.7	28.2	45.8	56.0	60.2	63.2	58.7	-	72.4	65.2
Other	-	-	-	-	-	6.0	0.6	-	-	-	1.6	-	-	-	0.7	
Household Income \$80,000-\$100,000	To win prizes/money	22.3	41.5	89.3	42.0	91.7	97.9	79.5	64.0	75.0	61.8	63.3	75.7	100.0	82.7	63.1
	For excitement/or a challenge	47.8	49.3	8.8	5.0	15.6	7.5	32.7	26.6	69.8	53.6	40.4	54.5	-	74.7	55.8
	To support worthy causes	3.2	11.0	7.4	79.5	8.4	3.4	1.3	20.5	1.5	-	-	2.1	-	8.0	1.4
	Out of curiosity	6.8	10.6	16.2	1.5	4.7	5.6	8.2	-	11.5	7.5	22.9	17.0	42.6	19.2	6.4
	To oblige or please people	2.3	19.2	3.8	14.1	3.8	-	0.8	-	1.9	4.4	-	0.8	-	-	2.5
	As gift for another person	-	2.5	2.9	7.9	13.1	6.2	21.1	-	-	-	-	-	-	-	-
	As an interest/or a hobby	16.0	6.8	1.9	0.6	4.2	3.4	4.8	-	37.3	11.9	8.3	7.2	51.0	23.2	26.7
	To be with other people/get out of the house	58.1	5.7	-	0.7	0.2	-	0.3	41.8	3.9	17.1	14.7	12.4	-	-	24.2
	As entertainment	78.2	52.0	23.3	6.1	12.5	11.6	22.8	34.4	78.2	66.2	71.5	59.9	42.6	70.9	65.7
Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Demo-graphic variables	Reasons for participating	Reasons for participating %														
		Card games	Bets with friends/workmates	Text game or comp.	NZ raffle or lottery	Lotto	Keno	Instant Kiwi/scratch ticket	Housie or bingo	Horse/dog race betting	Sports betting	Casino Table games (NZ)	Casino EGMS (NZ)	Non-casino EGMs	Short-term spec. invest.	Overseas internet
Household Income \$100,000+	To win prizes/money	43.4	40.4	78.1	36.5	91.5	92.1	74.9	70.0	76.2	70.0	63.5	64.9	90.7	39.6	65.7
	For excitement/or a challenge	54.4	54.6	41.8	5.7	14.0	34.7	35.0	59.5	52.4	56.9	39.9	34.3	41.6	39.7	60.5
	To support worthy causes	4.5	6.4	7.1	83.6	10.1	13.3	3.5	29.8	-	1.8	0.2	2.0	-	10.9	0.5
	Out of curiosity	9.8	4.8	29.0	2.2	3.5	8.0	7.4	12.6	4.2	10.8	7.5	12.1	25.1	8.5	7.7
	To oblige or please people	14.2	19.6	-	15.8	2.7	1.4	3.2	-	3.5	10.7	6.5	7.9	1.7	-	9.1
	As a gift for another person	2.7	0.3	-	6.6	16.3	6.4	24.5	-	0.3	-	2.4	1.0	-	-	0.5
	As an interest/or a hobby	23.6	11.0	3.5	0.5	2.0	7.0	1.9	30.8	22.7	12.1	2.5	4.9	30.0	3.6	19.9
	To be with other people/get out of the house	50.8	9.8	-	1.2	0.2	-	0.1	42.2	6.6	29.5	28.7	12.3	-	-	24.1
	As entertainment	72.9	54.0	18.4	5.9	9.0	15.4	25.9	47.9	56.9	77.2	66.7	68.5	6.5	79.6	63.9
	Other	-	-	-	-	0.1	-	-	-	-	-	-	-	-	8.4	-

## Appendix 9: Reasons for not having gambled by demographics

Demographic variables	Reasons for not having gambled %									
	Moral/religious reasons/against gambling/don't believe in gambling	Not interested/no desire to gamble	Chances of winning aren't very good/too risky/lose more than win	Waste of money/other priorities	Too busy/waste of time	Can't afford it	It's addictive/ seen people in trouble	Haven't thought about it/never done it	Don't know how to play/don't understand NZ gambling rules	Others
<b>Total</b>	43.1	31.3	14.4	29.1	5.4	9.4	7.9	3.4	0.6	0.9
<b>Gender</b>										
Male	43.2	31.6	17.4	31.8	4.5	7.1	8.2	2.1	0.4	0.5
Female	43.1	31.0	11.6	26.7	6.3	11.5	7.6	4.6	0.9	1.2
<b>Ethnic group</b>										
European/Other	38.4	35.4	14.9	30.6	2.9	10.2	7.9	3.7	-	0.8
Māori	36.3	28.9	15.2	32.0	7.6	11.0	4.5	3.6	0.8	0.6
Pacific	55.0	20.2	7.3	34.1	5.7	14.4	9.4	2.8	2.7	1.0
Asian	53.0	26.8	16.2	23.3	13.2	4.5	8.9	2.6	1.9	1.4
<b>Age group</b>										
18 - 24 years	34.4	32.9	17.9	36.0	2.3	13.5	6.7	4.7	0.5	-
25 - 34 years	47.5	35.3	13.9	28.4	6.0	8.5	3.4	1.3	1.4	1.1
35 - 44 years	39.0	30.1	16.7	28.4	6.8	10.5	6.0	2.8	0.2	0.4
45 - 54 years	44.4	28.8	13.3	27.4	7.7	7.6	12.5	1.9	0.3	0.3
55 - 64 years	47.5	32.2	7.1	23.5	6.1	5.4	9.5	5.6	1.9	1.7
65+ years	47.9	28.0	14.7	28.4	4.7	9.2	10.0	4.4	-	2.0
<b>Country of birth</b>										
NZ	36.0	38.2	12.9	32.0	3.5	9.7	8.4	3.5	0.2	1.0
Elsewhere	52.6	22.2	16.4	25.4	7.9	9.0	7.3	3.3	1.2	0.8
<b>Arrival in NZ</b>										
2008 or later	61.7	15.0	18.3	20.9	7.1	3.4	10.4	2.1	2.6	-
Before 2008	49.3	24.8	15.7	27.0	8.3	11.1	6.2	3.8	0.6	1.1
<b>Highest qualification</b>										
No formal qual.	46.3	19.7	9.6	36.6	3.0	8.3	14.4	3.9	1.0	2.3
School qual.	43.1	30.8	14.6	33.4	6.8	9.9	5.2	4.1	0.8	0.9
Trade/voc. qual.	51.4	30.9	14.6	25.8	3.6	8.6	5.1	1.1	0.2	-
Degree/higher	38.3	35.4	15.7	25.1	6.1	9.8	9.2	3.8	0.6	0.8
<b>Labour force status</b>										
Employed	41.3	31.7	15.1	29.9	6.3	8.9	7.9	2.7	0.3	0.2
Unemployed	41.2	27.4	4.1	32.1	4.3	9.4	5.9	4.7	-	6.1
Student/Home/Retired	46.8	31.8	15.9	27.3	4.2	10.4	8.2	4.2	1.4	0.3
Other	45.0	-	19.6	-	19.6	-	45.0	-	-	35.4
<b>Religion</b>										
No religion	18.8	43.0	22.2	35.2	5.0	15.1	2.8	4.5	0.9	1.1
Anglican	22.8	38.3	14.8	38.2	7.9	10.1	6.8	5.4	-	-
Presbyterian	44.5	43.4	6.8	23.2	2.0	6.9	12.5	2.7	-	-
Catholic	41.1	31.2	11.3	30.8	6.9	10.0	8.6	6.0	1.1	2.8
Other Christian	62.5	18.1	11.6	24.8	4.1	7.1	10.8	2.1	0.7	1.1
Other religion	66.7	19.9	11.3	23.0	8.8	4.4	9.8	1.8	0.7	0.2
<b>Household size</b>										
1	44.2	24.6	13.2	30.0	6.1	9.2	12.1	6.3	-	1.0
2	43.0	32.5	14.1	28.1	4.7	6.7	9.1	2.4	0.3	0.8
3	38.0	40.1	16.2	21.9	3.5	8.5	5.8	3.1	1.0	1.7
4	45.7	26.0	16.6	32.6	5.2	13.8	8.4	3.8	0.3	0.8
5+	45.2	29.5	12.0	33.0	7.6	10.2	6.1	3.3	1.3	0.5
<b>Personal Income (\$)</b>										
Up to 20,000	44.4	31.0	14.9	30.7	4.2	11.6	8.2	3.4	1.2	0.3
20,001 - 40,000	38.3	26.1	10.9	33.6	7.5	10.4	8.1	3.9	0.5	2.5
40,001 - 60,000	46.4	28.6	14.7	25.5	4.8	6.2	4.0	3.5	-	1.6
60,001 - 80,000	36.4	47.5	19.2	23.1	5.9	0.9	4.8	3.6	-	-
80,001 - 100,000	38.9	38.0	28.5	23.3	-	17.5	14.9	-	-	-
Over 100,000	42.9	47.2	23.5	24.2	9.1	-	17.8	-	-	-
<b>Household Income (\$)</b>										
Up to 20,000	49.9	24.1	11.1	25.6	4.5	7.6	5.8	3.4	0.4	1.0
20,001 - 40,000	43.1	31.0	11.4	23.7	5.6	13.7	10.9	3.5	0.6	1.4
40,001 - 60,000	47.0	24.3	11.3	34.6	7.0	13.4	9.4	3.2	1.0	0.6
60,001 - 80,000	46.0	21.3	20.2	36.6	7.6	7.9	6.7	2.7	0.3	-
80,001 - 100,000	41.5	36.4	25.0	29.9	1.1	11.2	4.3	6.0	-	1.1
Over 100,000	29.6	48.1	16.6	27.4	5.2	3.5	8.0	2.2	0.7	1.4

## Appendix 10: Perceptions on winning or losing by gambling activity by demographics

Demographic variables	Perceptions of winning or losing %															
	Cards for money (not in casino)				Poker for money/prizes (commercial venue in NZ)				Poker for money/prizes (friends/family private residence)				Poker for money/prizes online			
	Won money	Broke even	Lost money	Don't know	Won money	Broke even	Lost money	Don't know	Won money	Broke even	Lost money	Don't know	Won money	Broke even	Lost money	Don't know
Total	19.9	40.7	38.2	1.2	17.0	34.2	48.8	-	22.5	39.1	36.8	1.5	32.7	38.5	28	0.8
<b>Gender</b>																
Male	20.8	36.7	41.0	1.5	18.5	36.3	45.2	-	21.8	40.4	35.9	1.9	33.9	33.7	32.4	-
Female	17.4	51.9	30.4	0.3	9.9	24.3	65.8	-	25.3	34.3	40.4	-	25.2	69.0	-	5.8
<b>Ethnic group</b>																
European/Other	17.7	40.8	40.0	1.5	13.6	36.0	50.4	-	22.3	37.1	38.7	2.0	26.8	37.3	36.0	-
Māori	24.9	48.0	26.7	0.4	21.2	38.2	40.6	-	28.2	47.9	23.9	-	55.7	31.5	9.8	3.0
Pacific	31.1	33.9	35.0	-	37.3	24.6	38.1	-	33.1	32.4	34.4	-	32.9	52.8	14.3	-
Asian	14.6	28.0	57.3	-	14.4	26.7	58.9	-	16.0	26.4	57.6	-	100.0	-	-	-
<b>Age group</b>																
18 - 24 years	13.8	42.1	40.2	3.9	14.5	40.7	44.9	-	11.6	38.4	45.6	4.4	89.0	-	11.0	-
25 - 34 years	31.7	29.5	38.8	-	28.0	21.5	50.4	-	32.8	31.2	36.0	-	20.9	41.5	37.7	-
35 - 44 years	11.5	45.7	42.3	0.5	-	46.7	53.3	-	27.3	44.4	28.3	-	-	75.9	15.0	9.1
45 - 54 years	17.5	46.2	36.2	-	6.0	46.8	47.1	-	16.7	56.7	26.6	-	-	71.4	28.6	-
55 - 64 years	-	76.0	24.0	-	16.4	46.1	37.5	-	15.5	58.8	25.6	-	-	-	100.0	-
65+ years	13.8	61.4	24.8	-	-	-	100.0	-	-	100.0	-	-	-	-	-	-
<b>Country of birth</b>																
NZ	21.1	38.7	38.7	1.5	18.9	36.2	44.9	-	23.9	39.0	35.4	1.8	29.4	41.0	28.9	0.8
Elsewhere	15.0	48.8	36.2	-	9.1	25.7	65.3	-	15.5	40.1	44.4	-	84.7	-	15.3	-
<b>Arrival in NZ</b>																
2008 or later	17.5	32.5	50.0	-	10.3	17.4	72.3	-	26.5	24.2	49.3	-	-	-	-	-
Before 2008	14.3	53.1	32.6	-	8.7	28.4	63.0	-	11.9	45.2	42.9	-	84.7	15.3	-	-
<b>Highest qualification</b>																
No formal qual.	20.5	48.2	31.4	-	8.6	49.1	42.3	-	17.0	52.4	30.6	-	13.0	80.2	6.9	-
School qual.	14.8	50.8	31.1	3.4	8.9	38.8	52.3	-	13.1	45.0	37.1	4.8	68.5	18.5	13.0	-
Trade/voc. qual.	22.8	40.6	36.6	-	19.2	27.3	53.5	-	29.6	41.4	29.0	-	18.6	38.4	43.0	-
Degree/higher	22.8	26.7	50.3	0.3	27.0	27.6	45.4	-	27.9	25.9	46.2	-	43.1	29.4	25.6	1.9
<b>Labour force status</b>																
Employed	20.2	34.1	44.2	1.5	20.7	27.2	52.2	-	18.3	36.5	43.2	1.9	25.5	30.8	43.7	-
Unemployed	21.1	64.5	13.6	0.7	11.2	65.9	23.0	-	45.2	47.1	7.7	-	67.9	32.1	-	-
Student/Home/Retired	20.0	47.3	32.7	-	4.7	21.6	73.7	-	41.1	37.8	21.1	-	12.9	87.1	-	-

Demographic variables	Perceptions of winning or losing %															
	Cards for money (not in casino)				Poker for money/prizes (commercial venue in NZ)				Poker for money/prizes (friends/family private residence)				Poker for money/prizes online			
	Won money	Broke even	Lost money	Don't know	Won money	Broke even	Lost money	Don't know	Won money	Broke even	Lost money	Don't know	Won money	Broke even	Lost money	Don't know
Other	-	100.0	-	-	-	100.0	-	-	-	100.0	-	-	49.3	25.6	13.7	11.4
<b>Religion</b>																
No religion	20.3	41.4	36.6	1.7	15.2	38.7	46.1	-	22.7	41.9	33.2	2.3	32.3	37.6	30.1	-
Anglican	20.9	50.4	28.7	-	10.7	-	89.3	-	27.7	46.4	25.9	-	-	-	-	-
Presbyterian	7.7	47.2	45.1	-	7.8	62.5	29.7	-	18.0	54.1	27.9	-	-	-	100.0	-
Catholic	23.6	42.6	33.8	-	22.7	24.0	53.3	-	22.9	33.9	43.2	-	100.0	-	-	-
Other Christian	18.1	30.4	50.5	1.0	9.8	32.0	58.2	-	7.3	35.5	57.2	-	6.3	73.5	11.0	9.2
Other religion	21.7	28.4	49.9	-	55.2	-	44.8	-	36.7	-	63.3	-	-	-	-	-
<b>Household size</b>																
1	10.2	45.6	44.2	-	-	46.5	53.5	-	17.0	34.8	48.2	-	-	37.9	62.1	-
2	24.9	38.1	36.6	0.3	21.5	17.4	61.1	-	34.0	29.1	36.9	-	21.4	42.0	34.2	2.4
3	25.4	37.7	32.2	4.6	16.5	53.7	29.8	-	21.9	50.6	20.7	6.7	-	61.1	38.9	-
4	11.3	44.3	44.4	-	29.1	45.8	25.1	-	14.4	36.4	49.3	-	70.5	18.5	11.0	-
5+	19.0	42.2	38.8	-	6.9	26.3	66.7	-	19.4	41.6	39.0	-	85.8	14.2	-	-
<b>Personal Income (\$)</b>																
Up to 20,000	17.4	45.1	37.2	0.3	12.5	30.4	57.1	-	26.3	37.9	35.9	-	57.9	34.7	4.0	3.4
20,001 - 40,000	24.3	44.2	27.5	4.1	18.0	50.8	31.2	-	27.1	39.7	26.8	6.4	19.3	70.1	10.5	-
40,001 - 60,000	25.5	25.9	48.6	-	24.9	18.6	56.5	-	19.1	35.7	45.3	-	-	29.8	70.2	-
60,001 - 80,000	14.4	41.5	44.1	-	14.7	22.0	63.3	-	15.5	51.0	33.5	-	-	100.0	-	-
80,001 - 100,000	13.7	37.0	49.3	-	-	19.2	80.8	-	33.4	28.3	38.3	-	-	-	100.0	-
Over 100,000	7.8	73.0	19.2	-	4.4	72.3	23.3	-	9.0	74.0	16.9	-	-	-	100.0	-
<b>Household Income (\$)</b>																
Up to 20,000	11.7	57.5	28.9	1.9	32.7	28.0	39.3	-	15.7	52.5	31.8	-	-	33.5	36.2	30.3
20,001 - 40,000	27.3	39.1	33.6	-	41.1	43.6	15.3	-	41.4	46.7	11.9	-	16.3	63.9	19.8	-
40,001 - 60,000	33.7	32.4	33.9	-	12.4	41.4	46.2	-	25.6	34.1	40.3	-	33.5	51.2	15.3	-
60,001 - 80,000	2.8	48.8	38.6	9.7	3.2	48.9	47.9	-	18.4	39.1	30.3	12.3	100.0	-	-	-
80,001 - 100,000	25.4	40.0	34.6	-	30.5	27.3	42.2	-	23.9	47.6	28.5	-	-	49.3	50.7	-
Over 100,000	17.2	39.6	43.2	-	14.3	32.2	53.4	-	19.0	36.2	44.7	-	45.6	29.9	24.5	-

Demographic variables	Perceptions of winning or losing %											
	Bets with friends/workmates				Text game or competition				New Zealand raffle/lottery			
	Won money	Broke even	Lost money	Don't know	Won money	Broke even	Lost money	Don't know	Won money	Broke even	Lost money	Don't know
Total	19.1	21.5	59.1	0.3	12.0	17.4	69.5	1.1	4.5	7.0	88.4	0.1
<b>Gender</b>												
Male	19.6	26.2	53.6	0.6	12.4	19.6	68.0	-	4.2	8.1	87.5	0.2
Female	18.4	15.4	66.2	-	11.8	16.0	70.5	1.8	4.7	6.2	89.2	-
<b>Ethnic group</b>												
European/Other	17.3	21.6	60.8	0.4	12.3	18.3	68.4	1.0	4.1	6.4	89.5	0.1
Māori	27.4	21.0	51.6	-	8.0	28.8	63.2	-	7.1	9.8	82.7	0.4
Pacific	25.8	32.4	41.8	-	14.7	14.4	71.0	-	9.1	13.8	77.1	-
Asian	24.4	14.6	60.9	-	11.5	35.1	47.6	5.8	6.0	8.9	85.1	-
<b>Age group</b>												
18 - 24 years	28.6	32.6	36.9	2.0	6.7	12.4	75.5	5.4	6.2	8.4	85.1	0.4
25 - 34 years	24.8	24.7	50.5	-	12.1	14.5	73.4	-	5.9	7.8	86.4	-
35 - 44 years	14.2	19.5	66.2	-	24.4	31.7	43.9	-	5.6	5.4	89.0	-
45 - 54 years	15.2	19.1	65.7	-	4.6	12.5	83.0	-	4.2	7.3	88.4	0.1
55 - 64 years	16.4	11.5	72.0	-	-	10.3	89.7	-	2.4	5.7	91.7	0.3
65+ years	12.3	16.9	70.8	-	12.3	-	87.7	-	3.1	8.8	88.0	-
<b>Country of birth</b>												
NZ	18.7	23.0	57.9	0.4	13.1	18.4	68.5	-	4.4	6.8	88.7	0.1
Elsewhere	20.5	15.3	64.2	-	8.1	13.5	73.3	5.1	4.9	7.8	87.3	-
<b>Arrival in NZ</b>												
2008 or later	37.3	7.7	55.0	-	14.0	17.4	64.3	4.3	4.4	14.9	80.7	-
Before 2008	17.1	16.8	66.0	-	5.9	12.0	76.7	5.3	5.0	7.0	88.1	-
<b>Highest qualification</b>												
No formal qual.	25.6	29.8	44.6	-	-	8.2	91.8	-	4.3	9.6	85.9	0.2
School qual.	21.8	14.9	62.1	1.2	10.4	17.8	69.4	2.3	5.0	7.1	87.9	-
Trade/voc. qual.	21.0	21.3	57.8	-	13.0	17.0	70.0	-	5.0	7.8	86.9	0.3
Degree/higher	14.6	24.1	61.3	-	14.4	18.3	66.6	0.7	3.9	5.6	90.4	-
<b>Labour force status</b>												
Employed	19.8	21.5	58.3	0.4	13.2	15.3	71.5	-	4.5	6.7	88.8	0.1
Unemployed	11.4	35.6	53.0	-	5.7	49.8	44.5	-	6.1	6.5	87.0	0.4
Student/Home/Retired	18.3	17.3	64.3	-	9.3	18.6	66.4	5.7	3.9	8.3	87.8	-
Other	7.0	14.6	78.4	-	-	-	100.0	-	10.0	7.8	82.2	-

Demographic variables	Perceptions of winning or losing %											
	Bets with friends/workmates				Text game or competition				New Zealand raffle/lottery			
	Won money	Broke even	Lost money	Don't know	Won money	Broke even	Lost money	Don't know	Won money	Broke even	Lost money	Don't know
<b>Religion</b>												
No religion	21.8	24.8	52.7	0.7	9.6	15.2	75.2	-	5.6	6.5	87.9	-
Anglican	13.2	16.4	70.4	-	6.0	10.5	83.5	-	3.2	5.5	90.9	0.4
Presbyterian	11.8	18.4	69.8	-	29.7	10.7	59.6	-	2.8	6.6	90.6	-
Catholic	23.5	23.5	53.1	-	25.0	22.4	52.6	-	4.1	9.7	86.2	-
Other Christian	16.8	14.9	68.3	-	11.5	30.8	57.7	-	4.3	8.2	87.5	-
Other religion	17.2	16.2	66.6	-	3.4	13.6	68.4	14.6	6.1	5.6	87.9	0.4
<b>Household size</b>												
1	19.4	17.3	63.3	-	-	25.0	75.0	-	4.1	6.4	89.5	-
2	13.8	22.6	63.6	-	18.8	13.7	66.5	1.1	3.5	7.3	89.1	0.1
3	27.6	18.3	52.4	1.7	3.3	16.0	80.7	-	4.7	5.4	89.9	-
4	19.3	25.5	55.2	-	13.5	21.2	65.2	-	5.7	7.1	87.1	0.1
5+	20.0	19.2	60.7	-	12.0	16.6	67.5	3.9	4.9	8.3	86.7	0.2
<b>Personal Income (\$)</b>												
Up to 20,000	24.4	21.8	53.8	-	11.8	16.9	67.9	3.4	5.2	7.0	87.8	-
20,001 - 40,000	13.8	26.6	58.2	1.4	10.5	17.5	72.0	-	5.0	9.5	85.4	0.2
40,001 - 60,000	22.8	19.5	57.7	-	9.5	14.2	76.3	-	4.0	6.5	89.3	0.1
60,001 - 80,000	17.3	14.6	68.1	-	-	28.2	71.8	-	2.4	3.1	94.3	0.2
80,001 - 100,000	15.8	21.4	62.8	-	31.4	25.5	43.1	-	10.0	8.9	81.1	-
Over 100,000	14.9	21.0	64.1	-	-	18.3	81.7	-	1.1	6.0	92.9	-
<b>Household Income (\$)</b>												
Up to 20,000	24.0	19.3	56.7	-	-	37.1	62.9	-	5.8	10.3	83.9	-
20,001 - 40,000	18.3	29.0	52.7	-	10.8	11.1	76.5	1.6	5.1	8.7	86.2	-
40,001 - 60,000	24.4	17.6	58.0	-	13.2	29.7	57.1	-	5.5	9.0	85.1	0.4
60,001 - 80,000	17.5	15.8	64.2	2.4	11.8	22.4	65.7	-	2.4	5.3	92.2	0.2
80,001 - 100,000	10.1	31.4	58.4	-	15.2	15.7	69.1	-	4.0	6.1	89.9	-
Over 100,000	21.5	17.9	60.6	-	5.9	18.7	75.4	-	4.3	5.7	90.0	-

Demographic variables	Perceptions of winning or losing %															
	Lotto				Keno				Instant Kiwi or other scratch tickets				Housie or bingo			
	Won money	Broken even	Lost money	Don't know	Won money	Broke even	Lost money	Don't know	Won money	Broke even	Lost money	Don't know	Won money	Broke even	Lost money	Don't know
Total	4.2	7.0	88.7	0.1	9.6	18.1	72.3	-	10.6	29.8	59.6	-	22.9	20.4	56.7	-
<b>Gender</b>																
Male	3.9	6.4	89.7	-	6.4	20.7	72.9	-	10.7	27.3	62.0	-	20.3	9.6	70.0	-
Female	4.5	7.6	87.8	0.1	13.2	15.3	71.5	-	10.5	31.7	57.8	-	23.9	24.7	51.4	-
<b>Ethnic group</b>																
European/Other	3.8	6.4	89.6	0.1	9.2	18.0	72.8	-	8.8	30.3	60.9	-	18.4	17.3	64.3	-
Māori	6.0	10.6	83.1	0.3	6.5	20.1	73.4	-	19.2	30.5	50.3	-	27.7	26.3	46.0	-
Pacific	9.0	10.2	80.8	-	18.8	15.4	65.8	-	16.5	29.4	54.2	-	36.2	25.8	38.1	-
Asian	6.0	7.6	86.0	0.4	7.8	17.3	74.9	-	8.7	23.3	68.0	-	37.7	-	62.3	-
<b>Age group</b>																
18 - 24 years	7.8	9.3	82.2	0.7	6.4	34.3	59.3	-	14.2	36.4	49.4	-	19.2	5.5	75.3	-
25 - 34 years	5.0	7.6	87.4	-	18.2	14.9	66.9	-	17.1	32.9	50.0	-	31.0	18.2	50.8	-
35 - 44 years	3.6	5.8	90.6	-	5.5	12.9	81.5	-	9.7	28.4	61.9	-	19.5	21.2	59.3	-
45 - 54 years	4.3	6.5	89.2	-	11.5	12.9	75.6	-	7.3	27.3	65.4	-	41.5	18.6	39.9	-
55 - 64 years	3.9	6.7	89.1	0.3	9.1	24.7	66.2	-	4.9	30.2	64.8	-	4.0	19.9	76.1	-
65+ years	2.7	7.8	89.5	-	5.0	22.0	73.0	-	5.1	19.6	75.4	-	24.8	43.5	31.6	-
<b>Country of birth</b>																
NZ	4.0	6.8	89.1	-	5.0	21.9	73.1	-	10.6	30.8	58.7	-	20.4	19.6	60.0	-
Elsewhere	4.8	7.4	87.5	0.2	17.4	11.8	70.9	-	10.8	25.8	63.4	-	31.3	22.9	45.8	-
<b>Arrival in NZ</b>																
2008 or later	2.9	13.4	83.7	-	24.8	-	75.2	-	19.7	20.8	59.4	-	16.5	-	83.5	-
Before 2008	5.1	6.5	88.1	0.3	15.3	15.0	69.7	-	9.7	26.4	63.9	-	32.6	24.8	42.6	-
<b>Highest qualification</b>																
No formal qual.	4.3	8.6	86.8	0.2	14.0	22.9	63.1	-	9.9	30.0	60.1	-	23.5	38.5	38.0	-
School qual.	4.1	6.0	89.8	0.1	20.5	18.3	61.3	-	13.0	28.9	58.1	-	26.9	17.6	55.5	-
Trade/voc. qual.	4.7	7.7	87.6	-	1.1	21.6	77.3	-	9.3	32.2	58.5	-	17.3	18.0	64.6	-
Degree/higher	3.8	6.4	89.6	0.1	3.0	11.6	85.4	-	9.7	28.6	61.7	-	23.8	4.9	71.2	-
<b>Labour force status</b>																
Employed	4.2	6.5	89.2	0.1	11.5	13.1	75.4	-	10.3	30.3	59.4	-	21.9	17.4	60.7	-
Unemployed	4.2	10.4	85.5	-	6.9	18.9	74.2	-	12.4	31.7	55.9	-	14.6	16.6	68.8	-
Student/Home/Retired	4.2	7.1	88.4	0.3	5.8	32.7	61.5	-	9.8	27.9	62.3	-	28.3	26.2	45.5	-
Other	-	15.1	84.9	-	-	-	-	-	37.8	19.5	42.7	-	-	-	-	-

Demographic variables	Perceptions of winning or losing %															
	Lotto				Keno				Instant Kiwi or other scratch tickets				Housie or bingo			
	Won money	Broken even	Lost money	Don't know	Won money	Broke even	Lost money	Don't know	Won money	Broke even	Lost money	Don't know	Won money	Broke even	Lost money	Don't know
<b>Religion</b>																
No religion	4.4	5.8	89.8	-	10.4	23.6	65.9	-	12.6	31.8	55.6	-	23.9	1-	66.1	-
Anglican	3.7	8.3	87.9	-	9.7	8.7	81.7	-	6.6	32.9	60.5	-	12.3	25.7	62.0	-
Presbyterian	1.2	7.0	91.8	-	4.5	26.1	69.4	-	8.5	22.8	68.7	-	28.8	27.1	44.1	-
Catholic	4.0	8.2	87.7	0.1	14.2	14.4	71.3	-	6.5	25.0	68.5	-	27.4	35.1	37.5	-
Other Christian	5.7	6.4	87.4	0.4	8.4	18.1	73.5	-	12.7	30.8	56.5	-	16.6	23.7	59.8	-
Other religion	6.5	8.1	84.8	0.5	5.6	12.8	81.6	-	14.9	25.7	59.3	-	32.9	10.0	57.2	-
<b>Household size</b>																
1	4.5	5.8	89.8	-	7.2	23.6	69.2	-	6.9	22.7	70.4	-	13.9	34.9	51.2	-
2	3.9	6.4	89.5	0.2	6.6	16.2	77.2	-	8.0	27.5	64.5	-	18.9	16.5	64.6	-
3	4.1	8.5	87.4	-	13.4	18.5	68.1	-	10.2	30.7	59.0	-	31.5	21.8	46.7	-
4	4.2	7.0	88.6	0.2	10.8	21.2	68.0	-	11.8	31.2	57.0	-	7.9	20.5	71.5	-
5+	4.8	7.2	88.0	-	9.9	14.7	75.4	-	15.4	33.7	50.9	-	38.7	19.8	41.5	-
<b>Personal Income (\$)</b>																
Up to 20,000	5.0	7.4	87.3	0.2	10.1	25.2	64.7	-	10.7	29.3	60.0	-	21.0	20.2	58.8	-
20,001 - 40,000	3.2	10.0	86.7	-	5.4	18.7	75.8	-	14.3	30.7	55.0	-	23.6	25.1	51.3	-
40,001 - 60,000	4.7	6.4	88.9	-	6.6	8.3	85.1	-	10.2	27.0	62.8	-	38.0	14.5	47.5	-
60,001 - 80,000	4.0	3.6	92.4	-	17.0	11.8	71.2	-	4.4	33.0	62.5	-	-	3.9	96.1	-
80,001 - 100,000	4.6	6.5	88.8	-	15.0	25.1	59.9	-	9.1	30.2	60.8	-	79.1	20.9	-	-
Over 100,000	2.6	4.4	92.8	0.2	-	-	100.0	-	5.7	23.9	70.4	-	5.9	-	94.1	-
<b>Household Income (\$)</b>																
Up to 20,000	5.2	7.3	87.5	-	15.6	24.4	59.9	-	13.6	22.1	64.3	-	25.2	24.8	50.0	-
20,001 - 40,000	5.0	9.7	84.9	0.3	6.8	12.7	80.5	-	10.2	30.1	59.7	-	28.0	33.1	38.9	-
40,001 - 60,000	5.0	7.9	87.1	-	2.5	41.8	55.8	-	8.7	32.4	58.9	-	26.5	16.5	57.1	-
60,001 - 80,000	3.9	7.2	88.9	-	10.4	12.4	77.1	-	13.4	28.9	57.7	-	17.9	7.5	74.7	-
80,001 - 100,000	2.2	6.9	91.0	-	-	4.9	95.1	-	9.0	25.8	65.3	-	22.4	22.4	55.2	-
Over 100,000	4.1	5.2	90.7	0.1	15.0	12.4	72.6	-	9.4	32.6	58.1	-	20.6	11.7	67.7	-

Perceptions of winning or losing %																
Demographic variables	Horse/dog races (at the track)				Horse/dog races (TAB in person)				Horse/dog races (TAB telephone, online, interactive TV)				Horse/dog races (overseas betting organisation or TAB)			
	Won money	Broke even	Lost money	Don't know	Won money	Broke even	Lost money	Don't know	Won money	Broke even	Lost money	Don't know	Won money	Broke even	Lost money	Don't know
Total	24.5	24.7	50.8	-	22.4	19.8	57.2	0.6	20.6	28.4	51.0	-	10.4	26.5	63.1	-
<b>Gender</b>																
Male	25.8	25.5	48.7	-	23.0	23.2	52.7	1.0	20.0	32.0	48.0	-	20.6	37.1	42.3	-
Female	23.1	23.8	53.1	-	21.5	14.7	63.8	-	22.0	20.1	57.9	-	-	15.5	84.5	-
<b>Ethnic group</b>																
European/Other	25.1	25.0	50.0	-	22.5	20.1	57.1	0.4	18.9	29.6	51.5	-	9.5	27.0	63.5	-
Māori	28.0	28.2	43.9	-	25.5	24.2	50.3	-	23.1	27.5	49.4	-	26.4	33.7	39.9	-
Pacific	31.8	30.3	37.9	-	21.4	20.8	57.8	-	28.6	48.6	22.8	-	-	-	100.0	-
Asian	19.2	27.0	53.8	-	26.6	16.6	42.8	14.0	38.7	-	61.3	-	-	-	-	-
<b>Age group</b>																
18 - 24 years	35.7	16.3	48.0	-	37.5	9.0	51.1	2.4	16.4	27.6	56.0	-	-	-	100.0	-
25 - 34 years	25.1	14.9	60.1	-	19.3	27.5	53.2	-	26.5	30.8	42.7	-	-	100.0	-	-
35 - 44 years	24.2	32.7	43.0	-	23.5	18.7	57.9	-	25.4	24.9	49.7	-	-	-	100.0	-
45 - 54 years	21.8	31.3	46.8	-	18.7	22.1	59.2	-	12.6	23.4	64.0	-	42.1	10.7	47.2	-
55 - 64 years	22.6	22.8	54.5	-	25.9	15.5	56.7	1.9	15.8	26.6	57.6	-	-	27.3	72.7	-
65+ years	17.3	30.7	52.0	-	13.0	23.8	63.3	-	26.5	33.0	40.5	-	-	45.3	54.7	-
<b>Country of birth</b>																
NZ	25.1	24.9	50.0	-	20.3	21.1	58.3	0.4	17.6	30.2	52.2	-	17.6	30.2	52.2	-
Elsewhere	21.7	23.4	55.0	-	34.5	12.5	51.1	1.9	54.4	8.3	37.3	-	54.4	8.3	37.3	-
<b>Arrival in NZ</b>																
2008 or later	19.6	14.9	65.6	-	100.0	-	-	-	100.0	-	-	-	-	-	100.0	-
Before 2008	22.1	25.1	52.8	-	32.7	12.9	52.5	1.9	48.3	9.4	42.3	-	-	-	100.0	-
<b>Highest qualification</b>																
No formal qual.	10.9	38.7	50.5	-	15.3	26.0	56.6	2.2	19.7	42.8	37.4	-	-	24.7	75.3	-
School qual.	35.3	21.3	43.3	-	24.3	17.2	58.5	-	24.4	24.0	51.6	-	30.3	14.5	55.2	-
Trade/voc. qual.	22.8	22.7	54.5	-	27.8	13.9	58.3	-	18.8	24.9	56.3	-	-	58.1	41.9	-
Degree/higher	21.0	24.6	54.5	-	18.1	26.0	54.8	1.1	18.7	28.4	52.8	-	-	-	100.0	-
<b>Labour force status</b>																
Employed	23.9	24.3	51.8	-	23.0	20.2	55.9	0.8	18.1	27.1	54.7	-	2.7	21.9	75.4	-
Unemployed	22.5	22.0	55.5	-	21.5	26.3	52.2	-	36.1	40.9	23.0	-	-	100.0	-	-
Student/Home/Retired	24.2	28.8	47.0	-	22.2	16.7	61.1	-	27.0	32.2	40.8	-	48.8	28.6	22.6	-
Other	66.6	9.8	23.5	-	-	-	100.0	-	-	-	100.0	-	-	-	-	-

Demographic variables	Perceptions of winning or losing %															
	Horse/dog races (at the track)				Horse/dog races (TAB in person)				Horse/dog races (TAB telephone, online, interactive TV)				Horse/dog races (overseas betting organisation or TAB)			
	Won money	Broke even	Lost money	Don't know	Won money	Broke even	Lost money	Don't know	Won money	Broke even	Lost money	Don't know	Won money	Broke even	Lost money	Don't know
<b>Religion</b>																
No religion	29.6	20.3	50.1	-	25.4	20.9	53.0	0.7	19.5	31.1	49.5	-	-	45.3	54.7	-
Anglican	21.7	22.4	55.9	-	29.0	16.4	54.6	-	20.5	12.5	67.0	-	-	3.6	96.4	-
Presbyterian	23.5	18.2	58.3	-	10.0	17.8	72.2	-	14.2	32.6	53.2	-	-	51.6	48.4	-
Catholic	18.6	37.8	43.6	-	20.2	20.9	58.9	-	23.8	19.4	56.7	-	79.3	13.8	6.9	-
Other Christian	14.2	35.6	50.2	-	11.1	21.2	67.8	-	30.7	49.3	20.0	-	-	25.4	74.6	-
Other religion	20.2	20.6	59.2	-	22.0	24.2	46.0	7.8	40.4	-	59.6	-	-	-	100.0	-
<b>Household size</b>																
1	22.0	31.8	46.1	-	15.7	24.0	60.3	-	14.5	30.2	55.4	-	-	47.8	52.2	-
2	22.1	21.0	56.9	-	22.8	18.4	58.8	-	25.7	28.1	46.1	-	-	61.2	38.8	-
3	22.0	27.2	50.8	-	22.3	29.3	48.5	-	17.8	39.4	42.8	-	-	-	100.0	-
4	27.1	24.8	48.1	-	20.2	18.5	59.8	1.5	21.7	24.6	53.7	-	49.4	-	50.6	-
5+	30.3	24.2	45.5	-	29.6	10.1	58.4	2.0	17.2	16.5	66.3	-	-	7.8	92.2	-
<b>Personal Income (\$)</b>																
Up to 20,000	24.0	21.7	54.2	-	29.6	16.4	54.0	-	30.0	21.4	48.6	-	15.2	17.0	67.8	-
20,001 - 40,000	27.3	29.3	43.4	-	19.6	21.5	57.7	1.2	15.4	39.1	45.6	-	-	20.8	79.2	-
40,001 - 60,000	26.1	23.7	50.2	-	23.2	16.5	58.7	1.7	18.6	34.7	46.7	-	-	73.8	26.2	-
60,001 - 80,000	14.7	22.3	63.0	-	15.0	26.6	58.4	-	5.7	16.6	77.6	-	-	-	100.0	-
80,001 - 100,000	21.0	28.7	50.3	-	26.9	17.4	55.7	-	31.7	24.6	43.7	-	28.0	-	72.0	-
Over 100,000	26.7	24.4	48.9	-	16.9	26.5	56.6	-	20.2	44.5	35.3	-	-	-	-	-
<b>Household Income (\$)</b>																
Up to 20,000	12.6	23.1	64.3	-	17.1	21.2	61.7	-	8.9	6.8	84.3	-	-	-	100.0	-
20,001 - 40,000	27.7	25.2	47.1	-	22.9	11.7	63.4	2.0	30.8	31.2	38.0	-	-	48.6	51.4	-
40,001 - 60,000	17.9	38.0	44.1	-	23.3	27.6	49.1	-	18.9	68.0	13.1	-	-	77.3	22.7	-
60,001 - 80,000	29.6	12.1	58.4	-	20.3	20.0	59.7	-	19.6	23.0	57.4	-	35.2	20.7	44.1	-
80,001 - 100,000	17.3	27.4	55.3	-	21.6	22.5	52.9	3.0	17.8	11.4	70.9	-	-	28.6	71.4	-
Over 100,000	26.6	23.0	50.4	-	24.5	20.3	55.3	-	16.0	27.0	57.1	-	8.9	-	91.1	-

Perceptions of winning or losing %																
Demographic variables	Sports events (TAB at event)				Sports events (TAB in person)				Sports events (TAB telephone, online or interactive TV)				Sports events (overseas TAB, organisation/website)			
	Won money	Broke even	Lost money	Don't know	Won money	Broke even	Lost money	Don't know	Won money	Broke even	Lost money	Don't know	Won money	Broke even	Lost money	Don't know
Total	30.9	26.1	42.2	0.7	29.2	24.3	45.7	0.7	25.2	36.8	38.0	-	38.4	24.2	37.4	-
<b>Gender</b>																
Male	28.3	26.8	43.9	0.9	24.0	27.3	47.8	0.8	23.7	41.5	34.8	-	25.6	27.8	46.6	-
Female	40.4	23.6	36.0	-	58.8	7.2	34.0	-	29.8	22.4	47.8	-	74.4	14.1	11.6	-
<b>Ethnic group</b>																
European/Other	33.5	27.5	39.0	-	32.0	25.6	42.3	-	26.1	36.6	37.3	-	43.0	23.1	33.9	-
Māori	21.8	21.6	56.6	-	16.0	25.0	58.9	-	10.3	40.2	49.4	-	33.4	16.7	49.9	-
Pacific	9.1	30.9	59.9	-	16.2	17.0	66.9	-	15.6	60.7	23.7	-	-	-	100.0	-
Asian	31.7	21.3	35.7	11.3	15.8	24.2	46.3	13.7	39.7	21.8	38.4	-	-	42.6	57.4	-
<b>Age group</b>																
18 - 24 years	24.0	18.5	54.2	3.3	24.9	27.0	45.7	2.4	27.3	49.4	23.2	-	100.0	-	-	-
25 - 34 years	33.8	29.1	37.1	-	35.2	28.1	36.8	-	18.7	49.4	31.9	-	8.7	28.3	63.0	-
35 - 44 years	29.4	31.6	38.9	-	33.0	12.2	54.8	-	26.7	7.0	66.3	-	53.6	-	46.4	-
45 - 54 years	38.3	22.9	38.8	-	23.1	23.3	53.6	-	37.6	2.9	59.5	-	38.1	58.5	3.4	-
55 - 64 years	24.8	32.9	42.3	-	25.8	16.0	58.3	-	27.1	-	72.9	-	-	46.4	53.6	-
65+ years	45.1	7.9	47.0	-	26.4	33.3	40.3	-	27.8	53.0	19.2	-	-	-	-	-
<b>Country of birth</b>																
NZ	28.4	26.1	45.6	-	28.9	25.3	45.7	-	21.6	35.7	42.7	-	35.2	38.2	26.6	-
Elsewhere	43.2	26.3	26.2	4.3	31.2	17.7	45.8	5.3	42.8	42.2	15.0	-	42.2	8.0	49.9	-
<b>Arrival in NZ</b>																
2008 or later	54.7	22.3	23.0	-	-	100.0	-	-	70.4	29.6	-	-	-	-	100.0	-
Before 2008	41.5	26.9	26.7	5.0	32.3	14.7	47.5	5.5	37.8	44.5	17.8	51.1	9.7	39.3	-	-
<b>Highest qualification</b>																
No formal qual.	51.3	13.5	35.2	-	35.8	8.9	55.3	-	28.6	41.7	-	-	-	100.0	-	-
School qual.	14.1	16.8	69.1	-	10.2	31.2	58.6	-	39.6	36.6	23.8	-	-	100.0	-	-
Trade/voc. qual.	31.1	37.2	31.7	-	44.8	23.5	31.7	-	15.0	42.6	42.5	-	-	-	100.0	-
Degree/higher	34.0	24.8	39.6	1.6	27.6	23.4	47.0	2.1	24.0	34.6	41.5	-	44.2	17.0	38.8	-
<b>Labour force status</b>																
Employed	32.1	25.0	42.1	0.9	33.5	23.2	42.4	0.9	22.4	33.6	44.0	-	49.9	14.3	35.7	-
Unemployed	24.5	41.8	33.6	-	30.9	32.2	36.9	-	50.5	27.1	22.4	-	-	-	100.0	-
Student/Home/Retired	24.0	27.6	48.4	-	9.9	32.1	58.0	-	12.1	66.5	21.4	-	-	100.0	-	-
Other	-	-	-	-	-	-	100.0	-	100.0	-	-	-	-	-	-	-

Demographic variables	Perceptions of winning or losing %															
	Sports events (TAB at event)				Sports events (TAB in person)				Sports events (TAB telephone, online or interactive TV)				Sports events (overseas TAB, organisation/website)			
	Won money	Broke even	Lost money	Don't know	Won money	Broke even	Lost money	Don't know	Won money	Broke even	Lost money	Don't know	Won money	Broke even	Lost money	Don't know
<b>Religion</b>																
No religion	34.8	25.2	40.0	-	37.0	24.2	38.7	-	27.9	42.9	29.2	-	57.7	16.7	25.6	-
Anglican	22.0	53.7	24.3	-	-	59.0	41.0	-	46.4	5.5	48.1	-	42.7	-	57.3	-
Presbyterian	22.7	18.7	58.6	-	5.8	15.6	78.6	-	-	22.9	77.1	-	-	35.8	64.2	-
Catholic	37.3	15.4	47.3	-	30.4	16.7	52.9	-	13.6	24.3	62.1	-	-	100.0	-	-
Other Christian	9.2	22.3	68.5	-	9.9	2.8	87.3	-	5.7	16.0	78.3	-	-	-	100.0	-
Other religion	38.2	21.2	22.5	18.1	30.5	15.9	30.3	23.3	64.7	17.1	18.2	-	-	27.0	73.0	-
<b>Household size</b>																
1	47.7	13.4	38.9	-	35.5	31.6	32.8	-	7.2	30.5	62.3	-	-	-	100.0	-
2	27.8	23.8	48.4	-	17.6	22.4	60.0	-	35.4	32.2	32.4	-	31.6	30.9	37.5	-
3	39.5	15.5	45.1	-	45.6	13.6	40.8	-	32.5	13.5	54.0	-	-	-	100.0	-
4	35.5	21.1	43.3	-	34.3	36.9	28.7	-	4.4	56.4	39.1	-	-	47.6	52.4	-
5+	20.6	43.8	32.6	2.9	22.0	25.4	49.5	3.1	39.1	33.7	27.2	-	100.0	-	-	-
<b>Personal Income (\$)</b>																
Up to 20,000	25.9	32.1	42.0	-	31.5	30.2	38.3	-	12.1	53.6	34.3	-	-	73.0	27.0	-
20,001 - 40,000	37.7	20.0	38.8	3.5	32.9	13.4	50.7	3.0	51.6	33.7	14.6	-	100.0	-	-	-
40,001 - 60,000	19.2	25.6	55.2	-	18.2	24.9	56.9	-	20.9	39.7	39.3	-	-	36.3	63.7	-
60,001 - 80,000	32.7	29.2	38.1	-	36.5	17.9	45.6	-	21.5	23.5	55.1	-	-	-	100.0	-
80,001 - 100,000	47.7	37.1	15.1	-	45.4	21.3	33.3	-	18.9	-	81.1	-	100.0	-	-	-
Over 100,000	38.7	14.6	46.7	-	24.4	36.3	39.3	-	36.0	27.5	36.5	-	84.6	15.4	-	-
<b>Household Income (\$)</b>																
Up to 20,000	27.9	3.1	69.1	-	25.7	11.0	63.3	-	42.7	-	57.3	-	-	-	100.0	-
20,001 - 40,000	21.3	44.1	23.5	11.1	13.6	63.4	15.7	7.3	19.5	62.4	18.1	-	-	-	-	-
40,001 - 60,000	43.5	20.4	36.1	-	52.3	14.2	33.5	-	14.9	47.1	38.0	-	-	31.4	68.6	-
60,001 - 80,000	24.1	-	75.9	-	14.1	16.5	69.5	-	62.1	17.9	20.0	-	-	36.7	63.3	-
80,001 - 100,000	14.1	36.2	49.8	-	14.9	30.1	55.0	-	22.1	43.6	34.4	-	-	45.2	54.8	-
Over 100,000	36.9	30.3	32.8	-	39.4	21.0	39.6	-	21.9	29.6	48.5	-	95.8	4.2	-	-

Perceptions of winning or losing %																
Demographic variables	Casino table games (NZ)				Casino EGMs (NZ)				Pub EGMs				Club EGMs			
	Won money	Broke even	Lost money	Don't know	Won money	Broke even	Lost money	Don't know	Won money	Broke even	Lost money	Don't know	Won money	Broke even	Lost money	Don't know
Total	27.1	29.3	43.6	-	18.0	17.9	64.0	-	22.3	25.1	52.6	-	17.3	24.9	57.8	-
<b>Gender</b>																
Male	25.1	30.1	44.9	-	18.0	16.7	65.3	-	22.9	25.5	51.6	-	14.4	29.3	56.3	-
Female	31.8	27.5	40.7	-	18.0	19.3	62.7	-	21.6	24.7	53.7	-	19.7	21.1	59.2	-
<b>Ethnic group</b>																
European/Other	27.8	30.6	41.6	-	17.5	17.1	65.4	-	21.6	24.9	53.5	-	15.9	25.8	58.3	-
Māori	22.2	24.0	53.8	-	18.4	24.7	56.9	-	22.2	25.0	52.9	-	24.8	24.5	50.7	-
Pacific	30.7	35.6	33.6	-	21.8	18.1	60.1	-	32.9	28.7	38.4	-	21.3	39.1	39.6	-
Asian	24.7	31.8	43.5	-	18.3	13.7	68.0	-	21.4	25.1	53.5	-	29.7	5.7	64.5	-
<b>Age group</b>																
18 - 24 years	24.5	26.3	49.2	-	29.6	14.2	56.2	-	22.6	23.4	54.1	-	17.3	22.8	59.9	-
25 - 34 years	37.8	28.2	34.0	-	14.1	18.9	67.0	-	20.9	30.8	48.3	-	20.4	26.8	52.9	-
35 - 44 years	19.1	45.0	35.9	-	18.9	19.1	62.0	-	29.8	19.7	50.6	-	16.1	33.1	50.8	-
45 - 54 years	11.7	35.5	52.8	-	14.9	18.6	66.5	-	17.6	28.7	53.6	-	17.6	13.0	69.3	-
55 - 64 years	28.9	14.8	56.3	-	19.5	15.5	65.0	-	20.3	16.5	63.2	-	20.2	23.7	56.1	-
65+ years	17.7	35.5	46.8	-	10.1	22.2	67.7	-	18.4	26.3	55.3	-	11.8	30.3	57.9	-
<b>Country of birth</b>																
NZ	26.6	29.1	44.4	-	18.1	17.9	63.9	-	22.0	24.9	53.2	-	14.9	25.6	59.5	-
Elsewhere	28.8	29.9	41.3	-	17.7	18.0	64.3	-	24.2	26.7	49.2	-	30.7	20.9	48.4	-
<b>Arrival in NZ</b>																
2008 or later	24.6	10.1	65.3	-	23.6	6.8	69.6	-	1.2	53.5	45.3	-	-	-	100.0	-
Before 2008	29.5	33.5	37.0	-	17.0	19.4	63.7	-	26.1	24.4	49.5	-	32.0	21.8	46.2	-
<b>Highest qualification</b>																
No formal qual.	15.0	31.4	53.6	-	18.2	20.4	61.3	-	23.0	23.9	53.1	-	17.9	26.0	56.2	-
School qual.	30.0	26.7	43.3	-	23.2	16.9	59.9	-	21.5	27.6	50.9	-	21.8	18.0	60.2	-
Trade/voc. qual.	23.2	32.6	44.2	-	17.2	17.8	65.1	-	21.6	26.3	52.1	-	11.6	35.6	52.8	-
Degree/higher	30.0	28.8	41.1	-	14.7	17.7	67.6	-	23.5	21.3	55.2	-	17.1	19.9	63.1	-
<b>Labour force status</b>																
Employed	28.4	29.8	41.8	-	15.8	17.8	66.4	-	21.4	26.4	52.2	-	16.5	27.2	56.2	-
Unemployed	13.2	66.9	20.0	-	28.4	12.4	59.2	-	27.3	22.8	49.9	-	9.7	12.9	77.5	-
Student/Home/Retired	28.5	19.1	52.4	-	16.7	22.4	60.8	-	18.0	23.9	58.1	-	21.5	23.8	54.7	-
Other	-	-	100.0	-	100.0	-	-	-	78.7	-	21.3	-	-	-	-	-

Demographic variables	Perceptions of winning or losing %															
	Casino table games (NZ)				Casino EGMs (NZ)				Pub EGMs				Club EGMs			
	Won money	Broke even	Lost money	Don't know	Won money	Broke even	Lost money	Don't know	Won money	Broke even	Lost money	Don't know	Won money	Broke even	Lost money	Don't know
<b>Religion</b>																
No religion	25.6	27.5	46.9	-	20.7	17.8	61.6	-	23.7	25.6	50.7	-	16.1	25.6	58.3	-
Anglican	51.0	13.9	35.0	-	14.6	21.8	63.6	-	18.8	14.9	66.4	-	12.7	18.8	68.6	-
Presbyterian	19.2	38.2	42.5	-	8.0	16.1	75.9	-	27.1	14.8	58.2	-	22.9	33.5	43.6	-
Catholic	31.2	35.4	33.4	-	12.0	20.2	67.7	-	17.2	30.1	52.7	-	23.7	22.4	53.9	-
Other Christian	6.4	52.3	41.3	-	21.5	14.9	63.7	-	23.4	29.3	47.3	-	14.7	27.1	58.2	-
Other religion	23.7	24.8	51.6	-	24.4	12.0	63.6	-	25.6	23.1	51.3	-	17.6	23.5	58.9	-
<b>Household size</b>																
1	17.9	45.1	36.9	-	12.5	15.6	71.9	-	21.2	24.9	53.8	-	11.4	26.6	62.1	-
2	30.4	22.4	47.2	-	16.2	14.7	69.1	-	22.1	25.1	52.8	-	17.8	22.0	60.2	-
3	19.5	27.6	52.9	-	20.3	14.9	64.8	-	22.2	19.0	58.8	-	17.2	37.9	44.9	-
4	29.1	35.1	35.8	-	18.8	26.3	54.9	-	19.3	31.6	49.1	-	17.6	27.2	55.3	-
5+	31.6	31.6	36.8	-	19.4	18.8	61.8	-	26.0	24.4	49.6	-	18.6	11.4	70.0	-
<b>Personal Income (\$)</b>																
Up to 20,000	28.6	37.1	34.3	-	22.1	20.9	57.0	-	26.4	20.5	53.1	-	24.8	19.7	55.5	-
20,001 - 40,000	20.1	28.4	51.6	-	17.5	18.0	64.4	-	18.6	26.2	55.2	-	14.6	25.1	60.3	-
40,001 - 60,000	32.1	30.3	37.6	-	15.8	17.9	66.3	-	18.8	28.2	53.1	-	17.6	27.4	55.1	-
60,001 - 80,000	33.2	13.5	53.3	-	19.9	6.6	73.5	-	20.3	15.2	64.5	-	5.0	28.8	66.2	-
80,001 - 100,000	25.8	24.2	50.0	-	10.2	17.8	72.0	-	52.7	25.6	21.7	-	-	50.7	49.3	-
Over 100,000	18.4	39.1	42.5	-	17.6	19.3	63.1	-	20.7	44.8	34.5	-	25.0	32.4	42.6	-
<b>Household Income (\$)</b>																
Up to 20,000	7.3	17.4	75.3	-	28.4	13.6	58.0	-	25.3	28.6	46.2	-	14.1	16.5	69.4	-
20,001 - 40,000	33.4	37.6	28.9	-	23.4	12.8	63.8	-	25.0	18.3	56.7	-	22.0	19.7	58.3	-
40,001 - 60,000	24.1	33.2	42.7	-	24.3	12.8	62.9	-	20.7	28.3	51.0	-	16.9	26.2	56.9	-
60,001 - 80,000	12.7	26.7	60.5	-	26.7	12.8	60.4	-	25.2	23.3	51.5	-	18.2	20.0	61.8	-
80,001 - 100,000	33.1	16.3	50.7	-	6.5	18.9	74.6	-	15.9	24.8	59.4	-	10.2	28.4	61.3	-
Over 100,000	30.1	34.0	35.9	-	12.4	22.8	64.9	-	24.2	24.8	51.0	-	20.4	29.4	50.2	-

Demographic variables	Perceptions on winning or losing %							
	Short-term speculative investments				Overseas internet gambling for money/prizes			
	Won money	Broke even	Lost money	Don't know	Won money	Broke even	Lost money	Don't know
Total	67.4	22.0	6.9	3.7	14.0	21.2	64.8	-
<b>Gender</b>								
Male	73.6	16.0	5.2	5.2	19.2	26.8	54.0	-
Female	52.9	36.4	10.7	-	8.1	14.6	77.3	-
<b>Ethnic group</b>								
European/Other	73.2	18.4	3.7	4.8	17.0	24.2	58.9	-
Māori	95.8	-	4.2	-	3.2	35.2	61.6	-
Pacific	100.0	-	-	-	-	24.9	75.1	-
Asian	42.9	37.8	19.4	-	-	-	100.0	-
<b>Age group</b>								
18 - 24 years	33.7	66.3	-	-	3.1	24.3	72.5	-
25 - 34 years	72.5	22.0	5.5	-	9.8	19.3	70.9	-
35 - 44 years	76.3	-	5.7	18.1	42.5	32.6	24.9	-
45 - 54 years	51.8	23.9	24.4	-	-	-	100.0	-
55 - 64 years	74.5	25.5	-	-	-	-	100.0	-
65+ years	65.3	34.7	-	-	-	-	-	-
<b>Country of birth</b>								
NZ	84.6	14.8	0.6	-	19.6	24.4	56.0	-
Elsewhere	42.8	32.3	15.9	9.0	-	13.0	87.0	-
<b>Arrival in NZ</b>								
2008 or later	10.8	51.3	9.1	28.8	-	62.3	37.7	-
Before 2008	57.3	23.8	18.9	-	-	-	100.0	-
<b>Highest qualification</b>								
No formal qual.	80.0	20.0	-	-	37.4	8.3	54.2	-
School qual.	56.3	32.4	11.2	-	7.9	38.8	53.3	-
Trade/voc. qual.	67.2	18.4	14.4	-	21.5	-	78.5	-
Degree/higher	69.9	20.4	3.5	6.2	-	35.4	64.6	-
<b>Labour force status</b>								
Employed	66.1	19.6	9.0	5.4	18.3	24.7	57.0	-
Unemployed	43.9	56.1	-	-	2.7	5.2	92.0	-
Student/Home/Retired	74.0	23.2	2.8	-	-	49.4	50.6	-
Other	100.0	-	-	-	-	-	-	-

Demographic variables	Perceptions on winning or losing %							
	Short-term speculative investments				Overseas internet gambling for money/prizes			
	Won money	Broke even	Lost money	Don't know	Won money	Broke even	Lost money	Don't know
<b>Religion</b>								
No religion	60.0	26.6	13.4	-	19.8	28.1	52.1	-
Anglican	89.5	6.4	4.2	-	14.1	-	85.9	-
Presbyterian	59.0	41.0	-	-	-	13.0	87.0	-
Catholic	62.8	14.6	-	22.7	-	12.8	87.2	-
Other Christian	70.7	29.3	-	-	-	-	100.0	-
Other religion	80.3	19.7	-	-	-	-	100.0	-
<b>Household size</b>								
1	83.9	13.7	2.3	-	-	-	100.0	-
2	51.4	38.5	10.1	-	-	53.3	46.7	-
3	76.0	-	24.0	-	27.3	-	72.7	-
4	63.5	14.5	8.0	14.0	31.2	12.9	55.8	-
5+	82.9	17.1	-	-	-	29.8	70.2	-
<b>Personal Income (\$)</b>								
Up to 20,000	31.7	49.2	19.1	-	-	9.3	90.7	-
20,001 - 40,000	48.5	42.9	8.6	-	-	5.7	94.3	-
40,001 - 60,000	63.8	31.1	5.1	-	54.2	21.1	24.7	-
60,001 - 80,000	81.3	18.7	-	-	-	70.1	29.9	-
80,001 - 100,000	100.0	-	-	-	-	-	100.0	-
Over 100,000	71.3	-	11.7	17.1	-	68.1	31.9	-
<b>Household Income (\$)</b>								
Up to 20,000	52.6	47.4	-	-	-	-	100.0	-
20,001 - 40,000	12.6	43.5	44.0	-	4.1	7.8	88.1	-
40,001 - 60,000	47.7	42.7	9.6	-	43.6	-	56.4	-
60,001 - 80,000	94.2	5.8	-	-	-	-	100.0	-
80,001 - 100,000	48.4	51.6	-	-	17.3	23.2	59.5	-
Over 100,000	75.6	12.5	4.8	7.0	11.8	37.2	51.0	-

**Appendix 11: Use of systems or special skills to improve winning chances, by gambling activity by demographics**

Demographic variables	Use of systems or special skills %													
	Card games	Bets with friends/work-mates	Text game or comp.	NZ Raffle/lottery	Lotto	Keno	Instant Kiwi/scratch tickets	Housie or bingo	Horse/dog race betting	Sports betting	Casino table games (NZ)	Casino EGMs (NZ)	Non-casino EGMS	Short-term spec. invest.
Total	10.0	6.2	2.0	3.5	6.4	5.6	1.1	1.9	17.1	17.1	20.2	1.7	5.2	48.1
<b>Gender</b>														
Male	12.1	8.0	-	2.6	5.6	1.3	1.3	-	20.4	19.1	23.6	2.8	7.4	60.9
Female	4.4	4.0	3.2	4.2	7.2	1.0	1.0	2.7	13.1	9.2	12.6	0.5	3.0	17.9
<b>Ethnic group</b>														
European/Other	10.5	5.9	1.9	3.6	6.6	4.3	1.2	-	17.5	18.6	22.1	1.8	5.9	48
Māori	13.9	9.4	7.6	5.1	8.8	11.6	1.9	5.3	16.1	10.8	9.7	-	4.4	24.6
Pacific	17.7	9.5	-	2.5	4.3	8.0	0.9	2.5	13.7	9.6	7.2	2.8	4.9	30.5
Asian	3.0	10.5	9.5	0.9	4.7	3.6	0.9	-	24.9	8.8	15.6	1.9	6.6	51.3
<b>Age group</b>														
18 - 24 years	9.0	9.8	2.1	2.2	2.5	1.8	0.4	7.5	20.9	20.6	18.1	2.5	5.3	-
25 - 34 years	13.4	5.2	1.9	5.7	6.7	3.4	2.7	-	11.4	12.1	28.9	0.4	7.4	62.8
35 - 44 years	9.6	4.1	1.2	3.5	6.8	4.8	1.4	-	11.3	15.1	6.4	3.9	2.8	37
45 - 54 years	6.6	6.8	4.6	2.7	7.1	10.9	0.2	3.5	27.7	18.1	6.3	0.8	3.7	57.8
55 - 64 years	-	4.4	-	3.7	5.5	1.7	0.7	-	15.7	29.9	26.2	-	6.1	10.5
65+ years	-	9.9	-	2.5	7.3	9.5	0.6	-	17.9	19.8	27.5	4.2	4.1	74.8
<b>Country of birth</b>														
NZ	10.4	6.9	2.0	3.7	6.5	7.3	1.3	1.9%	18.0	36.6	18.9	2.1	5.4	49.8
Elsewhere	8.7	3.9	1.9	2.6	6.2	2.7	0.3	2.1%	12.2	15.5	24.2	0.7	4.4	45.8
<b>Arrival in NZ</b>														
2008 or later	-	7.4	7.1	-	2.0	-	-	27.1	-	38.6	10.1	-	-	33.5
Before 2008	11.0	3.1	-	2.9	6.8	3.4	0.4	-	13.9	15.5	26.1	0.7	4.6	51.3
<b>Highest qualification</b>														
No formal qual.	5.9	4.4	-	2.6	6.6	12.5	1.2	-	21.6	16.2	-	0.7	4.4	44.7
School qual.	8.1	6.0	3.1	4.6	5.7	2.3	0.9	3.0	17.9	19.9	27.4	1.4	7.2	32.7
Trade/voc. qual.	4.1	9.6	3.7	4.2	7.0	7.0	1.5	4.7	17.7	10.7	14.1	1.5	5.7	66.5
Degree/higher	18.7	4.7	-	2.8	6.4	2.5	1.0	-	14.0	20.6	23.0	2.6	2.5	46.7
<b>Labour force status</b>														
Employed	9.9	5.7	0.9	3.7	6.0	5.2	1.2	1.0	15.0	14.5	21.1	0.8	4.4	40.1
Unemployed	17.5	4.4	20.0	3.7	6.4	10.1	2.8	4.2	24.0	15.3	10.3	7.0	3.9	56.1

Use of systems or special skills %														
Demographic variables	Card games	Bets with friends/work-mates	Text game or comp.	NZ Raffle/lottery	Lotto	Keno	Instant Kiwi/scratch tickets	Housie or bingo	Horse/dog race betting	Sports betting	Casino table games (NZ)	Casino EGMS (NZ)	Non-casino EGMS	Short-term spec. invest.
Student/Home/Retired	6.0	8.9	2.2	2.8	7.7	3.7	0.4	2.0	23.3	32.8	4.7	2.6	6.9	66.1
Other	-	15.6	-	10.0	2.7	-	-	-	-	-	100.0	-	7.7	100.0
<b>Religion</b>														
No religion	9.6	6.3	2.4	3.9	6.4	7.4	0.8	2.1	17.5	18.3	16.1	1.0	3.7	56.8
Anglican	12.4	4.5	-	2.7	5.7	1.0	1.0	-	17.0	7.1	45	4.0	8.4	37.3
Presbyterian	27.4	6.0	4.0	2.5	7.2	12.6	1.9	-	17.3	23	9.8	-	8.8	50
Catholic	6.6	6.2	-	4.2	8.1	7.7	0.4	4.4	11.3	18.0	35.6	-	4.9	45
Other Christian	9.7	7.7	3.8	3.9	5.7	6.3	1.4	2.8	21.5	10.3	10.2	4.0	6.9	46.7
Other religion	4.4	18.4	-	1.7	4.2	3.4	4.3	-	29.4	25.1	5.9	3.2	8.8	18.7
<b>Household size</b>														
1	15.1	5.1	-	3.2	6.4	10.3	1.4	-	22.5	23.7	-	-	4.9	43.5
2	8.2	7.8	1.8	2.8	6.1	6.7	1.4	-	18.8	16.3	18.6	1.8	6.8	42.6
3	7.9	3.1	3.3	3.5	6.7	2.2	1.4	-	16.3	12.5	21.8	3.8	2.5	28.7
4	14.1	9.9	2.8	5.1	6.4	4.2	0.8	7.3	16.1	30.5	7.2	0.8	2.9	34.3
5+	9.3	2.6	-	2.9	6.7	8.0	0.7	2.2	11.8	7.2	40.3	0.6	8.1	79.6
<b>Personal Income (\$)</b>														
Up - 20,000	11.6	8.1	3.1	3.2	7.9	8.7	1.6	1.4	5.4	27.4	12.3	1.1	7.0	42.2
20,001 - 40,000	8.1	9.0	3.6	4.3	6.3	4.6	1.1	2.7	11.1	11.8	28.9	4.4	4.4	56.8
40,001 - 60,000	6.2	2.4	-	4.7	7.0	1.5	1.0	-	12.8	12.4	22.1	0.3	2.9	62.3
60,001 - 80,000	3.8	1.9	-	2.7	7.8	12.2	-	-	21.1	11.8	2.1	1.3	6.4	41.9
80,001 - \$100,000	18.8	7.8	-	2.9	3.8	-	-	-	26.5	19.9	34.6	-	10.5	100.00
Over \$100,000	2.8	3.8	-	1.2	3.1	-	2.0	-	5.0	3.4	31.8	-	6.8	36.4
<b>Household Income</b>														
Up - 20,000	6.4	26.4	-	2.6	6.8	1.3	0.9	7.5	25.7	45.5	-	-	5.0	32.6
20,001 - 40,000	18.5	10.7	2.7	4.9	7.2	8.1	2.3	-	14.7	25.2	7.9	0.3	4.1	32.0
40,001 - 60,000	10.6	2.6	-	2.6	5.0	-	0.6	-	10.3	12.8	15.6	4.7	4.0	34.8
60,001 - 80,000	9.1	7.1	11.2	4.6	8.3	3.2	1.5	2.5	21.5	7.7	35.6	5.5	6.6	70.5
80,001 - \$100,000	4.6	2.5	-	3.9	6.4	6.5	1.5	-	18.2	12.2	10.7	1.1	3.6	63.1
Over \$100,000	10.4	5.3	-	2.8	6.0	5.5	0.4	-	13.2	15.2	24.6	-	7.8	44.9