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Conflict of interest declaration

The authors declare no conflict of interest in relation to this report or project.

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Our vision: A Victoria free from gambling-related harm

Victorian Responsible Gambling Foundation

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Victorian Population Gambling and Health Study (2018-19)

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The authors accept full responsibility for the conduct of the study and the presentation of the results contained herein.

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Executive summary

This report details results from a large general population survey on gambling participation, gambling problems and gambling-related harm in the state of Victoria, Australia conducted between September 2018 and January 2019. The purpose of the survey is to inform future research, policy, treatment and prevention efforts. This survey aimed to distinguish itself from past gambling-prevalence surveys by adopting new methods and measures to better reflect a growing trend to explore gambling behaviour as a public health issue. Past prevalence surveys have had the principal purposes of understanding patterns and trends in gambling participation, including participation by product (e.g., casino games, sports betting, etc.), as well as producing a headline rate of problem gambling in the adult population; which is sometimes referred to as disordered gambling in clinical contexts. This survey was constructed for this purpose too, although it adds new elements that better align the investigation to the public health approach by virtue of considering gambling-harm in the community at large. Browne et al. (2016) produced a report on gambling-related harm in Victoria that found a large quantum of harm was being experienced by gamblers who were not likely diagnosable with the mental health condition of disordered gambling. This report details a population-representative sample exposed to similar measures as used in Browne et al.'s study and provides estimates on how gambling-harms are distributed throughout the Victorian community.

Methodology

The research was conducted using a Random Digit Dialled (RDD) telephone survey of Victorians (n = 10,638). It comprised mobile telephone (n = 5,316) and landline (n = 5,322) contacts. For landline contacts, a person within the household was selected for interview using the most recent birthday method. The prevalence results reported herein rely on weights that were constructed to reflect the ABS Estimated Resident Population (ERP) data for Victoria, as well as known selection and response rate biases for these methods.

The telephone survey questionnaire was designed by Central Queensland University's Experimental Gambling Research Laboratory (EGRL) in consultation with an expert working group organised by the Victorian Responsible Gambling Foundation. Broadly, the research covered: 1) gambling participation by product (e.g., casino games, race betting, etc.), 2) problem gambling prevalence, 3) the relationship between gambling and other health and well-being outcomes, 4) comparison of the present results with prior findings in Victoria, and 5) the prevalence and distribution of gambling harms within the Victorian community.

Gambling participation

More than two-thirds of adult Victorians (69%) participated in some form of gambling in the past twelve months at the time of the survey. The most popular form of gambling was lottery ticket purchases (44.4% of adults), followed by raffle tickets (37.4%), horse, harness or greyhound race betting (19.8%) and pokies (14.1%). Relatively few Victorians participated in some of the newer forms of gambling, such as betting on eSports (0.5%) or fantasy sports (0.4%).

The internet continues to grow in popularity as a platform for gambling. In the present survey, an estimated 19.2% of all adults have placed bets online within the prior 12 months. There has been a dramatic growth in online race and sports betting. An estimated 34.7% of gamblers who took part in horse, harness or greyhound race betting had placed bets online. A large majority (78.1%) of all people who had bet on various sports, such as AFL, Cricket or Soccer, had placed bet(s) online within the prior 12 months.

Gambling participation, in some form, is highest for persons aged 65-74 (78%) and lowest among people 18-24 (52.4%), illustrating a general trend of increasing participation with advancing age. Relatedly, gambling participation advances reliably with income, where only 57.3% of people earning $1-20,799 per year gambled in the prior 12 months, compared to 78.9% of persons earning more than $156,000.

Results on pg. 106 show changes in gambling product participation from prior Victorian population surveys conducted in 2008 and 2014. In general, and without repeating the detail contained therein, pokies, and raffles and sweeps have declined in popularity since 2008.

Problem gambling (a mental health condition)

An important outcome to understanding gambling prevalence is developing estimates of the number of gamblers who could benefit from formal treatment due to an underlying problem gambling disorder. Like past population studies, the current survey found that less than 1% of the adult population is likely to suffer from a gambling disorder (0.7% overall, or an estimated 36,123 Victorians). Men in Victoria (1.0%) are more likely to be problem gamblers when compared to women (0.5%), even though gambling participation is almost equal (70.0% versus 68.2%, respectively). Aboriginal and Torres Strait Islander peoples have higher rates of problem gambling (2.9%) than other Victorians (0.7%). While gambling participation advances reliably with income, as noted above, moderate-risk and problem gambling levels decline as incomes increases. Presumably, these contrasting effects reflect the fact that gambling is more affordable for more affluent people. Moreover, this finding parallels the observed alcohol “harm paradox” whereby people from low socio-economic groups often consume the same or even less alcohol than others but nevertheless suffer more from alcohol-related problems (see Bellis et al., 2016).

Despite the low overall prevalence of problem-gambling among adults, many gamblers show at least some indicators of problem gambling (14.2%), qualifying as either so-called low risk or moderate risk gamblers. Moreover, as noted previously, a public health perspective on gambling suggests that attention should be paid to gambling harms in the larger community, and not just to an exclusive focus on problem gambling as a mental health condition. As detailed by Browne et al. (2016), many harms occur to people who are not likely diagnosable as problem gamblers, and to concerned significant others connected to gamblers (i.e., partners, co-workers, etc.).

The relationship between problem gambling and mental health/well-being

Problem gambling status was reliably related to self-rated overall well-being according to the Australian Unity Wellbeing Index. This index is a “barometer of Australians’ satisfaction with their lives and life in Australia” (per the 2017 Australian Unity Wellbeing Index summative report, pg. 5). In comparison with both non-gamblers and gamblers without any gambling problems, low risk, moderate risk and problem gamblers had progressively and significantly lower levels of self-reported life satisfaction. Both moderate risk and problem gamblers fell well below the normative range for well-being of 8.09. This result suggests that some gamblers who are not problem gamblers are showing lower than normal well-being, and that this could potentially be due to their gambling. It is also possible that people with low well-being are particularly drawn to gambling as a distraction or for entertainment. Perhaps unsurprisingly, problem gamblers are more likely than all others to be suffering from high levels of psychological distress too (according to the Kessler scale), although both low- and moderate risk gamblers are also (slightly) more likely to be suffering from high distress.

Other addictive disorders are comorbid with gambling problems. More than one in five (22.8%) problem gamblers said that they always drank alcohol while gambling, whereas only 6.0% of non-problem gamblers said the same.

According to the Alcohol Use Disorders Identification Test – Consumption (AUDIT-C), 64.8% of problem gamblers were at high risk of harm due to their excessive consumption. By comparison, only 35.9% of non-gamblers were similarly drinking at high-risk levels. Problem gamblers were also much more likely to be smokers, with almost two-fifths (39.4%) smoking daily, in comparison to an estimated 11.5% of all adults.

Comparison of present results with prior findings in Victoria

One of the important benefits of regularly surveying gambling-related issues in Victoria is the potential to examine trends over time and identify emerging threats as well as potential indicators of positive progress. One difficulty in the process, however, is the substantial changes in the research environment that have necessitated changes to study methods. One of the principal changes has been the introduction of mobile-phone surveying as a major vehicle for contacting potential respondents, with 0%, 7.4% and 50% of respondents being contacted by mobile phone in 2008, 2014 and 2018-19, respectively. Nevertheless, at each study point every effort was made to get the most population- representative sample at the time of the survey - given the current state of technology. Thus, while significance testing was not used to make these comparisons, large-scale changes can be identified and interpreted with these cautions in mind.

The prevalence of problem gambling has remained largely unchanged between the study-years 2008, 2014 and 2018-19, at 0.7%, 0.8% and 0.7%, respectively. There has been a modest decline in gambling participation overall, with the number of gamblers (all types) declining from 73.1% in 2008 to 70.1% in 2014 and 69.0% in 2018-19. While most major products have declined in popular participation, betting on casino table games (e.g., blackjack, roulette, poker, etc.), and sports betting have seen moderate increases. Informal private betting, such as playing cards at home for money, has also risen in popularity.

Distribution of gambling harms within the Victorian community

Problem gamblers tend to engage in several forms of gambling, making it difficult to analyse their engagement with products as a direct indicator of harm. For instance, problem gamblers often buy lottery tickets, but it is unlikely that lottery tickets are where most losses occur for the vast majority of these gamblers. Consequently, a direct measure of gambling harm, the Short Gambling Harms Screen (SGHS, Browne, Goodwin, & Rockloff, 2017), was included in the survey and asked of all gamblers.

This scale allowed a direct comparison between the mean count of harms being experienced by people who use each type of product. This analysis revealed that people who engage in private betting, bet on eSports, fantasy sports and keno show some of the highest levels of average harm. Meanwhile, people who bet on horse, harness and greyhound racing, Australian lottery purchases, scratch tickets and prize-draws show some of the lowest levels of harm. Since this analysis does not control for the fact that people use multiple products, a multiple-regression analysis looked at product-use characteristics to see what factors are most highly associated with experiencing the most gambling-related harm and problem gambling. Individually, the riskiest gambling activities for people to engage with included eSports, informal private betting, Keno and EGMs/Pokies. In consideration of both prevalence and harm, the gambling activities with the greatest population impact included EGMs, casino table games, and Keno, which together contributed to a majority of gambling harms (65.9% estimated).

Gambling harms also varied by region in Victoria. In particular, the Northern Metro and South-eastern areas have relatively high prevalence of harms. In contrast, Victorian gamblers living in Western Victoria have relatively fewer harms.

Gambling harm was analysed across problem-gambling status to conceptually replicate the methods employed in Browne et al.'s 2016 Victorian gambling harms report. By a sum of the number of harms on the Short Gambling Harms Screen, only 30% of harms were nominated by problem gamblers, with the remaining 70% of harms being experienced by non-problem, low and moderate risk gamblers. The survey also included four severe, but somewhat common, harms from gambling. These harms include "spent less on essential expenses such as medication, health care and food", "Experienced greater conflict in my relationships (arguing, fighting, ultimatums)", "Been a victim of family/domestic violence" and "Didn't attend fully to the needs of children". Importantly, each of these harms were identified by participants as explicitly being caused by gambling. When examining only these 4 severe harms, nearly fifty per cent (49%) were nominated by problem gamblers, with the remaining set of severe gambling- harms being experienced by non-problem, low risk and moderate risk gamblers (see Figure 78 pg. 117). It is important to note that gamblers may occasionally misattribute or over-attribute experiences of harm as being a result of gambling. This attribution problem, however, is likely to affect gamblers with both few and many gambling problems.

The health utility weights calculated from Browne et al.'s 2016 Victorian gambling harms report were used in the current study (2018-19) to estimate the Years of Life Lost due to Disability (YLD) over the prior 12 months. The decrement to health and well-being in Victoria is estimated to have cost the equivalent of 123,809 years of life. With the average lifespan of Australians currently estimated to be 82 years, this YLD equates to 1,510 full lifetimes lost during the past 12 months. On a per-capita basis, this corresponds to 2.5% of decrement to the quality of life of adult Victorians (exclusive of any recreational benefits from gambling, cf., Rockloff, Browne, Russell, Merkouris, & Dowling, 2019).

Conclusion

This report provides a unique window into 12-month rates of gambling participation, gambling problems and gambling-related harm in Victoria for interviews conducted between September 2018 and January 2019. While the rates of problem gambling have remained steady in recent years, there is a growing recognition - backed by solid data - that gambling harm is widely spread in the Victorian community.

While gambling is a recreational activity enjoyed by many people, low-risk gamblers, moderate-risk gamblers and problem gamblers are experiencing lower life-satisfaction than other Victorians. In the future, a public health approach that focuses on reduction in community-level harm, rather than exclusively seeking to reduce rates of problem gambling, has the greatest scope for improving the lives and well-being of Victorians.

Introduction

Background

Victoria regularly commissions large general population studies to monitor gambling participation and behaviour, as well as the health and well-being of gamblers.

Gambling is an activity that affects the quality of life of many Victorians. While many people enjoy the recreational benefits of gambling, there are also many Victorians who experience harm. Recent work (Browne et al. 2017) has found that gambling causes community level harms that approach the level of harm caused by alcohol abuse disorder. Monitoring gambling problems and gambling harm in the community is essential to informing an effective approach to minimising harm.

Two gambling prevalence surveys have previously been undertaken in Victoria – in 2014 with 13,544 participants and in 2008 with 15,000 participants. This new population study (2018-19) provides further data on how gambling participation and behaviour have changed since 2008.

Research objectives

The aim of the project was to conduct a population representative survey of persons (18+) in Victoria for the purposes of surveying the prevalence of gambling problems, gambling harm, attitudes towards gambling, and correlates of gambling problems.

The survey will assist the Victorian Government in understanding the distribution of gambling problems and gambling harm in the community for the purpose of allocating treatment, public education, and research resources to prevent gambling-related issues affecting the Victorian community.

Reporting conventions

Statistical tests have been carried out (t tests, using the 95% confidence interval) to highlight significant differences between the following key analysis variables:

- Age group
- Gender
- Melbourne residents versus residents of the rest of Victoria
- Language other than English (LOTE) spoken at home versus only English
- Non-Indigenous status versus Indigenous status
- Annual personal income
- Problem gambling status - measured by the Problem Gambling Severity Index (PGSI, Ferris & Wynne, 2001). The PGSI was measured using the original four response options (never = 0, sometimes = 1, most of the time = 2, almost always = 3) with total scores categorised according to its original validation (0 = non-problem gambler, 1-2 = low risk gambler, 3-7 = moderate risk gambler, 8-27 = problem gambler). Two variables have

been used for this analysis – theoriginal four category PGSI, consisting of problem gambler, moderate risk, low risk and non-problem gambler; and also, a collapsed three category version consisting of 'MR/PG' (problem gambler and moderate risk combined), low risk, and non-problem gambler for some analyses. Where there are significant differences for the four-category version, these are shown and the collapsed variable is disregarded (i.e., MR/PG); conversely, where there are significant differences for the collapsed version only, these are reported in the text instead.

It is important to recognise that the categories of low risk and moderate risk gambling should not be interpreted to imply that these gamblers are not suffering from any harm. These categories follow traditional nomenclature for the problem gambling severity index, which was conceived as a measure of risk for a mental health condition: problem or disordered gambling. Unless otherwise specified, all the results are based on weighted data, and are therefore representative of the population of Victoria.

Totals for questions with single-response answers might not add to 100% due to rounding or the exclusion of refused / don't know responses. Multiple-response items might add to more than 100% due to respondents selecting multiple response codes. Base sizes may vary due to the exclusion of refused / don't know responses.

Sample sizes vary between questions, since not all questions were asked of every respondent, and some cases are also not included because of a refused / don't know response and due to the filtering of questions.

Some sections and questions have a small sample size – these findings should be interpreted with caution.

Asterisks (*) in charts or tables indicate a statistically significant difference to the overall mean result at a probability level of .05.

About this report

This report presents the study findings for the 2018-19 Victorian Population Gambling and Health Study.

The findings for overall gambling participation amongst the Victorian population are presented first. Participation is followed by details on problem gambling as a mental health condition within the community. The report presents 12-month participation-rates for different types of gambling activities amongst Victorian adults, inclusive of a separate section on internet-enabled gambling. The next section explores how gambling problems and participation is related to other measures of health, mental health and well-being. Knowledge and usage of help-resources amongst Victorians is explored in the next section. Comparisons of the present results with previous Victorian prevalence studies provides historical context to the present findings. The prevalence and distribution of gambling harms, which are distinct from the mental health condition of problem gambling, are detailed in separate sections. Lastly, a conclusion highlights lessons learned from the conduct of the study and how it might inform future research

Contemporary issues in measurement of gambling and problem-gambling prevalence

Problem gambling as a mental health disorder

Prevalence studies are routinely carried out in many jurisdictions, with the overarching goal being the measurement of problem gambling rates expressed as a percentage of the adult population. This measurement of problem gambling prevalence informs government priorities and how gambling is viewed in comparison with other health problems. In addition, problem gambling prevalence has determined government involvement in gambling education and treatment, as well as industry rhetoric around their responsibilities as gambling providers.

Typically, the prevalence of gambling problems or harm has been measured by the National Opinion Research Center (NORC) DSM Screen for Gambling Problems (NODS, National Opinion Research Center (NORC), 1999), the South Oaks Gambling Screen (SOGS, Lesieur & Blume, 1987), or the Problem Gambling Severity Index (PGSI, J. Ferris & Wynne, 2001). The PGSI is the most widely used contemporary population-measure of gambling problems. Although the PGSI has good psychometric properties, being highly reliable and unidimensional, it conceptually measures more than one construct (Orford et al., 2010). Like many measures that came before, including the SOGS and the NODS, the PGSI is inspired by the common features of addiction in the DSM criteria, as well as the common harms that many people experience as a result of gambling (Abbott & Volberg, 2006). Although these are related well in a common syndrome that can be described as “problem gambling,” the constituent items that measure harms and addictive symptoms are at least conceptually distinct.

The mental health disorder that is problem gambling was previously categorised as an impulse control problem, along with conditions such as trichotillomania (chronic hair pulling). The current view, as published in the DSM-5, is that problem gambling is a mental health disorder in the category of behavioural addictions (American Psychiatric Association, 2013). The constellation of traits used to define such disorders have the primary practical purpose of correctly classifying people with various mental disorders, rather than seeking to identify clearly the underlying causes. The practical import of this approach is that most population-based measures in the gambling field only measure the broad syndrome of problem gambling, and thus fail to account for gambling-related harms experienced by people who are not problem gamblers.

The issue in using prevalence studies mainly as a tool to estimate the prevalence of problem gambling in a population is that it de-emphasises other important levels of gambling problems, falsely suggesting by the language of being termed “at risk” that moderate-risk and low-risk gamblers are not currently being harmed. Focussing on the 0.81% (Hare, 2015) of the population that meet the criteria for problem gambling as a mental health problem can lead to policies and industry practices that focus on the individual gambler as the problem. This view of problem gambling as a mental health disorder only affecting those who are classified as “problem gamblers” makes it challenging to justify population-wide interventions that may reduce gambling harm. Instead problem gambling viewed as a mental health condition emphasises personal responsibility for seeking treatment and management of the disorder.

The gambling industry has lobbied against the introduction of many harm minimisation measures on these grounds, arguing that interventions such as maximum bet limits and mandatory pre-commitment unfairly disadvantage the industry and impact upon the enjoyment and freedoms of recreational gamblers. Further, industry argues that, due to problem gambling affecting such a small proportion of the population and being the result of an individual’s underlying predisposition, services such as in-venue chaplaincy and school-based education programmes are preferable to structural changes to gambling products that might make them safer (Clubs Australia, 2012).

However, the assumption that people at lower risk of experiencing problem gambling are not experiencing any ill effects from gambling is not well supported by data. Recent research by Browne et al. (2016) and Langham et al. (2016) shows that lower risk gamblers are experiencing harms from gambling that, in aggregate, lead to a large impact on community well-being. While some at-risk gamblers may only be harmed somewhat or slightly by gambling, this nevertheless becomes a significant burden at a population level when those harms are summed. Attending only to problem gamblers also ignores longitudinal study findings that people tend to move between gambling risk levels, illustrating that problem gambling is a fluid state (Abbott, Williams, & Volberg, 2004; Billi, Stone, Marden, & Yeung, 2014).

It is reasonable to argue that typical problem-gambling measures, such as the PGSI, are imperfect and misclassify some gamblers as low risk when in fact they are problem gamblers. Irrespective of whether this argument is correct, however, it still suggests that gambling harm is more prevalent than the common measures suggest. Another argument is that gambling harm exposed by Browne et al. (2016) contains an abundance of opportunity costs that are a normal consequence of most product purchases (Delfabbro and King, 2017). For instance, people often lack money for purchasing other goods when they go on an expensive vacation or buy a car. This logic, however, would urge us to potentially reject any harm that people nominate as being directly due to their gambling simply because a suitably qualified researcher decides for him or herself, without evidence, that the harm is inconsequential. It would also ignore the evidence that lesser harms correlate well with more severe harms.

Langham et al (2016) proposed the following definition of gambling harm in an attempt to highlight the occurrence of harm across the entire population: “Any initial or exacerbated adverse consequence due to an engagement with gambling that leads to a decrement to the health or well-being of an individual, family unit, community or population” (Langham et al., 2016, p4). This definition is important for the framing of prevalence studies as tools to evaluate the consequences of gambling amongst a population and support the public health approach to gambling.

The burden of harms across the population

In operationalising Langham et al.’s (2016) definition of harm, Browne et al. (2016) utilised the World Health Organisation’s Burden of Disease (BoD) methodology to investigate gambling-related harm in Victoria and the impact across the population. The morbidity measure of the BoD approach facilitates the measurement of the impact of a certain disease or disorder on quality of life. In this way, quality of life is framed as Years of Life Lost due to Disability (YLD). At a population level, the prevalence of a disorder can be multiplied by the YLD, giving an estimate of the impact on the jurisdiction in question.

By using prevalence values for the range of gambling problems experienced across the whole Victorian population, Browne et al. (2016) calculated the aggregated harms occurring to low-risk, moderate-risk and problem gamblers. Low-risk gamblers are much more common in the population than moderate risk gamblers, who are in turn more common than problem gamblers. Consequently, although low risk gamblers experience far fewer individual-level harms from their gambling, they nevertheless as a group contribute to the largest amount of aggregate harm suffered, at about 50%, even in consideration of harm-severity. Moderate risk gamblers experience 35% of the aggregate harms, and problem gamblers the remaining 15%. Browne et al.’s (2016) population health approach to gambling harm demonstrated that an exclusive focus on reducing or eliminating “problem gambling” as a policy outcome would only target 15% of the gambling harms that occur within the Victorian population. A whole-of-population approach to harm-minimisation that also targets low- and moderate-risk gamblers is warranted for reasons of efficiency and efficacy, illustrating the value of using prevalence studies as a vehicle to explore gambling harm as opposed to traditional problem gambling prevalence.

The emergence of new forms of gambling

Another challenge presented in prevalence study design is the emergence of new forms of gambling, particularly those that are technology-based. These new forms of gambling have emerged in the past decade due to the proliferation of internet access and mobile internet devices, such as smartphones. These new forms of interactive gambling have replaced other forms that relied on older technology, such as teletext gambling, a platform that shut down in Australia in 2009 due to the technology no longer being commercially viable (Fung, 2009). Although prevalence studies, especially those with a longitudinal element, need to ensure comparability to previous iterations, it is important to keep pace with changes to how people are gambling in order not to miss important changes in gambling participation based on these newly available products. The new forms of gambling, detailed below, appear to be growing steadily and have the potential to be harmful, according to recent academic studies (Gainsbury et al., 2013; Hing, Russell, Lamont, & Vitartas, 2017; Hing, Russell, Rockloff, Browne, Langham, Li, Lole, Greer, Thomas, Jenkinson, Rawat, Thorne, 2018; Macey & Hamari, 2019) and public reports (Commonwealth of Australia, 2018; Hing, Vitartas, & Lamont, 2014; Sinclair, 2018; Thomas et al., 2016).

Internet or mobile sports and race betting is one of the fastest growing gambling segments, with a 30% increase in participation between 2009 and 2014 (Hare, 2015). This increase in participation is reflected in the increasing resources that the betting industry has put into advertising, spending $33.8 million in 2014, the sixth largest increase in advertising spend of any industry in Australia. In fact, sports betting advertising spend has been growing at a rapid pace, with a 41% increase in advertising spend from 2012 to 2013 and a 30% increase from 2013 to 2014 (Ebiquity, 2015). This increase in marketing spend follows the shifting of sports betting from a land-based activity to online, with half of all sports betting occurring online (Hing et al., 2014). Treatment seeking for this form of gambling has also increased, with the University of Sydney Gambling Treatment Clinic reporting four times as many people citing sports betting as a major contributor to their problems in 2010-11 compared to 2006-2007 (University of Sydney, 2011).

Esports, or competitive video gaming streamed online (e.g., Twitch, YouTube, Fetch TV) or watched live in-venue (e.g., Melbourne Esport Open) (Hamari & Sjöblom, 2017), is another growing sector of the gambling market. Esports had a global viewership of 350 million in 2018 and is especially popular amongst youth, with 18-34 year olds making up 62% of viewers, compared to 30% of traditional sports viewers (Activate, 2017; Newzoo, 2018). Gambling on eSports is growing in popularity, akin to the growing popularity of internet sports betting. Globally, eSports betting was valued at US$1.5 billion in 2017, with most Australian-licensed bookmakers offering wagering on eSports (Macey & Hamari, 2018; VRGF, 2015; SuperData, 2018). Concerningly, young males are the most likely to bet on eSports, a demographic already over-represented in problem gambling statistics (Gainsbury, Abarbanel, & Blaszczynski, 2017a). In addition, eSports bettors are more likely to be at-risk gamblers (Gainsbury, Abarbanel, & Blaszczynski, 2017b).

Loot boxes are a type of reward available in video games, which are often (but not always) purchased in a micro-transaction (a small payment). Loot boxes are virtual “boxes” that can be opened within a game, and may contain items that are valuable to the player both within and outside the video game (Commonwealth of Australia, 2018). Examples of loot box items that are valuable within a video game include weapons, virtual avatars or the ability to access higher levels. A set of items that is frequently valuable outside the game is skins (see below for more detail). Skins can sometimes be sold for cash, and therefore meet the technical definition of a gambling product, although they remain unregulated in most jurisdictions worldwide. Loot boxes can be accessed by playing certain games for a long period of time, but another common way to access them is to pay for them with either game points or real money (Zendle & Cairns, 2019).

As the contents of the loot boxes are unknown, and essentially a ‘lucky dip,’ this is a type of gambling: the loot box can be paid for with real money and redeemed (sold) for cash. There are concerns that the structural characteristics of loot boxes, such as the randomness of reward and frequency of ‘bet’ opportunities, mimic those of roulette or electronic gaming machines (Drummond & Sauer, 2018; Zendle, McCall, Barnett, & Cairns,

2018). A recent study examining adult gamers in the United Kingdom found that increases in loot box spend were significantly related to increased problem gambling risk (Zendle & Cairns, 2018). Video games attract many young players and, therefore, the widespread availability of loot boxes may be increasing the risk for youth to develop gambling problems (Drummond & Sauer, 2018).

Skins are one of the items that can be found in loot boxes and are a novelty or decorative weapon design or enhanced character appearance. Skins are a sought-after addition for many gamers and, with some games, can be sold online for real money. Skins can sell on specialist auction sites or skin exchanges from a few dollars each to tens of thousands of dollars, with the global skins economy estimated to be worth over US$7 billion (Commonwealth of Australia, 2018). The most paid for an individual skin to date is US$61,052 (Bozhenko, 2018), dramatically illustrating the potential of skins as a de facto currency for gambling. In addition, despite their intangible nature, and yet because of their real monetary value, skins are also used in place of money to gamble on eSports (video game competitions) and games of chance (e.g., roulette, jackpots, coin flip, slots). This market is currently unregulated, despite being estimated as larger than the cash betting market for eSports (Grove, 2016).

The changing nature of representative sampling

Another major trend in prevalence study methodology is the shift to mobile phone rather than landline interviewing. Not only has mobile phone ownership increased in past decades, it has been accompanied by a steep fall in landline ownership. The proportion of mobile-only access for household voice calls has increased from 36% in 2017 to 41% in 2018 (Australian Communications and Media Authority, 2019).

Not only does this represent a problem in terms of response rates for those prevalence studies using landline-only sample frames, but it also affects the representativeness of these samples. As seen in Table 1, there is a clear pattern of landline access falling with age. For example, people aged 25-34 years are more than four times more likely than those aged over 64 to only have access to a mobile for voice calls. The only group that bucks this trend is those aged 18 to 24, which may be explained by them being likely to still live in the family home (Australian Communications and Media Authority, 2019).

Table 1: Use of fixed phone line by age (ACMA, 2019)

Age group	2017	2018
65+	85%	79%
55-64	71%	65%
45-54	68%	54%
35-44	40%	35%
25-34	23%	18%
18-24	29%	26%
Total	**54%**	**48%**

In order to remedy the sampling problem presented by an increasing mobile-only population, prevalence studies need to incorporate a dual frame sampling methodology. This methodology uses both landline and mobile phone numbers to contact participants. However, as reported above, although mobile-only voice call access is increasing, many members of the community have both a landline and a mobile phone. Dual frame sampling increases the likelihood of these particular people being selected for participation, thus invalidating traditional weighting methods. Weighting is also affected by the unknown attributes of the mobile-only sample, i.e., whether they differ significantly from landline users demographically other than being younger in age. Details on the dual frame design for the

current study are provided in the Methodology section of this report.

Past studies have also shown that mobile-only users differed from landline users in their gambling behaviour and problem gambling risk status. Hare (2015) found that mobile-only users were more likely to participate in race betting, Lotto, Powerball, and keno and to bet on novelty events. They were also more likely to report spending more than they could afford to lose on gambling, chasing losses and needing to bet with greater amounts of money to get the same feeling of excitement. Similar findings were reported by Jackson et al. (2014) using a national sample, with mobile-only users being more likely to have lied about their gambling and attempted to reduce the amount they gamble. Continued penetration of the National Broadband Network (NBN) has dramatically altered the landscape for landlines, with many households newly abandoning a static home-based telephone service. Therefore, the experience of even these recent studies is unlikely to represent the divide in the current time-period, where mobile-only households are more often the norm.

Summary

In sum, the gambling literature is at a point of transition from focusing exclusively on problem gambling as a diagnosable mental illness to a broader concern with gambling as a public health problem (cf., Sulkunen, et al., 2018). Recognising the diversity of the population is important for addressing the multitude of harms that are caused by gambling, and the multitude of people who experience harm based on vastly different life circumstances. In addition, the landscape of gambling is changing, with the growth of interactive gambling and the development of novel forms of gambling that may disproportionately target youth. This technological shift also affects how prevalence studies recruit representative samples, with the traditional sampling that relies on landline ownership becoming less valid. Thus, our public health approach to this study incorporates key outcome measures of both gambling harms and gambling problems to examine interrelationships between gambling, health and well-being in Victoria, as well as addressing the changing face of gambling in the 21st Century.

Methodology

This section provides a summary of the methodology used for the prevalence survey to assist in the interpretation and understanding of the results. The principal purpose of this study was to explore the population prevalence of product use, gambling problems and gambling harm in the Victorian community using a population-representative sample. The questionnaire is provided in Appendix A and additional methodological details are provided in Appendix B.

The project was carried out in compliance with ISO 20252 and membership requirements for The Association of Market and Social Research Organisations (AMSRO) and the Australian Market and Social Research Society (AMSRS).

Overview

The research involved 10,638 computer-assisted telephone interviews (CATI) with Victorians aged 18 years or over. The sample frame design was split 50/50 between landline and mobile numbers. The fieldwork period was from 3 September 2018 to 31 January 2019.

Questionnaire design and pilot

The questionnaire was designed by Central Queensland University's (CQU) Experimental Gambling Research Laboratory (EGRL) in consultation with Steering Committee members. The final draft questionnaire, CATI programming and operational procedures were tested prior to the main fieldwork through a pilot survey (n=104) between 13–14 August 2018. The main fieldwork was launched on 3 September 2018, which included a two-day dress rehearsal where survey data and protocols were closely monitored. No issues with the survey or data collection procedures were found.

Interviewing in languages other than English

Non-English interviewing was available in Mandarin, Italian, Vietnamese and Greek. Once the preferred language of a sample member was identified, these records were stockpiled until a reasonable workload for a bi-lingual interviewer was available.

A total of 77 interviews were conducted in a language other than English (32 Mandarin, 19 Italian, 14 Vietnamese and 12 Greek).

Response rates

For the present 2018-19 survey, response rates were calculated based on the internationally recognised American Association for Population Opinion Research (AAPOR) standards. The final landline response rate was 6.0% and the mobile response rate was 12.6%. Response rates for telephone surveys have been falling in most countries, and response rates are typically lower for mobile contacts due to the tendency of many people to screen out unknown callers (Keeter, Hatley, Kennedy and Lau, 2014).

Details of the 2018-19 response rates can be found in Appendix C.

Sample design

Dual frame sample design

The sample frame design was split 50/50 between landline and mobile numbers. It was not possible to set quotas for regional Victoria (expressed as “Rest of Vic” in the report) by mobile phones as the sample did not contain geographical information; instead, the distribution of Greater Melbourne / Rest of Vic fell out naturally due to the random sample design. That is, mobile contacts occurred in Melbourne, as opposed to elsewhere in Victoria, in approximately direct proportion to the number of mobiles active within Melbourne (relative to elsewhere). Sampling quotas by Greater Melbourne /Rest of Victoria were enforced for the landline sample only. Table 2 illustrates the sample design.

Table 2: Sample design

Area	Quota	%
Greater Melbourne - Landline	4,077	38%
Rest of Victoria - Landline	1,238	12%
Mobile	5,315	50%
Total	**10,630**	**100%**

Sub-sampling

A sub-sampling design was used in order to reduce the average survey length. Under this design, all respondents were administered a core set of data items with an additional set of questions being administered to a randomly selected sub-sample of respondents. The core data items constituted the short version of the questionnaire, whereas the core data items plus the additional set of questions constituted the long version of the questionnaire.

In order to maximise the information obtained from at-risk gamblers, the long version of the questionnaire was administered to all low risk, moderate risk and problem gamblers (as calculated using the Problem Gambling Severity Index [PGSI]). In addition, the long version of the questionnaire was administered by random selection to 32.0% of non-gamblers and 11.5% of non-problem gamblers.

These percentages were targeted to achieve at least 800 non-gamblers and non-problem gamblers within the sample based on 2014 prevalence rates, although ultimately non-problem completes were slightly fewer (n = 766). The remaining non-gamblers and non-problem gamblers were administered the short questionnaire.

The table below summarises the sample size for the short and long questionnaire for the different gambler groups.

Table 3: Sub-sampling (unweighted)

	Respondents	Non-gamblers	Non-problem gamblers	Low risk gamblers	Moderate risk gamblers	Problem gamblers
Completed	**10,638**	3,007	6,655	683	223	70
Completed long version	**2,704**	962	766	683	223	70
% completing long version (sub-sampled)	**25.4%**	32.0%	11.5%	100.0%	100.0%	100.0%

Weighting

The survey data were weighted to enable weighted estimates to be representative of the adult Victorian population.

The use of sub-sampling meant that two sets of weights were required. Main weights were calculated to enable weighted estimates based on the core data (common to both the short and long version of the questionnaire and administered to all respondents) to be representative of the adult Victorian population.

Additionally, sub-sample weights were calculated to enable data from the additional data items (only on the long questionnaire and only administered to the sub-sampled respondents) to also be representative of the adult Victorian population.

The sub-sample weights were required to account for the fact that the extra data items had been obtained from a random sub-sample of respondents.

Further details about the weighting can be found in Appendix B.

Sample profile

The sample profile tables in this section show the proportion of respondents who completed the survey (based on unweighted counts), by gender, location, language spoken at home, identification as Aboriginal or Torres Strait Islander, and personal annual income.

The proportion of respondents by gender is shown in Table 4.

Table 4: Gender (unweighted)

Gender	Respondents
Male (n=4,888)	45.9%
Female (n=5,750)	54.1%

Record gender. Base: Respondents (n=10,638)

Three quarters of respondents (75.3%) were living Melbourne and one quarter (24.7%) were living in other areas of Victoria.

Table 5: Location (unweighted)

Location	Respondents
Melbourne (n=8,012)	75.3%
Rest of Victoria (n=2,626)	24.7%

Derived from: What is the postcode of the suburb/area where you live? What is the suburb? In which of the following areas do you live? Base: Respondents (n=10,638)

Just under one in five respondents (17.4%) spoke a language other than English at home.

Table 6: Language spoken at home (unweighted)

Language	Respondents
Yes, other language (n=1,856)	17.4%
No, English only (n=8,773)	82.4%

Do you usually speak another language other than English at home? Base: Respondents (n=10,638)

Those who spoke a language other than English at home were asked to indicate their main language. The most common language mentioned was Mandarin (12.4%), followed by Italian (7.7%), Greek (6.5%) and Hindi (5.2%).

Table 7: Main language other than English (unweighted)

Main language	Respondents
Mandarin	12.4%
Italian	7.7%
Greek	6.5%
Hindi	5.2%
Vietnamese	3.9%
Arabic	3.8%
Spanish	3.4%
Cantonese	3.2%
German	3.1%
Sinhalese	3.1%
Filipino/Tagalog	2.8%
French	2.5%
Punjabi	2.4%
Russian	1.8%
Tamil	1.6%
Turkish	1.6%
Polish	1.4%
Maltese	1.4%
Chinese dialect/NFI	1.3%
Indonesian	1.3%
Urdu	1.3%
Croatian	1.3%
Malayalam	1.2%
Dutch	1.2%
Macedonian	1.1%
Telugu	1.0%
Portuguese	1.0%
Thai	0.9%
Serbian	0.9%
Japanese	0.8%
Persian	0.8%
Hungarian	0.8%
Bengali	0.8%
Nepalese	0.7%
Korean	0.6%
Somali	0.5%

Main language	Respondents
Afrikaans	0.5%
Other	12.8%
Refused/ Don't know	1.6%

Which single main language (other than English) do you speak at home? Base: Respondents who spoke a language other than English (n=1,856)

Less than one percent of respondents (0.9%) identified as being of Aboriginal and Torres Strait Islander descent.

Table 8: Aboriginal and Torres Strait Islander (unweighted)

Indigenous status	Respondents
Yes – Aboriginal and Torres Strait Islander (n=92)	0.9%
No (n=10,507)	98.8%

Are you of Aboriginal or Torres Strait Islander origin? Base: Respondents (n=10,638)

Annual personal income is shown in Table 9. Please note that 17.1% of respondents refused to provide their personal income and 7.0% of respondents said, "don't know".

Table 9: Annual personal income (unweighted)

Income	Respondents
Nil or negative income (n=515)	4.8%
$1-20,799 (n=1,226)	11.5%
$20,800-$41,599 (n=2,067)	19.4%
$41,600-$77,999 (n=1,999)	18.8%
$78,000-$155,999 (n=1,799)	16.9%
$156,000 or more (n=475)	4.5%
Refused (n=1,817)	17.1%
Don't know (n=740)	7.0%

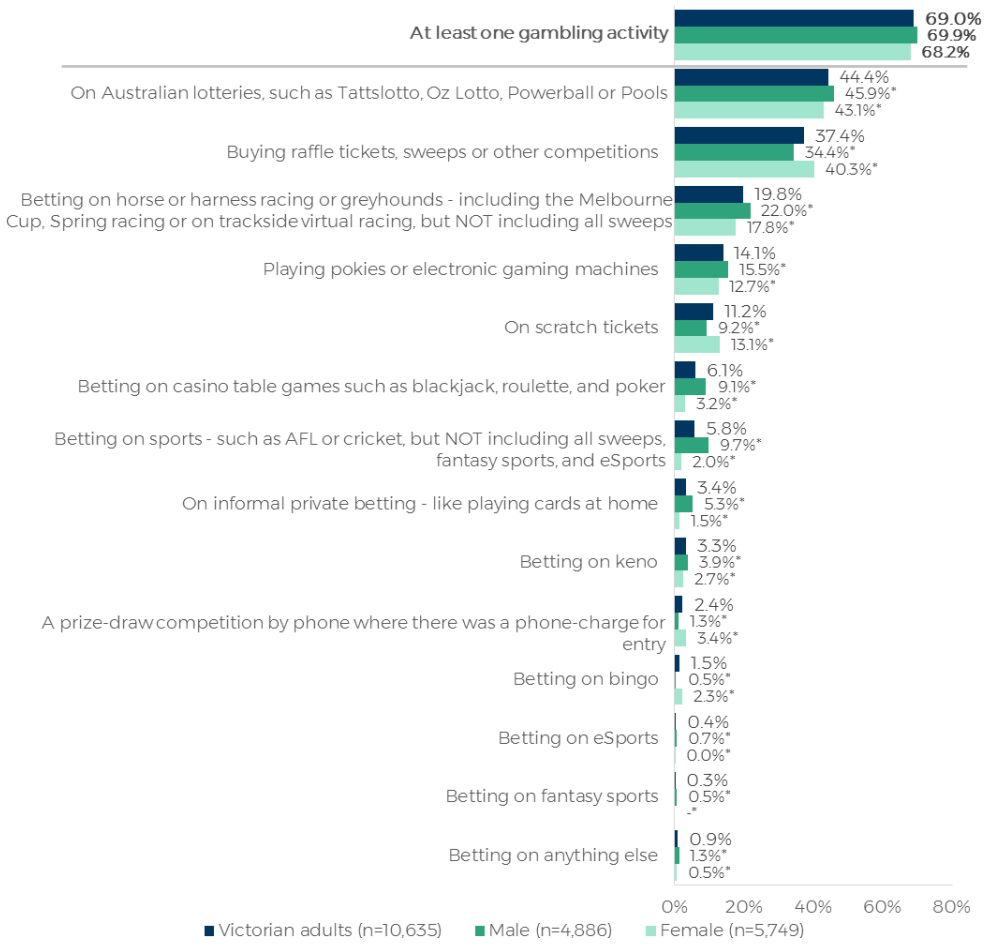
What is your approximate total personal income? Base: Respondents (n=10,638)

Section 1 - Overall gambling participation

Over two-thirds of Victorian adults had spent money on some form gambling, inclusive of lottery products, in the last twelve months (69.0%). There was little difference in participation between the genders (69.9% of men, 68.2% of women).

Lottery tickets had been purchased by 44.4% of Victorians in the last twelve months, and this was the most popular form of gambling, as shown in Figure 1. Over a third of Victorians had bought raffle tickets (37.4%), while a fifth had bet on horse, harness or greyhound racing (19.8%); and 14.1% had played pokies. Gamblers' participation in each gambling activity is discussed in more detail later in this report, in Section 3 - *Gambling activities* on page 42. Many of these activities can be played online, and Section 4 page 73 details the proportion of people playing these games online as opposed to in-person.

Figure 1: Proportion of Victorian adults participating in gambling activities, overall and by gender[1]



In the last 12 months, have you spent any money…? Base: All respondents (n=10,638). * indicating significant differences from all adults.

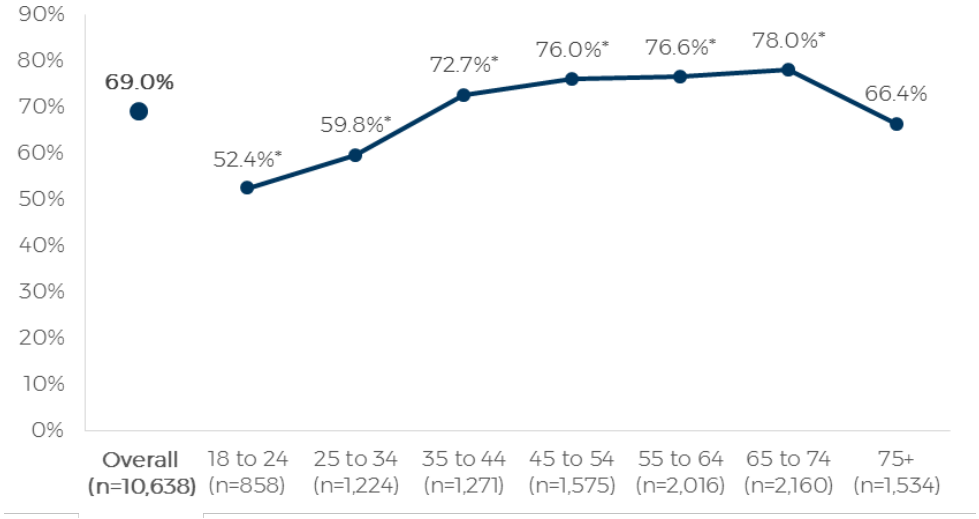
1 Percentages may sum to more than 100% as respondents were asked about each gambling activity individually, so could have participated in more than one of the gambling activities listed.

Victorians who *only* spoke English at home were significantly more likely to have gambled than people who spoke a language *other* than English at home (73.4% compared with 53.1%). Gambling was more common among regional Victorians compared with those living in Melbourne (74.3% compared with 67.4%). Participation was higher among people of Aboriginal or Torres Strait Islander descent (77.2% compared with 69.1% of non-Indigenous people), however, this finding was not statistically significant.

Although there was only a small difference between women and men in overall gambling participation (68.2% vs 69.9%, respectively), there were more substantial differences in the types of games they play. Women more frequently purchased raffle tickets, sweeps or other competitions compared to men (40.3% vs 34.4%). Women also more commonly purchased instant scratch tickets (13.1% vs 9.2%) and entered prize-draws by phone (3.4% vs 1.3%). However, women less commonly played Casino table games (3.2% vs 9.1%), bet on sports (2.0% vs 9.7%), played pokies (12.7% vs 15.5%), bought lottery tickets (43.1% vs 45.9%), and bet informally such as playing cards at home (1.5% vs 5.3%).

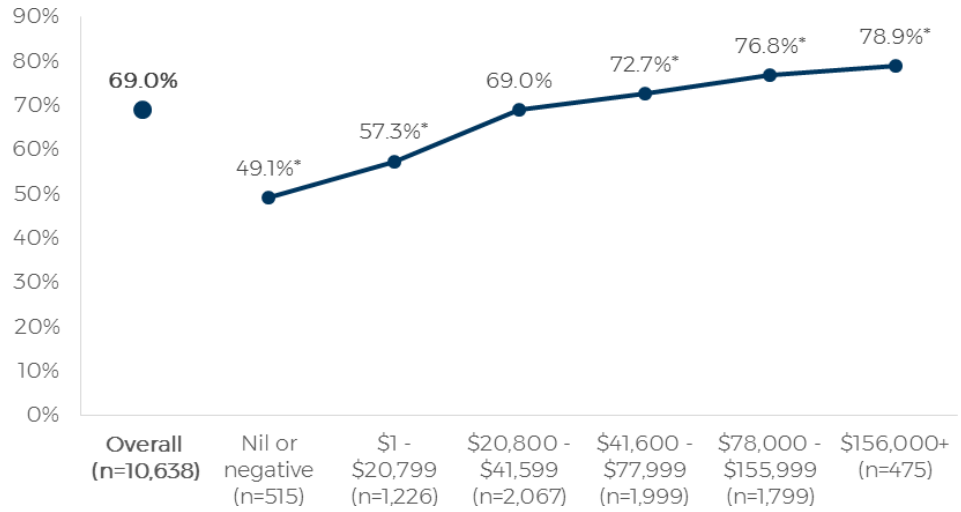
The propensity to gamble (in some form) within the last year increased with age (until age 74), and with personal income, as shown in Figure 2 and Figure 3, respectively.

Figure 2: Proportion of gamblers within adult population, by age



In the last 12 months, have you spent any money…? ['Yes' to one or more gambling activities] * significant difference from overall mean. Base: All respondents

Figure 3: Proportion of gamblers within adult population, by personal income



In the last 12 months, have you spent any money…? ['Yes' to one or more gambling activities] * significant difference from overall mean.
Base: All respondents

Over the last year, a fifth (19.2%) of Victorian adults had participated in some form of gambling over the internet. Participation in online gambling is discussed further in Section 4 - *Internet gambling*, on page 73.

Section 2 - Problem gambling

The Problem Gambling Severity Index

In order to assess the prevalence and risk of problem gambling, all respondents who had participated in at least one gambling activity in the last twelve months were asked the nine item Problem Gambling Severity Index (PGSI, Ferris & Wynne, 2001). The PGSI is a subset of questions drawn from the larger Canadian Problem Gambling Index, which is a standardised screening tool that is used widely in international and Australian gambling prevalence surveys. The results for each PGSI item are shown in Table 10.

Seven percent (7.3%) of Victorian gamblers reported that they had felt guilty about their gambling at some point in the last 12 months (some of the time, most of the time or almost always). This was the most commonly endorsed PGSI item. Five percent of gamblers reported that they had bet more than they could afford to lose (at least sometimes) (5.0%), and 4.1% reported chasing losses.

The two least endorsed PGSI items affected around one percent of Victorian gamblers. A little over half a percent had borrowed money or sold something to raise gambling money in the last year (0.6%), and 1.4% felt their gambling had caused financial problems for themselves or their households.

Table 10: Problem Gambling Severity Index (PGSI). Thinking about the last 12 months, how often...

	Never	Sometimes	Most of the time	Almost always	Sometimes/ Most of the time/Almost always
Have you felt guilty about the way you gamble, or what happens when you gamble?	92.8%	5.8%	0.7%	0.8%	**7.3%**
Have you bet more than you could really afford to lose?	95.0%	3.8%	0.7%	0.6%	**5.0%**
Have you gone back another day to try to win back the money you lost?	95.9%	3.5%	0.3%	0.3%	**4.1%**
Have you needed to gamble with larger amounts of money to get the same feeling of excitement?	96.7%	2.6%	0.5%	0.2%	**3.3%**
Have you felt that you might have a problem with gambling?	97.0%	2.3%	0.3%	0.4%	**3.0%**
Have people criticised your betting or told you that you had a gambling problem, regardless of whether or not you thought it was true?	97.4%	2.3%	0.2%	0.2%	**2.7%**
Has your gambling caused you any health problems, including stress or anxiety?	97.8%	1.7%	0.3%	0.3%	**2.2%**

	Never	Sometimes	Most of the time	Almost always	Sometimes/ Most of the time/Almost always
Has your gambling caused any financial problems for you or your household?	98.6%	1.2%	0.1%	0.2%	**1.4%**
Have you borrowed money or sold anything to get money to gamble?	99.5%	0.5%	0.0%	0.0%	**0.6%**

Base: Respondents who gambled in the last 12 months (n=7,631)

Problem gambling and level of risk for problem gambling was assessed based on responses to the PGSI. Specifically, each 'never' response received a score of zero, 'sometimes' received a score of 1, 'most of the time' received a score of 2 and 'almost always' received a score of 3, which accords to standard grading criteria. A total score was calculated by summing together all responses to the nine- item scale. Gamblers were subsequently split into one of four categories: problem gamblers, moderate risk gamblers, low risk gamblers or non-problem gamblers. It is important to note that the PGSI is a screening measure that requires gamblers to reach a certain score before they are said to be problem or moderate risk gamblers. Thus, it would be incorrect to interpret any score above 0 on this measure as being indicative of having a gambling problem to 'some' degree. To do this would be diagnostically incorrect because, as with any illness measure, endorsing 1 out of 9 symptoms does not mean that one has 1/9 of the illness or the disorder. Moreover, individual items on the PGSI measure various symptoms that are indicative of a gambling problem in aggregate, rather than exclusively probing individually significant gambling "problems" or "harms". Several relevant symptoms or indicators would need to be present to classify someone as having a mental health condition, and this includes problem gambling. PGSI categories are therefore indicative of the level of risk of being a problem gambler, and the likelihood of having experienced adverse effects from gambling, rather than being indicative of the extent to which someone has a gambling problem. This important point about a diagnosable mental health condition, however, does not suggest that low-risk or moderate risk gamblers are unharmed by gambling. A brief definition or guide to each of the four categories of gamblers is below (Social Research Centre, 2013):

Problem gamblers are defined as those who have experienced adverse consequences as a result of their gambling and who may have lost control of their gambling behaviour. Involvement in gambling may be at any level but is likely to be heavy. Problem gamblers have scores of 8 or more on the PGSI.

Moderate risk gamblers are those who may have responded 'never' to most of the indicators of behavioural problems in the PGSI, but who are likely to score on one or more 'most of the time' or 'almost always' responses. This group may or may not have experienced significant adverse consequences from gambling. Moderate risk gamblers have scores of 3 to 7 on the PGSI.

Low risk gamblers are likely to have experienced only minor adverse consequences from gambling, if any, and will have answered 'never' to most (but not all) of the indicators of behavioural problems in the PGSI. Low risk gamblers have scores of 1 or 2 on the PGSI.

Non-problem gamblers are those who have responded 'never' to all of the indicators of behavioural problems (that is, who score 0 on the PGSI). Members of this group may or may not be frequent gamblers with heavy involvement in gambling in terms of time and money, but they will be unlikely to have experienced severe adverse consequences.

As there is typically some overlap between moderate risk and problem gambler behaviours, and in order to obtain a larger sample for separate analysis, the PGSI categories 'problem' and 'moderate risk' gambler have been collapsed into an 'MR/PG' category for some analyses. [2]

Problem gambling prevalence

The proportion of the population in each PGSI risk category, and non-gamblers, are shown in Table 11.

Seven out of every thousand people were identified as problem gamblers (0.7%), and twenty-four out of every thousand (2.4%) as moderate risk gamblers. Most Victorian adults (59.2%) were categorised as non-problem gamblers according to respondents' PGSI scores. Three in ten (31.0%) were non-gamblers.

Men were significantly more likely than women to be problem gamblers (1.0%, compared with 0.5%), moderate risk gamblers (3.4%, compared with 1.5%), or low risk gamblers (8.4% compared with 5.0%). Conversely, women were significantly more likely to be classified as non-problem gamblers (61.2% compared with 57.1% of men).

Table 11: PGSI categories, population overall and by gender

	Population estimates (# of adults)	All respondents (n=10,638)	Men (n=4,888)	Women (n=5,750)
NG (Non-gambler)	1,524,228	**31.0%**	30.1%	31.8%
NPG (Non-problem gambler)	2,911,781	**59.2%**	57.1%*	61.2%*
LRG (Low risk gambler)	329,153	**6.7%**	8.4%*	5.0%*
MRG (Moderate risk gambler)	118,004	**2.4%**	3.4%*	1.5%*
PG (Problem gambler)	36,123	**0.7%**	1.0%*	0.5%*

Base: All respondents. * significant difference from all adults.

The proportion of gamblers (who participated in at least one gambling activity in the last 12 months) in each PGSI risk category is shown in Table 12. One percent (1.1%) of gamblers were classified as problem gamblers, while a further 13.2% had at least some problem gambling symptoms.

Table 12: PGSI categories, gamblers overall and by gender

	Gamblers (n=7,631)	Men (n=3,497)	Women (n=4,134)
NPG (Non-problem gambler)	**85.8%**	81.7%*	89.8%*
LRG (Low risk gambler)	**9.7%**	12.1%*	7.4%*
MRG (Moderate risk gambler)	**3.5%**	4.8%*	2.1%*
PG (Problem gambler)	**1.1%**	1.4%*	0.7%*

Base: Respondents who gambled in the last 12 months (n=7,631). * significant difference from mean of all gamblers.

2 See section *Reporting conventions*, on page 11

Problem gambling by sociodemographic characteristics

Table 13 lists the proportions of MR/PG (i.e., moderate risk and problem gamblers) within the Victorian population by sociodemographic characteristics. As noted in the previous section, men were more likely than women to be moderate risk or problem gamblers (4.4% and 1.9% MR/PGs, respectively).

Young adults were most likely to be MR/PGs, with 5.9% of 18 to 24-year-olds MR/PG, compared with 3.1% of Victorian adults, overall. The proportions of MR/PGs declined with age, to 2.1% of 55 to 65- year-olds and 1.6% of adults aged 75 or older.

The prevalence of MR/PGs was highest among adults with an annualised personal income of around $20,800-$41,599 (4.5% compared with 3.1% overall). MR/PG levels declined as incomes increased, down to 1.8% of those with $156,000 or more. The patterns of MR/PGs by age and personal income are shown in Figure 4 and Figure 5.

Australians of Aboriginal or Torres Strait Islander descent were more likely than non-Aboriginal or Torres Strait Islanders to be MR/PGs (7.5% compared with 3.1%), as shown in Table 13. However, this finding should be treated carefully as the difference was not statistically significant due to the small sample of Aboriginal and Torres Strait Islander respondents.

There was also no statistically significant difference between the percentage of MR/PGs living in Melbourne (3.2%) and in the rest of Victoria (3.0%).

Four percent (3.7%) of adults who mainly spoke a language other than English at home were MR/PGs, compared with 3.0% of adults who mainly spoke English at home. The difference between the two was not statistically significant. However, these results were affected by each group's likelihood to gamble.

Adults who mainly spoke a language other than English at home were less likely than those who mainly spoke English to have gambled in the last twelve months (53.1% compared with 73.4%), but a significantly higher proportion of gamblers who mainly spoke a language other than English at home were MR/PGs (7.0%), compared with gamblers who mainly spoke English at home (4.0%).

Within sociodemographic segments other than language mainly spoken at home, patterns of MR/PG prevalence amongst gamblers were similar to the patterns of prevalence within the population that are described above. A table showing the proportion of gamblers who were moderate and problem gamblers, by sociodemographic characteristics, is included in Appendix D.

Table 13: Moderate risk and problem gamblers, by sociodemographic characteristics

	MRG (Moderate risk gambler)	**PG (Problem gambler)**	**MR/PG (Moderate risk and problem gambler combined)**
All Victorian adults	2.4%	0.7%	**3.1%**
Gender			
Male (n=4,888)	3.4%*	1.0%*	**4.4%***
Female (n=5,750)	1.5%*	0.5%*	**1.9%***
Age			
18 to 24 years (n=858)	5.4%*	0.5%	**5.9%***

	MRG (Moderate risk gambler)	PG (Problem gambler)	MR/PG (Moderate risk and problem gambler combined)
25 to 34 years (n=1,224)	2.4%	0.6%	**3.1%**
35 to 44 years (n=1,271)	2.1%	1.2%	**3.2%**
45 to 54 years (n=1,575)	2.4%	1.1%	**3.5%**
55 to 64 years (n=2,016)	1.4%*	0.8%	**2.1%***
65 to 74 years (n=2,160)	1.9%	0.5%	**2.3%**
75 years or older (n=1,534)	1.5%	0.1%*	**1.6%***
Part of state			
Melbourne (n=8,012)	2.4%	0.8%	**3.2%**
Rest of Victoria (n=2,626)	2.4%	0.6%	**3.0%**
Speaks language other than English (LOTE) at home			
LOTE speaker (n=1,856)	2.2%	0.8%	**3.7%**
English only (n=8,773)	3.1%	0.6%	**3.0%**
Aboriginal and / or Torres Strait Islander origin			
Yes (n=92)	4.6%	2.9%	**7.5%**
No (n=10,507)	2.4%	0.7%	**3.1%**
Personal income, per year			
Nil or negative income (n=515)	2.9%	0.1%	**3.0%**
$1 - $20,799 (n=1,226)	2.2%	0.7%	**2.9%**
$20,800 - $41,599 (n=2,067)	3.2%	1.3%*	**4.5%***
$41,600 - $77,999 (n=1,999)	2.7%	0.8%	**3.6%**
$78,000 - $155,999 (n=1,799)	2.3%	0.8%	**3.0%**
$156,000+ or more (n=475)	1.8%	Nil	**1.8%**

Base: All respondents. * significant difference from the mean for all respondents.

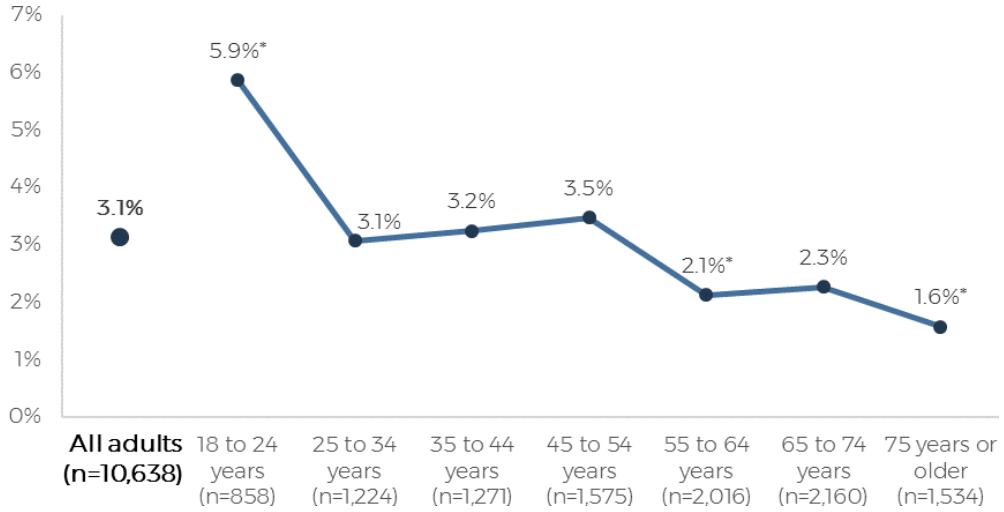
Table 14 shows age and gender differences across problem gambling severity levels. In general, the results show greater prevalence of more severe gambling problems (i.e., MR/PG) amongst young males.

Table 14: Moderate risk and problem gamblers, by age and gender

	MRG (Moderate risk gambler)	PG (Problem gambler)	MR/PG (Moderate risk and problem gambler combined)
All Victorian adults	2.4%	0.7%	**3.1%**
Male (n=4,888)	**3.4%†**	**1.0%†**	**4.4%†**
18 to 24 years (n=472)	7.1%	0.9%	**8.1%*†**
25 to 34 years (n=644)	4.2%†	1.1%	**5.3%†**
35 to 44 years (n=632)	3.0%	1.8%	**4.7%†**
45 to 54 years (n=704)	3.0%	0.7%	**3.7%**
55 to 64 years (n=876)	1.5%*	1.2%	**2.7%***
65 to 74 years (n=937)	2.6%	0.5%	**3.1%**
75 years or older (n=623)	1.9%	0.1%*	**2.0%***
Female (n=5,750)	**1.5%**	**0.5%**	**1.9%**
18 to 24 years (n=386)	3.5%	0.0%*	**3.5%**
25 to 34 years (n=580)	0.7%	0.1%*	**0.8%***
35 to 44 years (n=639)	1.2%	0.6%	**1.8%**
45 to 54 years (n=871)	1.8%	1.5%	**3.3%**
55 to 64 years (n=1140)	1.2%	0.3%	**1.5%**
65 to 74 years (n=1223)	1.2%	0.4%	**1.6%**
75 years or older (n=911)	1.1%	0.1%*	**1.2%**

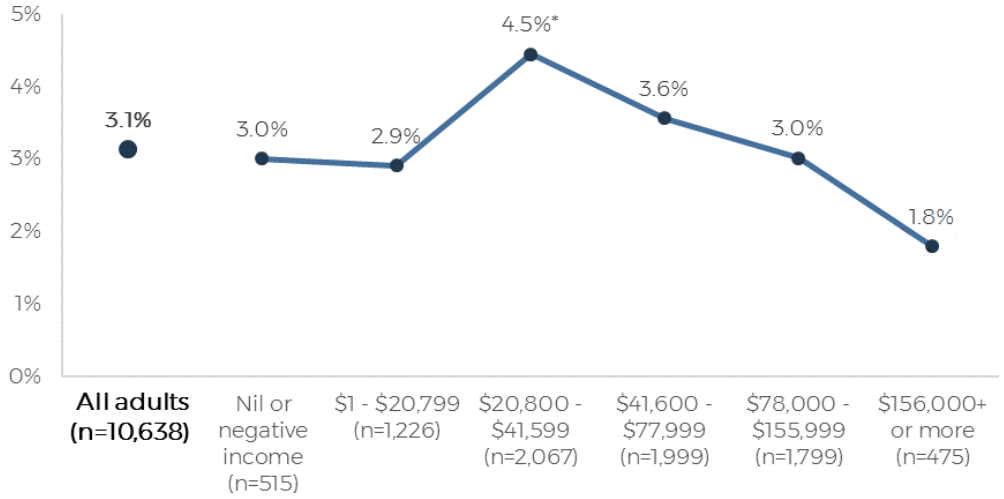
Base: All respondents. * Indicates a significant difference for the age group, from the overall result for the gender;
† indicates a significant difference between genders, within the same age group.

Figure 4: Proportion of MR/PGs (moderate risk and problem gamblers) within adult population, by age



Calculated PGSI risk categories. Base: All respondents* significant difference from the mean of all respondents.

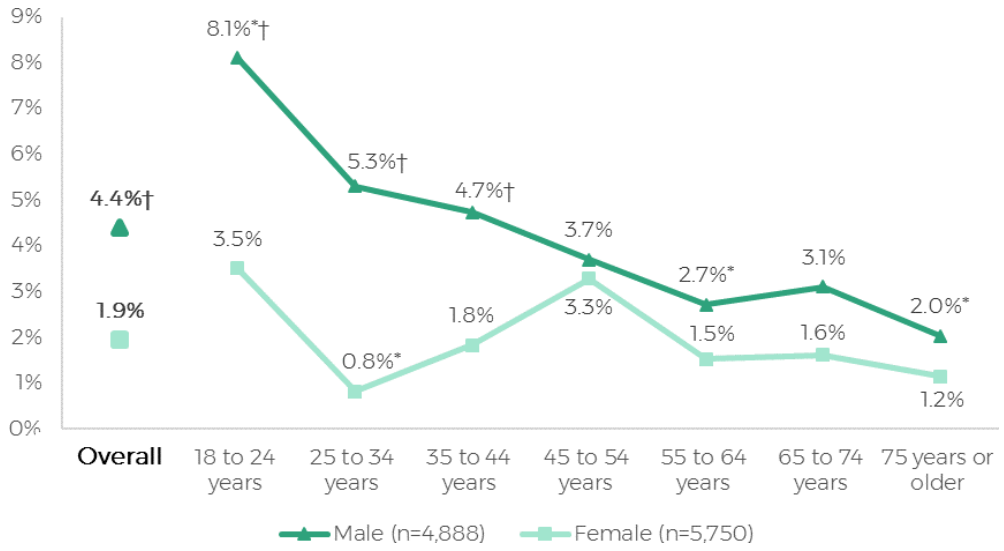
Figure 5: Proportion of MR/PGs (moderate risk and problem gamblers) within adult population, by personal income



Calculated PGSI risk categories. Base: All respondents. * significant difference from the mean of all respondents.

Figure 6 shows the pattern of more severe gambling problems (MR/PG) for both males and females across the lifespan. Men have significantly more gambling problems than women up until age 44. Thereafter, gambling problems are similar for both sexes, although still marginally and non-significantly higher for men.

Figure 6: Proportions of male and female MR/PGs (moderate risk and problem gamblers) within adult population, by age



Calculated PGSI risk categories. Base: All respondents. * Indicates a significant difference for the age group, from the overall result for the gender; † indicates a significant difference between genders, within the same age group.

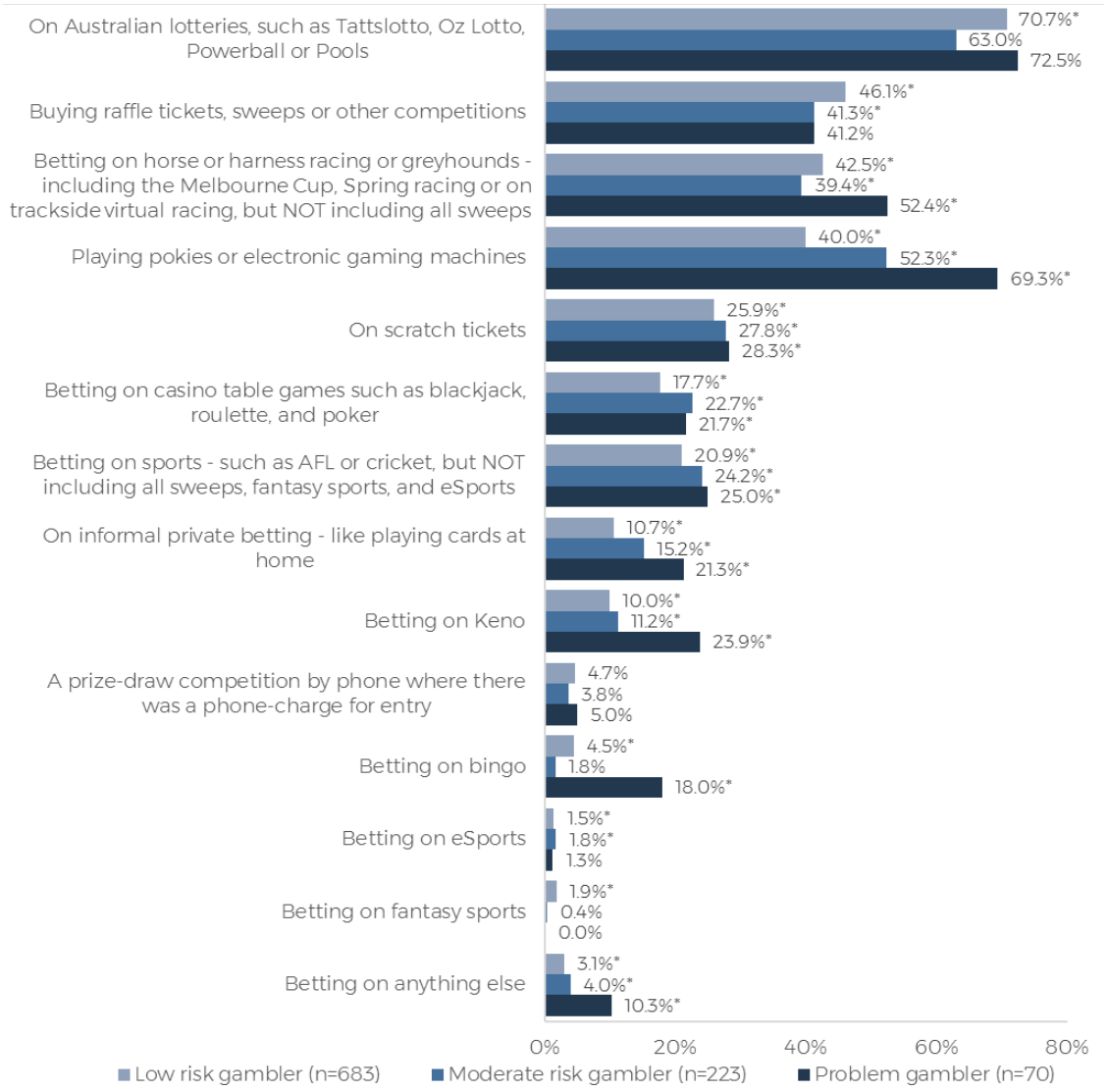
Problem gambling by gambling activities

Figure 7 shows the proportion of each problem gambler risk group who had participated in each gambling activity in the last year. Relative to lower risk gamblers, high proportions of problem gamblers tended to participate most activities [3]. The main exception to this trend related to buying raffle tickets and entering sweeps and competitions - whereby these activities were undertaken by a high proportion of non-problem gamblers (55.6% compared with 41.2% of problem gamblers).

Problem gamblers were particularly likely to play pokies (69.3% compared with 20.4% of gamblers overall), and to bet on horse, harness or greyhound races (52.4% compared with 28.7% overall).

3 As discussed later in this report, in section 3, problem gamblers tended to participate in more gambling activities than non- problem gamblers. This means that problem gamblers collectively had high rates of participation in multiple activities.

Figure 7: Gambling activity by PGSI



In the last 12 months, have you spent any money…? Base: Respondents who gambled in the last 12 months (n=7,631). * significant difference from the mean of all low risk, moderate risk and problem gamblers.

Figure 8 shows the MR/PG proportion of gamblers nominating use of products within each activity. Thus, for instance, 1.2% of people who played the lottery within the prior 12 months were classified as problem gamblers and a further 3.4% of these lottery players were moderate risk gamblers. Activities are listed in order of overall gambling participation rates (overall prevalence by activity, as listed in Figure 1 on page 27).

The activities which had the highest proportions of MR/PG participation (relative to overall participation) included:

- betting on “anything else” (18.6%) [4]
- informal private betting, like playing cards at home (15.4%)
- playing Keno (13.6%)
- sports betting (13.3%)
- playing pokies (12.5%).

Informal private betting, playing Keno, and sports betting had high proportions of MR/PGs, but were mid-range activities in terms of overall gambling participation. Playing pokies ranked similarly in both overall gambling participation and MR/PG proportions: fourth highest in gambling participation; and fifth highest in MR/PG proportion.

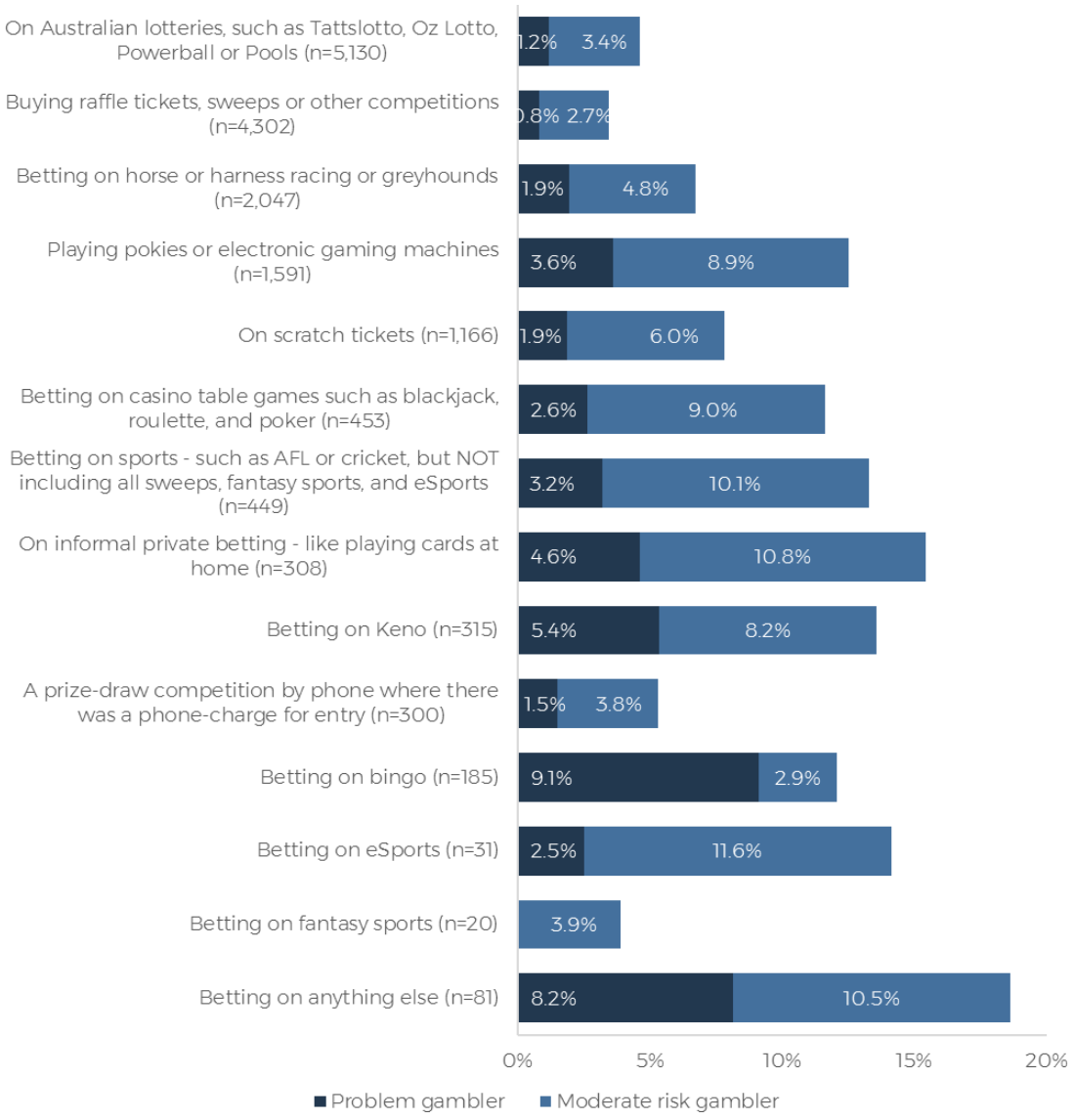
Betting on ‘other’ activities had low gambling prevalence but the highest proportion of MR/PGs, perhaps because of the level of interest and involvement required to seek out and participate in less well-known, novelty gambling events (e.g., betting on election outcomes).

The two most prevalent gambling activities, buying lottery tickets and buying raffle tickets, were among the three activities with the lowest proportions of MR/PGs (4.6% and 3.5% respectively). [5]

4 Respondents were asked to specify what else they had spent money betting on, after being asked about each defined gambling activity listed in Figure 7. Responses included a range of activities, such as: betting on a non-sporting event, such as who will win an Academy Award, a political event, or a reality TV show; entering home or charity lotteries; or buying shares or speculating on the market.

5 Betting on fantasy sports was the activity with the second lowest proportion of MR/PGs (3.9%). However, the small sample (n=20) also makes the data for this activity the least reliable.

Figure 8: Problem gambling status by gambling activity



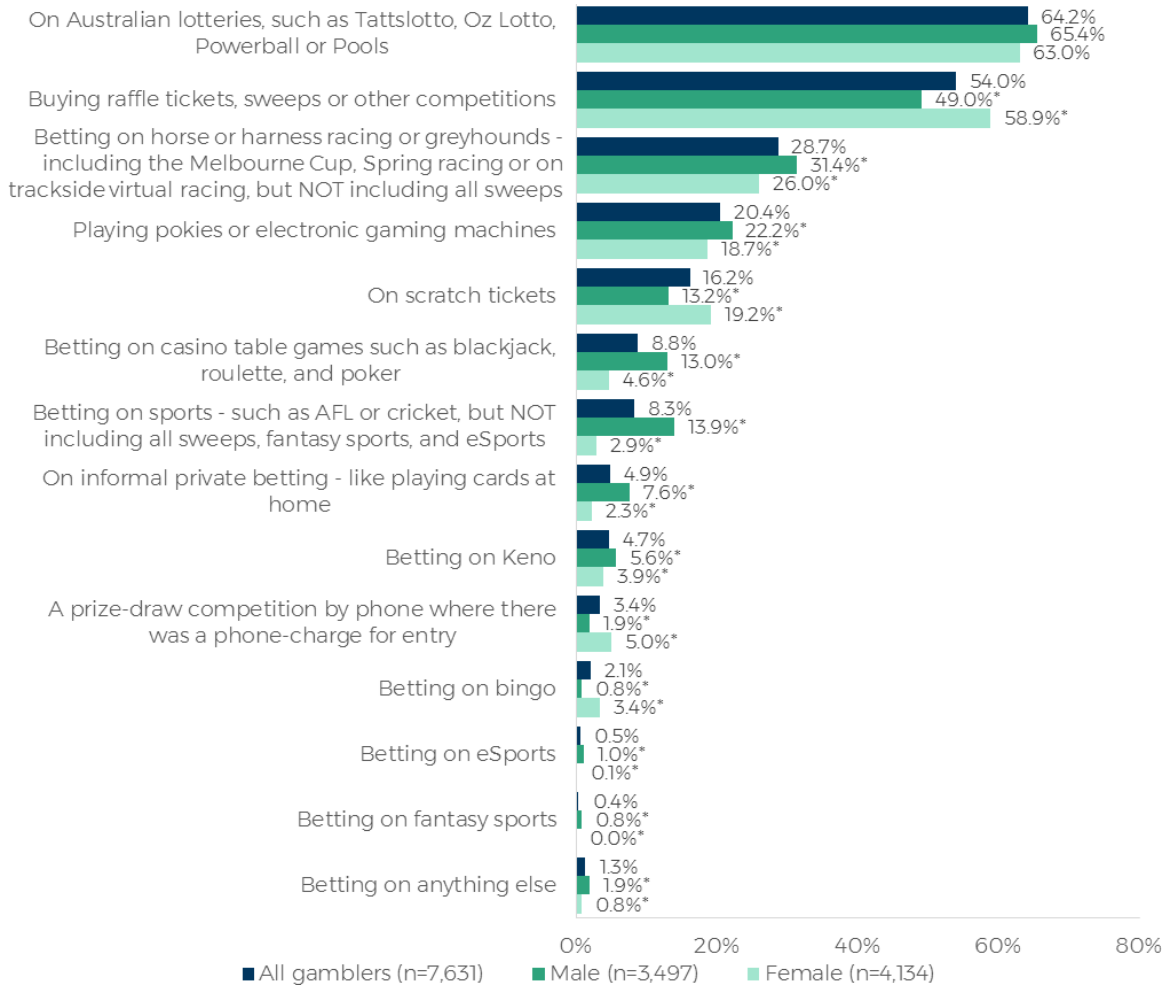
In the last 12 months, have you spent any money…? Bases: Respondents who gambled on the specified activity in the last 12 months (n= indicated in figure, per activity)

Section 3 - Gambling activities

Section 1 of this report on *Overall Gambling Participation* presented an overview of gambling participation rates amongst all adults within the Victorian population. This present section further examines participation in gambling activities. However, here the report focuses only on Victorian adults who had gambled in the last twelve months (69.0% of the population). Consequently, percentages in this section represent proportions within this restricted segment of gamblers.

As mentioned in the *Overall Gambling Participation* section, buying lottery tickets, and entering raffles and sweeps were the most common gambling activities for Victorian gamblers. In the last year, these were undertaken by 64.2% and 54.0% of gamblers, respectively, as shown in Figure 9. Participation rates were next highest for race betting and playing pokies (28.7% and 20.4% of Victorian gamblers).

Figure 9: Proportion of gamblers participating in gambling activities, overall and by gender



In the last 12 months, have you spent any money…? Base: Respondents who gambled in the last 12 months (n=7,631) * significant differences by gender.

While similar proportions of male and female gamblers bought lottery tickets (65.4% and 63.0%, respectively), significantly more women entered raffles and sweeps (58.9% compared with 49.0% of men) and bought scratch tickets (19.2% compared with 13.2% of men). More men bet on races (31.4% compared with 26.0% of women), played pokies (22.2% compared with 18.7% of women), gambled on casino table games (13.0% compared with 4.6% of women) and bet on sports (13.9% compared with 2.9% of women).

Information was collected to indicate which activity gamblers had spent the most money on in the last 12 months [6]. Over forty percent of gamblers had spent most on lotteries (44.3% of gamblers), as shown in Table 15. Almost a quarter (22.6%) reported spending most on raffle tickets, sweeps and competitions, and over one in ten (12.1%) spent most on race betting. Eight percent (8.3%) of Victorian gamblers had spent the most money on pokies.

The top four activities which gamblers had spent the most money on were also the four most popular gambling activities (as shown in Figure 9).

Table 15: Most money spent by gamblers on single gambling activity

Gambling activities	Proportion of gamblers
On Australian lotteries, such as Tattslotto, Oz Lotto, Powerball or Pools	44.3%
Buying raffle tickets, sweeps and other competitions. This includes sweeps on the Melbourne Cup, spring racing carnival and sporting events	22.6%
Betting on horse or harness racing or greyhounds - including any bets at the Melbourne Cup, Spring racing or on trackside virtual racing, but NOT including all sweeps	12.1%
Playing pokies or electronic gaming machines	8.3%
Betting on casino table games such as blackjack, roulette, and poker	3.9%
Betting on sports - such as AFL or cricket, but NOT including all sweeps, fantasy sports, and eSports	3.1%
On scratch tickets	2.7%
Informal private betting for money - like playing cards at home?	0.8%
On bingo	0.8%
Competitions where you enter by phone or SMS to be part of a prize draw and there is a charge to your phone	0.6%
Betting on eSports	0.2%
On Keno	0.2%
Betting on fantasy sports	0.1%
Other	0.6%

Over the past 12 months, on which single gambling activity did you spend the most money? Base: Respondents who gambled in the last 12 months (n=7,589 excluding don't know on which activity most money spent)

Four in ten Victorian gamblers had gambled on only one of the activities listed in Figure 9 and Table 15 (39.9%), while 28.3% had done two of the activities in the last year. Fifteen percent (14.8%) of gamblers had participated in four or more gambling activities, as shown in Table 16. Gamblers had, on average, gambled on 2.18 activities.

6 Gamblers who had gambled on more than one activity were asked which they had spent most money on, while the programming recorded the activity for gamblers who had only participated in one activity.

Table 16: Number of gambling activities undertaken by gamblers

Number of activities	Proportion of gamblers
1 activity	39.9%
2 activities	28.3%
3 activities	16.9%
4 or more activities	14.8%
Mean number of activities	**2.18**

Base: Respondents who gambled in the last 12 months (n=7,631)

The propensity to gamble on four or more activities generally increased with personal income, as shown in Table 17. Eleven and a half percent (11.5%) of gamblers with a personal income of $1-$20,799 gambled on four or more activities compared with 19.1% of gamblers with a personal income of $156,000+.

Table 17: Number of gambling activities undertaken by gamblers, by income

Number of activities	Proportions for all gamblers	Nil or negative (n=285)	$1-$20,799 (n=792)	$20,800-$41,599 (n=1,490)	$41,600-$77,999 (n=1,500)	$78,000-$155,999 (n=1,408)	$156,000+ (n=378)
1 activity	**39.9%**	43.6%	45.1%*	41.2%	38.7%	34.7%*	39.9%
2 activities	**28.3%**	29.1%	27.4%	29.1%	27.7%	30.3%	24.2%
3 activities	**16.9%**	16.9%	16.0%	16.7%	18.2%	17.9%	16.8%
4 or more activities	**14.8%**	10.5%	11.5%*	13.0%	15.4%	17.2%*	19.1%

Base: Respondents who gambled in the last 12 months (n=7,631) * significant difference from the proportions shown for all gamblers under each count of activities: 1, 2, 3 and 4+.

Significantly more male than female gamblers had gambled on four or more activities (17.2%, compared with 12.5%); and males had participated in significantly more gambling activities on average (2.28 compared with 2.09).

Older gamblers were more likely to participate in at least two gambling activities (32.0% of those aged 64-74 years compared with 28.3% overall). Gamblers aged 55-64 years were more likely to participate in at least three gambling activities (20.0% compared with 16.9% overall).

Gamblers from the following sub-groups had also participated in a significantly higher number of gambling activities, on average, than their counterparts:

- Internet gamblers (2.87, compared with 1.91 for non-internet gamblers) [7]
- Indigenous Victorians (2.67, compared with 2.17 for non-Indigenous Victorians)
- Non-Melbourne Victorian residents (2.34, compared with 2.13 for Melbourne residents)
- People who spoke a language other than English at home (2.25, compared with 1.84 for people who did not).

7 Internet gamblers here includes gamblers who had used the internet in the last year for at least one of *any type* of gambling activity. Their average number of activities includes all their gambling activities in the last year, regardless of whether they were conducted online, or not.

Gamblers at higher PGSI risk levels tended to participate in multiple gambling activities. Over half of problem gamblers (as determined by PGSI risk categories) had participated in four or more activities (54.8%, compared with 14.8% overall, or 11.6% of non-problem gamblers).

Table 18 shows the proportion of gamblers who undertook 1, 2, 3 and 4+ gambling activities across PGSI categories. In general, people without gambling problems were more likely to participate in 2 or fewer activities, whereas people with at least some risk for problems participated in 3 or more activities.

Table 18: Number of gambling activities undertaken by gamblers, by PGSI

		PGSI			
	Proportions for all gamblers (n=7631)	**Non-problem gamblers (n=6655)**	**Low risk gamblers (n=683)**	**Moderate risk gambler (n=223)**	**Problem gamblers (n=70)**
1 activity	**39.9%**	43.3%*	20.3%*	19.1%*	11.1%*
2 activities	**28.3%**	29.1%	24.7%*	24.6%	12.0%*
3 activities	**16.9%**	16.0%*	22.5%*	22.0%*	22.1%
4 or more activities	**14.8%**	11.6%*	32.5%*	34.3%*	54.8%*

Base: Respondents who gambled in the last 12 months (n=7,631) * significant differences from the proportions shown for all gamblers under each count of activities: 1, 2, 3 and 4+.

During the last year, the average number of different gambling activities chosen by Victorians within each PGSI category was:

- 3.90 for problem gamblers
- 3.09 for moderate risk gamblers
- 3.00 for low risk gamblers
- 2.03 for non-problem gamblers.

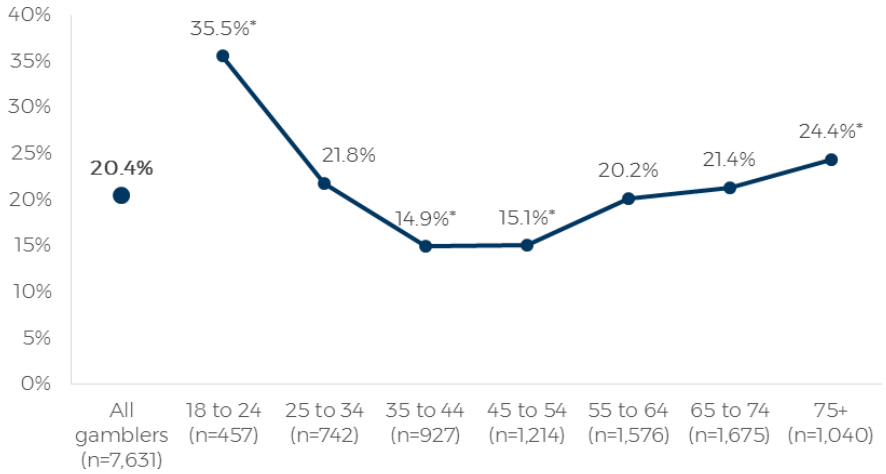
‘Pokies’ or electronic gaming machine play

Twenty percent (20.4%) of gamblers had played pokies in the last twelve months. More males had played pokies than females (22.2% compared with 18.7%).

Problem gamblers (69.3%), moderate-risk gamblers (52.3%) and low risk gamblers (40.0%) were more likely to have played the pokies compared with non-problem gamblers (16.3%).

Over a third (35.5%) of young adult gamblers aged 18 to 24 years had played pokies, as shown in Figure 10. Gamblers aged 35 to 54 were least likely to have played pokies (inclusive of 14.9% of 35 to 44 year-olds and 15.1% of 45 to 54 year-olds).

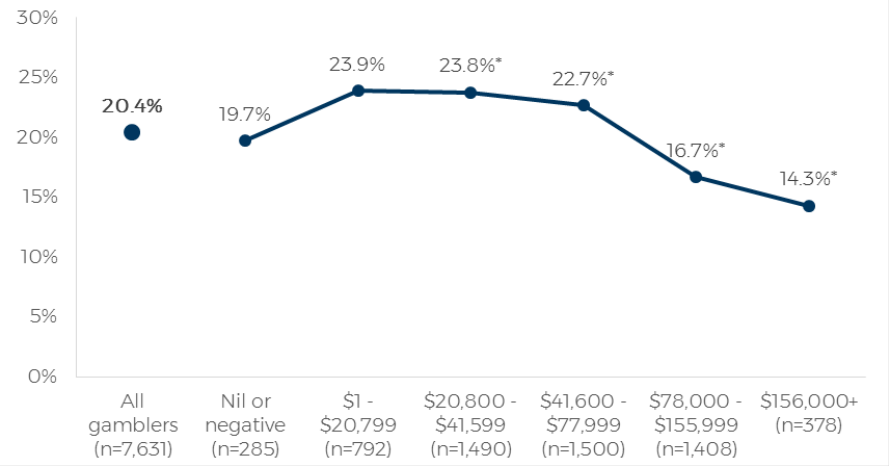
Figure 10: Proportion of gamblers who played pokies, by age



In the last 12 months, have you spent any money…? Base: Respondents who gambled in the last 12 months (n=7,631) * significant difference from proportion for all gamblers.

Lower income gamblers were more likely to have played pokies than high income gamblers, as shown in Figure 11. Almost a quarter (23.9%) of all gamblers with incomes of $1 to $20,599 had played pokies, compared to only 14.3% of gamblers with incomes of $156,000 or more.

Figure 11: Proportion of gamblers who played pokies, by personal income



In the last 12 months, have you spent any money…? Base: Respondents who gambled in the last 12 months (n=7,631). * significant difference from proportion for all gamblers.

Gamblers who spoke English at home (21.2%) were more likely to play pokies compared with gamblers who spoke a language other than English at home (16.5%).

Furthermore, 25.4% of gamblers who lived in regional Victoria had played pokies compared with 18.8% of Melbourne-based gamblers.

There were no significant differences in Pokies play by Indigenous status (20.3% were non-Indigenous and 30.4% were of Aboriginal or Torres Strait Islander descent).

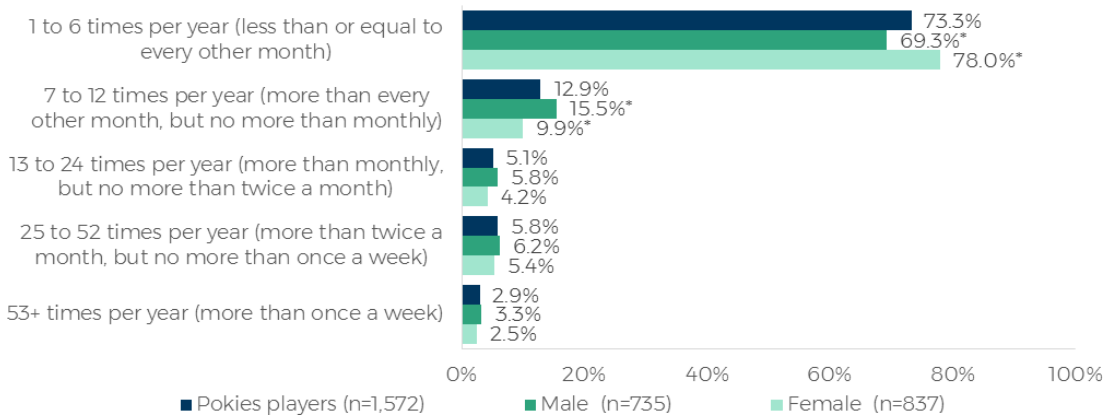
Frequency of participation for pokies

Almost three-quarters (73.3%) of pokies players gambled on the games once to six times a year, whereas three percent (2.9%) played more than weekly.

As well as being more likely to play pokies, male pokies players tended to play more often than women, as shown in Figure 12. Thirty-one percent (30.7%) of male pokies players played more than six times per year, compared with 22.0% of female pokies players.

Pokies players from the oldest age group gambled on the pokies more frequently than those from the youngest age group. Around seventeen percent (17.4%) of those aged 75 years or over played the pokies 25 to 52 times per year compared with 5.8% overall, and the difference was statistically significant. Four in five (81.0%) of those aged 18-24 played the pokies only 1 to 6 times per year compared with 73.3% overall, although this finding was not statistically significant.

Figure 12: How often gamblers played pokies, overall and by gender



In the past 12 months, how often did you take part? Base: Respondents who had spent money playing pokies (n=1,572). * significant differences by gender.

Table 19 shows how often gamblers played the pokies across each of the PGSI gambling-risk categories. People classified as problem gamblers were proportionately more likely to be playing in excess of 25 times a year, or about one-or-more a fortnight.

Table 19: How often gamblers played the pokies, by PGSI

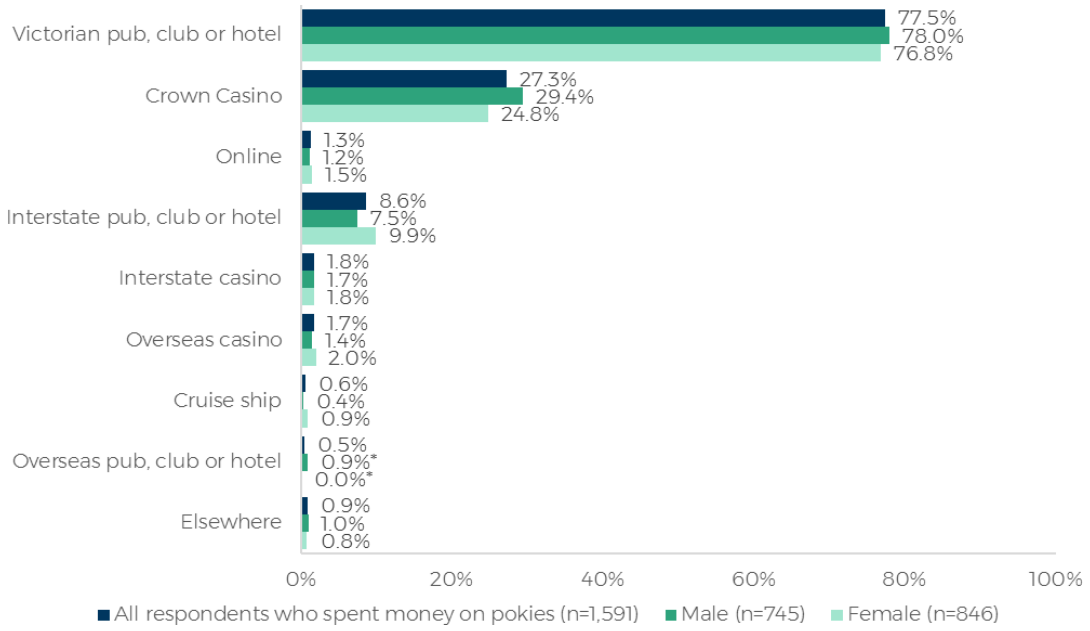
		PGSI			
	Proportions for all pokies gamblers (n=1572)	**Non-problem gamblers (n=1113)**	**Low risk gamblers (n=279)**	**Moderate risk gambler (n=126)**	**Problem gamblers (n=54)**
1 to 6 times per year (less than or equal to every other month)	**73.3%**	81.9%*	63.0%*	51.7%*	18.1%*
7 to 12 times per year (more than every other month, but no more than monthly)	**12.9%**	11.1%*	16.9%*	21.0%*	4.7%*
13 to 24 times per year (more than monthly, but no more than twice a month)	**5.1%**	3.6%*	7.9%*	9.3%*	8.4%
25 to 52 times per year (more than twice a month, but no more than once a week)	**5.8%**	2.6%*	10.5%*	11.1%*	30.7%*
53+ times per year (more than once a week)	**2.9%**	0.8%*	1.8%	7.0%*	38.1%*

Base: Respondents who spent money on pokies or EGMs in the last 12 months (n=1,591). * significant differences from the proportions for all pokies gamblers.

‘Pokies’ venues visited

The most common pokies venues were Victorian pubs, clubs or hotels (77.5% of players). Just over one quarter of Victorian pokies players played at the Crown Casino (27.3%) and 1.3% played online. It is important to note that more than one response was allowed. The results are shown in Figure 13. There were no significant differences by gender in the locations of pokies used.

Figure 13: Locations of pokies used, overall and by gender



Did you play the pokies at…? Base: Respondents who spent money on pokies or EGMs in the last 12 months (n=1,591). * significant differences between genders.

Older gamblers were significantly more likely than younger gamblers to play the pokies at Victorian pubs, clubs or hotels (85.4% of gamblers aged 75 years and older compared with 63.4% of gamblers aged 18-24 years). Gamblers who only spoke English at home (80.1%) were also more likely to play at these venues compared with gamblers who spoke languages other than English at home (60.7%).

Unsurprisingly, gamblers living in Rest of Victoria were more likely than gamblers living in Melbourne to play the pokies at Victorian pubs, clubs or hotels (81.9% compared with 75.5%).

Younger gamblers, on the other hand, were significantly more likely to play the pokies at the casino (46.1% of gamblers aged 18-24 years) compared with gamblers aged 75 years and older (12.8%). Gamblers who spoke a language other than English at home were also more likely to play the pokies at the casino than those who spoke English only (44.9% compared with 24.5%). Gamblers living in Melbourne were more likely to play at the Crown Casino than gamblers living in Rest of Victoria (31.6% compared with 17.7%).

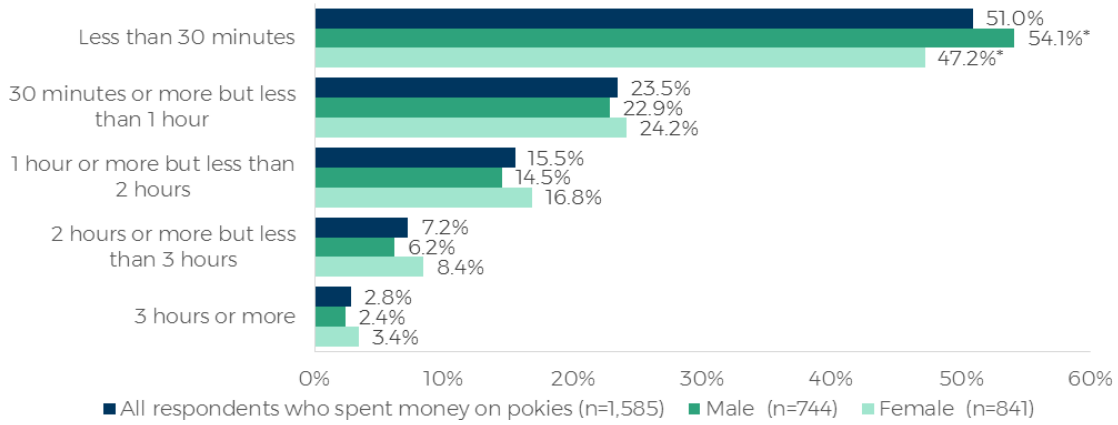
There were no significant differences observed in locations of pokies used by PGSI status.

Typical length of playing pokies

Respondents who spent money playing pokies during the last 12 months were asked how much time they spent playing on a typical day that they gambled. One half of Victorian pokies players spent less than 30 minutes on a typical day (51.0%). A progressively smaller proportion of gamblers nominated longer playing times.

Male pokies players were more likely than female pokies players to spend less than 30 minutes playing the pokies on a typical day (54.1% compared with 47.2%). The full results are shown in Figure 14.

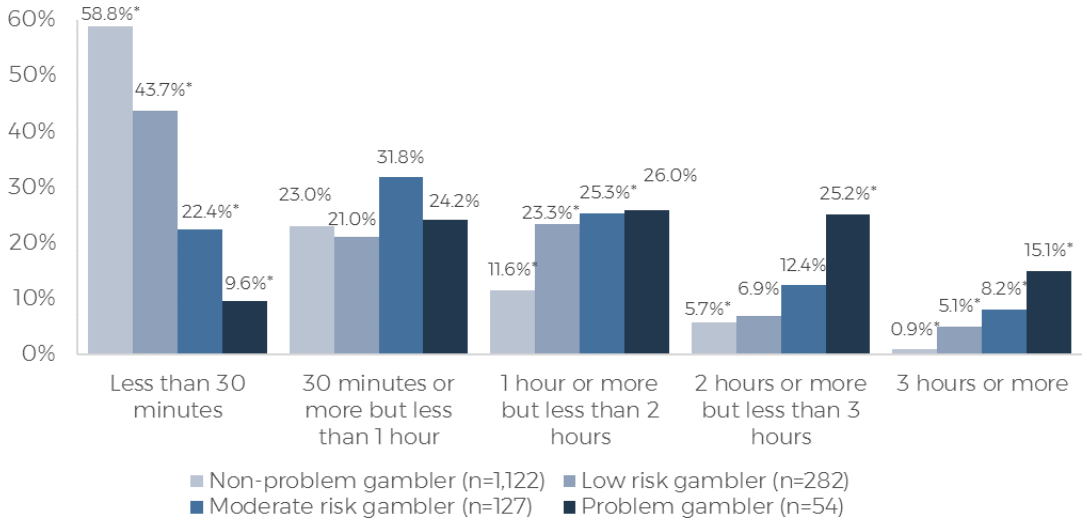
Figure 14: Typical time spent playing pokies (on a day when pokies were played), overall and by gender



Over the past 12 months, on a typical day in which you played the pokies, how much time did you spend playing? Base: Respondents who spent money on pokies or EGMs in the last 12 months (n=1,585), * significant differences between genders.

As presented in Figure 15, problem gamblers spent a longer time playing pokies than non-problem gamblers. Fifteen percent (15.1%) of problem gamblers spent 3 hours or more playing pokies compared with 0.9% of non-problem gamblers.

Figure 15: Typical time spent playing pokies (on a day when pokies were played), by PGSI



Over the past 12 months, on a typical day in which you played the pokies, how much time did you spend playing? Base: Respondents who spent money on pokies or EGMs in the last 12 months (n=1,585). * significant difference from the proportion of respondents within each category (i.e., typical time spend playing).

Withdrawing cash

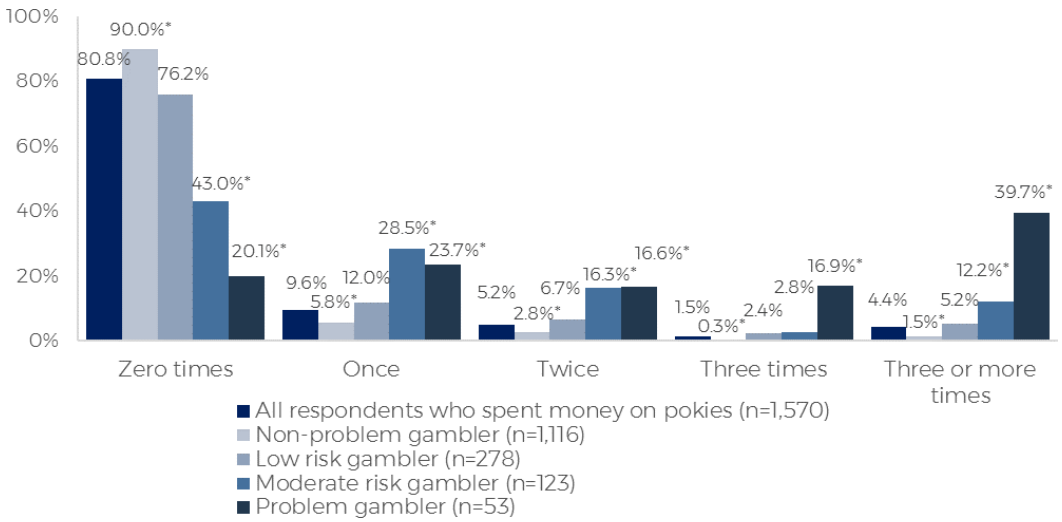
Respondents who spent money on playing pokies over the last year were asked how many times they would typically withdraw extra cash through EFTPOS [8] during the course of a gambling session.

Most pokies players did not withdraw any extra money through EFTPOS during a typical session on the pokies (80.8%). One in ten pokie players (9.6%) typically made a single EFTPOS withdrawal to continue a gambling session, while 5.2% typically made two EFTPOS withdrawals for extra gambling money.

Over the past 12 months, 4.4% of pokies players typically withdrew extra money three or more times during a gambling session.

The proportion of gamblers who made EFTPOS withdrawals to get extra money for gambling on pokies was associated with problem gambling risk. As shown in Figure 16, moderate risk and problem gamblers typically withdrew money more frequently than low risk and non-problem gamblers. More specifically, 12.2% of moderate risk and 39.7% of problem gamblers made three or more EFTPOS withdrawals, compared with 1.5% of non-problem and 5.2% of low risk gamblers.

Figure 16: Number of times using EFTPOS to get extra gambling money in a typical pokies' session, overall and by PGSI



Over the past 12 months and in a typical session, how many times did you get EXTRA money for gambling on pokies through EFTPOS (after you had already started gambling)? Base: Respondents who spent money on pokies or EGMs in the last 12 months (n=1,570). * significant difference from the proportion of all respondents within each category (e.g., zero times, once, twice, etc.).

Pokies players who made any EFTPOS withdrawals for extra gambling money were asked how much extra money they typically withdrew per session. The mean amount of extra money withdrawn was $127.26 per session. The mean amount for problem gamblers was $227.41, the amounts for moderate risk gamblers was $116.73, and the amount for low risk gamblers was $166.11. Non-problem gamblers took out the lowest amount at $70.05. The full results are shown in Table 20.

8 A recent policy change in Victoria means that there are no ATMs (automatic teller machines) in venues, hence respondents were asked about withdrawing extra cash through EFTPOS (Electronic funds transfer at point of sale)

Table 20: Extra money withdrawn through EFTPOS for gambling on pokies, by PGSI

		PGSI			
	Respondents who withdrew extra money for gambling on pokies (n=263)	**Non-problem gamblers (n=92)**	**Low risk gamblers (n=67)**	**Moderate risk gambler (n=65)**	**Problem gamblers (n=39)**
Up to $20	**18.5%**	21.6%	14.8%	25.9%	2.7%*
$21 to $50	**29.6%**	48.8%*	20.4%	23.6%	7.5%*
$51 to $100	**25.5%**	16.6%	38.8%*	27.7%	21.4%
$101 to $200	**16.0%**	12.2%	13.7%	15.0%	31.7%*
$201 or more	**10.4%**	0.7%	12.3%	7.8%	36.7%*
Mean	**$127.26**	**$70.05**	**$166.11**	**$116.73**	**$227.41**
Median	**$60.00**	**$50.00**	**$100.00**	**$60.00**	**$200.00**

Over the past 12 months, when you have withdrawn extra money, how much did you typically withdraw per session? Base: Respondents who withdrew extra money for gambling on pokies through EFTPOS (n=263)* significant differences from mean proportion of all 263 respondents who withdrew extra money, $p < .05$.

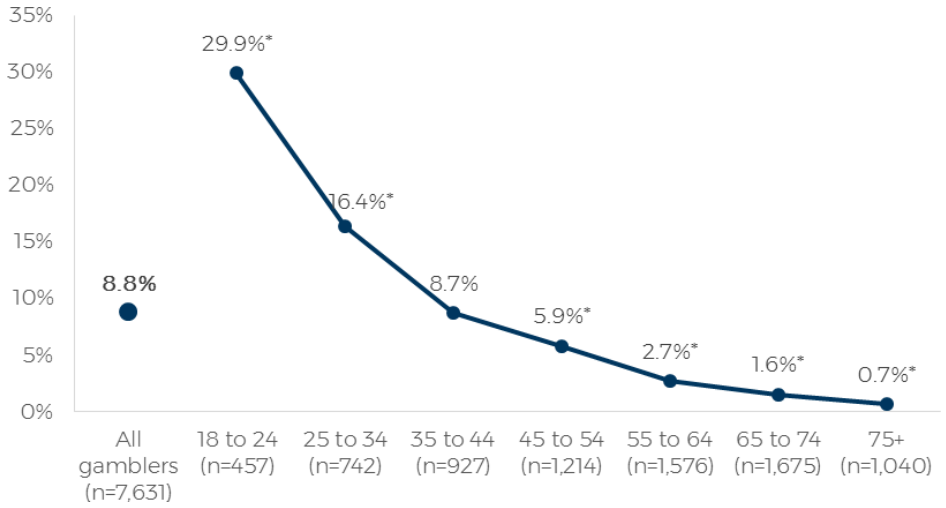
Casino table games

Nearly nine percent (8.8%) of gamblers had spent money betting on casino table games such as blackjack, roulette, and poker in the last twelve months.

More males had played these casino games than females (13.0% compared with 4.6%).

Casino table games were more frequently played by young gamblers. Almost a third (29.9%) of young adult gamblers aged 18 to 24 years had gambled in a casino, as shown in Figure 17. Older gamblers were significantly less likely to have gambled in a casino, with fewer than one in ten over 35 years having done so (8.7% of 35 to 44 year-olds, down to 0.7% of those aged 75 or over).

Figure 17: Proportion of gamblers who bet on casino table games, by age



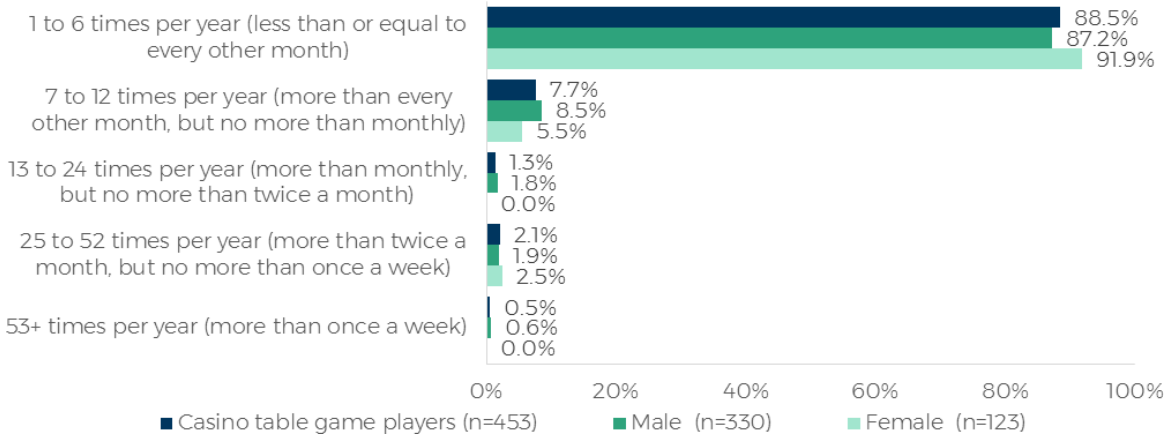
In the last 12 months, have you spent any money…? Base: Respondents who gambled in the last 12 months (n=7,631). * significant difference from the proportion for all gamblers.

Gamblers who spoke a language other than English at home were more likely to have played casino table games (14.1%) compared with gamblers who only spoke English (7.7%). Unsurprisingly, casino gamblers were also more likely to live in Melbourne (9.9%) compared with gamblers who lived in other parts of Victoria (5.4%).

Frequency of participation in casino gambling

The majority (88.5%) of casino gamblers played once to six times a year. The percentage who participated in this activity weekly was small (0.5%). As shown in Figure 18, there was little difference between men and women's frequency of participation

Figure 18: How often gamblers played casino table games, overall and by gender



In the past 12 months, how often did you take part? Base: Respondents who had spent money betting on casino table games (n=1,572). * no significant differences by gender were found.

Table 21 show the frequency of play for casino table-game gamblers across problem gambling (PGSI) categories. Non-problem gamblers were significantly more likely to gamble less often, whereas gamblers with problems were conversely more likely to gamble frequently.

Table 21: How often gamblers played casino table games, by PGSI

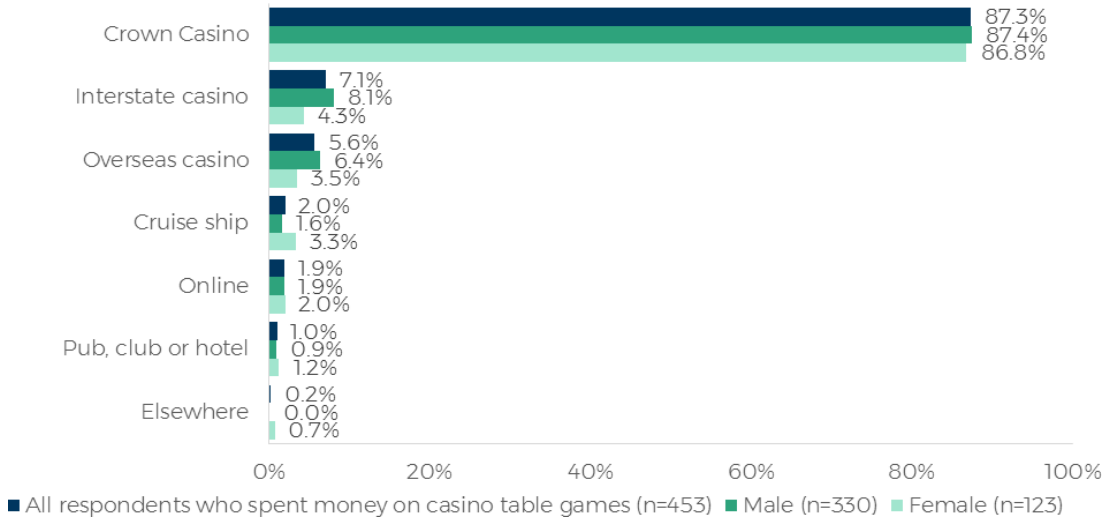
		PGSI			
	All table-games gamblers (n=453)	**Non-problem gamblers (n=305)**	**Low risk gamblers (n=91)**	**Moderate risk gambler (n=44)**	**Problem gamblers (n=13)**
1 to 6 times per year (less than or equal to every other month)	**88.5%**	92.9%*	85.9%	70.9%*	52.0%*
7 to 12 times per year (more than every other month, but no more than monthly)	**7.7%**	6.1%*	9.0%	13.8%*	16.7%
13 to 24 times per year (more than monthly, but no more than twice a month)	**1.3%**	0.4%	0.0%	1.9%	31.3%*
25 to 52 times per year (more than twice a month, but no more than once a week)	**2.1%**	0.5%	5.0%	8.3%*	0.0%
53+ times per year (more than once a week)	**0.5%**	0.0%	0.0%	5.1%*	0.0%

Base: 453 casino table-game gamblers. * significant differences from the proportions for all table-game gamblers.

Where casino table games were played

The most popular venue for casino gamblers was the Crown Casino, where 87.3% of casino gamblers had bet on blackjack, roulette, poker or other casino games during the last 12 months. As the sole casino in Victoria, Crown is in Melbourne CBD. Consequently, its proximity for Melbourne-based gamblers is likely to have contributed to their higher participation in this activity than gamblers from regional Victoria (9.9% compared with 5.4%, as noted above). The locations where casino table game players partook in this type of gambling are shown in Figure 19.

Figure 19: Locations of betting on casino table games, overall and by gender



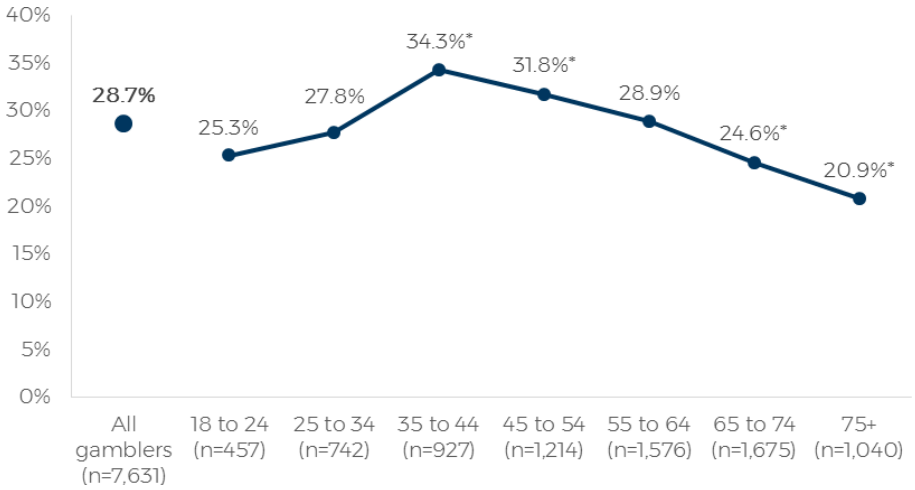
Did you place your bets at...? Base: Respondents who spent money betting on casino table games in the last 12 months (n=453). * no significant differences by gender were found

Horse, harness or greyhound racing

Twenty-nine percent (28.7%) of Victorian gamblers had bet on horse, harness or greyhound races in the last year. Male gamblers were significantly more likely to be race bettors (31.4% compared with 26.0% of female gamblers).

Race betting was most prevalent among 35 to 44 year old gamblers (34.3%), as shown in Figure 20; although at least a fifth of gamblers across all age groups had participated in race betting (with 20.9% of gamblers aged 75 or over comprising the lowest proportion).

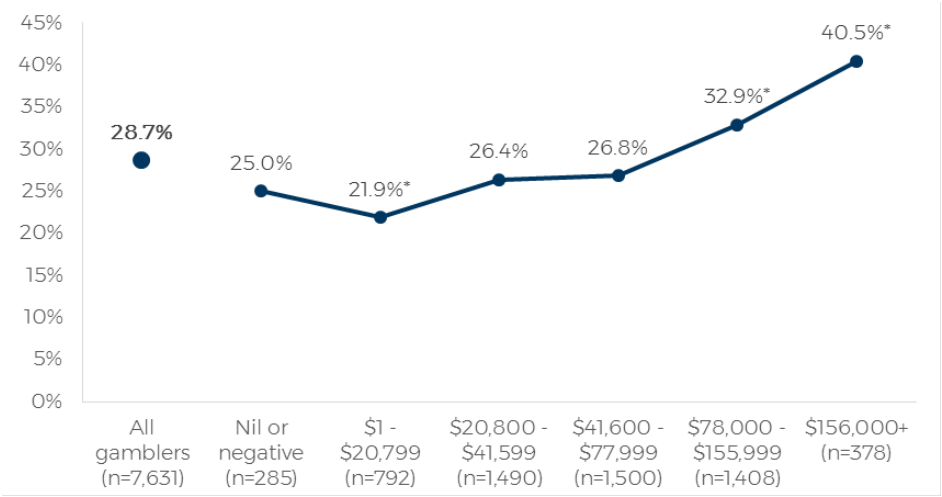
Figure 20: Proportion of gamblers who bet on races, by age



In the last 12 months, have you spent any money…? * sig. difference from mean of all 7,631 gamblers, p < .05. Base: Respondents who gambled in the last 12 months (n=7,631)

The propensity for race betting rose with income, as shown in Figure 21. Two in five of the wealthiest gamblers bet on horse, harness or greyhound racing (i.e., 40.5% of gamblers with personal incomes of $156,000 or more).

Figure 21: Proportion of gamblers who bet on races, by personal income



In the last 12 months, have you spent any money…? * sig. difference from mean of all 7,631 gamblers, p < .05. Base: Respondents who gambled in the last 12 months (n=7,631)

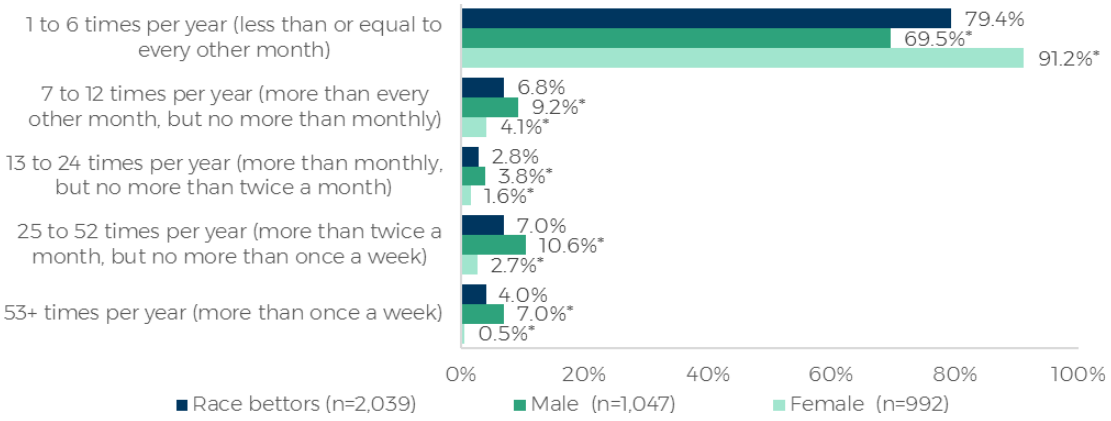
Gamblers who only spoke English at home were significantly more likely than LOTE speakers to bet on horse, harness or greyhound racing (31.4% compared with 15.0%).

Frequency of participation in race betting

Four in ten (79.4%) race bettors placed bets once every other month, or less frequently. Four percent (4.0%) placed bets more than weekly.

Men also bet more frequently than women. More than one in ten (10.6%) male race bettors placed weekly racing bets (compared with 2.7% of female race bettors), and another 7.0% placed bets more often than weekly (compared with 0.5% of females). These participation rates are shown in Figure 22.

Figure 22: How often gamblers bet on races, overall and by gender



In the past 12 months, how often did you take part? Base; Respondents who had spent money betting on horse, harness or greyhound races (n=2,039). * significant differences by gender.

Table 22 shows the frequency of people's race betting across problem gambling (PGSI) categories. In general, non- problem gamblers bet on races at significantly lower frequencies, whereas people with at least some gambling problems bet at higher frequencies.

Table 22: How often gamblers bet on races, by PGSI

		PGSI			
	All race gamblers (n=2039)	**Non-problem gamblers (n=1650)**	**Low risk gamblers (n=271)**	**Moderate risk gambler (n=83)**	**Problem gamblers (n=35)**
1 to 6 times per year (less than or equal to every other month)	**79.4%**	85.2%*	63.0%*	51.5%*	37.4%*
7 to 12 times per year (more than every other month, but no more than monthly)	**6.8%**	5.8%*	11.9%*	7.4%	10.4%
13 to 24 times per year (more than monthly, but no more than twice a month)	**2.8%**	1.7%*	5.8%*	10.3%*	3.7%
25 to 52 times per year (more than twice a month, but no more than once a week)	**7.0%**	5.4%*	11.5%*	15.9%*	14.8%*
53+ times per year (more than once a week)	**4.0%**	1.9%*	7.7%*	14.9%*	33.7%*

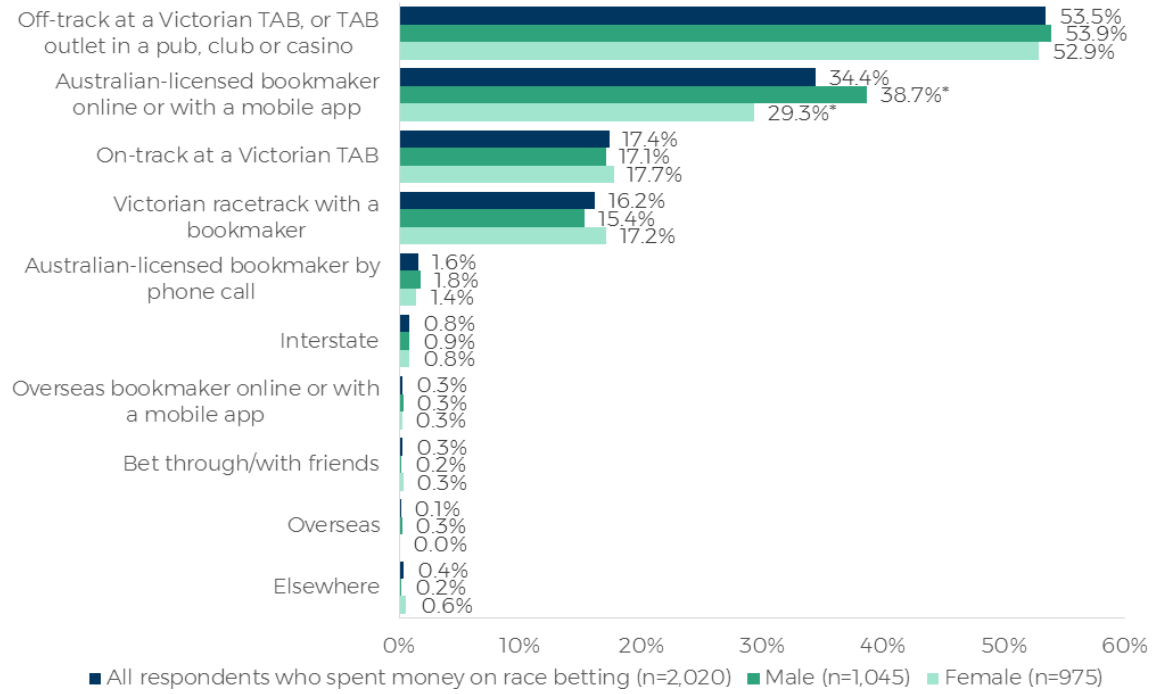
Base: 2039 race bettors. * significant differences from proportions for all race-betting gamblers.

Where horse, harness or greyhound race betting took place

The most popular location for betting on horse, harness or greyhound racing was off-track at a Victorian TAB, or a TAB outlet in a pub, club or casino (53.5%). This was followed by an Australian-licensed bookmaker online or with a mobile app (34.4%), on-track at a Victorian TAB (17.4%) and at a Victorian racetrack with a bookmaker (16.1%).

Men were more likely than women to bet via an Australian-licensed bookmaker online or with a mobile app (38.7% compared with 29.3%). The results are shown in Figure 23.

Figure 23: Locations of race betting, overall and by gender



Did you place your bets at...? * sig. difference by gender, p < .05. Base: Respondents who spent money betting on horse or harness racing or greyhounds in the last 12 months (n=2,020)

Although not shown within the tables or figures, problem gamblers were significantly more likely to place bets off-track at a Victorian TAB, or TAB outlet in a pub, club or casino (79.9% compared with 53.5% overall).

Low risk gamblers were significantly more likely than non-problem gamblers to bet via an Australian- licensed bookmaker online or with a mobile app (43.8 % compared with 32.1%).

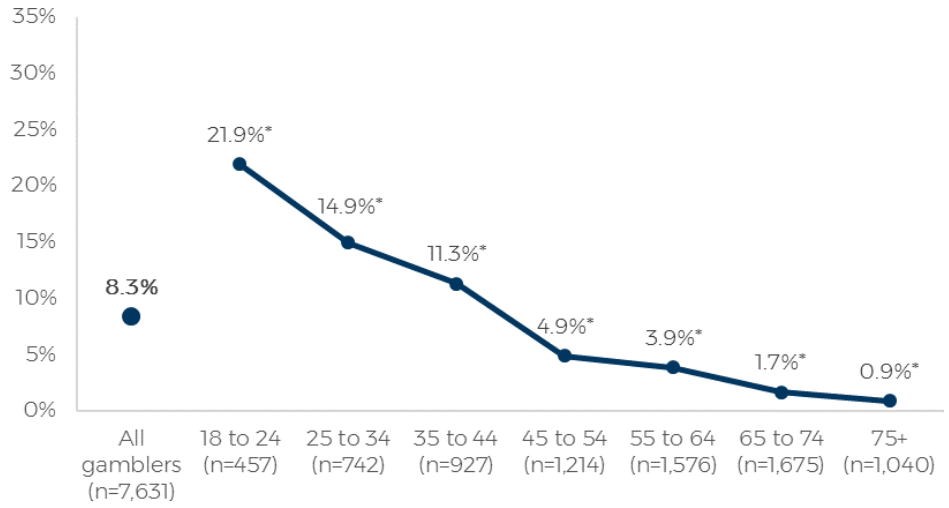
Gamblers aged 75 or older were significantly more likely than gamblers aged 25-34 years to place their bets off-track at a Victorian TAB, or TAB outlet in a pub, club or casino (68.3% compared with 38.6%). In contrast, younger gamblers aged 18-24 were significantly more likely than gamblers aged 75 or older to place their bets online or with a mobile app using an Australian-licensed bookmaker (51.0% compared with 7.9%).

Sports betting

Eight percent (8.3%) of gamblers had bet on sports in the last 12 months. As was the case for pokies, casino table games and race betting, male gamblers were significantly more likely than female gamblers to bet on sports (13.9% compared with 2.9%).

As with casino game playing, the trend for sports betting was highest for 18 to 24 year old gamblers (21.9%), and declined with age (to 0.9% of gamblers aged 75 or over), as shown in Figure 24.

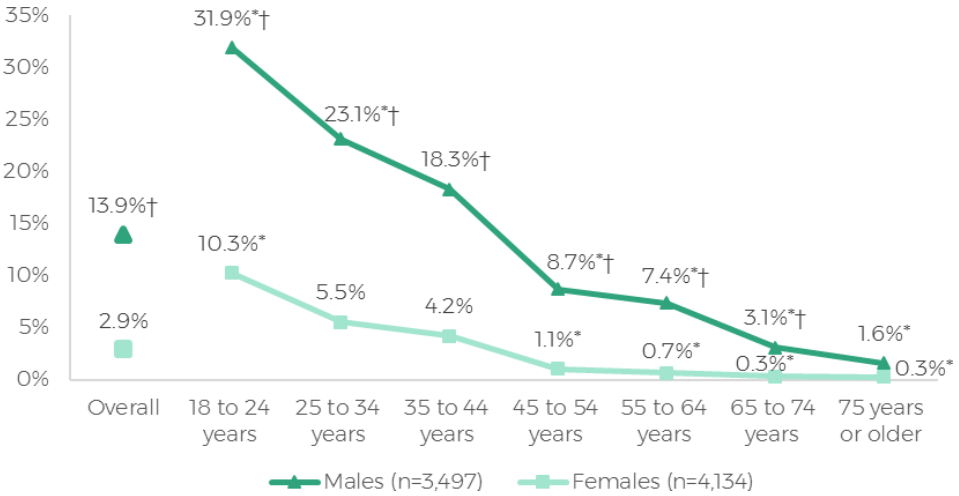
Figure 24: Proportion of gamblers who bet on sports, by age



In the last 12 months, have you spent any money…? * sig. difference from mean of all 7,631 gamblers, p < .05. Base: Respondents who gambled in the last 12 months (n=7,631)

The proportion of male and female gamblers who bet on sports by age is shown in Figure 25. Sports betting for both male and female gamblers declined with age. Nearly one third of males aged 18 to 24 years (31.9%) bet on sports, this declined to 1.6% of males aged 75 years or over. For females aged 18-24 years, 10.3% bet on sports and this declined to 0.3% of females aged 75 years or older.

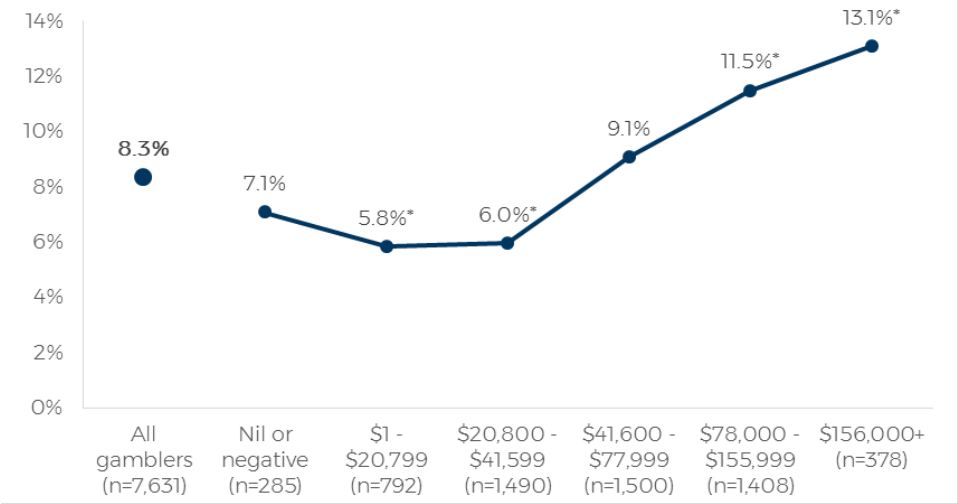
Figure 25: Proportion of male and female gamblers who bet on sports, by age



In the last 12 months, have you spent any money…? Base: Respondents who gambled in the last 12 months (n=7,631). * Indicates a significant difference for the age group, from the overall result for the gender, p < .05; † indicates a significant difference between genders, within the same age group.

As with race betting, sports betting was most common for the wealthiest gamblers (13.1% of gamblers with personal incomes of $156,000 or more). The proportion of gamblers in each income group who bet on sports in the last twelve months is shown in Figure 26.

Figure 26: Proportion of gamblers who bet on sports, by personal income



(In the last 12 months), have you spent any money betting on sports – such as AFL or cricket, but NOT including all sweeps, fantasy sports, and eSports? Base: Respondents who had spent money betting on sports (n=447). * significant difference from the proportion for all gamblers.

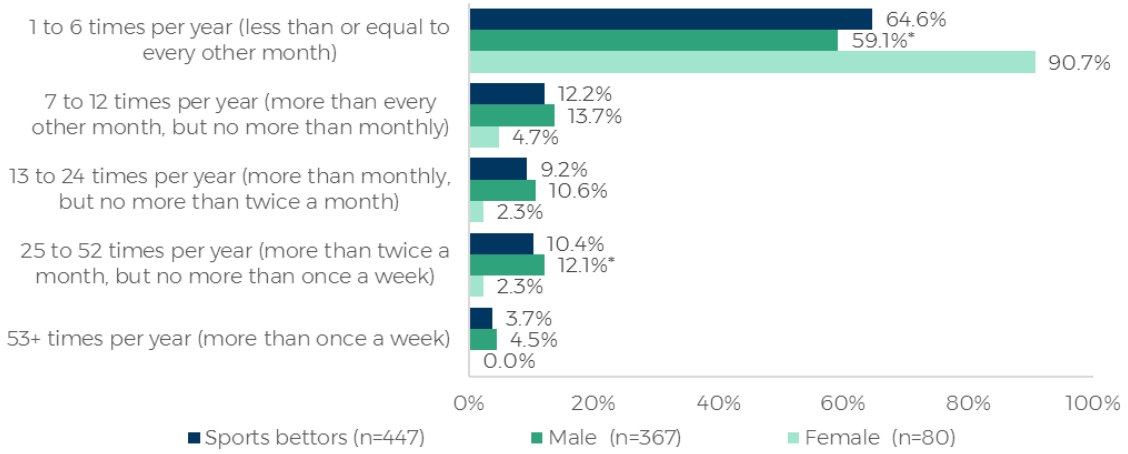
As with casino gambling, gamblers who mainly spoke a language other than English at home were significantly more likely to bet on sports than those who only spoke English at home (10.6% compared with 7.9%). This finding contrasts with gambling on pokies and race betting, in which significantly more English only speakers participate.

Frequency of participation for sports betting

Nearly two-thirds (64.6%) of sports bettors placed bets on sports only once every other month, or even less frequently. Four percent (3.7%) placed bets more often than weekly (which was a similar percentage to that of the people who engage with race betting).

Twelve percent (12.1%) of male sports bettors placed weekly racing bets (compared with 2.3% of female sports bettors), and another 4.5% placed bets more often than weekly (compared with zero females). These results are shown in Figure 27.

Figure 27: How often gamblers bet on sports, overall and by gender



In the past 12 months, how often did you take part? * sig. difference by gender, p < .05. Base: Respondents who had spent money betting on sports (n=447)

Table 23 shows the frequencies of betting on sports across problem gambling (PGSI) categories. Non-problem gamblers were significantly more than likely than the average to bet with low frequency (1 to 6 times per year), whereas gamblers with one or more problems were proportionately more likely to bet with greater frequency.

Table 23: How often gamblers bet on sports, by PGSI

		PGSI			
	All sports gamblers (n=447)	**Non-problem gamblers (n=285)**	**Low risk gamblers (n=107)**	**Moderate risk gambler (n=43)**	**Problem gamblers (n=12)**
1 to 6 times per year (less than or equal to every other month)	**64.4%**	72.8%*	50.3%*	58.0%*	32.7%*
7 to 12 times per year (more than every other month, but no more than monthly)	**12.2%**	11.9%	13.5%	12.7%	5.5%
13 to 24 times per year (more than monthly, but no more than twice a month)	**9.2%**	7.8%	9.3%	11.1%	31.5%
25 to 52 times per year (more than twice a month, but no more than once a week)	**10.4%**	5.7%	21.1%*	9.8%	22.0%
53+ times per year (more than once a week)	**3.7%**	1.9%	5.9%	8.5%	8.3%

Base: 447 sports gamblers. * significant difference from the proportions for all sports gamblers.

The frequency of sports betting by age is shown in Table 24. Sports betters aged 45 to 54 years were more likely to place bets more than once a week (8.9% compared with 3.7% overall). This difference was not statistically significant.

Table 24: How often sport bettors bet on sports, by age

	All sports bettors (n=447)	18 to 24 years (n=102)	25 to 34 years (n=115)	35 to 44 years (n=88)	45 to 54 years (n=54)	55 years or older [9] (n=88)
1 to 6 times per year (less than or equal to every other month)	64.6%	71.2%	64.3%	61.5%	58.0%	65.7%
7 to 12 times per year (more than every other month, but no more than monthly)	12.2%	11.2%	15.4%	12.0%	9.7%	9.0%
13 to 24 times per year (more than monthly, but no more than twice a month)	9.2%	7.4%	11.4%	5.9%	11.1%	11.9%
25 to 52 times per year (more than twice a month, but no more than once a week)	10.4%	8.4%	7.0%	15.1%	12.3%	10.4%
53+ times per year (more than once a week)	3.7%	1.9%	2.0%	5.4%	8.9%	3.0%

In the past 12 months, how often did you take part? Base: Respondents who had spent money betting on sports (n=447).* no significant differences by age were found. Sample sizes are small.

The frequency of sports betting among males by age is shown in Table 25. No clear pattern was observed for male sports bettors by age, however, placing bets more than once a week increased with age from 2.4% of males aged 18 to 24 to 10.0% of males aged 45 to 54 years.

9 The sample of sports bettors aged 65 to 74 years (n=28) and of those aged 75 years or older (n=10) were too small to report separately, so have been reported in the aggregate with sports bettors aged 55 to 64 years (n=50).

Table 25: How often male sport bettors bet on sports, by age [10]

	All male sports bettors (n=367)	Males 18 to 24 years (n=83)	Males 25 to 34 years (n=94)	Males 35 to 44 years (n=72)	Males 45 to 54 years (n=45)	Males 55 years or older [11] (n=73)
1 to 6 times per year (less than or equal to every other month)	59.1%	66.0%	56.4%	56.0%	55.5%	63.1%
7 to 12 times per year (more than every other month, but no more than monthly)	13.7%	13.3%	18.9%	12.7%	8.7%	9.2%
13 to 24 times per year (more than monthly, but no more than twice a month)	10.6%	7.6%	13.9%	7.3%	12.1%	13.8%
25 to 52 times per year (more than twice a month, but no more than once a week)	12.1%	10.7%	8.5%	17.4%	13.8%	10.3%
53+ times per year (more than once a week)	4.5%	2.4%	2.4%	6.7%	10.0%	3.5%

In the past 12 months, how often did you take part? Base: Respondents who had spent money betting on sports (n=447). * no significant differences were found across age in comparisons to all male sports bettors. Sample sizes are small.

Where sports betting took place

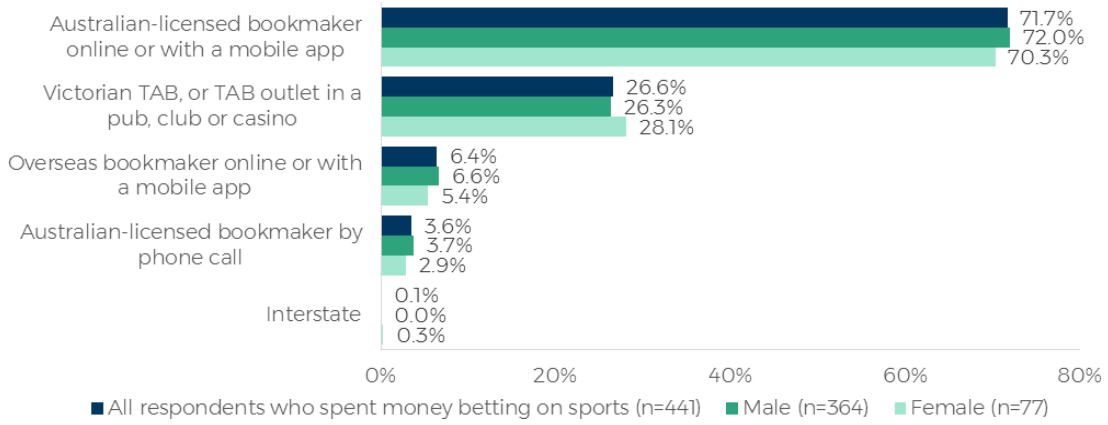
People most often nominated betting on sports online through an Australian-licensed bookmaker or a mobile app (71.7%). Just over one quarter of sports bettors mentioned placing bets at a Victorian TAB, or TAB outlet in a pub, club or casino (26.6%), 6.4% mentioned using an overseas online bookmaker or mobile app, and 3.6% mentioned betting with an Australian-licensed bookmaker over the phone.

Younger sports bettors were significantly more likely to bet online or with a mobile app (83.3% compared with 71.7% overall) and were less likely to use a Victorian TAB or TAB outlet in a pub, club or casino (15.2% compared with 26.6% overall).

10 The sample of female sport bettors (n=80) was too small to report this segment's frequency of sport betting by age.

11 The sample of male sports bettors aged 65 to 74 years (n=23) and of those aged 75 years or older (n=8) were too small to report separately, so have been reported in the aggregate with male sports bettors aged 55 to 64 years (n=42).

Figure 28: Locations of sports betting, overall and by gender



Did you place your bets at...? Base: Respondents who spent money betting on sports in the last 12 months (n=441). * no significant differences were found by gender

Keno

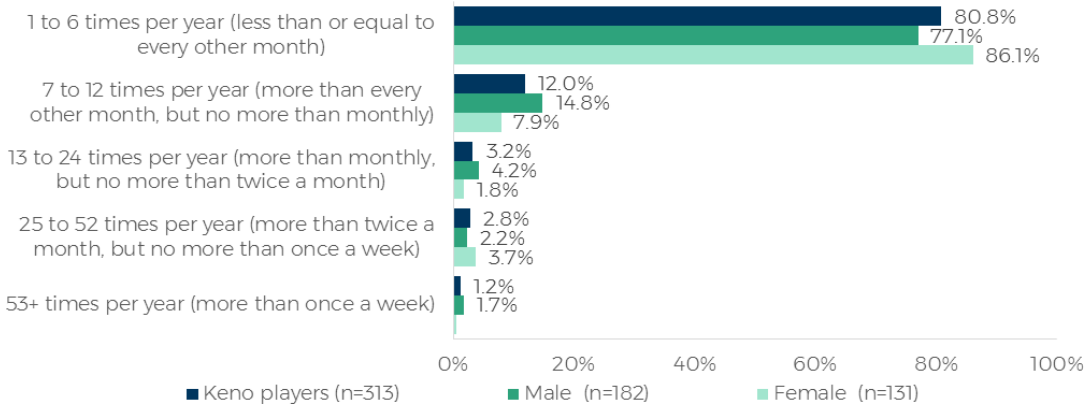
One in twenty (4.7%) gamblers had played Keno. Six percent (5.6%) of male gamblers had participated in Keno, compared with 3.9% of female gamblers.

There were no significant differences in Keno participation by age or income, but gamblers who lived in regional Victoria and those who only spoke only English at home were more likely to play Keno than their counterparts (respectively, 9.1% compared with 3.3% of Melbourne-based gamblers, and 5.1% compared with 3.0% of LOTE-speaking gamblers).

Frequency of participation in Keno

Eighty-one percent (80.8%) of Keno players played once to six times a year. One percent (1.2%) played more than once a week. Although male Keno players tended to play Keno more often than female Keno players, the differences were not significant (see Figure 29).

Figure 29: How often gamblers played Keno, overall and by gender

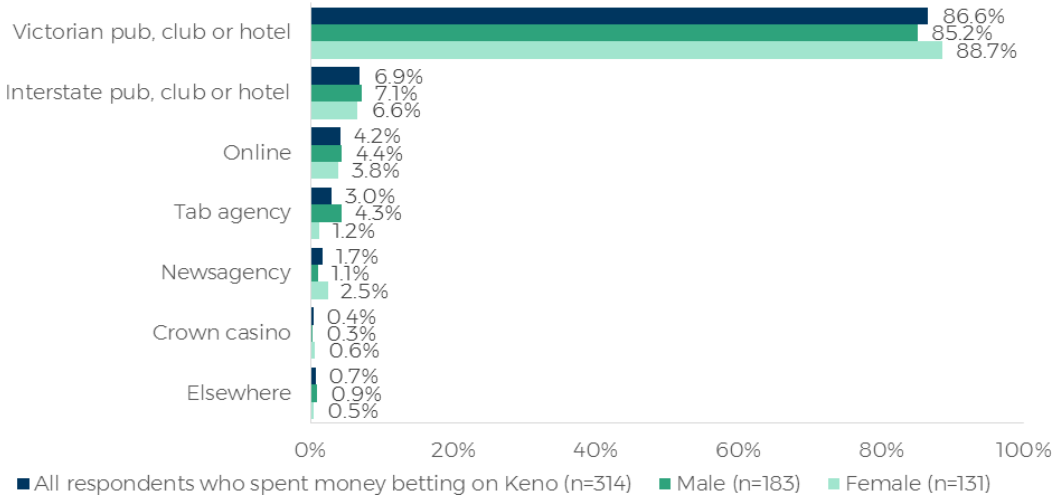


In the past 12 months, how often did you take part? Base: Respondents who had spent money betting on Keno (n=313). * no significant differences were found by gender.

Keno venue

A Victorian pub, club or hotel was the preferred venue for playing Keno (86.6%). The full results are presented in Figure 30. There were no subgroup differences by problem gambling (PGSI) status.

Figure 30: Locations where Keno was played, overall and by gender



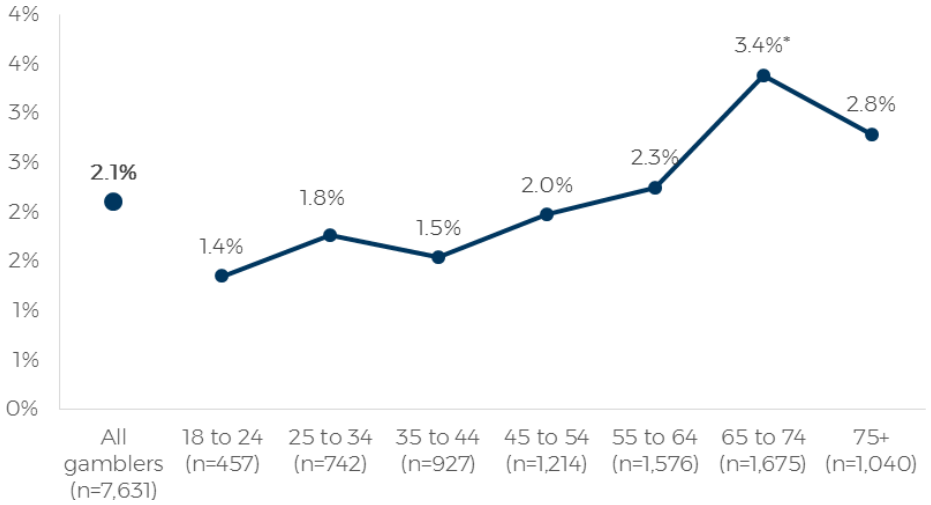
Where did you play keno…? Base: Respondents who spent money betting on Keno in the last 12 months (n=314). * no significant differences were found by gender

Bingo

Two percent (2.1%) of gamblers played bingo. Unlike most other activities, women were more likely than men to play (3.4% compared with 0.8%).

Bingo players most frequently were older gamblers – 3.4% of gamblers aged 65 to 74 played, compared with 1.4% of 18 to 24-year-olds, as shown in Figure 31.

Figure 31: Proportion of gamblers who bet on bingo, by age



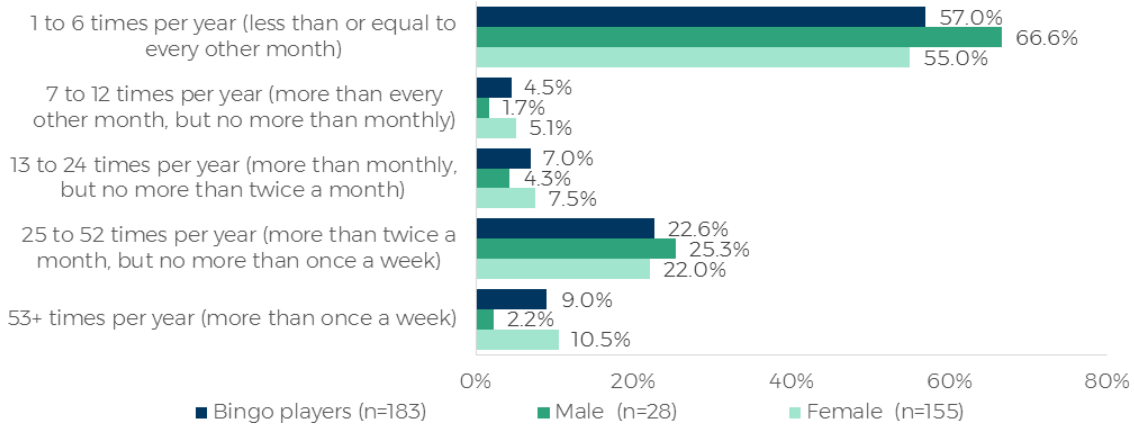
In the last 12 months, have you spent any money…? Base: Respondents who gambled in the last 12 months (n=7,631). * significant difference from the proportion for all gamblers.

Frequency of participation in Bingo

Almost a quarter (22.6%) of bingo players spent money betting on bingo two to four times a month, and 9.0% did so more than weekly. Fifty-seven percent (57.0%) gambled on bingo only every second month, or less frequently.

Women tended to play more often than men, as shown in Figure 32, but the differences were not significant due to the small sample of bingo players.

Figure 32: How often gamblers played bingo, overall and by gender

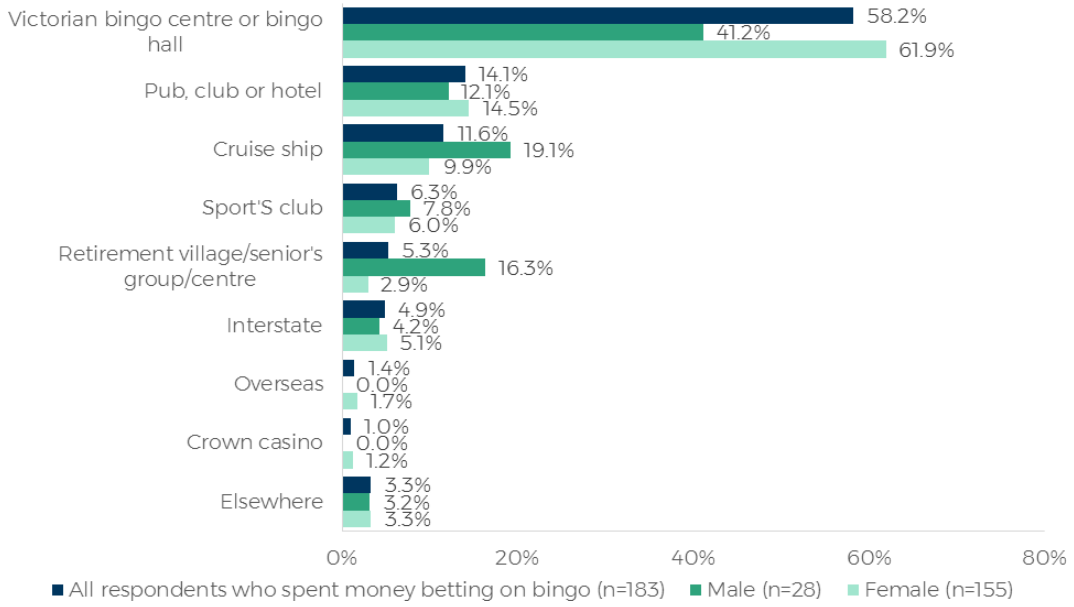


In the past 12 months, how often did you take part? Base: Respondents who had spent money betting on bingo (n=183). * no significant differences were found by gender.

Bingo venue

The most popular place to play bingo was a Victorian bingo centre or bingo hall (58.2%). This was followed by a pub, club or hotel (14.1%) and a cruise ship (11.6%). The full results are shown in Figure 33.

Figure 33: Locations where bingo was played, overall and by gender



Where did you play bingo? Base: Respondents who spent money betting on bingo in the last 12 months (n=183). * no significant differences were found by gender.

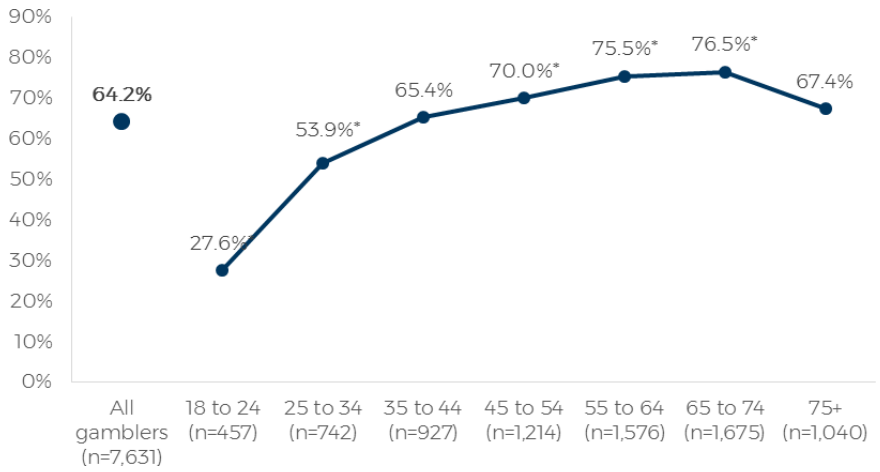
Lotteries, raffles and scratch tickets

Lotteries

Approximately two-thirds (64.2%) of gamblers had spent money on Australian lotteries, such as Tattslotto, Oz Lotto, Powerball or Pools in the last twelve months.

Older gamblers bought more lottery tickets than younger gamblers, with a little over three-quarters (76.5%) of gamblers aged 65 to 74 gamblers buying them, compared with a little over a quarter (27.6%) of 18 to 24-year-olds, as shown in Figure 34.

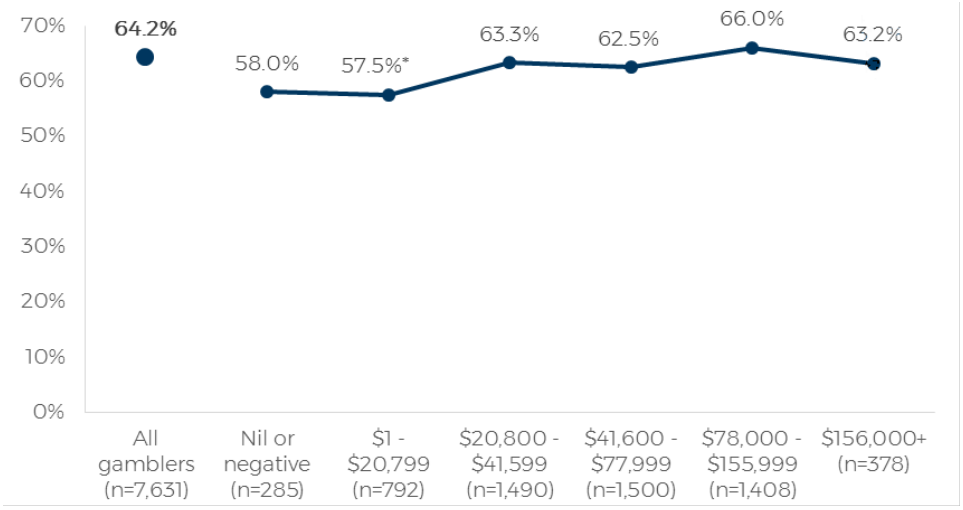
Figure 34: Proportion of gamblers who bought lottery tickets, by age



In the last 12 months, have you spent any money…? Base: Respondents who gambled in the last 12 months (n=7,631). * significant differences from the proportions for all gamblers.

There were no significant differences between the proportions of other sociodemographic subgroups who had spent money on lotteries in the last year. Notably, there was little difference in participation by income, as shown in Figure 35.

Figure 35: Proportion of gamblers who bought lottery tickets, by personal income



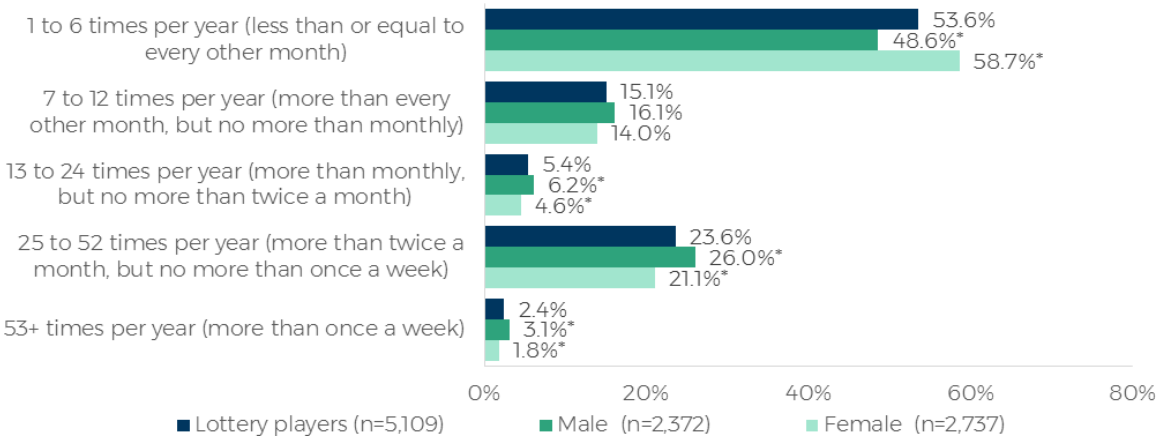
In the last 12 months, have you spent any money…? Base: Respondents who gambled in the last 12 months (n=7,631). * no significant differences from across income were found in comparison to the proportion for all gamblers.

Frequency of participation in Lotteries

A little more than half (53.6%) of lottery ticket buyers had spent money on lotteries one to six times in the last year. Almost a quarter (23.6%) bought tickets two to four times a month. Only two percent (2.4%) bought them more than once a week.

Men bought lottery tickets more often than women. Over a quarter (26.0%) of male lottery players bought tickets two to four times a month, compared with 21.1% of female lottery players, as shown in Figure 36.

Figure 36: How often gamblers spent money on lotteries, overall and by gender



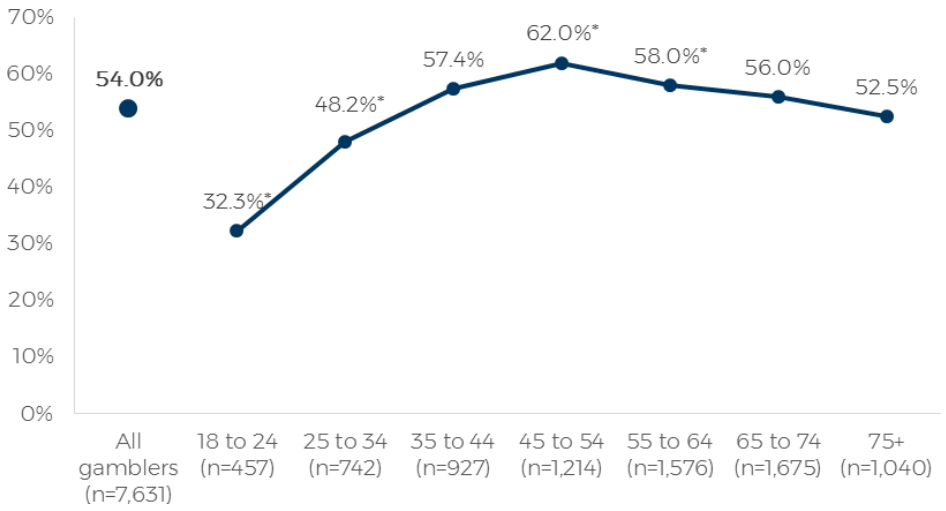
In the past 12 months, how often did you take part? Base: Respondents who had spent money on lotteries (n=5,109). * significant differences by gender.

Raffles, Sweeps or Other Competitions

Fifty-four percent (54.0%) of gamblers had entered raffles sweeps or other competitions (including sweeps on the Melbourne Cup, spring racing carnival or sporting events). Women were more likely than men to enter raffles (58.9% of female gamblers, compared with 49.0% of male gamblers).

Raffle ticket-buying peaked around middle age, with 62.0% of 45 to 54-year-old gamblers entering raffles, compared with 32.3% of 18 to 24-year-olds. It remained a common activity for older gamblers, with participation declining only slightly after middle-age, to 52.5% of gamblers aged over 74, as shown in Figure 37.

Figure 37: Proportion of gamblers who bought raffle tickets, by age



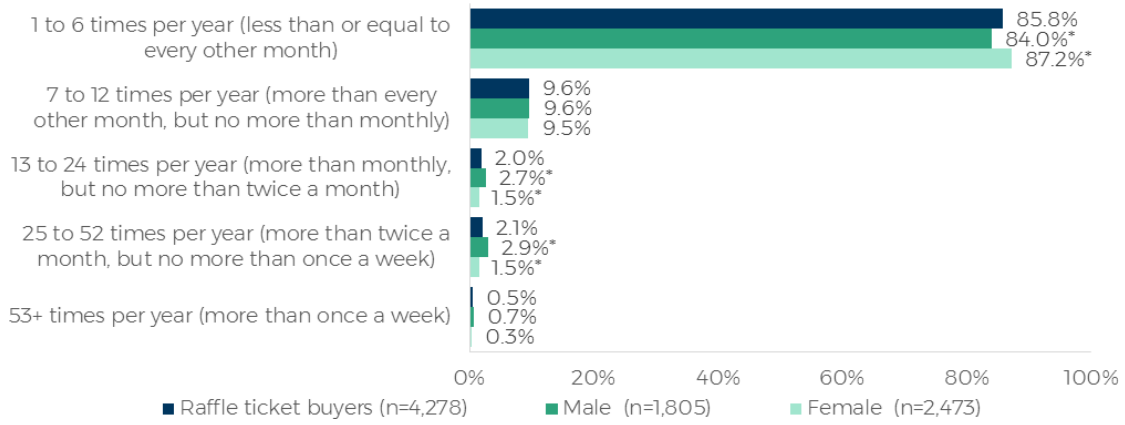
(In the last 12 months, have you spent any money…? Base: Respondents who gambled in the last 12 months (n=7,631) * significant difference from the proportion for all gamblers.

Gamblers from regional Victoria were more likely to enter raffles than those living in Melbourne (60.2% compared with 51.9%), as were gamblers who spoke English at home compared with those who spoke a language other than English (58.3% compared with 32.3%).

Frequency of participation in Raffles, Sweeps or Other Competitions

The vast majority (85.8%) of Victorians who had spent money on raffles, sweeps or other competitions in the last year had done so one to six times. Men who entered raffles, sweeps or other competitions did so more often than women (2.9% had done so two to four times a month compared with 1.5%; See Figure 38).

Figure 38: How often gamblers spent money on raffles, sweeps and other competitions, overall and by gender



In the past 12 months, how often did you take part? Base: Respondents who had spent money on raffles, sweeps and other competitions (n=5,109) * significant differences by gender.

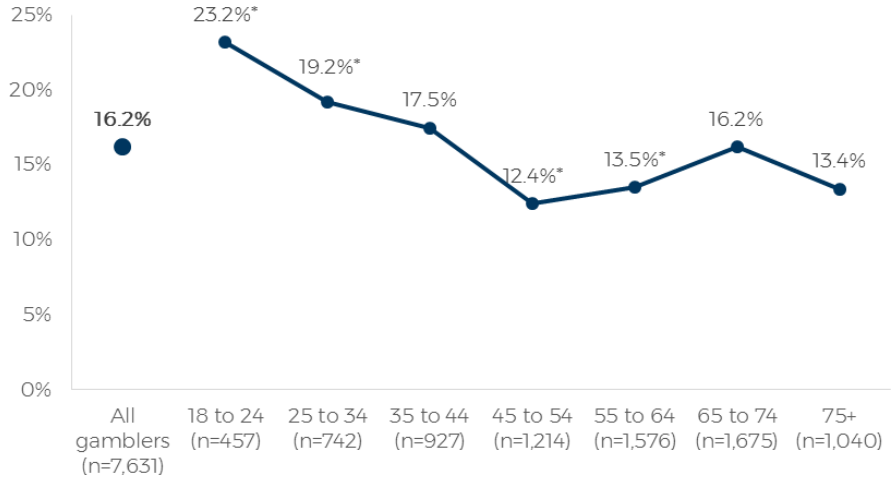
Scratch tickets

Sixteen percent (16.2%) of gamblers had bought scratch tickets in the last twelve months. Women were more inclined to buy scratch tickets than men (19.2% of female gamblers, compared with 13.2% of male gamblers).

Scratch tickets appealed most to young gamblers and were purchased by almost a quarter (23.2%) of gamblers aged 18 to 24 years. Middle-aged gamblers, 45 to 54 years old, were least likely to buy them (12.4%) as shown in Figure 39.

Gamblers who spoke only English at home were more likely to buy scratch tickets than those who spoke other languages (17.0% compared with 12.3%).

Figure 39: Proportion of gamblers who bought scratch tickets, by age

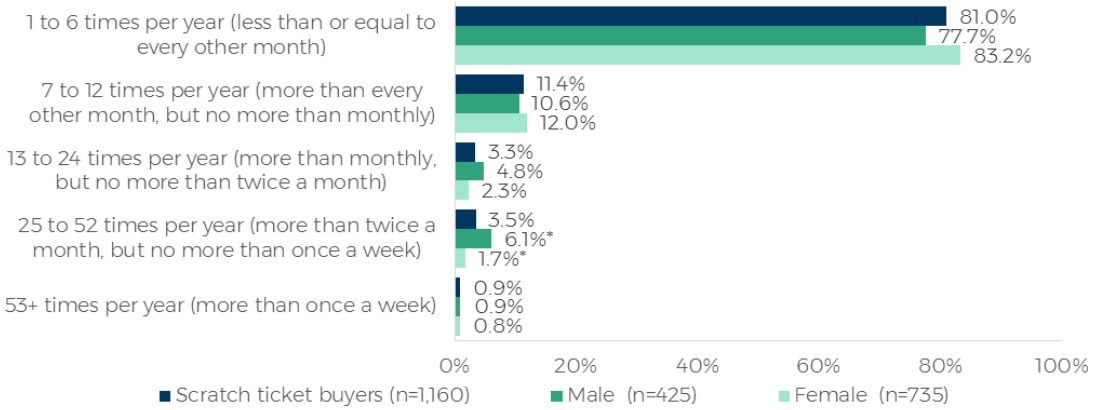


In the last 12 months, have you spent any money…? Base: Respondents who gambled in the last 12 months (n=7,631) * significant differences from the proportion for all gamblers.

Frequency of participation in Scratch Tickets

Ninety-two percent (92.4%) of scratch ticket buyers bought the tickets on a monthly basis or less frequently (81.0% did so every other month or less). As with entering raffles, sweeps and other competitions, men bought scratch tickets more often than women (6.1% of male scratch ticket buyers bought them between twice a month to weekly, compared with 1.7% of female scratch ticket buyers; see Figure 40).

Figure 40: How often gamblers spent money on scratch tickets, overall and by gender



In the past 12 months, how often did you take part? Base: Respondents who had spent money on scratch tickets (n=1,160) * significant difference by gender.

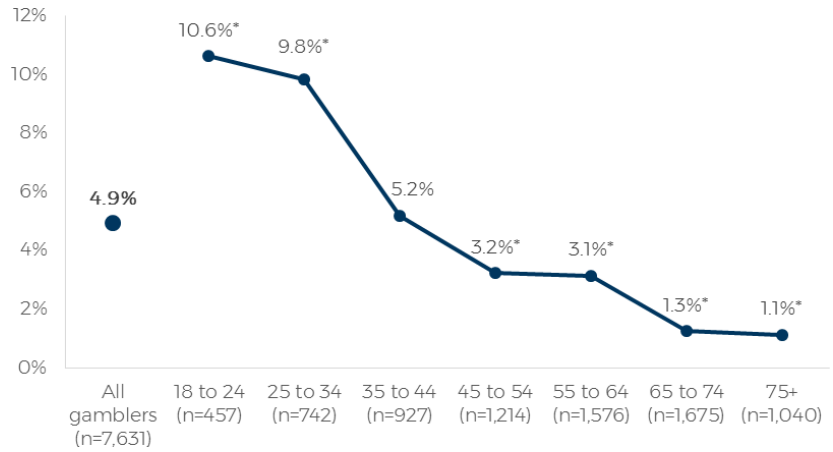
Other gambling activities

Informal betting

Five percent (4.9%) of gamblers had participated in informal private betting sessions, like playing cards for money at home. More male gamblers than female gamblers had done so (7.6% compared with 2.3%).

This was another activity more likely to be undertaken by younger gamblers, with 10.6% of gamblers aged 18 to 24 years participating over the last year, compared with 1.3% of 65 to 74 year old gamblers, and only 1.1% of those aged over 74 (see Figure 41).

Figure 41: Proportion of gamblers who spent money on informal private betting, by age



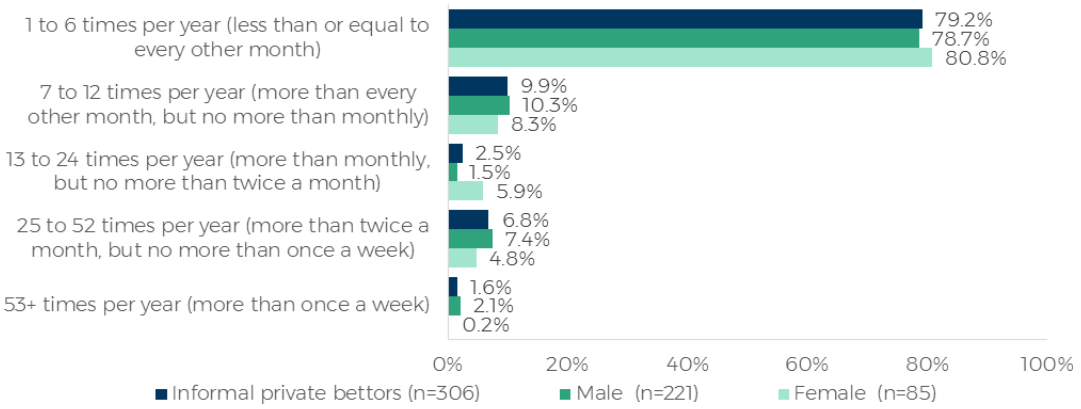
In the last 12 months, have you spent any money…? Base: Respondents who gambled in the last 12 months (n=7,631) * significant differences from the proportion for all gamblers.

Gamblers of Aboriginal or Torres Strait Islander descent were more likely to have spent money on informal private betting (10.6% compared with 4.8% of gamblers not of Aboriginal or Torres Strait Islander descent).

Frequency of participation in Informal Private Betting

As shown in Figure 42, 79.2% of gamblers who gambled money on informal private betting sessions did so less than seven times a year.

Figure 42: How often gamblers participated in informal private betting, overall and by gender



In the past 12 months, how often did you take part? Base: Respondents who had spent money on informal private betting (n=306) * no significant differences were found by gender.

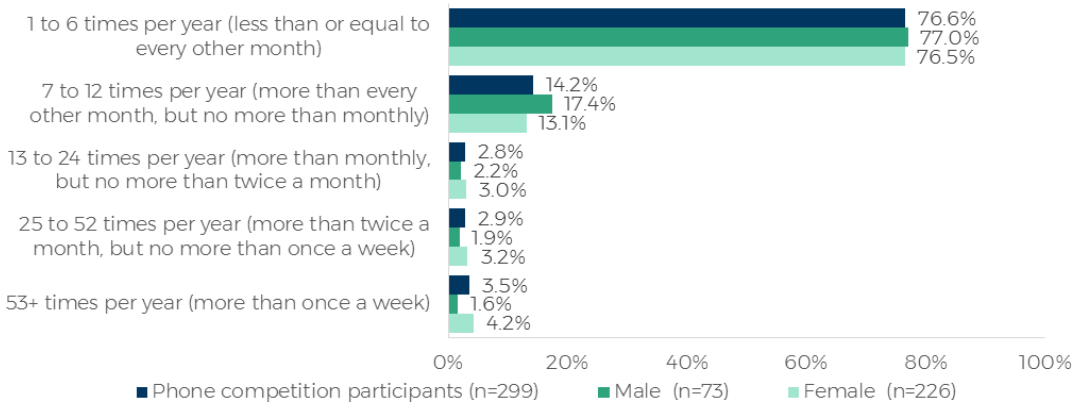
Phone competitions

In the last year, 3.4% of gamblers had entered prize-draw competitions by phone, where there was a phone charge for entry. Women were more likely to enter these competitions than men (5.0% of female gamblers, compared with 1.9% of male gamblers).

Frequency of participation in Phone Competitions

As shown in Figure 43, 76.6% of gamblers who spent money entering prize-draw competitions by phone did so between one and six times in the last year.

Figure 43: How often gamblers spent money entering phone competitions, overall and by gender



In the past 12 months, how often did you take part? Base: Respondents who had spent money on phone competitions (n=299) * no significant differences were found by gender.

eSports

Very few (0.5%, n = 31) gamblers bet on eSports. One percent (1.0%, n = 30) of male gamblers did, compared with only 1 female gambler (0.1%).

Fifty-seven percent (57.3%, n = 20) of gamblers who had bet on eSports in the last year had done so one to six times, while 27.9% (n = 7) had done so seven to twelve times. Only six percent (5.5%, n = 2) of eSports bettors had bet on eSports more than once a week.

Fantasy sports

Only 0.4% (n = 20) of gamblers had bet on fantasy sports in the last twelve months, and all these respondents were male.

More than half (52.1%, n = 13) the gamblers who had bet on fantasy sports had done so infrequently: one to six times in the last twelve months.

Other activities

One percent (1.3%, n = 77) of gamblers had spent money betting on ‘other’ activities not previously listed.

The ‘other’ activities specified by respondents included (among other novelty activities): betting on a non-sporting event, such as who will win an Academy Award, a political event, or a reality TV show; buying home or charity lottery tickets; or shares market speculation.

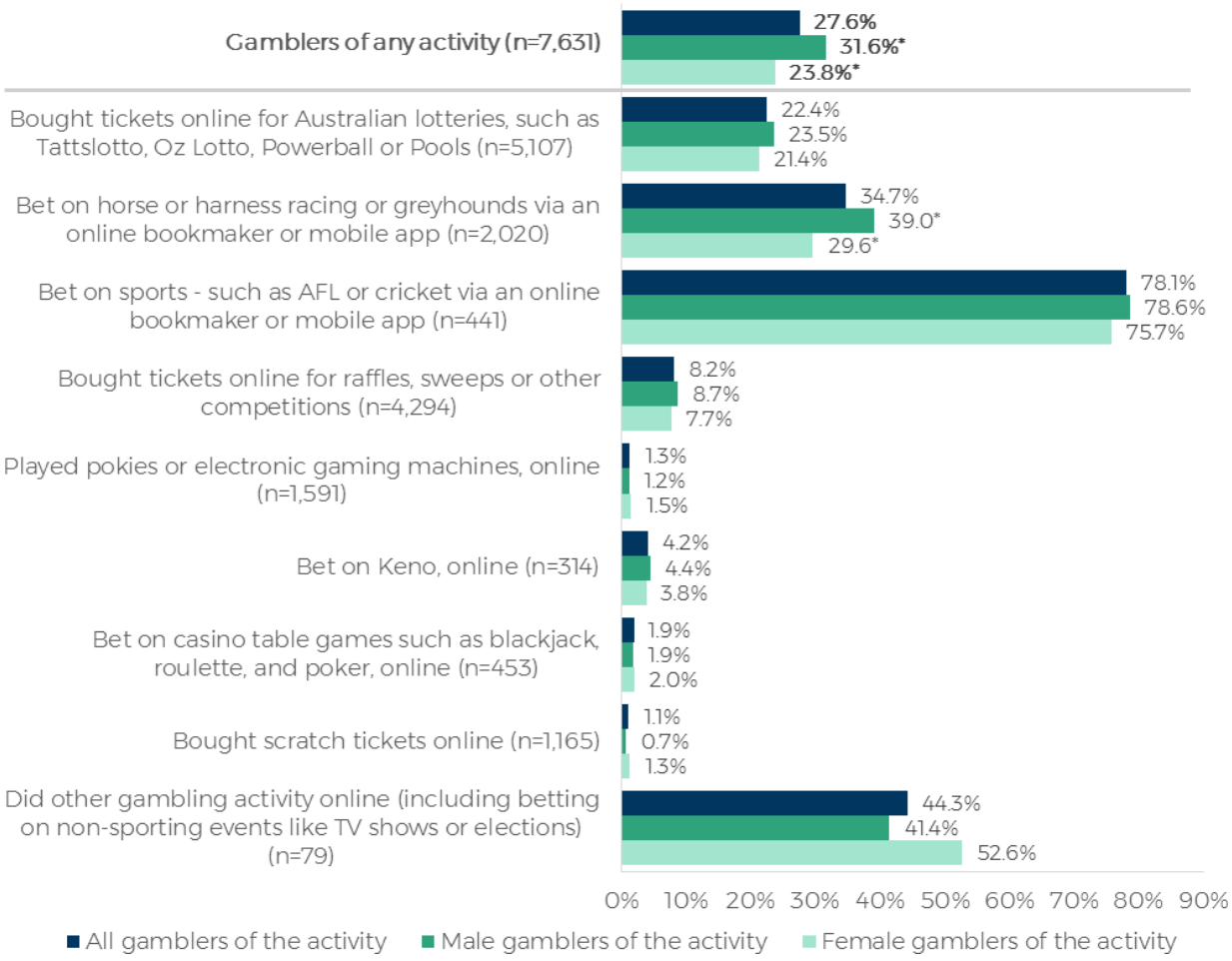
Section 4 - Internet gambling

Figure 44 shows the percentage of gamblers on each activity who used the internet to undertake the gambling activity (activities are listed in order of gambling prevalence).

Sports bettors had the highest level of online gambling activity, with 78.1% of sports bettors using the internet to place bets via online bookmakers or mobile apps. Over a third (34.7%) of race bettors had placed racing bets over the internet via online bookmakers or mobile apps.

Men were significantly more likely than women to use the internet to place racing bets (39.0% of male race bettors compared with 29.6% of female race bettors). They were also more likely to use the internet to bet on sports (78.6% of male sports bettors compared with 75.7% of female sports bettors).

Figure 44: Proportion of gamblers who made some bets online for each gambling activity



[Derived from questions about location of gambling, or online gambling, per gambling activity]. Base: Respondents who had gambled on the specified activity in the last twelve months (n= indicated in figure, per activity). * significant differences by gender.

Internet gambling on non-lottery products

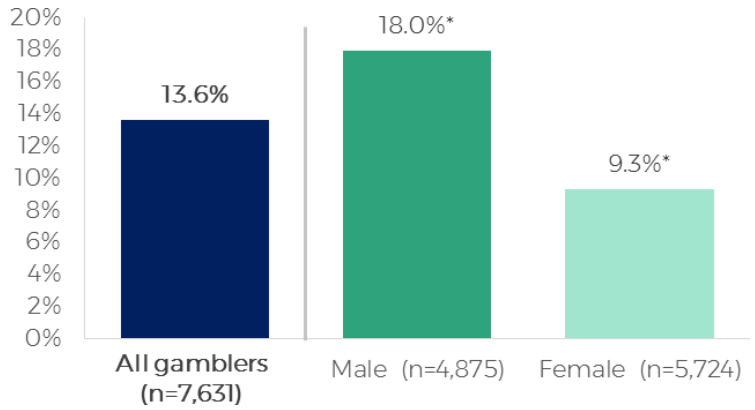
Other gambling prevalence studies have found that buying lottery, scratch or raffle tickets have not typically been strongly associated with problem gambling (Binde, 2011) and this was also found in the Victorian survey. These are some of the most popular gambling activities for Victorians (64.2% purchased lottery tickets and 54.0% entered raffles and sweeps), but have the lowest proportions of MR/PGs, as discussed in Section 2.

The prevalence of internet gambling was analysed, *excluding* respondents who *only* bought lottery, scratch or raffle tickets or played Keno. This enabled an analysis that focused on Victorian gamblers who had used the internet at some time over the last year to gamble on:

- sports
- racing
- online pokies
- eSports
- fantasy sports
- online casino games
- or 'other' (novelty) activities. [12]

Eighteen percent (18.0%) of male gamblers had used the internet for gambling on sports, racing, pokies, eSports, fantasy sports, casino games or 'other' (novelty) activities (compared with 9.3% of female gamblers), as shown in Figure 45.

Figure 45: Gamblers who had used the internet to gamble on sports, racing, pokies, eSports, fantasy sports, casino games or 'other' (novelty) activities, overall and by gender

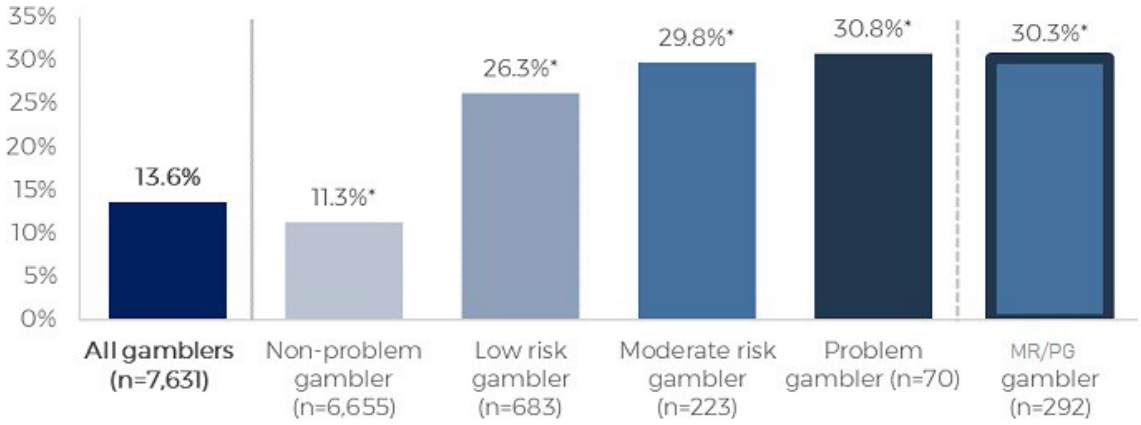


[Derived from location of gambling per gambling activity questions.] Base: Respondents who gambled in the last 12 months (n=7,631). * significant difference by gender.

Problem gamblers were significantly more likely than non-problem gamblers to use the internet for gambling on sports, racing, pokies, eSports, fantasy sports, casino games or 'other' (novelty) activities (30.3% and 11.3%, respectively), as shown in Figure 46.

12 These gamblers may have *also* bought lottery, scratch or raffle tickets or played Keno (on or off line) but were singled out as having used the internet to gamble on one or more of the activities specified in the bullet points.

Figure 46: Gamblers who had used the internet to gamble on sports, racing, pokies, eSports, fantasy sports, casino games or 'other' (novelty) activities, overall and by PGSI

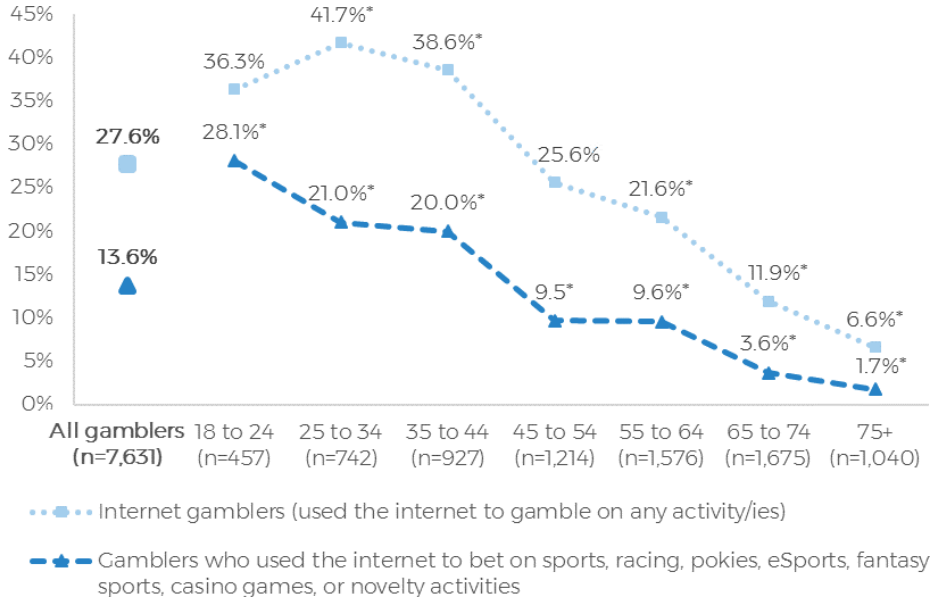


[Derived from location of gambling per gambling activity questions.] Base: Respondents who gambled in the last 12 months (n=7,631). * significant difference from the proportion for all gamblers.

Almost three in ten (28.1%) gamblers aged 18 to 24 had used the internet to gamble on sports, racing, pokies, eSports, fantasy sports, casino games or 'other' (novelty) activities, as shown in Figure 47. The proportion declined with age, to 1.7% of gamblers aged 75 years or over.

Although 41.7% of gamblers aged 25 to 34 years had used the internet for gambling on any activity, the peak in online gambling at this age was largely associated with buying lottery, scratch or raffle tickets or playing Keno. A lower proportion (21.0%) of 25 to 34-year-old gamblers had used the internet to gamble on sports, racing, pokies, eSports, fantasy sports, casino games or 'other' (novelty) activities.

Figure 47: Internet gamblers, and gamblers who had used the internet to gamble on sports, racing, pokies, eSports, fantasy sports, casino games or 'other' (novelty) activities, by age

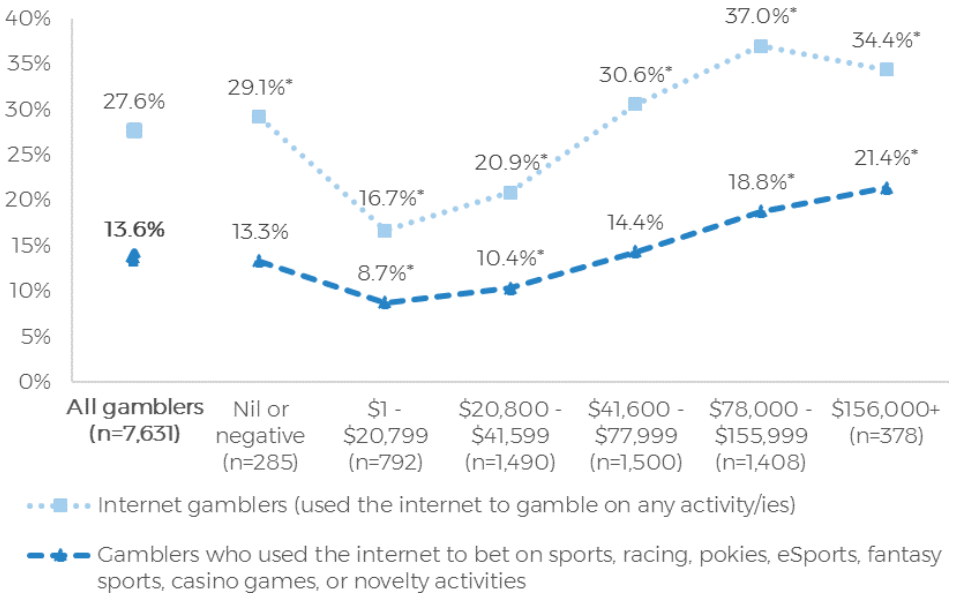


[Derived from location of gambling per gambling activity questions.] Base: Respondents who gambled in the last 12 months (n=7,631). * significant differences from the proportions for all gamblers

The wealthiest gamblers were most likely to use the internet to gamble on sports, racing, pokies, eSports, fantasy sports, casino games or 'other' (novelty) activities. As shown in Figure 48, 21.4% of gamblers with incomes of $156,000 or more used the internet to gamble on those activities (compared with 8.7% of gamblers on $1 to $20,799 a year).

Thirteen percent (13.3%) of gamblers with nil or negative incomes used the internet to gamble on sports, racing, pokies, eSports, fantasy sports, casino games or 'other' (novelty) activities. Nearly a third (29.1%) of nil or negative income gamblers used the internet to gamble, with much of their online gambling related to buying lottery, scratch or raffle tickets or playing Keno. This contributed to them having a higher than the overall rate of general online gambling (29.1% compared with 27.6% overall).

Figure 48: Internet gamblers, and gamblers who had used the internet to gamble on sports, racing, pokies, eSports, fantasy sports, casino games or 'other' (novelty) activities, by personal income



[Derived from location of gambling per gambling activity questions.] Base: Respondents who gambled in the last 12 months (n=7,631). * significant differences from the proportions for all gamblers.

Gamblers who mainly spoke English at home were significantly more likely than gamblers who spoke another language to use the internet to gamble on sports, racing, pokies, eSports, fantasy sports, casino games or 'other' (novelty) activities (13.8% compared with 12.7%).

Respondents were asked a series of questions about the types of gambling activities they had participated in over the last twelve months, and where their gambling took place. *Internet gamblers* were classified as gamblers who had spent money doing *one or more* of the following online gambling activities:

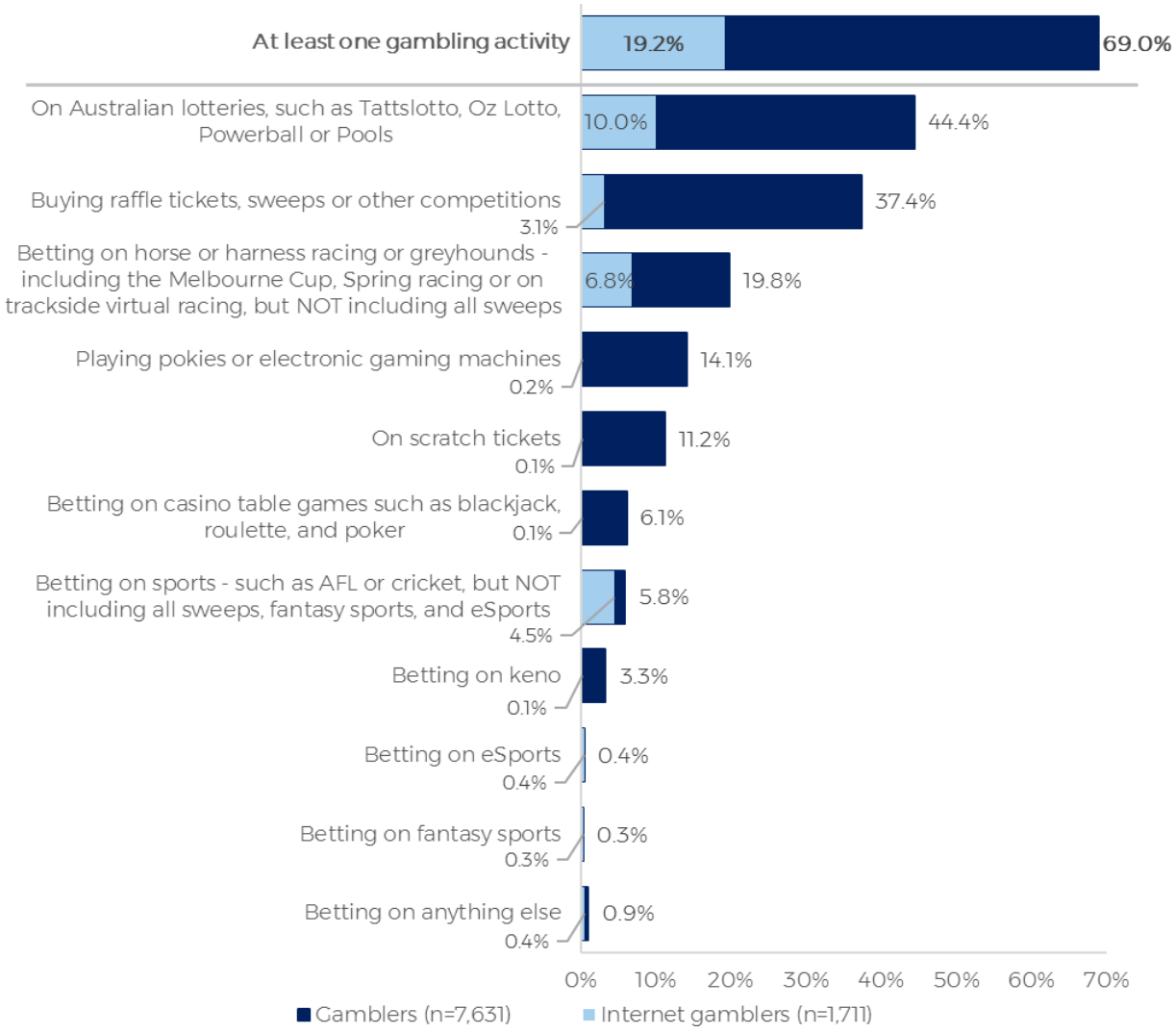
- betting on horse or harness racing or greyhounds, by placing bets through an Australian- licensed or overseas bookmaker online or with a mobile app
- betting on sports, by placing bets through an Australian-licensed or overseas bookmaker online or with a mobile app
- buying tickets online for Australian lotteries, such as Tattslotto, Oz Lotto, Powerball or Pools
- buying scratch tickets online
- playing Keno online
- playing pokies online
- betting on casino table games such as blackjack, roulette, and poker, online
- buying raffle tickets, or entering sweeps or other competitions (including sweeps on the Melbourne Cup, spring racing carnival or sporting events), online
- betting on eSports [13]
- betting on fantasy sports [13]

13 All eSports and fantasy sports bettors were assumed to have gambled on these activities online.

- betting on anything else, online.

The proportion of Victorian adults who participated in each of these gambling activities, and the proportion who used the internet to do so, are shown in Figure 49.

Figure 49: Proportion of Victorian adults participating in gambling activities, overall and through the internet



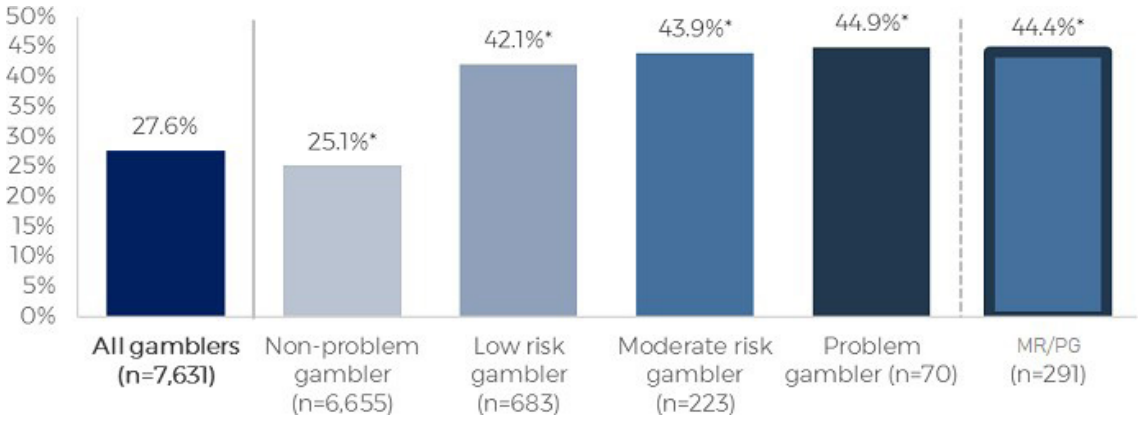
In the last 12 months, have you spent any money…? [Internet gambling derived from location of gambling per gambling activity questions.]
Base: All respondents (n=10,638). * no significant testing was undertaken for this figure.

A little under one in five (19.2%) of the Victorian adult population had gambled online over the last year. These online gamblers comprised 27.6% of all Victorian gamblers.

More men than women had used the internet to gamble (31.6% of male gamblers, compared with 23.8% of female gamblers).

MR/PGs were significantly more likely than non-problem gamblers to have gambled over the internet, as shown in Figure 50. Over four in ten problem gamblers (44.9%), moderate risk gamblers (43.9%), and low risk gamblers (42.1%) gambled online, compared with a quarter (25.1%) of non-problem gamblers.

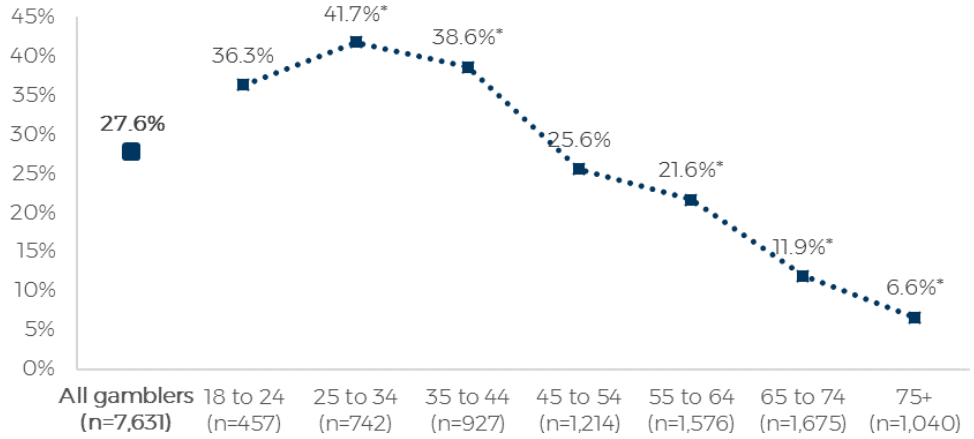
Figure 50: Gamblers who had used the internet to gamble, overall and by PGSI



[Derived from location of gambling per gambling activity questions.] Base: Respondents who gambled in the last 12 months (n=7,631). * significant differences from the proportion for all gamblers.

The propensity to use the internet to gamble was highest among 25 to 34 year-olds; declining with age, as shown in Figure 51. Four in ten (41.7%) gamblers aged 25 to 34 years had gambled online, compared with only around one in ten (11.9%) gamblers aged 65 to 74.

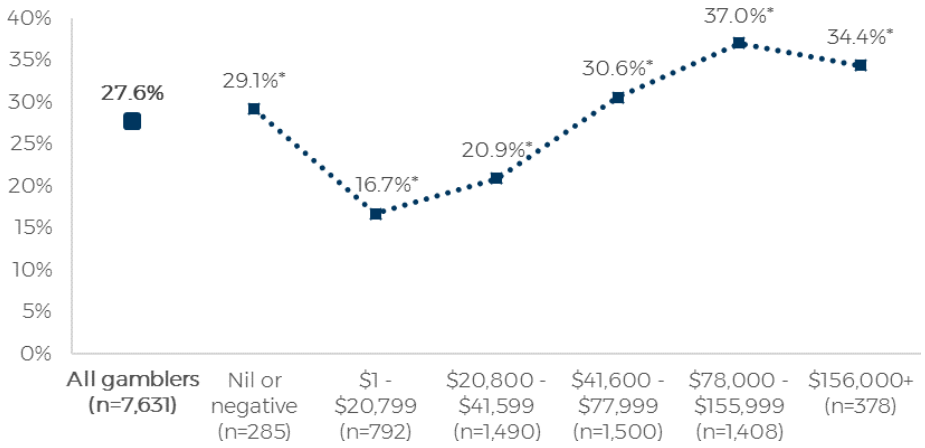
Figure 51: Gamblers who had used the internet to gamble, by age



[Derived from location of gambling per gambling activity questions.] Base: Respondents who gambled in the last 12 months (n=7,631). * significant differences from the proportion for all gamblers.

Use of the internet to gamble generally increased with personal income, as shown in Figure 52. Thirty- seven percent (37.0%) of gamblers with an annual income of $78,000 to $155,999 had gambled online, which was more than double the proportion of gamblers with incomes of $1 to $20,799 (16.7%). However, a relatively high proportion of gamblers with nil or negative incomes (e.g., net losses from a sole proprietorship) also used the internet to gamble (29.1% compared with 27.6% overall).

Figure 52: Gamblers who had used the internet to gamble, by personal income



[Derived from location of gambling per gambling activity questions.] Base: Respondents who gambled in the last 12 months (n=7,631). * significant differences from the proportion for all gamblers.

Table 26 shows the percentage of gamblers who used the internet, by sociodemographic characteristics. Gamblers who mainly spoke a language other than English were significantly more likely to have conducted some of their gambling over the internet than those who mainly spoke English at home (32.0% compared with 26.8%).

Non-Indigenous people (27.7%) were more likely to gamble over the internet than people of Aboriginal or Torres Strait Islander descent (20.9%); however, this finding was not statistically significant. There was also no statistically significant difference between the percentage of gamblers who had used the internet to gamble that were living in Melbourne (28.6%) and in the rest of Victoria (24.9%).

Table 26: Gamblers who had used the internet to gamble, by sociodemographic characteristics

Sociodemographic	Percentage of gamblers
All Victorian gamblers	27.6%
Gender	
Male (n=3,497)	31.6%*
Female (n=4,134)	23.8%*
Part of state	
Melbourne (n=5,628)	28.6%
Rest of Vic (n=2,003)	24.9%
Speaks language other than English (LOTE) at home	
English only (n=6,581)	26.8%*
LOTE speaker (n=1,043)	32.0%*
Aboriginal and / or Torres Strait Islander origin	
Yes (n=73)	20.9%
No (n=7,539)	27.7%

[Derived from location of gambling per gambling activity questions.] Base: Respondents who gambled in the last 12 months (n=7,631). * significant differences from the proportion for all gamblers.

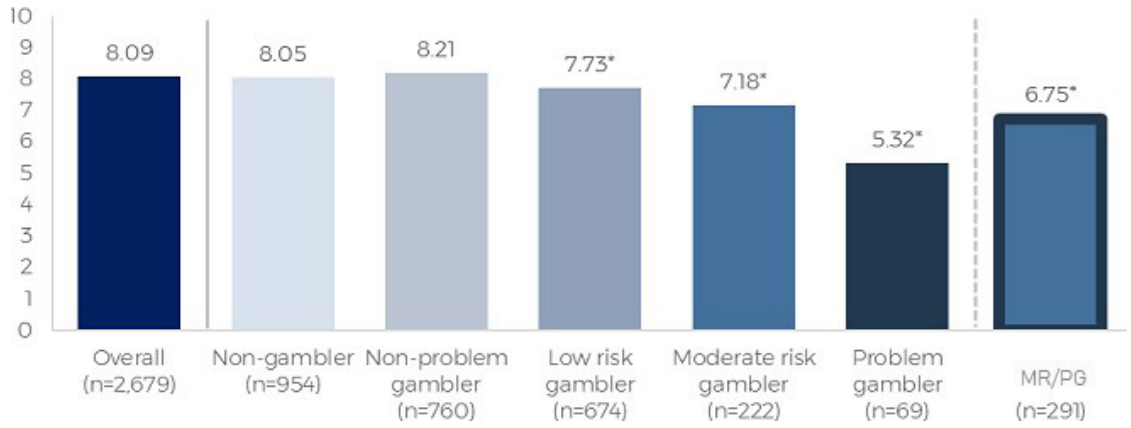
Section 5 - Gambling and health

Australian Unity Wellbeing Index

The Australian Unity Wellbeing Index was used to measure overall well-being. "The Australian Unity Wellbeing Index has been designed as a new barometer of Australians' satisfaction with their lives, and life in Australia" (Cummins, Eckersley, Pallant, van Vugt, & Misajon, 2003). Sub-sampled respondents were asked to rate their satisfaction with their lives, and aspects of it, on a scale of one to ten.

The average score given for *life as a whole* was 8.09 out of ten, as shown in Figure 53, which is higher than the 2003 average of 7.55 (Cummins et al. 2003). MR/PGs were significantly less satisfied with their lives (6.75), and this was particularly marked for problem gamblers (5.32).

Figure 53: Australian Unity Wellbeing Index average scores (out of ten) for satisfaction with life as a whole, overall and by PGSI



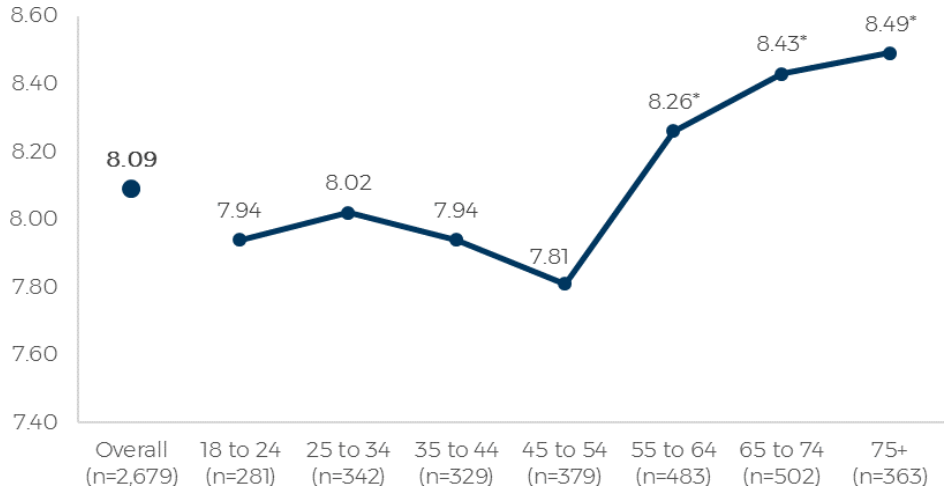
Thinking about your own life and personal circumstances, how satisfied are you with your life as a whole? Base: Sub-sampled (n=2,679). * significant differences from the overall mean.

The average score for males and females was 7.95 and 8.22 respectively. This finding was not statistically significant.

For LOTE speakers, the average score was 8.13 and for those who spoke English only, the average score was 8.07. The average score for non-Indigenous people and people of Aboriginal or Torres Strait Islander descent was 8.09 and 7.72, respectively.

Satisfaction generally increased with age as shown in Figure 54. Satisfaction was lowest among Victorian adults aged 45 to 54 years (7.81) and increased from aged 55 years (8.26 for aged 55 to 64 years, 8.43 for aged 65 to 74 years, and 8.49 for 75 years or over).

Figure 54: Australian Unity Wellbeing Index average scores (out of ten) for satisfaction with life as a whole, overall and by age



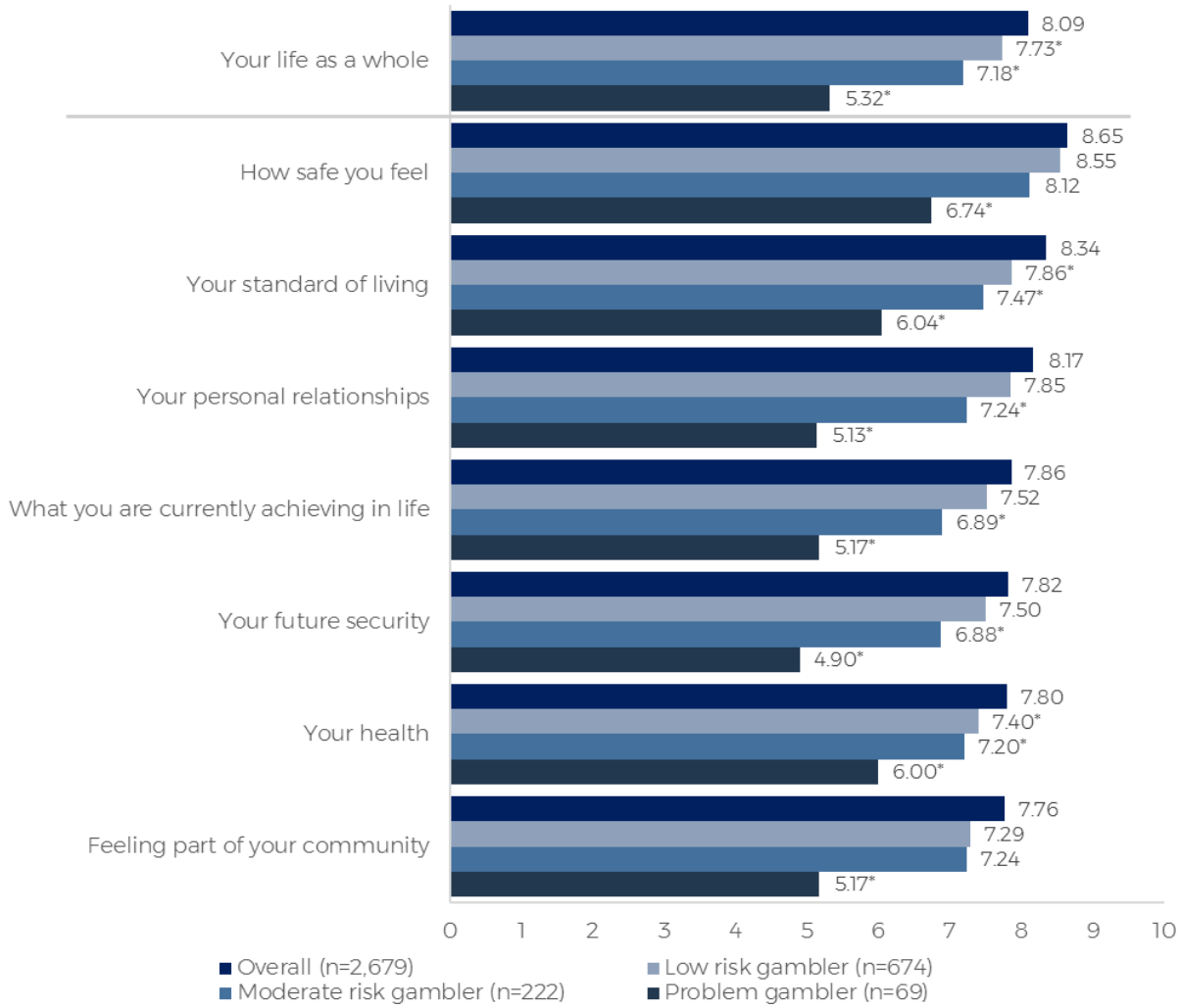
Thinking about your own life and personal circumstances, how satisfied are you with…? Base: Sub-sampled (n=2,679). * significant differences from the overall mean.

Victorian adults were most satisfied with how they felt about their safety (8.65 average score - out of ten), and least satisfied with feeling part of their community (7.76 average score), as shown in Figure 55.

Problem gamblers' satisfaction levels were significantly lower in every area measured. Like other Victorians, they were most satisfied with how safe they felt, although they gave this a satisfaction score of 6.74 (compared with 8.65 from Victorians overall).

Problem gamblers were most concerned about their future security, giving it a satisfaction score of 4.90, on average (compared with 7.82 overall). They also indicated low satisfaction with their personal relationships, at 5.13, compared to the average score of 8.17.

Figure 55: Satisfaction with Australian Unity Wellbeing Index items, average scores (out of ten), overall and for low risk, moderate risk and problem gamblers



Thinking about your own life and personal circumstances, how satisfied are you with…? Base: Sub-sampled (n=2,679). * significantly different form the overall mean.

Kessler Psychological Distress Scale (K6)

Sub-sampled respondents were asked the Kessler Psychological Distress Scale (K6) to assess their mental health and well-being in the past 30 days. The K6 involves six questions about a person's psychological state and the results are listed in Table 27.

Table 27: Kessler Psychological Distress Scale (K6)

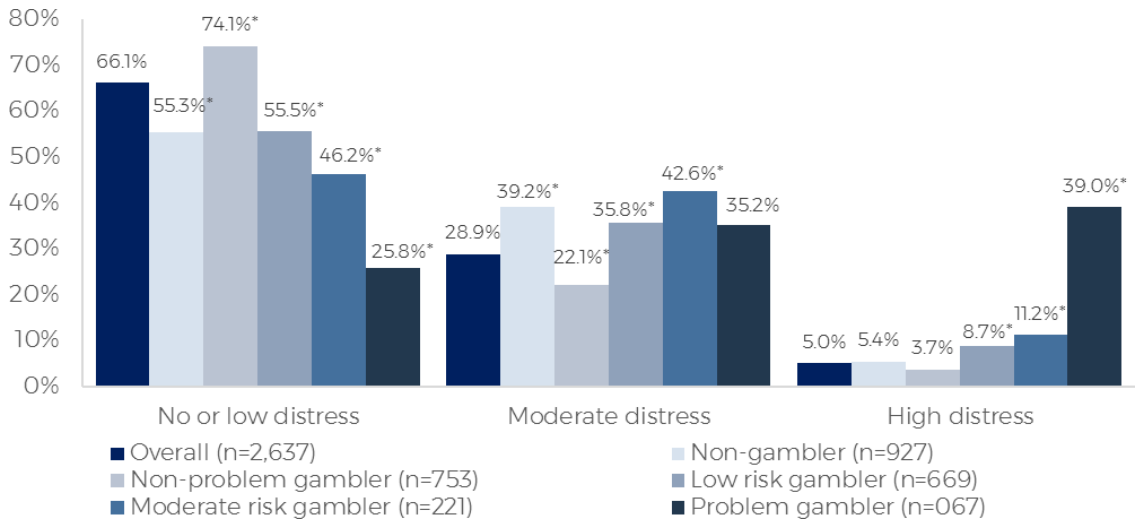
Statement	None of the time	A little of the time	Some of the time	Most of the time	All of the time
Feel that everything was an effort (n=2,677)	47.2%	26.1%	19.5%	5.3%	1.9%
Feel restless or fidgety (n=2,678)	48.3%	24.5%	20.6%	4.8%	1.8%
Feel nervous (n=2,685)	36.7%	33.2%	24.1%	4.9%	1.2%
Feel hopeless (n=2,689)	69.8%	17.8%	9.4%	2.4%	0.6%
Feel worthless (n=2,689)	78.0%	11.7%	8.4%	1.4%	0.5%
Feel so depressed that nothing could cheer you up (n=2,692)	75.1%	12.9%	9.8%	1.9%	0.3%

About how often during the past 30 days did you [insert statement] - would you say all of the time, most of the time, some of the time, a little of the time, or none of the time? Base: Sub-sample (n=2,692). * no significance testing was undertaken.

A score was calculated for each respondent from their answers to the six K6 items. This score was then used to categorise respondents into *no*/*low* to *high* distress levels. According to ABS progressive scoring criteria (ABS 2012), scores less than 12.5% of the maximum are low distress, less than 27.5% are moderate, less than 47.5% are high, whereas 47.5% and greater are classified as high distress. As shown in, two-thirds of Victorian adults displayed no or low distress based on the K6 items (66.1%), while 28.9% indicated moderate distress levels, and 5.0% presented high distress levels.

Two in five (39.0%) problem gamblers were categorised as being in a state of high distress (compared to 5.0% of Victorians). Another 35.2% were in moderate distress (compared with 28.9% overall). Conversely, a quarter (25.8%) of problem gamblers were categorised as having no or low distress (compared to 66.1% of Victorians).

Figure 56: K6 level of psychological distress, overall and by PGSI



Base: Sub-sample (n=2,637). * significantly different from the overall mean.

Substance use

Alcohol consumption while gambling

Over two-thirds of respondents who had gambled in the last year had never drunk alcohol while gambling (68.2%). Seven percent reported that they always drank alcohol while gambling (7.1%; see 28). The frequency of drinking while gambling was associated with problem gambling status. More than one in five (22.8%) problem gamblers *always* drank while gambling, compared with 6.0% of non-problem gamblers. Conversely, 71.7% of non-problem gamblers *never* drank while gambling, compared with 37.7% of problem gamblers.

Almost a third of moderate risk and problem gamblers drank often or always while gambling (29.2% and 31.0% respectively, compared with 9.6% of non-problem gamblers).

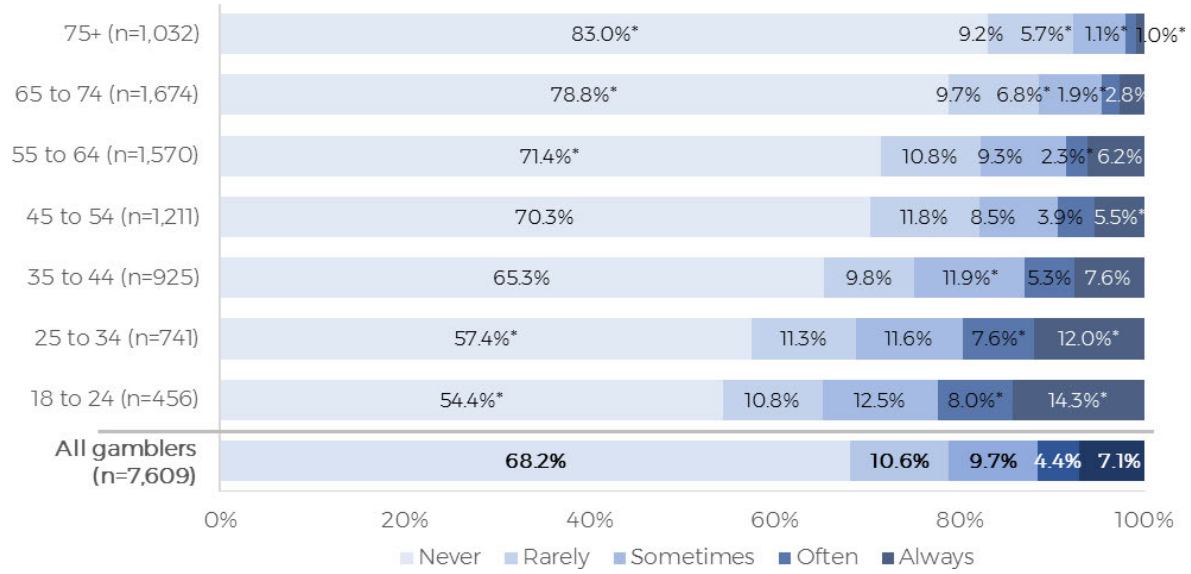
Table 28: Frequency of alcohol consumptions whilst gambling, overall and by PGSI

		PGSI			
	Respondents who gambled in the last 12 months (n=7,609)	**Non-problem gamblers (n=6,635)**	**Low risk gamblers (n=682)**	**Moderate risk gambler (n=222)**	**Problem gamblers (n=70)**
Never	**68.2%**	71.7%*	49.8%*	41.3%*	37.7%*
Rarely	**10.6%**	9.9%*	14.5%*	14.7%	20.8%*
Sometimes	**9.7%**	8.9%*	15.2%*	14.7%*	10.6%
Often	**4.4%**	3.5%*	8.7%*	13.1%*	8.2%
Always	**7.1%**	6.0%*	11.8%*	16.1%*	22.8%*
Often/ always	**11.5%**	**9.6%***	**20.5%***	**29.2%***	**31.0%***

During the past 12 months, how often did you drink alcohol while gambling? Base: Respondents who gambled in the last 12 months (n=7,609).
* significant differences from the proportions for all gamblers.

Young gamblers, aged 18 to 34, drank more often while gambling than older respondents, as shown in Figure 57. Around one in five 18 to 24 year-old gamblers (22.4%) and 25 to 34 year old gamblers (19.6%) drank *often* or *always*, compared with 4.7% of gamblers aged 65 to 74 and 2.0% of gamblers aged 75 or older.

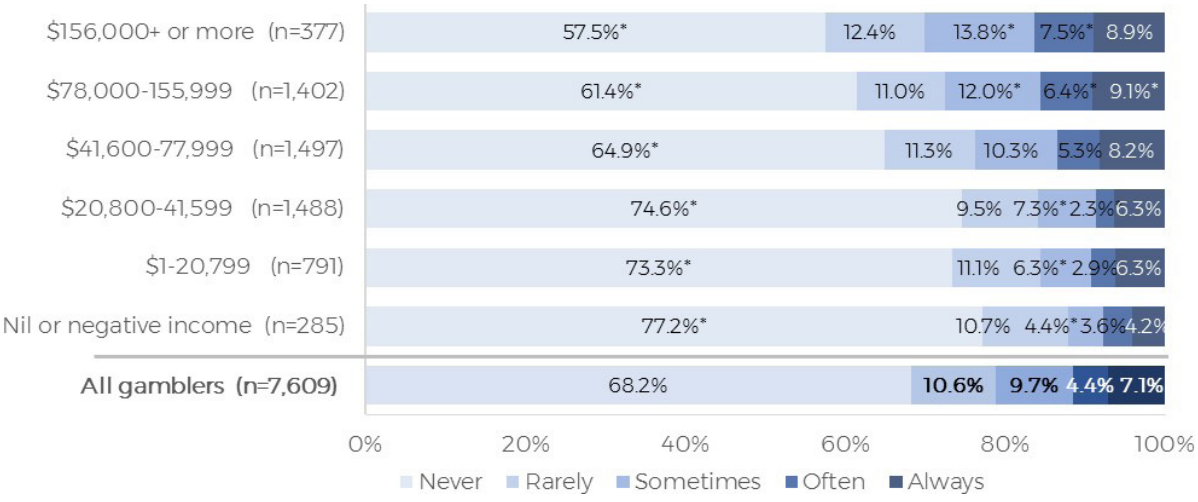
Figure 57: Frequency of alcohol consumptions whilst gambling, by age group



During the past 12 months, how often did you drink alcohol while gambling? Base: Respondents who gambled in the last 12 months (n=7,609).
* significant differences from the proportions for all gamblers.

Wealthier gamblers were more likely than poorer ones to drink while gambling, as shown in Figure 58. Sixteen percent of gamblers with annual incomes of at least $78,000 *often* or *always* drank while gambling (15.5% of those with incomes $78,000-$155,999, and 16.4% of those with incomes of $156,000 or more). In comparison, 9.2% of gamblers with incomes of $1-$41,599, and 7.8% of gamblers with nil or negative incomes, drank *often* or *always*.

Figure 58: Frequency of alcohol consumptions whilst gambling, by annual personal income



During the past 12 months, how often did you drink alcohol while gambling? Base: Respondents who gambled in the last 12 months (n=7,609).
* significant differences from the proportions for all gamblers.

General alcohol consumption

The Alcohol Use Disorders Identification Test (AUDIT-C) [14] is a brief screening test to help identify risky drinking and alcohol abuse and dependence (alcohol misuse) (Frank et al., 2008). Sub-sampled respondents [15] (including gamblers and non-gamblers) were asked how often they had drunk alcohol over the last year.

Fewer than one in five abstained from alcohol (18.3%), 15% drank four or more times a week, while equal proportions drank monthly or less (22.1%), two to four times a month (22.6%), or two to three times a week (22.0%), as shown in Table 29.

Men tended to drink more often than women, with significantly more men drinking two to three times a week (25.0% compared with 19.2%), or four or more times a week (19.8% compared with 10.3%).

Women were more likely to never drink (22.3% compared with 14.1% of men), or to drink only occasionally (25.5% drank monthly or less, compared with 18.6% of men).

Table 29: AUDIT-C Alcoholic drink in the last 12 months, overall and by gender

	Respondents sub-sampled (n=2,691)	Male (n=1,358)	Female (n=1,332)
Never	**18.3%**	14.1%*	22.3%*
Monthly or less	**22.1%**	18.6%*	25.5%*
2 to 4 times a month	**22.6%**	22.6%	22.7%
2 to 3 times a week	**22.0%**	25.0%*	19.2%*
4 or more times a week	**15.0%**	19.8%*	10.3%*

How often did you have a drink containing alcohol (in the last 12 months)? Consider a "drink" to be a can or bottle of beer, a glass of wine, a wine cooler, or one cocktail or a shot of hard liquor (like scotch, gin or vodka) Base: Sub-sample (n=2,691). * significant differences by gender.

Similar patterns were evident in the number of alcoholic drinks consumed in a typical day when drinking, as shown in Table 30; with men being significantly more likely than women to have three or more drinks (24.4% and 15.1% respectively had 3-4 drinks, 10.4% and 5.1% had 5-6 drinks, 3.6% and 1.3% had 7-9 drinks, and 2.8% of men and 0.6% of women had 10 or more drinks).

14 Bush, K., Kivlahan, DR. McDonell MB., Fihn SD. and Bradley KA (1998) The AUDIT alcohol consumption questions (AUDIT-C): an effective brief screening test for problem drinking.

15 See section 3.2.2 for details on the sub-sampling approach employed for some parts of this survey.

Table 30: AUDIT-C Alcoholic drinks on a typical day when drinking in last 12 months, overall and by gender

	Respondents sub-sampled (n=2,692)	Male (n=1,356)	Female (n=1,336)
0 drinks	**18.2%**	14.0%*	22.2%*
1 to 2 drinks	**50.4%**	44.8%*	55.7%*
3 to 4 drinks	**19.6%**	24.4%*	15.1%*
5 to 6 drinks	**7.7%**	10.4%*	5.1%*
7 to 9 drinks	**2.4%**	3.6%*	1.3%*
10 or more drinks	**1.7%**	2.8%*	0.6%*

How many drinks did you have on a typical day when you were drinking (in the last 12 months)? Base: Sub-sample (n=2,692). significant differences by gender.

More than half of Victorian adults said that they 'never' had drunk six or more alcoholic beverages on one occasion in the last year (56.8%). Women were significantly more likely than men to have said 'never', as shown in Table 31. Twenty-nine percent of men said that they drank six or more drinks on one occasion less than monthly (29.1% compared with 21.9% of women) and 1.7% said they drank six or more drinks on one occasion daily or almost daily (compared with 0.5% of women).

Table 31: AUDIT-C Six or more alcoholic drinks in one occasion in the last 12 months, overall and by gender

	Respondents sub-sampled (n=2,699)	Male (n=1,354)	Female (n=1,337)
Never	**56.8%**	46.6%*	66.6%*
Less than monthly	**25.4%**	29.1%*	21.9%*
Monthly	**11.0%**	13.5%*	8.6%*
Weekly	**5.7%**	9.2%*	2.4%*
Daily or almost daily	**1.1%**	1.7%	0.5%

How often do you have six or more drinks on one occasion (in the last 12 months)? Base: Sub-sample (n=2,699). * significant differences by gender.

AUDIT-C harm categories

An overall alcohol harm score was derived for each respondent, based on the three questions [16] about their alcohol consumption over the last year (Australian Institute of Health and Welfare, 2015). As shown in Table 32, 18.3% of Victorian adults were non-drinkers. Over a half of men were deemed to be at a high risk of harm (50.7% compared with 46.7% of women).

16 See table 29, Table 30, Table 31

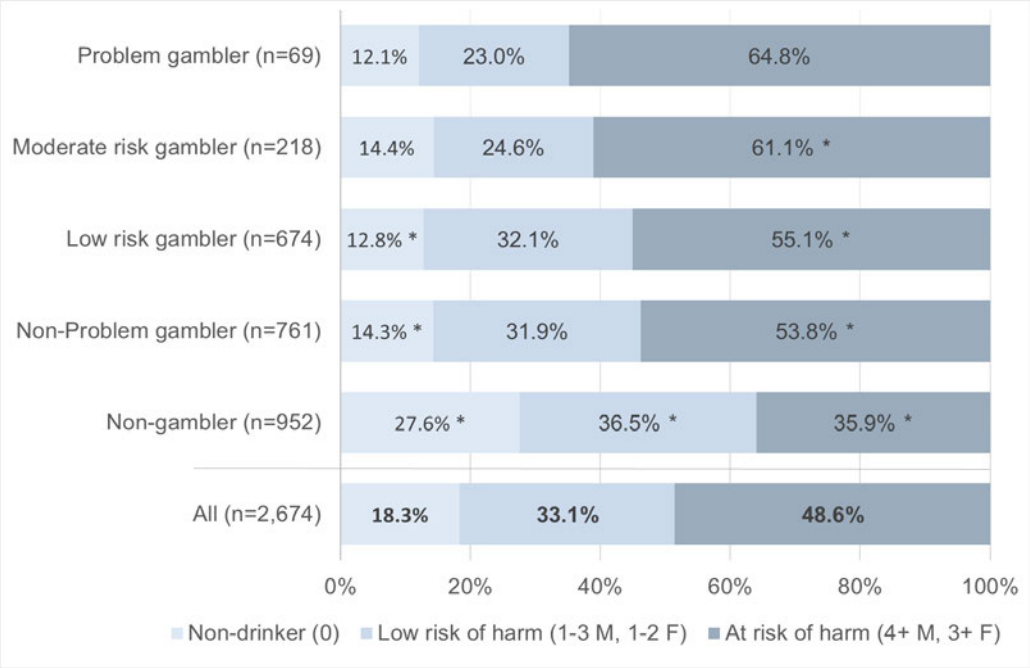
Table 32: AUDIT-C overall harm category, overall and by gender

	Respondents sub-sampled (n=2,674)	Male (n=1,346)	Female (n=1,328)
Non-drinker (0)	**18.3%**	14.1%*	22.3%*
Low risk of harm (1-3 Male, 1-2 Female)	**33.1%**	35.2%*	31.0%*
At risk of harm (4+ Male, 3+ Female)	**48.6%**	50.7%*	46.7%*
Total	**100.0%**	100.0%	100.0%

Base: Sub-sample (n=2,672). * significant differences by gender.

The risk of harm from alcohol was elevated for gamblers as shown in Figure 59, inclusive of gamblers without identifiable gambling problems.

Figure 59: AUDIT-C overall harm category, overall and by PGSI



[Derived from responses to three alcohol consumption questions.] Base: Sub-sample (n=2,674). * significant differences from proportions for all sub-sampled gamblers.

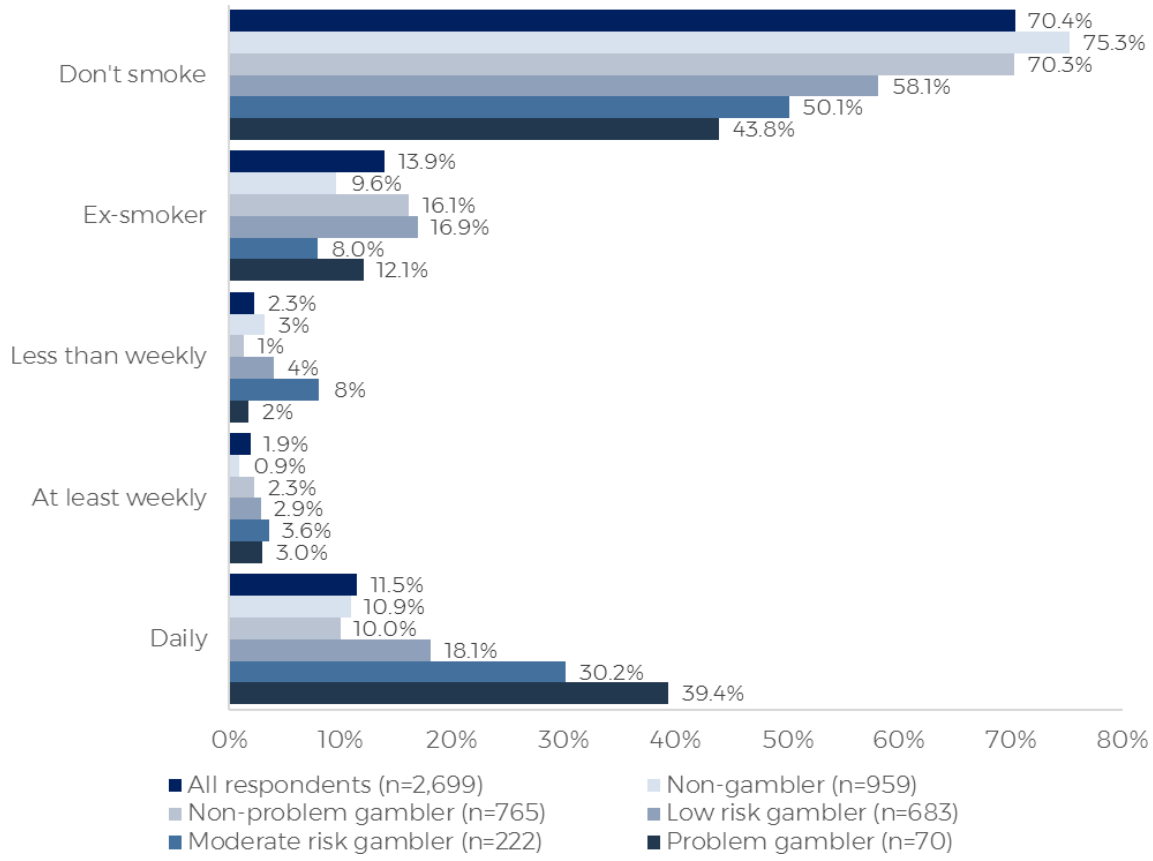
Other sociodemographic groups found to have significantly large proportions of people at-risk of harm from their alcohol consumption were:

- people living in regional Victoria (52.5% compared with 46.7% of Melbourne residents)
- people who mainly spoke English at home (53.8% compared with 30.4% of people who mainly spoke a language other than English at home).

Smoking

Sub-sampled respondents were asked how often they smoked. [17]The propensity to smoke daily rose with problem gambling (PGSI) risk level, as shown in Figure 60. Moderate risk and problem gamblers were far more likely than other Victorians to smoke daily (30.2% and 39.4% respectively, compared with 11.5% overall). It is noteworthy the overall rate of daily smoking (11.5%) found in this study is similar to the rate recently reported in the Cancer Council Victoria's Victorian Smoking & Health Survey 2018 (11.1%).

Figure 60: Frequency of smoking, by PGSI



Base: Sub-sample (n=2,699). * no significance testing was undertaken.

17 See section 3.2.2 for details on the sub-sampling approach employed for some parts of this survey.

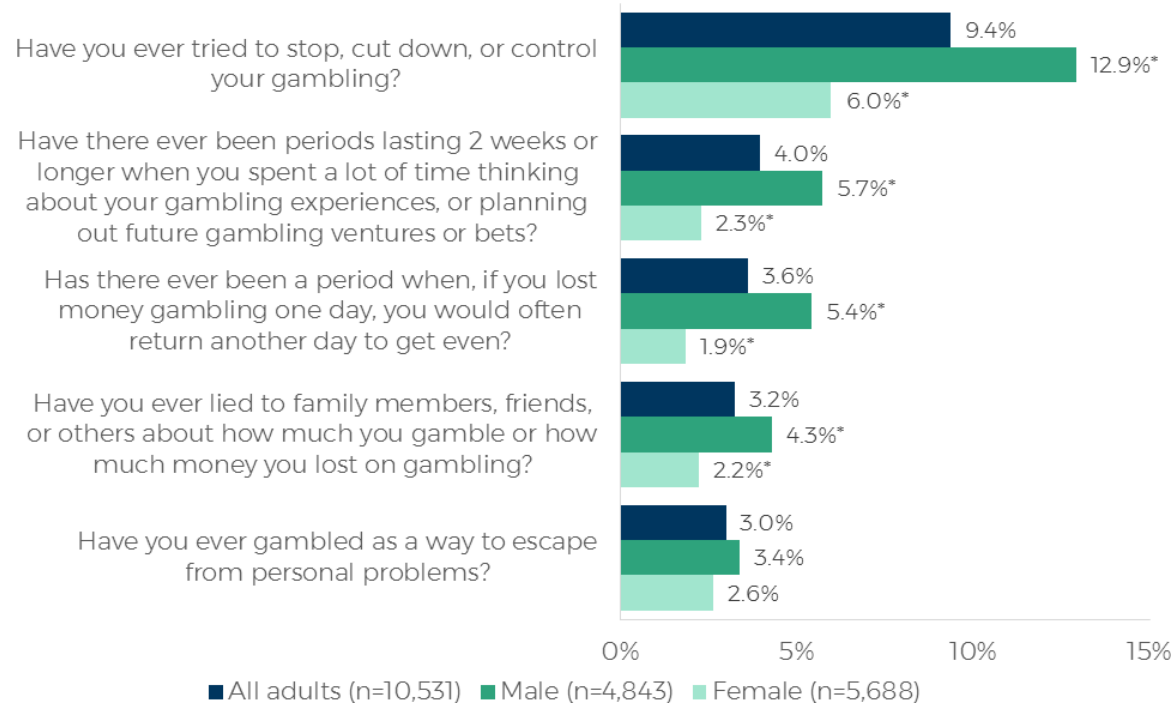
Lifetime risk of problem gambling (NODS-CLIP 2)

In order to assess problem gambling behaviour over their lifetime, all respondents were asked the short five-item version of the National Opinion Research Center DSM-IV Screen for Gambling Problems (NODS-CLiP 2, Toce-Gerstein, Gerstein and Volberg, 2009). As shown in Figure 61, 9.4% of Victorian adults reported that they had previously tried to stop, cut down or control their gambling at some point in their lifetime. Four percent had spent at least two weeks or more thinking about their gambling (4.0%), 3.6% had chased their losses (returned to win back money lost), 3.2% had lied to family members or friends about their gambling at some point in their life, and 3% had gambled as a way to escape from personal problems.

Men were significantly more likely to report having displayed each of these symptoms, except for having gambled to escape personal problems (done by 3.4% of men and 2.6% of women). The largest difference showed that 12.9% of men had tried to stop, cut back or control their gambling, compared with 6.0% of women.

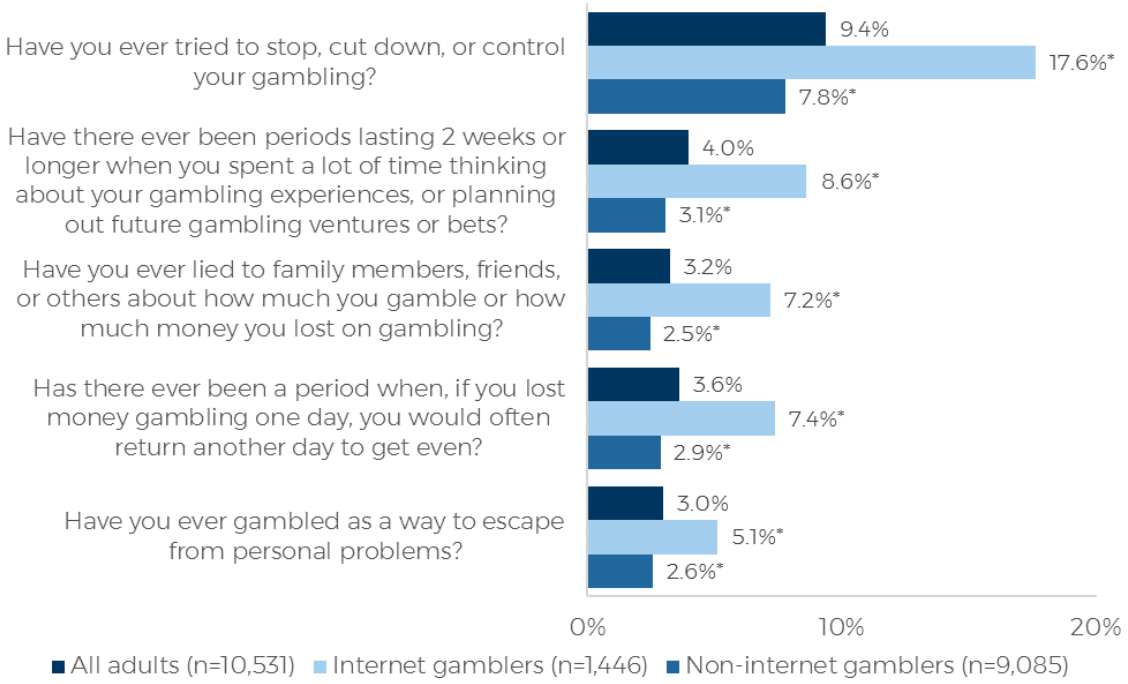
Similarly, internet gamblers were significantly more likely than non-internet gamblers to have experienced each of the five short NODS-CLiP 2 items (see Figure 62).

Figure 61: NODS-CLiP 2, proportion saying 'yes', first five items, overall and by gender



Now thinking about gambling across the whole of your life may I ask… Base: All respondents (n=10,531) * significant differences by gender.

Figure 62: NODS-CLiP 2, proportion saying 'yes', first five items, overall and by Internet gamblers



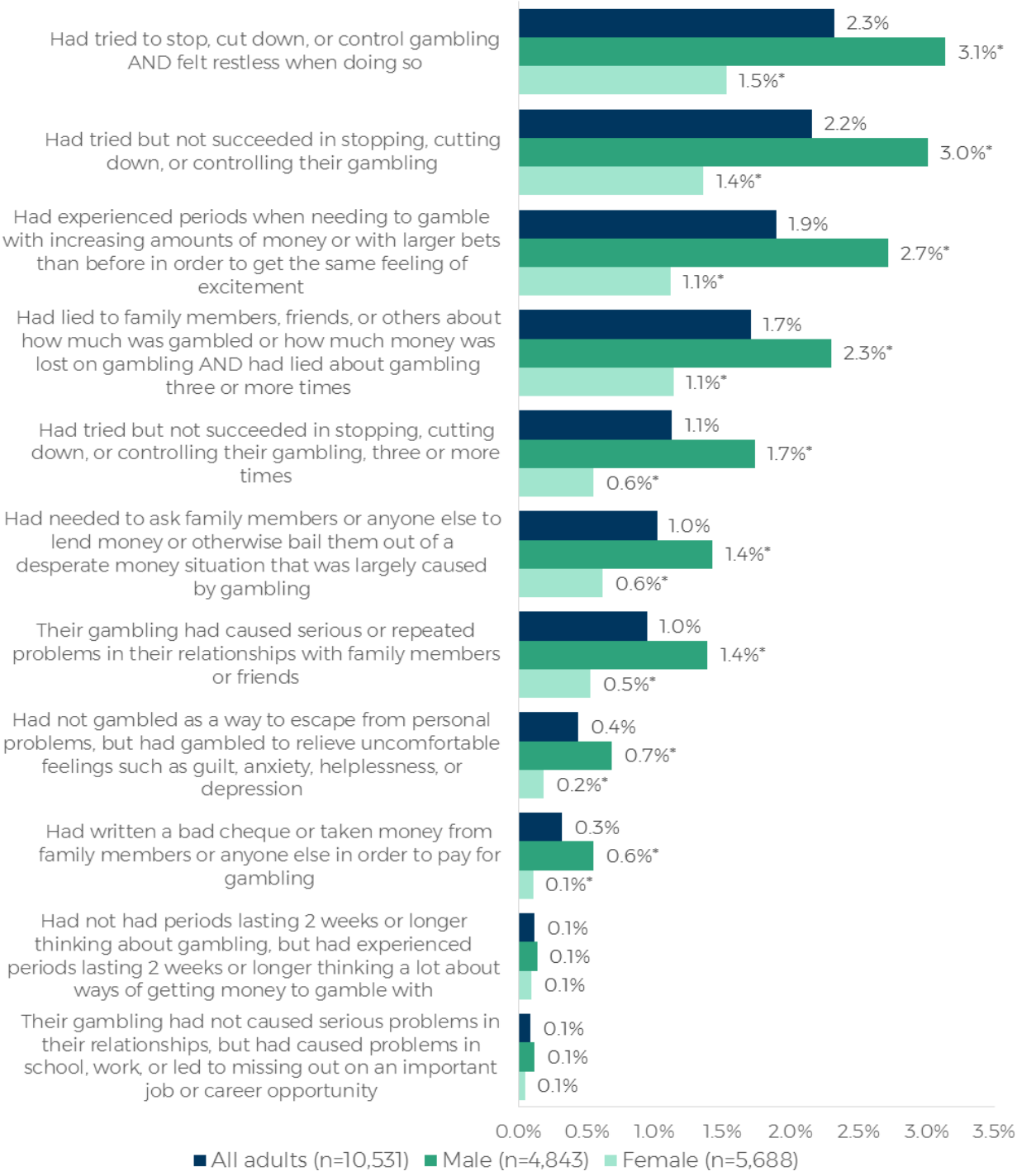
Now thinking about gambling across the whole of your life may I ask… Base: All respondents (n=10,531). * significant differences between internet and non-internet gamblers.

A further set of questions was asked only of respondents who said 'yes' to at least one of the five short NODS-CLiP 2 items discussed above. The results are shown in Figure 63.

Two percent (2.3%) of Victorian adults had tried to stop or cut down on their gambling and also agreed that they had been restless or irritable during those attempts. A similar amount (2.2%) had tried to stop or cut down, but had not been successful in doing so.

Men (who were more likely to be at-risk gamblers) were also more likely than women to have experienced all the adverse effects explored in the additional NODS-CLiP 2 items.

Figure 63: NODS-CLiP 2, proportion of Victorian adults who experienced at least one of the first five short NODS-CLiP 2 items AND..., overall and by gender



Now thinking about gambling across the whole of your life may I ask… Base: All respondents (n=10,531). * significant differences by gender.

Lifetime risk

A score for lifetime risk of problem gambling was calculated for all respondents using their responses to all the NODS-CLiP 2 items, and a NODS-CLiP 2 [18] lifetime risk classification was assigned. The resulting estimated breakdown for the population is listed in Table 33. Five percent of Victorians were categorised as at-risk of having been problem gamblers during their life (4.7%), [19] 1.1% were classified as NODS-CLiP 2 problem gamblers at some point in their lifetime, whereas 1.3% were identified as NODS-CLiP 2 pathological gamblers at some point. Having a gambling problem at some time in the past is hereafter referred to as "lifetime" gambling problems, but this shorthand phrase should not be misinterpreted as gambling problems that never resolve themselves. Rather, these problems existed in the past, and may or may not be continuing problems.

Men were significantly more likely than women to develop gambling issues at some point in their life, with 6.0% being considered at-risk gamblers according to the NODS-CLiP 2 classification (compared with 3.4% of women). Two percent (1.6%) of men were classified as being lifetime problem gamblers under the NODS-CLiP 2 (compared with 0.7% of women), and 1.9% were classified as lifetime pathological gamblers (compared with 0.7% of women).

The sociodemographic groups comprising significantly more NODS-CLiP 2 lifetime *pathological gamblers* than their counterparts included Victorians of Aboriginal and Torres Strait Islander descent (5.8%, compared with 1.3%) Similarly, Victorians who mainly spoke a language other than English at home had higher risk of lifetime pathological gambling (1.5%, compared with 0.7%).

Under this NODS-CLiP 2 classification, internet gamblers were also significantly more likely than non- internet gamblers to be lifetime at-risk gamblers (11.7% and 4.0% respectively), lifetime problem gamblers (4.3% and 0.8%), and lifetime pathological gamblers (2.6% and 1.2%).

Table 33: Lifetime risk for problem gambling, NODS-CLiP 2, overall and by gender

	Respondents (n=10,446)	Men (n=4,793)	Women (n=5,653)
Non-problem gambler	**92.9%**	90.5%*	95.2%*
At-risk gambler	**4.7%**	6.0%*	3.4%*
Problem gambler	**1.1%**	1.6%*	0.7%*
Pathological gambler	**1.3%**	1.9%*	0.7%*

Base: All respondents (n=10,446). * significant differences by gender.

18 Volberg, R. A. & Taylor, Y. S. (2003). Five item NODS CLiP2 (unpublished).

19 The NODS-CLiP 2 category of at-risk gamblers differs from the PGSI at-risk gambler category used throughout the other sections of this report. NODS-CLiP at-risk gamblers are discussed only in this section of the report and are at a lower lifetime risk for problem gambling than NODS-CLiP 2 categories of problem gamblers and pathological gamblers (pathological gamblers form the highest NODS-CLiP 2 lifetime problem gambling risk category).

Section 6 - Help seeking

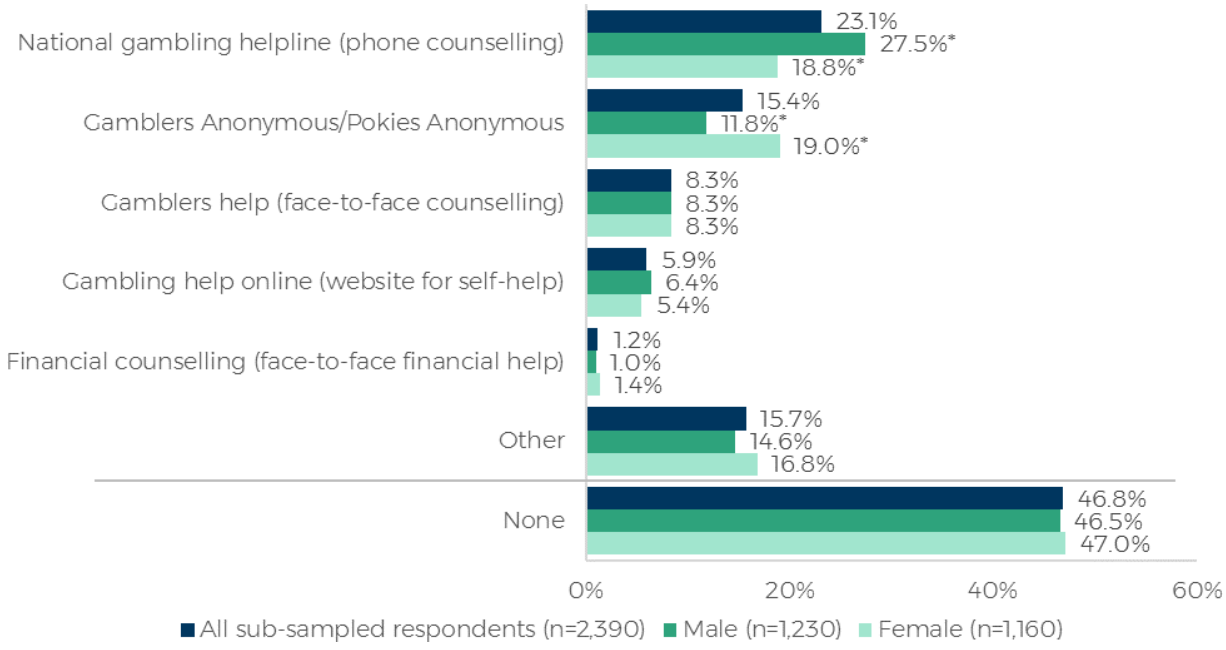
Awareness of gambling support services

Sub-sampled respondents [20] were asked to say, in their own words and without prompts, what gambling help services they were aware of in Victoria.

Almost a quarter of Victorians were aware of the National Gambling Helpline (23.1%), as shown in Figure 64, with significantly more men than women mentioning it in their unprompted responses (27.5% of men compared to 18.8% of women). The next most frequently mentioned help service was Gamblers or Pokies Anonymous (15.4%), which women mentioned more than men (19.0% compared with 11.8%).

A little under half of the sample said they were not aware of any gambling help services (46.8% overall; including 46.5% of men and 47.0 of women).

Figure 64: Awareness of Victorian gambling help services, overall and by gender



What services are you aware of in Victoria to assist people with gambling problems? Base: Sub-sampled (n=2,390). * significant differences by gender.

20 See section 3.2.2 for details on the sub-sampling approach employed for some parts of this survey.

The ‘other’ gambling help services specified by Victorians comprised:

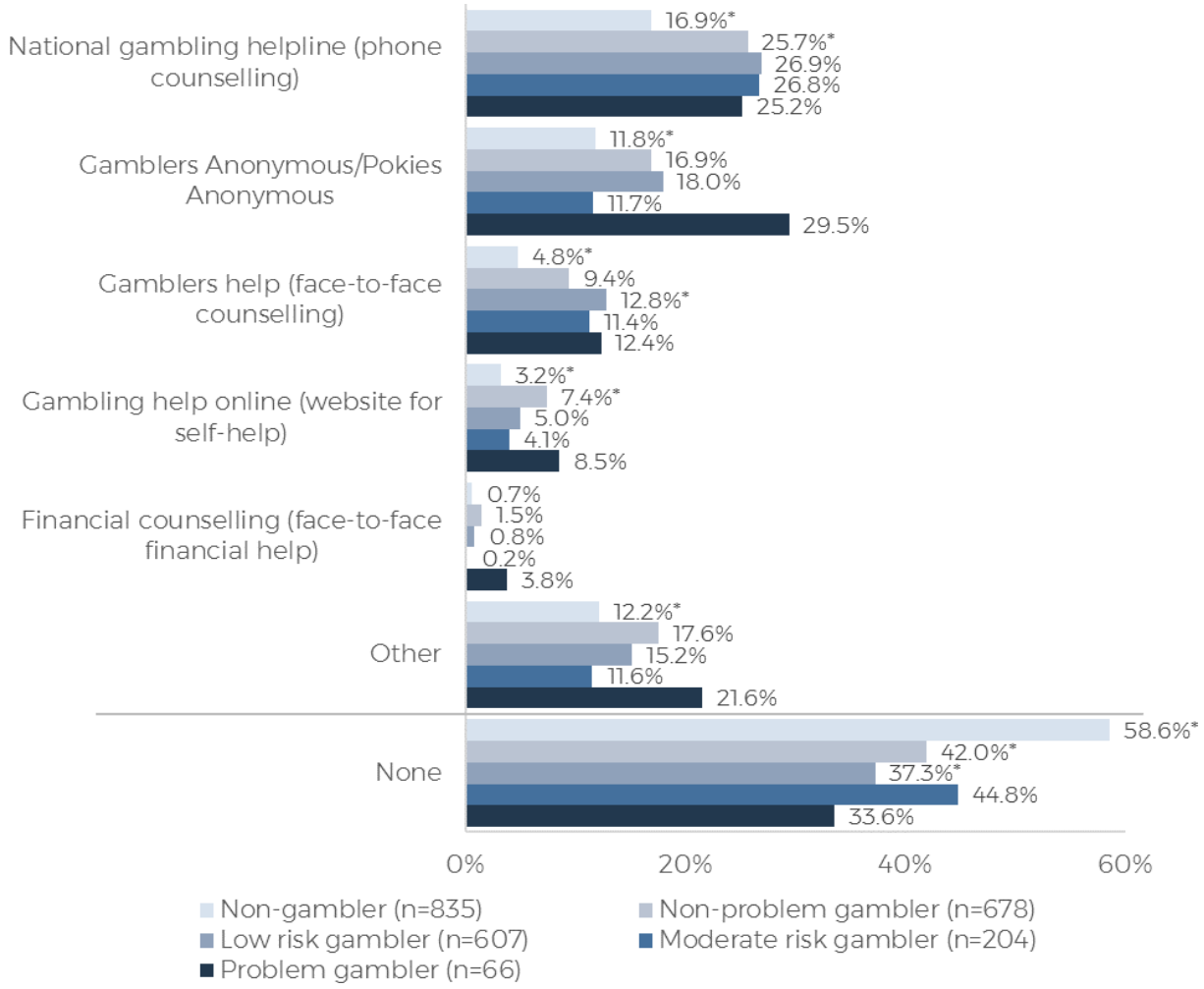
- Beyond Blue (3.9%)
- GP/Doctor/medical professional (1.8%)
- Charitable organisations (1.5%) [21]
- Lifeline (1.5%)
- Gambling Victoria (1.3%)
- Community/council/government general/No further information (0.9%)
- Mainstream TV/newspaper/radio/No further information (0.7%)
- Phone number general/No further information (0.5%)
- Other mental health services (0.5%)
- Responsible Gambling campaign/hotline (0.4%)
- Quit hotline (0.4%)
- Counselling general/No further information (0.3%)
- Exclusion/lock out (0.2%)
- Church (0.1%)
- Alcoholics Anonymous (0.1%)
- Gambling service/general/No further information (0.1%)
- In venue cards/ads/signage (0.1%)
- Crown casino support services (0.1%).

Around a quarter of moderate risk and problem gamblers were aware of the National Gambling Helpline (26.8% and 25.2%, respectively), as shown in Figure 65. Thirty percent of problem gamblers knew of Gamblers or Pokies Anonymous (29.5%, compared with 11.7% of moderate risk gamblers and 11.8% of non-gamblers).

A third of problem gamblers (33.6%) and 44.8% of moderate risk gamblers were not aware of any services in Victoria to assist people with gambling problems.

21 Charitable organisations included mentions of organisations such as The Salvation Army and Sacred Heart.

Figure 65: Awareness of Victorian gambling help services, by PGSI



What services are you aware of in Victoria to assist people with gambling problems? Base: Sub-sampled (n=2,390). * significant difference from the proportions for all sub-sampled gamblers in each category.

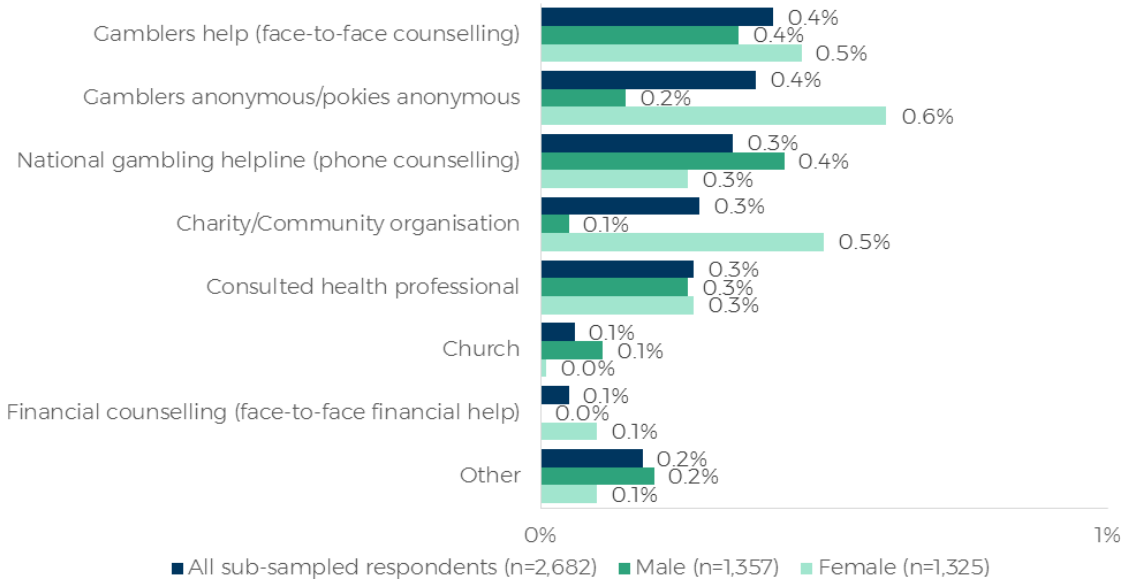
Help-seeking behaviour

Two percent (1.6%) of Victorians had used a help service for their own or someone else's gambling issues.

Sub-sampled respondents were asked to say, in their own words, which services they had used (for either their own or someone else's gambling issues). [22] The services they mentioned using are shown in Figure 66.

22 Respondents were asked about help services used for either their own or someone else's gambling in one question, rather than two, to reduce the interview length and minimise respondent fatigue

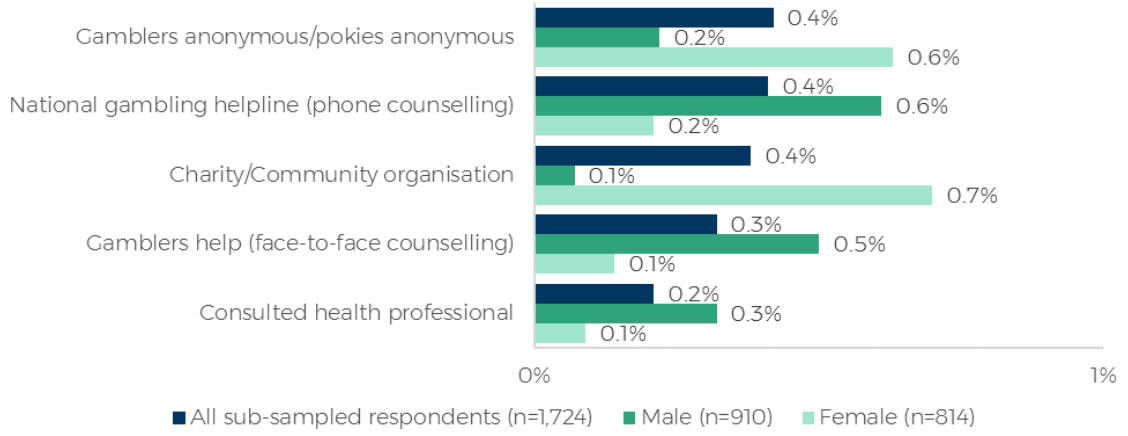
Figure 66: Use of gambling services by Victorians, overall and by gender



Have you used any help services for gambling for your own or someone else's gambling issues? What were they? Base: Sub-sampled (n=2,682). * no significant differences were found by gender.

The vast majority (98.3%) of gamblers said they had not used any gambling services. Male gamblers who had used gambling services were most likely to have phoned the National gambling helpline (0.6% of male gamblers compared with 0.2% of female gamblers). Charity or community organisations were most often contacted by female gamblers who had used help services for their own or someone else's gambling issues (0.7% of female gamblers compared with 0.1% of male gamblers). These differences were not statistically significant.

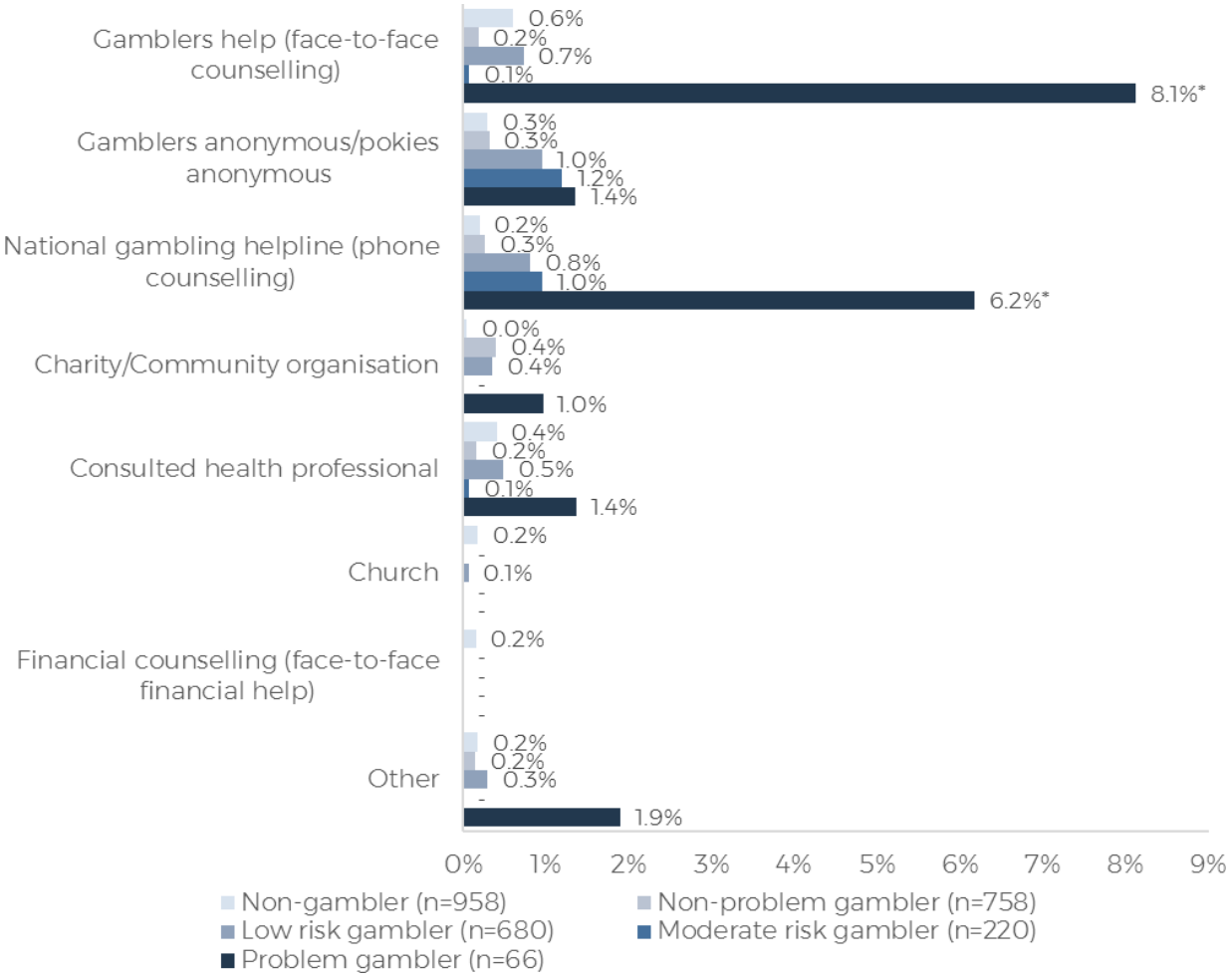
Figure 67: Use of gambling services by gamblers, overall and by gender



Have you used any help services for gambling for your own or someone else's gambling issues? What were they? Base: Sub-sampled respondents who gambled in the last 12 months (n=1,724). * no significant differences were found by gender.

Unsurprisingly, problem gamblers were more likely than non-gamblers or lower risk gamblers to have used most services, especially Gamblers help/face-to-face counselling services (8.1% of problem gamblers, compared with 0.6% of non-gamblers and 0.2% of low risk gamblers), as shown in Figure 68. They were also significantly more likely to have used the National Gambling Helpline for their own, or someone else's, gambling issues (6.2% compared with 0.2% of non-gamblers and 0.3% of low risk gamblers).

Figure 68: Use of gambling services by gamblers, by PGSI



Have you used any help services for gambling for your own or someone else's gambling issues? What were they? Base: Sub-sampled (n=2,682). * significant differences from the proportion for all sub-sampled gamblers.

Section 7 - Profile of problem, moderate, low risk and non-problem gamblers

This section provides an overview of the profile of each of the problem gambling (PGSI) categories; pulling together and summarising the results from previous sections of this report.

Problem gambler profile

In summary, problem gamblers were more likely to:

- be male (1.0% of Victorian men were problem gamblers compared with 0.5% of women)
- be 35 to 54 years old (1.1%-1.2% of Victorians of this age were, compared with 0.7% overall)
- have a personal annual income in the $20,800 to $41,599 range (1.3%, compared with 0.7% overall).

Over half of problem gamblers had participated in four or more gambling activities (54.8%, compared with 14.8% of gamblers overall). They had participated in an average of 3.9 different gambling activities (compared with an average of 2.2 overall).

Buying lottery tickets was the most common gambling activity for problem gamblers (72.5%), as it was for gamblers overall (64.2%). Problem gamblers were significantly more likely than other gamblers to play pokies (69.3% compared with 20.4% overall), and to bet on horse, harness or greyhound racing (52.4% compared with 28.7% overall).

Problem gamblers who had played pokies withdrew extra cash to continue playing significantly more frequently than other non-problematic pokies players. Eighty percent (79.9%) typically made at least one extra cash withdrawal (compared with 19.2% of pokies players overall). Four in ten (39.7%) problem gamblers said that they would make three or more EFTPOS withdrawals to obtain extra gambling money during a typical session on the pokies (compared with 4.4% of pokies players overall).

Problem gamblers showed high levels of being affected by someone else's gambling (28.8% compared with 6.1% overall).

Problem gamblers' well-being tended to suffer from their gambling. They gave an average score of 5.32 out of ten for their satisfaction with life as a whole (compared with 8.09 overall) and 39.0% were categorised as being in a state of high distress using the Kessler Psychological Distress Scale (compared with 5.0% overall). They were also more likely to drink alcohol while gambling (31.0% did often/always, compared with 11.5% of gamblers overall), and had an elevated risk of harm from alcohol (48.7% had a *high* risk, compared with 26.4% of Victorian adults overall). In addition, problem gamblers were more likely than other Victorians to smoke daily (39.4% compared with 11.5% overall).

Two-thirds (66.4%) of problem gamblers were aware of services in Victoria to assist people with gambling problems (compared with 53.2% of Victorians overall). Thirty percent (29.5%) of problem gamblers knew of Gamblers or Pokies Anonymous, and 25.2% were aware of the National Gambling Helpline. They were more likely than non-gamblers, low risk and moderate risk gamblers to have used most services, especially Gamblers help/face-to-face counselling services (8.1% of problem gamblers mentioned using this, compared with 0.4% of Victorians overall).

Moderate risk gambler profile

In summary, moderate risk gamblers were more likely to:

- be male (3.4% of Victorian men were moderate risk gamblers compared with 1.5% of women)
- be from the youngest age group (5.4% were aged 18-24 years old compared with 2.4% overall)
- have a personal annual income in the $20,800-41,599 range (3.2% compared with 2.4% overall; however, this finding was not statistically significant).

Just over one third of moderate risk gamblers had participated in four or more gambling activities (34.3%, compared with 14.8% of gamblers overall). They had participated in an average of 3.1 different gambling activities (compared with an average of 2.2 overall).

Moderate risk gamblers were the group most likely to bet on casino table games such as blackjack, roulette, and poker (22.7% compared with 8.8% overall).

Fourteen percent (13.8%) of moderate risk gamblers reported that they had been affected by someone else's gambling (compared with 6.1% overall).

As with problem gamblers, the well-being of moderate risk gamblers was lower than that of other Victorians. When rating their satisfaction with life as a whole, they gave an average score of 7.18 out of ten, compared with 8.09 given by Victorians overall. Eleven percent (11.2%) were categorised at the *high distress* level on the Kessler Psychological Distress Scale (compared with 5.0% of Victorians overall). Just under thirty percent (29.2%) of moderate risk gamblers drank often or always while gambling (compared with 11.5% of gamblers overall), and 46.9% were considered to have a high risk of harm from alcohol (compared to 26.4% of Victorians overall). Thirty percent (30.2%) smoked daily (compared with 11.5% of Victorians overall).

A little over half (55.2%) of moderate risk gamblers were aware of gambling help services (compared with 53.2% of Victorians overall). However, use of help services was low (for both their own or someone else's gambling issues). One percent (1.2%) of moderate risk gamblers had used the services of Gamblers or Pokies Anonymous (compared to 0.4% of Victorians overall).

Low risk gambler profile

Low risk gamblers were more likely to be males (8.4% of Victorian men were low risk gamblers compared with 5.0% of women) and have a personal annual income in the $20,800-41,599 range (8.0% compared with 6.7% overall).

Just over one third of low risk gamblers had participated in four or more gambling activities (32.5%, compared with 14.8% of gamblers overall). They had done an average of 3.0 different gambling activities (compared with an average of 2.2 overall).

Low risk gamblers were more likely to buy lottery tickets (70.7% compared with 64.2% overall).

Non-problem gambler profile

Non-problem gamblers were more likely to:

- be females (61.2% of Victorian women were non-problem gamblers compared with 57.1% of men)
- be 35 to 54 years old (67.0%-68.9% of non-problem gamblers were this age compared with 59.2% overall)
- live in regional Victoria than Melbourne (65.1% compared with 57.4%)
- speak English only (64.1% non-problem gamblers compared with 41.4% overall)
- have a personal annual income of $41,600-$156,000 and over (61.7%-72.1% compared with 59.2% overall).

Section 8 - Comparisons with previous years

Introduction

This section of the report compares the findings from the 2018-19 Victorian Population Gambling and Health Study with the previous 2008 [23] and 2014 [24] studies.

It is important that the reader notes the following methodological differences between the three studies, which should be considered in interpreting any differences in results:

- The 2008 study was landline only and thus did not include mobile-only respondents.
- The 2014 study used a dual frame RDD (mobile and landline) sample but the mobile sample was small (comprising 7.4% of the total sample).
- The 2014 study reported unweighted figures for some questions. This has been footnoted within this section of the report.
- The current 2018-19 study, in contrast, used a dual frame RDD (mobile and landline) 50/50 sample frame.
- There were numerous minor questionnaire design/wording changes between the surveys.
- Because of these differences in the sampling approach, comparisons have been made at the overall level only and should be interpreted carefully by reference to the original past reports, where appropriate.
- Significance testing has not been carried out due to the differences in sampling approaches that could cloud a fair interpretation of changes.
- To protect against erroneous interpretations, the text only highlights differences where prevalence rates change by a collective 5%+ from 2008 or 2014 to 2018-19, and where the 2014 results fall in-between any decade-long change. Nevertheless, these highlights should not be taken as evidence of significant differences due to the issues noted above.

This section of the report should be considered in the context of a relatively mature gambling industry in Victoria between 2008 and 2019 (1.8% annual growth overall). For the convenience of the reader, total gambling expenditures in Victoria have been reproduced in Table 34 from public sources.

23 A study of Gambling in Victoria – Problem Gambling from a Public Health Perspective, 2008

24 Study of Gambling and Health in Victoria, Findings from the Victorian Prevalence Study 2014

Table 34: Total Gambling Expenditure (losses in mil $) for 2007-08, 2013-14 and 2018-19

Source	2007-08	2013-14	2018-19
Gaming Machines – hotels & clubs	$2611.5	$2504.3	$2698.7
Melbourne Casino – gaming machines and table games	1101.4	1556.8	1679.1
Wagering – racing (totalisator), football, trackside and sports-betting	691.1	825.2	827.3
Lotteries	425.9	492.1	642.5
Keno	6.6	15.0	22.0
Total	**$4836.4**	**$5393.4**	**$5869.6**

Sources: VCGLR's annual report for 2013-14 and 2018-19, and Australian Gambling Statistics (QLD) for 2007-08.

Prevalence of problem gambling in Victoria

The proportion of problem gamblers in the Victorian population since 2014 is largely unchanged (0.7% in 2008, 0.8% in 2014 and 0.7% in 2018-19). There were only minor differences in the composition of at- risk gamblers across 2008, 2014 and 2018-19. The results are shown in Table 35.

Table 35: PGSI categories, 2008, 2014 and 2018-19

	All Victorians		
PGSI Category	**2008 (n=15,000)**	**2014 (n=13,554)**	**2018-19 (n=10,638)**
NG (Non-gambler)	26.9%	29.9%	31.0%
NPG (Non-problem gambler)	64.3%	57.6%	59.2%
LRG (Low risk gambler)	5.7%	8.9%	6.7%
MRG (Moderate risk gambler)	2.4%	2.8%	2.4%
PG (Problem gambler)	0.7%	0.8%	0.7%

Base: All respondents.

Gambling participation in Victoria

Consistent with the 2014 prevalence study, the three most popular gambling activities in 2018-19 were Australian lotteries; buying raffle tickets, sweeps or other competitions, and betting on horse or harness racing or greyhounds.

Buying raffle tickets and sweeps has declined, from 42.9% in 2008, to 41.6% in 2014, to 37.4% in 2018-19. Playing pokies has also become less popular, down from 21.5% of adults in 2014, to 16.7% in 2014 and 14.1% in 2018-19.

The proportions of adults participating in each gambling activity in 2008, 2014 and 2018-19 are listed in Table 36.

Table 36: Participation in gambling activities, 2008, 2014 and 2018

Gambling activities	2008 (n=15,000)	2014 (n=13,554)	2018-19 (n=10,638)
At least one gambling activity	**73.1%**	**70.1%**	**69.0%**
On Australian lotteries, such as Tattslotto, Oz Lotto, Powerball or Pools	47.5%	46.9%	44.4%
Buying raffle tickets, sweeps or other competitions	42.9%	41.6%	37.4%
Betting on horse or harness racing or greyhounds - including the Melbourne Cup, Spring racing or on trackside virtual racing, but NOT including all sweeps	16.4%	20.6%	19.8%
Playing pokies or electronic gaming machines	21.5%	16.7%	14.1%
On scratch tickets	15.3%	10.7%	11.2%
Betting on casino table games such as blackjack, roulette, and poker	4.6%	5.1%	6.1%
Betting on sports - such as AFL or cricket, but NOT including all sweeps, fantasy sports, and eSports	4.0%	4.8%	5.8%
On informal private betting - like playing cards at home	3.5%	2.8%	3.4%
Betting on Keno	2.3%	3.7%	3.3%
A prize-draw competition by phone where there was a phone-charge for entry	7.4%	5.8%	2.4%
Betting on bingo	2.1%	2.6%	1.5%
Betting on eSports	[Not reported]	[Not reported]	0.4%
Betting on fantasy sports	[Not reported]	[Not reported]	0.3%
Betting on anything else [25]	0.0%	0.7%	0.9%

2008: On which of the following activities have you spent any money on in the past 12mths? Base: All Victorian adults

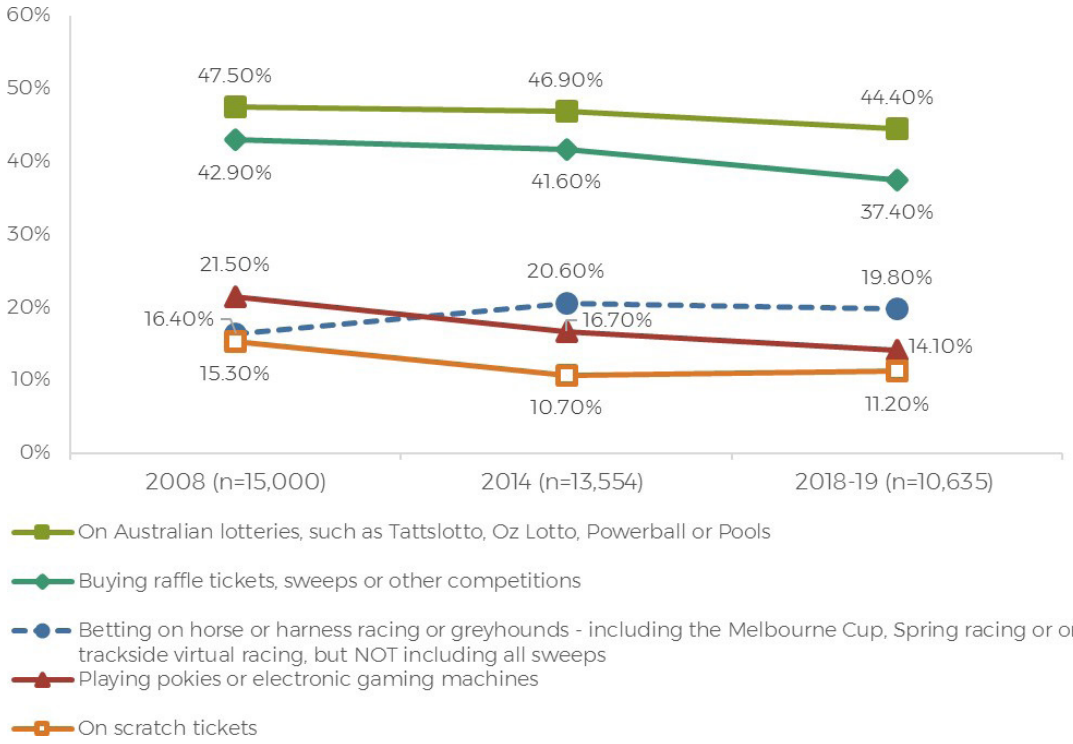
2014: On which of the following activities have you spent any money on in the past 12mths? Base: All Victorian Adults. Weighted results without subsampling.

2018-19: In the last 12 months, have you spent any money…? Base: All respondents.

Figure 69 illustrates participation-rate trends in the five most popular activities, and Figure 70 illustrates trends for the other gambling activities.

25 'Anything else' is not comparable, as different types of gambling were included/excluded. For example, betting on events (like elections) was reported separately in 2014, and eSports and fantasy sports betting were reported separately in 2018.

Figure 69: Proportion of adults participating in the five most participated in activities, 2008-2019

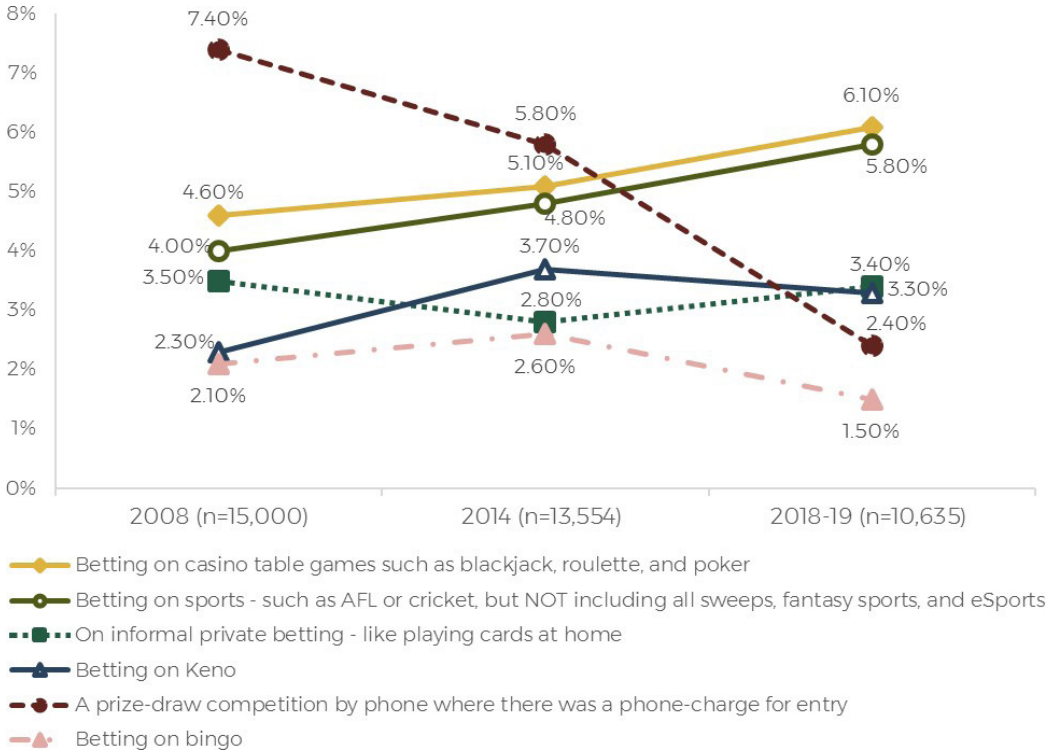


2008: On which of the following activities have you spent any money on in the past 12mths? Base: All Victorian adults

2014: On which of the following activities have you spent any money on in the past 12mths? Base: All Victorian Adults. Weighted results without subsampling.

2018-19: In the last 12 months, have you spent any money…? Base: All Victorian Adults.

Figure 70: Proportion of adults betting on casino table games; sports; informal private betting; keno; prize draw competition by phone; and bingo, 2008-2019



2008: On which of the following activities have you spent any money on in the past 12mths? Base: All Victorian adults

2014: On which of the following activities have you spent any money on in the past 12mths? Base: All Victorian Adults. Weighted results without subsampling.

2018-19: In the last 12 months, have you spent any money…? Base: All respondents.

Changes in internet gambling

Respondents were asked which types of gambling activities they had participated in over the last twelve months and where the activities took place.

The proportion of respondents who had participated in individual gambling activities who had participated in the activity online are compared over time in Table 37.

The most noticeable change in internet gambling has occurred for sports betting. Increasing proportions of sports bettors have been placing their sports bets online, from 22.4% in 2008, to 52.0% in 2014, to 78.1% in 2018-19.

The 2014 study did not ask where horse, harness or greyhound racing betting took place, therefore a comparison cannot be made with 2018-19. However, betting on horse or harness racing *online* has increased since 2008, from 6.8% of those who had spent money on race betting in the previous twelve months, to 34.7% in 2018-19.

Table 37: Gambling activities played online

Gambling activities played online	2008 (n=15,000)	2014 (n=13,554)	2018-19 (n=10,638)
Playing pokies online	0.3%	1.6%	1.3%
Betting on casino table games such as blackjack, roulette, and poker, online	1.7%	7.3%	1.9%
Betting on horse or harness racing or greyhounds, by placing bets through an Australian-licensed or overseas bookmaker online or with a mobile app	6.8%	[not asked]	34.7%
Betting on sports, by placing bets through an Australian-licensed or overseas bookmaker online or with a mobile app	22.4%	52.0%	78.1%
Playing Keno online	1.3%	1.0%	4.2%

2008 and 2014: Did you place your bets at (channels prompted)? Base: Adults participating in table games in the past 12mths. Weighted results without subsampling.

2018-19: In the last 12 month, have you spent any money on <insert activity>? If yes, respondents were then asked "Did you place your bets at…?" Base: Adults who spent money on gambling activities undertaken online

EGM play since 2008

Changes in 'pokies' venues

Comparisons over time for the location of pokies gambling can only be made for the Crown Casino and online as these were the only locations that were asked in the same way in all three surveys. Playing pokies interstate or overseas were asked separately in 2018-19, but the results have been combined for better comparability with previous studies. Results are shown in Table 38.

Table 38: Locations of where pokies were undertaken, 2008, 2014 and 2018

Locations of where pokies were undertaken [26]	2008 (n=3,252)	2014 (n=2,298)	2018-19 (n=1,591)
Victorian pub, club or hotel	77.0%	77.0%	77.5%
Victorian clubs such as an RSL club	48.9%	43.7%	[asked differently]
Victorian pubs or hotels	38.3%	60.6%	[asked differently]
Crown Casino	23.6%	30.1%	27.3%
Interstate or overseas [27]	10.7%	7.0%	12.5%
Online	0.3%	1.6%	1.3%

2008: Did you play pokies at (channels prompted)? (Base: Adults participating in gaming machines in the past 12mths). Weighted results without subsampling.

2014: Did you play pokies at (channels prompted)? (Base: Adults participating in gaming machines in the past 12mths). Weighted results without subsampling.

2018-19: Did you play pokies at (channels prompted)? (Base: Adults participating in gaming machines in the past 12mths).

26 Not all pokies location shown as different locations were included/excluded in 2018-19

27 Interstate and overseas were asked separately in 2018-19. They response options were: interstate pub, club or hotel; interstate casino; overseas pub, club or hotel; and overseas casino.

Changes in withdrawing cash

One in ten (9.6%) pokies players withdrew extra cash through EFTPOS once in 2018-19; this is down from 21.3% in 2014. Withdrawing cash more than once has declined since 2014, however, it is important to note that the 2014 reported results are unweighted and thus direct comparisons should be made with caution. Results are show in Table 39.

Table 39: Number of times using EFTPOS to get extra gambling money in a typical pokies' session

Number of times per gambling session	2014 (n=563) [28]	2018-19 (n=1,570)
Zero times	52.3%	80.8%
Once	21.3%	9.6%
Twice	8.9%	5.2%
Three times	2.7%	1.5%
Four or more times	5.5%	3.0%
Don't know	8.0%	[not reported]

2014: Over the past 12 months, how many times per gambling session did you typically get money for gambling through EFTPOS? (Base: gaming machine players) Unweighted results

2018-19: Over the past 12 months and in a typical session, how many times did you get EXTRA money for gambling on pokies through EFTPOS (after you had already started gambling)? Base: Respondents who spent money on pokies or EGMs in the last 12 months

The average amount of extra money withdrawn through EFTPOS for gambling on pokies has decreased from $169.69 in 2014 to $127.26 in 2018-19. In 2018-19, however, the question wording was modified to clarify that people should report "extra" money withdrawn through EFTPOS in a session, which presumably did not include the player's initial bankroll Results are shown in Table 40.

Table 40: Extra money withdrawn through EFTPOS for gambling on pokies

Extra money withdrawn through EFTPOS for gambling on pokies	2014 (n=264) [29]	2018-19 (n=263)
Up to $50	36.7%	48.1%
$51 to $100	22.9%	25.5%
$101-$200	25.1%	16.0%
$201 or more	14.2%	10.4%
Refused	1.1%	[not reported]
Mean	**$164.69** [30]	**$127.26**

2014: In total, how much money did you withdraw from EFTPOS per gambling session? (Interviewer instruction - make sure this is per session and includes all EFTPOS withdrawals per session) Base: gaming machine players who reported using EFTPOS to access money for gambling over the past 12 months) Unweighted results.

2018-19: Over the past 12 months, when you have withdrawn extra money, how much did you typically withdraw per session? Base: Respondents who withdrew extra money for gambling on pokies through EFTPOS

28 The 2014 results reported were unweighted. (The 2018-19 results in this table are weighted).

29 The 2014 results reported were unweighted. (The 2018-19 results in this table are weighted)

30 Mean excluding don't know and refused responses

Casino table games venues

The Crown Casino was still the most popular venue for betting on casino table games; however, the proportion of table game players nominating play at the Crown Casino has declined from 92.3% in 2014 to 87.3% in 2018-19.

The prevalence of playing casino games online has decreased from 7.3% in 2014 to 1.9% in 2018-19.

In contrast, playing casino table games at an interstate or overseas casino has increased from 7.1% in 2014 to 12.6% in 2018-19. Results are shown in Table 41.

Table 41: Locations of where casino table games were undertaken, 2008, 2014 and 2018

Location of where casino table games were undertaken [31]	2008 (n=486)	2014 (n=454)	2018-19 (n=453)
Crown Casino	86.1%	92.3%	87.3%
Online	1.7%	7.3%	1.9%
Interstate or overseas [32]	15.5%	7.1%	12.7%
Total [33]	**100.0%**	**100.0%**	**100.0%**

2018-19: Did you place your bets at (channels prompted)? (Base: Adults participating in table games in the past 12mths).

Harm to self and to Concerned Significant Others (CSOs)

Harm to self and harm to CSOs were asked of sub-sampled respondents in both the 2014 and 2018-19 surveys. The questions about having experienced problems from one's own, or someone else's gambling were worded differently in 2014 and 2018-19, and therefore direct comparisons cannot be made. Percentages are included for indicative purposes only.

In 2014, 1.2% of Victorian adults indicated that they had experienced issues or problems in the last 12 months as a result of their own gambling. [34]

In 2018-19, 0.5% of Victorian adults indicated that they had experienced problems in the last twelve months that resulted from their own gambling from over twelve months ago. [35] It is important to note that in the 2018-19 study, the response option 'never gambled' was added and this was reported by 2.4% of Victorian adults.

31 Not all casino table game location shown as different locations were included/excluded in 2018-19

32 Interstate and overseas casinos were asked separately in 2018-19

33 Percentages do not add to 100% exactly due to rounding errors

34 In 2014, the question was *"In the last 12 months, have you experienced problems because of your gambling?"*

35 In 2018-19, the question was "*Have you had any issues or problems arise in the last 12 months that resulted from your past gambling? That is, issues that resulted from your gambling that took place more than 1 year ago?"*

In 2014, 2.8% of Victorian adults indicated that, in the last twelve months, they had experienced problems from someone else's gambling. [36]

In 2018-19, 4.9% of Victorian adults indicated that they had experienced problems in the last twelve months that resulted from another person's gambling from over twelve months ago. [37]

36 In 2014, the question was "*In the last 12 months, have you experienced problems because of someone else's gambling?*"

37 In 2018-19, the question was "*Have you had any issues or problems arise in the last 12 months that resulted from another person's past gambling? That is, issues that resulted from another person's gambling that took place more than 1 year ago?*"

Section 9 - Prevalence of gambling harms

Harms for self

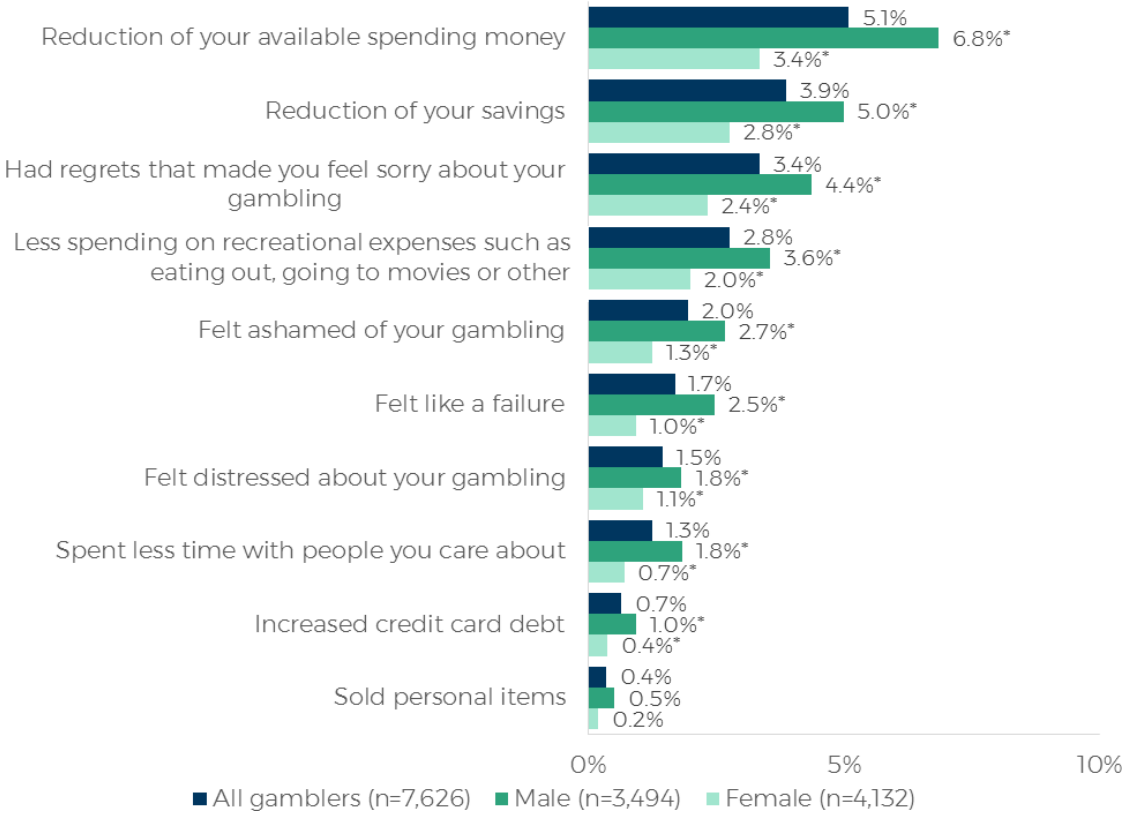
To assess harm as a result of gambling, all last-year gamblers were asked the Short Gambling Harm Screen (SGHS) [38]. The SGHS is a screening tool developed to assess the degree of harm caused by gambling, which is distinguishable from *problem gambling*, which is defined as a mental health condition.

The main harms gamblers reported from their own gambling were reductions in available spending money (5.1%) and reduced savings (3.9%), as shown in Figure 71. Three percent (3.4%) of gamblers had regrets that made them feel sorry about their gambling.

More men than women selected each of the ten items in the SGHS. The gender differences were statistically significant (except for having sold personal items). Seven percent (6.8%) of male gamblers said their available spending money had been reduced (compared with 3.4% of women), 5.0% said their savings were reduced (compared with 2.8% of women), and 4.4% had regrets and felt sorry about their gambling (compared with 2.4% of women).

38 Browne, M., Goodwin, B. and Rockloff, M. (2018) Validation of the Short Gambling Harm Screen (SGHS): A Tool for Assessment of Harms from Gambling, Journal of Gambling Studies. 34:499-512. doi:10.1007/s10899-017-9698-y

Figure 71: Short Gambling Harm Screen, overall and by gender



These next questions are about how gambling can affect people in a negative way. In the last 12 months, have you experienced any of the following issues as a result of your gambling… Base: Respondents who gambled in the last 12 months (n=7,626). *significant differences by gender.

Overall, 9.6% of gamblers indicated that they had experienced at least one of the ten SGHS items (shown as 'Any harm' in Table 42). The proportion of gamblers having experienced some harm rose significantly with each PGSI risk category. Four percent (4.3%) of non-problem gamblers associated their gambling with some harm, as did 29.2% of low risk gamblers, and 59.4% of moderate risk gamblers. All problem gamblers reported having experienced some harm from their gambling (100%), which helps to support the 8+ score on the Problem Gambling Severity Index (PGSI) as being indicative of probable disordered gambling.

Ninety-four percent (94.2%) of problem gamblers (PGSI 8+) identified with three or more of the ten SGHS items (compared with 2.6% overall, 27.5% of moderate risk, 4.4% of low risk and 0.2% of non- problem gamblers).

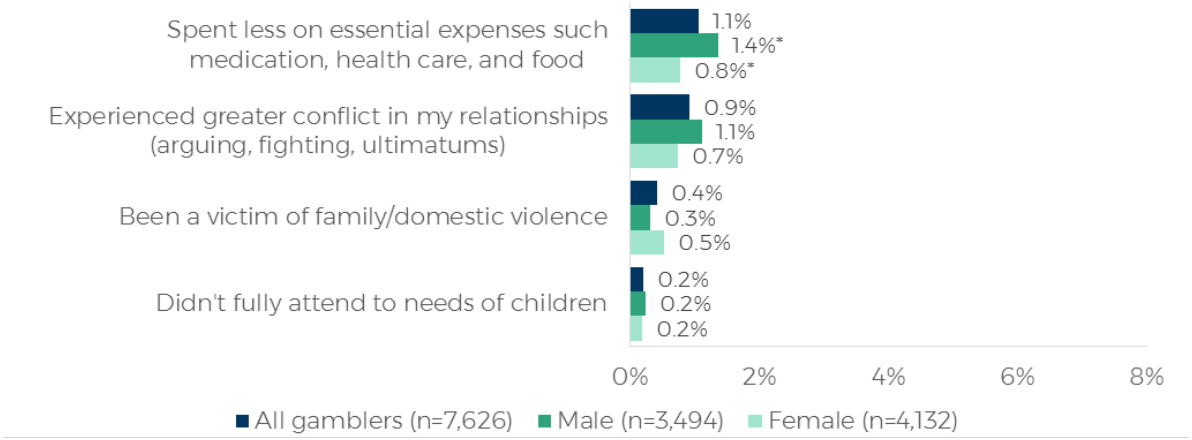
Table 42: Short Gambling Harms Screen, by PGSI

		PGSI			
	Respondents who gambled in the last 12 months (n=7,587)	**Non-problem gamblers (n=6,624)**	**Low risk gamblers (n=676)**	**Moderate risk gamblers (n=220)**	**Problem gamblers (n=67)**
No harm	**90.4%**	95.7%*	70.8%*	40.6%*	0.0%*
Any harm	**9.6%**	4.3%*	29.2%*	59.4%*	100.0%*

These next questions are about how gambling can affect people in a negative way. In the last 12 months, have you experienced any of the following issues as a result of your gambling… Base: Respondents who gambled in the last 12 months (n=7,587). 'No harm' calculated as 'no' to all ten SGHS items * significant differences from the proportions for all gamblers.

Gamblers were also asked whether they had experienced four extra harm items as a result of their gambling. These additional harms items were asked of participants due to their unique policy relevance in Victoria. As shown in Figure 72, 1.1% of gamblers had spent less on essential expenses such as medication, health care and food. Significantly more men than women nominated this outcome as a harmful consequence of their gambling (1.4% compared with 0.8%).

Figure 72: Short Gambling Harm Screen, four extra items, overall and by gender



These next questions are about how gambling can affect people in a negative way. In the last 12 months, have you experienced any of the following issues as a result of your gambling… Base: Respondents who gambled in the last 12 months (n=7,626). * significant differences by gender.

Effects on significant others

Questions about being affected by someone else's gambling were among those asked only of a small, randomly selected sub-group of respondents (in order to keep the interview length down for the majority of respondents who were not at-risk gamblers, as outlined in *Methodology* section on page 21).

These sub-sampled respondents (regardless of their own gambling status) were asked the Short Harms Screen for Concerned Significant Others to assess the extended effects of gambling on friends, family and associates of gamblers [39]. As shown in Table 43, 6.1% of Victorians had been adversely affected by someone else's gambling in the past 12 months.

Harm resulting from someone else's gambling was strongly related to one's own risk for problem gambling. The impact was most pronounced for problem gamblers, 28.8% of whom reported that they had been affected by someone else's gambling. By comparison, 12.2% and 13.8% of low risk and moderate risk gamblers, respectively, had been similarly affected, as had 6.0% of non-problem gamblers. The lowest self-reported impact from someone else's gambling was among those who had not themselves participated in any gambling in the past 12 months (3.9%).

Self-reported impact was also significantly higher among people of Aboriginal or Torres Strait Islander descent, with almost a quarter stating that they had been impacted by someone else's gambling (23.5%, compared with 5.9% of non-Indigenous people).

Middle aged respondents, 35 to 44 years, were the age group most affected by another person's gambling (9.9% compared with 6.1% overall). Respondents in the highest personal income bracket also reported significantly higher impact rates (14.4% of those with incomes of $156,000 per year, or more, compared with 6.1% overall).

Table 43: Short Harm Scale for Concerned Significant Others, proportion affected by another person's gambling in the last 12 months, overall, by PGSI and sociodemographic characteristics

	Proportion affected by another's gambling
Respondents sub-sampled (n=2,702)	**6.1%**
Gender	
Male (n=1,365)	**7.4%**
Female (n=1,337)	4.9%
Gambling status	
Gambler (n=1,740)	7.1%*
PGSI	
Non-gambler (n=962)	3.9%*
Non-problem gambler (n=766)	6.0%
Low risk gambler (n=682)	12.2%*
Moderate risk gambler (n=223)	13.8%*
Problem gambler (n=69)	28.8%*
Age	
18 to 24 years (n=281)	9.4%
25 to 34 years (n=344)	4.6%
35 to 44 years (n=333)	9.9%*
45 to 54 years (n=379)	6.2%
55 to 64 years (n=490)	4.4%

39 Browne et al., Tasmanian Prevalence Study, 2017

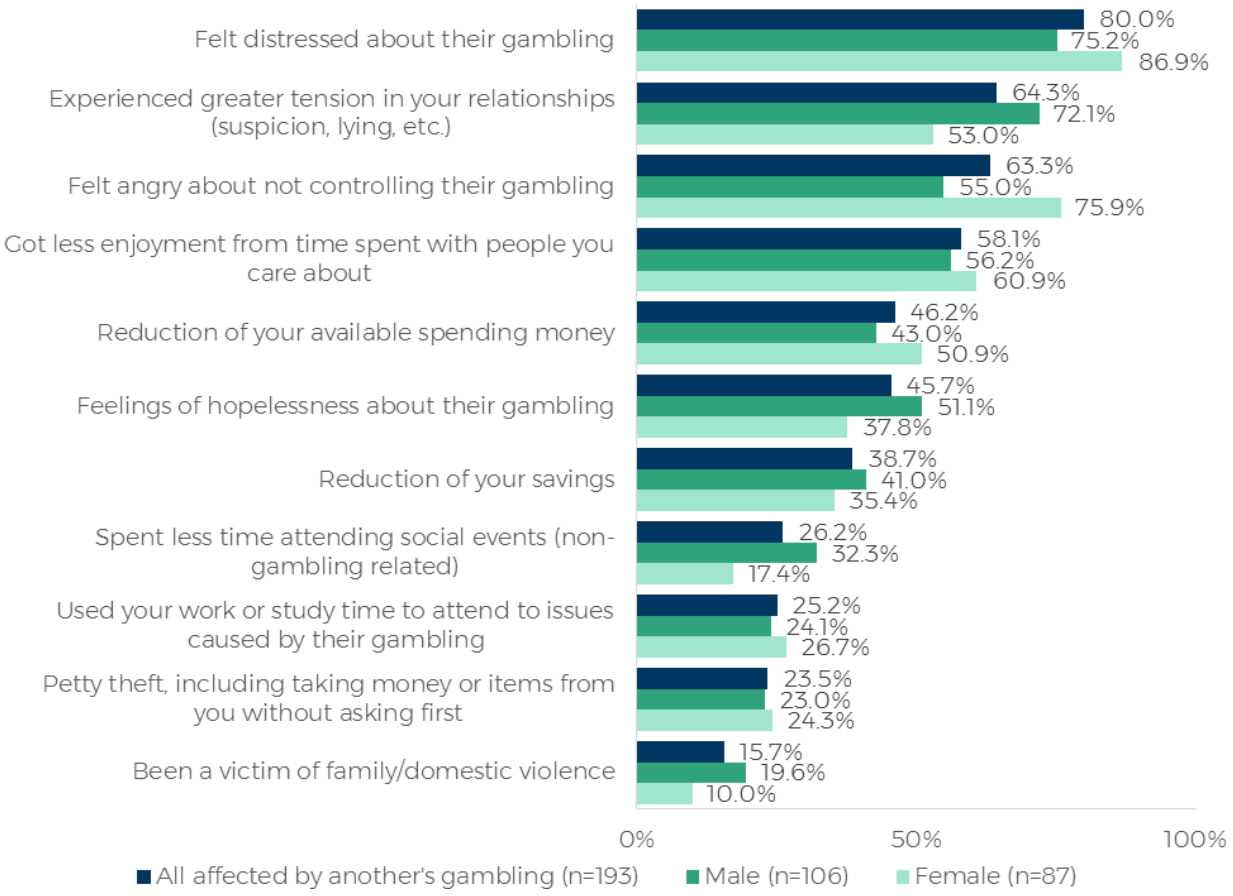
	Proportion affected by another's gambling
65 to 74 years (n=506)	5.7%
75 years or older (n=369)	0.6%*
Part of state	
Melbourne (n=2,052)	6.8%
Rest of Vic (n=650)	3.8%
Speaks language other than English (LOTE) at home	
Speaks language other than English at home (n=568)	4.2%
Speaks English only at home (n=2,131)	6.7%
Aboriginal and / or Torres Strait Islander origin	
Aboriginal or Torres Strait Islander (n=31)	23.5%*
Not Aboriginal or Torres Strait Islander (n=2,658)	5.9%*
Personal income, per year	
Nil or negative income (n=150)	4.7%
$1-20,799 (n=351)	9.2%
$20,800-41,599 (n=579)	4.9%
$41,600-77,999 (n=487)	5.2%
$78,000-155,999 (n=403)	8.4%
$156,000+ or more (n=98)	14.4%*

In the past 12 months, have you been personally affected by another person's gambling? Base: Sub-sample (n=2,702). * significantly different from mean of all subsampled respondents

Sub-sampled respondents who reported that they had been affected by another person's gambling were subsequently asked if they had been affected in any of the ways listed in Figure 73. The three most commonly reported effects were feeling distressed about the other person's gambling (80.0%), experiencing increased tension in relationships (64.3%), and feeling angry at the person for not controlling their gambling (63.3%).

There were no statistically significant gender differences in the proportions affected by someone else's gambling (due to small sample sizes for persons being asked this set of questions). However, women were non-significantly more likely to report feeling distressed (86.9% compared with 75.2% of men) and feeling angry (75.9% compared with 55.0% of men). Men more often nominated experiencing increased tension in their relationships, although again the findings were non-significant (72.1% compared with 53.0% of women).

Figure 73: Short Harm Scale items for Concerned Significant Others, overall and by gender



In the last 12 months, have you been impacted by this person's gambling in any of the following ways? Base: Respondents who reported that they had been personally impacted by another person's gambling (n=193) * no significant differences by gender were found.

Section 10 - Distribution of Gambling Harms

This section describes how gambling-harms are distributed throughout the Victorian community. While the overall prevalence of gambling-harms has been described in a prior section (see Section 9), this section instead describes how the occurrence of gambling-harms is associated with gambling-products, demographics and lifestyle factors.

Harms by Product Category

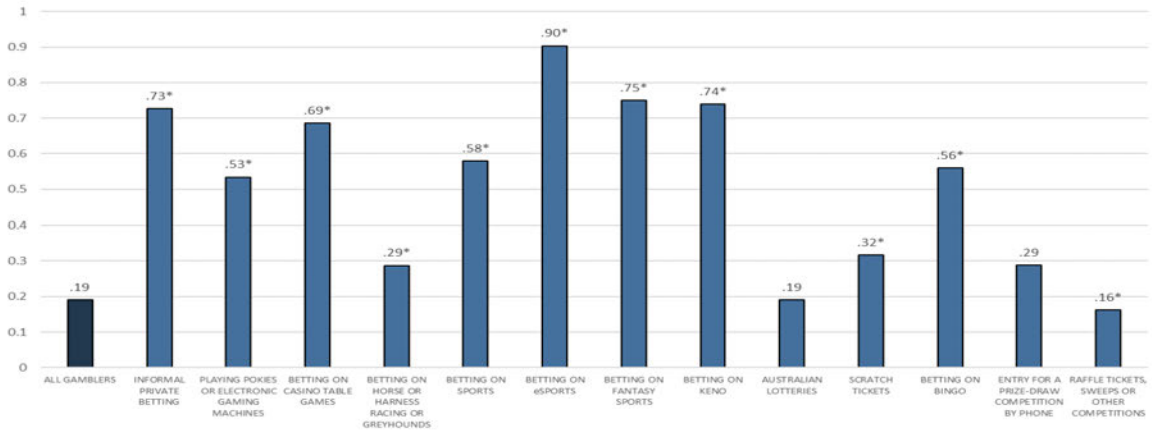
Figure 7 on pg. 39 explored the gamblers' use of various product categories by Problem gambling (PGSI) status. Some popular activities – such as lotteries – had high rates of participation by people with gambling problems. However, this does not strongly suggest that popular products are the direct source of gambling problems, since it is common that gamblers use multiple products. Moreover, problem gamblers use more types of gambling products on average when compared to other gamblers.

A potentially better means of exploring the risk associated with various gambling products is to look at the average levels of gambling harms experienced by people who engage with each product. This has the advantage of looking at the whole population of people who use such products when determining harm.

Figure 74, below, shows the average number of gambling harms (a count of 0-10) that people experience who nominate using each product category within the last 12 months. People who participate in Australian Lotteries and who buy raffle tickets, sweeps or participate in other competitions have the lowest average experience of harm – despite these activities also being popular with people who have gambling problems. In contrast, people who bet informally on private games, bet at casino table games, bet on eSports, fantasy sports and play keno show some of the highest levels of harm.

These statistics on harm by product should be interpreted with caution, however, since - as noted - many gamblers engage with multiple products. The products with the highest associated harms may not be the products that are the direct source of the harm. Nevertheless, this gross analysis reliably points to products that attractive to people who are harmed by gambling.

Figure 74: Mean Scores on Short Gambling Harms by participation in each product type, 2018- 2019



Base: Respondents who gambled in the last 12 months (n=7,631). * significant difference from the mean for all gamblers.

Gambling harms and problems are associated with excessive gambling on one or more different gambling activities. Accordingly, it is possible to regress people's participation in different activities, as dummy coded variables, to establish which activities are associated with more harms. The beta coefficients in these regressions, illustrate in Table 44, correspond to the risk of increased harm per- person (in the case of the harms regression), or a greater probability for a person to be classified as a moderate risk or problem gambler (in the case of the regression with PGSI as the outcome). However, if the prevalence of an activity in the population is relatively low (e.g., eSports betting), then a high risk per-person may not necessarily correspond to a large aggregate population impact. This is best captured by metrics that measure the percentage of variance explained by the *partial effect* of each activity. Partial effects are somewhat problematic to calculate in multiple regression, because of the problem of dividing common explained variance between predictors. In other words, the incremental amount of variance explained depends on what other covariates are in the model. The LMG metric, named after the authors Lindeman, Merenda, and Gold (1980), solves this problem by averaging partial effects for all possible combinations of predictors. In this manner, the *relative importance* of each predictor can be defined by dividing this explained variance by the total explained variance of the model. Given that all gambling harm must logically be associated with engagement in some gambling activity, then this percentage can be interpreted as the total amount of harm in those who gambled in the past 12 months attributable to each form of gambling

Table 44 summarises the sample prevalence of each form (labelled "prev."), beta coefficients (β) and the LMG metric, for an ordinary least squares regression predicting scores on the Short Gambling Harms Screen (SGHS). Beta coefficients for a separate logistic regression predicting either moderate- risk or problem gambling status based on PGSI scores are also illustrated in the same table. The gambling activities individually predicting the most harm were eSports (β = .40), informal private betting (.36), Keno (.33) and EGMs (.32). Due to their high prevalence, however, the gambling forms with the greatest population impact were EGMs (37.7%), casino table games (15.0%), and Keno (13.2%).

Together, these 3 activities constituted the estimated majority of all gambling harm (65.9%). Among gamblers, raffle tickets were associated with relatively lower number of gambling harms and a lower likelihood of being a moderate-risk or problem gambler.

Table 44: Model summaries and LMG[b] variable importance metrics for gambling forms predicting SGHS harm count and PGSI moderate-risk or problem gambler status

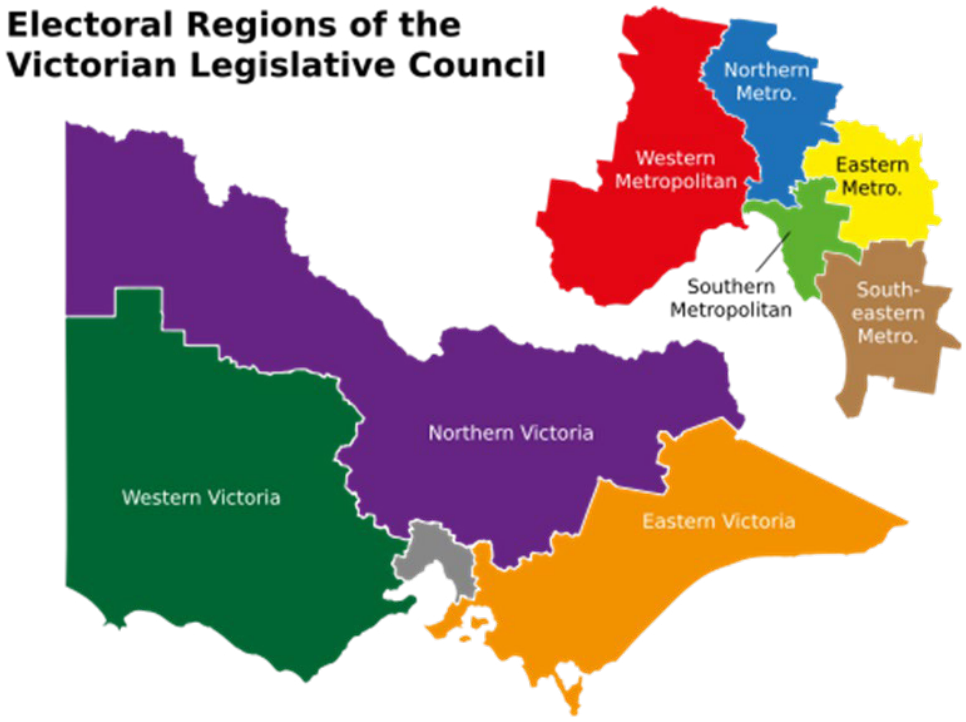
	Harms (OLS[a])						MR/PG (Logistic)		
Variable	**Prev.**	**β**	**SE(β)**	**t**		**LMG[b]**	**β**	**SE(β)**	
EGMs	15%	0.32	0.02	13.08	*	37.7%	0.08	0.01	*
Casino table games	4%	0.28	0.04	6.81	*	15.0%	0.04	0.01	*
Keno	3%	0.33	0.05	6.72	*	13.2%	0.04	0.01	*
Informal private	3%	0.36	0.05	7.28	*	13.1%	0.05	0.01	*
Sports	4%	0.20	0.04	4.85	*	8.3%	0.06	0.01	*
Bingo	2%	0.23	0.06	3.71	*	3.7%	0.02	0.01	
Scratch tickets	11%	0.06	0.03	2.37		2.4%	0.02	0.01	
eSports	0%	0.40	0.15	2.73	*	2.1%	0.07	0.03	*
Horse racing	19%	0.01	0.00	0.25		1.8%	0.00	0.01	
Raffle tickets	40%	-0.06	0.02	-2.94	*	1.7%	-0.02	0.00	*
Fantasy sports	0%	0.18	0.18	0.98		0.6%	-0.06	0.04	
Entry for a private	3%	0.06	0.05	1.31		0.4%	0.00	0.01	
Lotto	48%	-0.02	0.02	-1.18		0.2%	0.00	0.01	

Base: 7631 persons who had gambled in the last 12 months. a. Ordinary least squares. b. Statistic named after authors: Lindeman, Merenda, and Gold (1980).* significance for each variable in predicting harm for OLS regression and MR/PG for Logistic regression, respectively.

Harms by Region

The geography of the state of Victoria is defined by 8 electoral regions. These regions are illustrated in Figure 75 for ease of reference.

Figure 75: Map of the 8 Electoral Regions of Victoria [40]

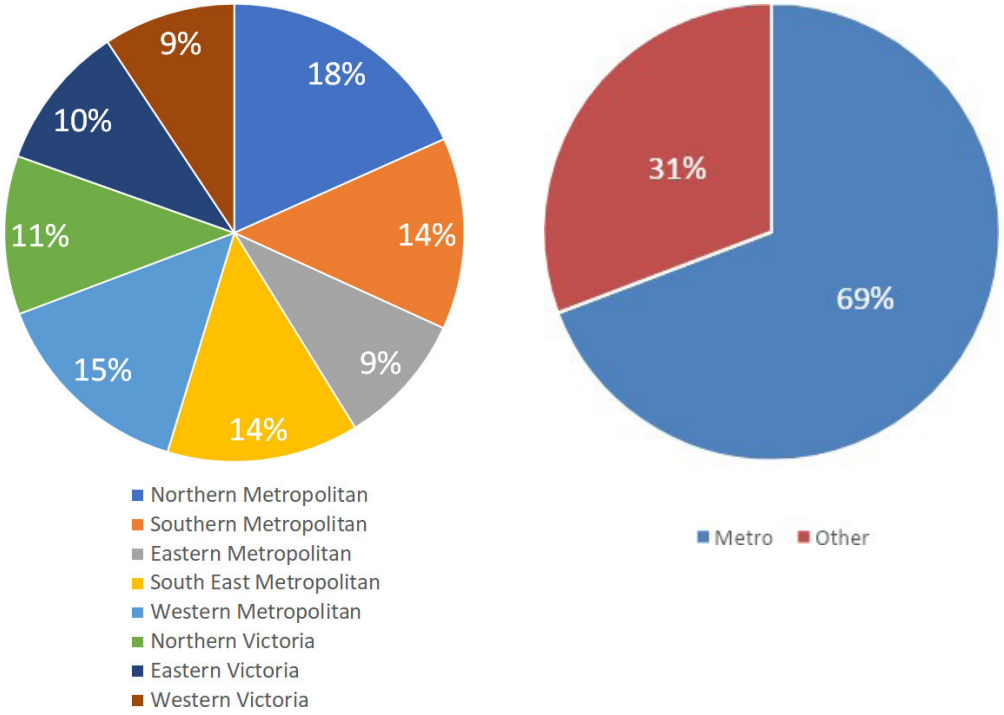


The count of population weighted harms, as estimated with the Short Gambling Harms Screen (SGHS) were summed by region in Victoria, and the results are illustrated in Figure 76. As shown in the second panel, nearly 70% of the sum total of all harms experienced were in the metro regions of Victoria.

Perhaps unsurprisingly, however, the counts of harm are distributed in line with the population, where an estimated 77% of the Victorian population lives in the Metro areas.

40 https://en.wikipedia.org/wiki/Electoral_regions_of_Victoria (creative commons licence)

Figure 76: Total Count of Harms (SGHS) by Region, 2018-2019



While the bulk of harms are distributed in the metro areas along with the population, it is also useful to understand the relative likelihood that a gambler may have experienced some harm as a function of where they live. Table 45 below illustrates the prevalence of harms, expressed as a percentage of gamblers living in each region. The Northern Metro and South-eastern areas have relatively high prevalence of harms. In contrast, gamblers living in Western Victoria have relatively fewer harms.

Table 45: Gambling Harms (SGHS) by Region, 2018-19

	Harms (SGHS)		Extra Severe Harms	
	Harms 0	**Harms 1+**	**Harms 0**	**Harms 1+**
Northern Metro	88.8% *	11.2% *	97.7%	2.3%
Southern Metro	92.0%	8.0%	98.6%	1.4%
South-eastern Metro	87.6% *	12.4% *	97.7%	2.3%
Eastern Metro	90.5%	9.5%	98.4%	1.6%
Western Metro	89.4%	10.6%	97.9%	2.1%
Northern Victoria	90.9%	9.1%	98.4%	1.6%
Eastern Victoria	91.3%	8.7%	98.2%	1.8%
Western Victoria	92.6% *	7.4% *	98.3%	1.7%
All Victorian Gamblers	**90.4%**	**9.6%**	**98.2%**	**1.8%**

Base: 7631 persons who had gambled in the last 12 months. * significant differences from the proportions for all Victorian gamblers.

Harms by Income

There is a significant relationship between income and gambling harm, as measured by the Short Gambling Harms Screen (see 46). The greatest likelihood of suffering harm occurs amongst people on low- to middle annual personal incomes of between $20,800 and $41,599.

Table 46: Gambling Harms (SGHS) by Income, 2018-19

	Harms 0	Harms 1+
Nil or negative income	91.8%	8.2%
1-399 weekly / 1-799 fortnightly / 1-20,799 annually	88.5%	11.5%
400-799 weekly / 800-1,599 fortnightly / 20,800-41,599 annually	86.0% *	14.0% *
800-1,499 weekly / 1,600-2,999 fortnightly / 41,600-77,999 annually	89.2%	10.8%
1,500-2,999 weekly / 3,000-5,999 fortnightly / 78,000-155,999 annually	89.7%	10.3%
3,000+ weekly / 6,000+ fortnightly / 156,000+ annually	94.1%	5.9%
Missing	93.6% *	6.4% *
Refused/Don t know	92.4% *	7.6% *
All Victorian Gamblers	**90.4%**	**9.6%**

Base: 7631 persons who had gambled in the last 12 months. * significant differences from the proportions for all Victorian gamblers.

Harms by Problem Gambling Severity (PGSI)

The Prevention Paradox refers to the situation where “A large number of people exposed to a low risk is likely to produce more cases than a small number of people exposed to a high risk” (Rose, 1981, p.1849). Gambling harm is not easily considered a disease-state, because one person can have multiple harms that originate from their gambling. Nevertheless, there is a logical analogue to the prevention paradox in considering gambling-harm, since non-problem, low and moderate risk gamblers, in turn, are more numerous than problem-gamblers, and yet still suffer from gambling harms.

Figure 77 below displays the sum of harms from all gamblers and Figure 78 shows extra harms by their relative frequency across problem-gambling status (PGSI). Figure 77 shows harms by PGSI status calculated from the Short Gambling Harms Screen. These common, although less severe, harms are excellent indicators that gamblers are likely to be also suffering from more severe harms. Therefore, these harms are good proxy measures for overall harm that is likely to be suffered within each PGSI category. As shown, and in line with prior results from Browne et al.’s (2016) Victorian harms study, about ½ of all harms are nominated by non-problem and low risk gamblers. An estimated 30% of harms are being suffered by problem gamblers, which is well above Browne et al.’s prior estimates (albeit these prior findings were made in an internet convenience sample). Moderate risk gamblers are estimated to constitute a smaller proportion of harm in the present sample (26%) in comparison to the prior estimates (34.5%).

These comparisons, however, should be made with caution since the underlying methodology and samples are somewhat different. Browne et al.’s 2016 study scaled harms according to their severity before summation. The present study sums only common (prevalent) harms as a proxy for overall harm. In addition, as noted, the prior 2014 sample was gathered from an internet panel that was weighted to the Victorian population using Census data.

Sampling in the present study is superior, since the RDD design helps ensure representativeness to the whole Victorian population even before weighting procedures are employed.

In Figure 78, a summation of the 4 “extra” harm items was made and expressed (again) as a percentage of total “extra” harms amongst all gamblers. The four extra harm items, as detailed in Figure 72 on pg. 107, reflect relatively less frequent but more severe types of gambling harm. These harms include “spent less on essential expenses such as medication, health care and food”, “Experienced greater conflict in my relationships (arguing, fighting, ultimatums), “Been a victim of family/domestic violence” and “Didn’t attend fully to the needs of children”. Each of these 4 extra harms items were nominated to be as a result of the respondent’s gambling and not for any other reason. Importantly, on inspection of Figure 78, still (slightly) over ½ of harms are nevertheless being counted outside of the ranks of problem gamblers. Thus, even unambiguously harmful consequences from gambling are still, in the majority, occurring to people who by best estimates likely do not have a diagnosable problem gambling disorder.

Figure 77: Total Count of Harms (SGHS) by Problem Gambling Status (PGSI), 2018-19

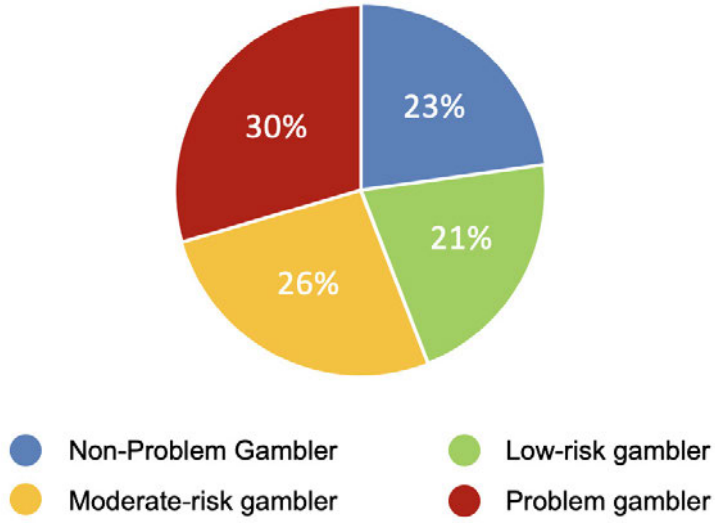


Figure 78: Total Count of Extra Harms by Problem Gambling Status (PGSI), 2018-19

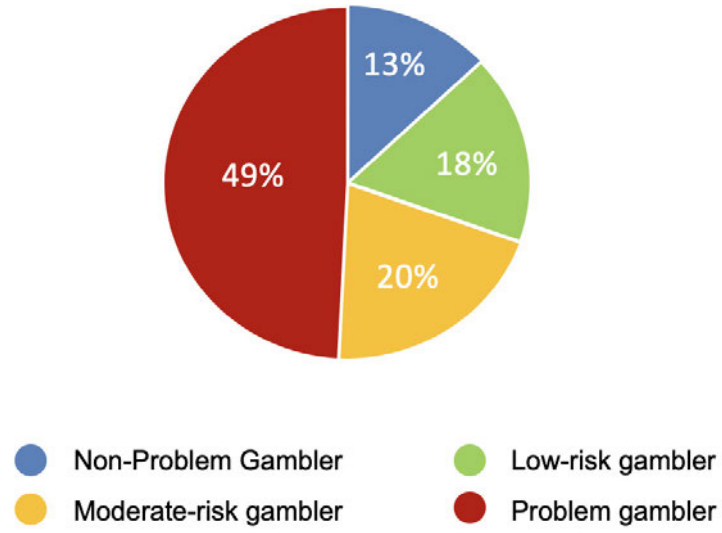


Table 47 shows the frequencies for endorsement of each of the harms items on the Short Gambling Harms Screen (SGHS) as well as the 4 additional "extra" severe harms. In general, endorsement of harms items increases with problem gambling severity, and harms are particularly prevalent amongst people who are classified as problem gamblers.

Table 47: Short Gambling Harms Screen items, by PGSI

		PGSI			
	All gamblers (n=7631)	**Non-problem gamblers (n=6655)**	**Low risk gamblers (n=683)**	**Moderate risk gamblers (n=223)**	**Problem gamblers (n=70)**
Short Gambling Harms Screen (SGHS):					
Reduction of your available spending money	**5.1%**	2.0%*	12.9%*	34.9%*	82.7%*
Reduction of your savings	**3.9%**	1.5%*	7.6%*	30.2%*	72.0%*
Had regrets that made you feel sorry about your gambling	**3.4%**	0.7%*	9.6%*	27.5%*	81.3%*
Less spending on recreational expenses such as eating out, going to movies or other	**2.8%**	0.8%*	6.4%*	18.7%*	73.6%*
Felt ashamed of your gambling	**2.0%**	0.3%*	4.4%*	19.1%*	63.2%*
Felt like a failure	**1.7%**	0.3%*	2.7%*	11.3%*	76.8%*
Felt distressed about your gambling	**1.5%**	0.1%*	1.5%	14.8%*	66.3%*
Spent less time with people you care about	**1.3%**	0.3%*	1.5%	7.5%*	53.7%*
Increased credit card debt	**0.7%**	0.1%*	1.5%	5.2%*	27.7%*
Sold personal items	**0.4%**	0.0%*	0.4%	0.4%	27.1%*
Extra Harms:					
Spent less on essential expenses such as medication, health care, and food	**1.1%**	0.1%*	0.8%	6.3%*	61.2%*
Experienced greater conflict in my relationships (arguing, fighting, ultimatums)	**0.9%**	0.1%*	2.3%*	6.8%*	36.7%*
Been a victim of family/domestic violence	**0.4%**	0.1%*	1.1%	1.7%	15.0%*
Didn't fully attend to needs of children	**0.2%**	0.1%	0.5%	0.4%	7.4%*

Base: 7631 persons who had gambled in the last 12 months. * significant differences from the proportions for all gamblers.

Years of Life Lost to Disability (YLD)

Browne et al.'s 2016 Victorian Harms Study estimated the utility weights, or health state decrements, for gamblers according to each problem gambling status (PGSI) category (with the exception of non- problem gamblers who were excluded due to low participant numbers). These health state decrements were based on vignettes that described the life circumstances of gamblers according to the harms they were experiencing, which were presented in a straightforward and unemotional language that detailed these harms. Gamblers, the general public, and gambling-help professionals rated these circumstances using two methods to determine these health state decrements.

The present study, for the first time, counted harms that were occurring (albeit infrequently) to people who rate as non-problem gamblers on the PGSI. As shown in Figure 77, non-problem gamblers experience 23% of all Short Gambling Harms (SGHS), and as shown in Figure 78, 13% of the more severe harms that were asked in the present survey. In order to make the most conservative estimate of Years of Life Lost to Disability, the present analysis assumes the proportions of harm according to the 4 most severe "extra" harm items that were surveyed in the questionnaire. Table 48 shows these calculations. The utility weights, or health decrements, were copied from Browne et al.'s (2016) study for the low risk, moderate risk, and problem gamblers for the present analysis, since it is reasonable to assume that these should not change substantially over the brief intervening period. The health state utility for non-problem gamblers, in contrast, was not estimated in Browne et al.'s (2016) study due to low numbers of these persons in the sample. Nevertheless, the health state utility was imputed in Table 48 for non-problem gamblers, since both the prevalence of non-problem gamblers and the proportion of harms for this group is known (see Figure 78). Unsurprisingly, this utility decrement is small (1%).

Table 48: Years of Life Lost to Disability by PGSI, 2018-19

Problem Gambling Severity Index (PGSI)	Utility Weight	Prevalence in Population (%)	Total of Victorian Gambling Population	Years of Life Lost to Disability (YLD)
Non-problem	0.01	59.20%	2,911,781	30,904
Low Risk	0.13	6.70%	329,153	42,790
Moderate Risk	0.29	2.40%	118,004	34,221
Problem Gambler	0.44	0.70%	36,123	15,894
Total (Gamblers)		**69.00%**	**3,395,061**	**123,809**

The total Years of Life Lost due to Disability for the 12-month study frame (2018-19) was 123,809. Given the average Australian expected lifespan of 82 years, this figure amounts to 1,510 lifetimes of lost productivity and enjoyment due to gambling harm experienced during the year. On a per-capita basis, this corresponds to a 2.5% decrement to the quality of life of adult Victorians; which is exclusive of any recreational benefits from gambling (cf., Rockloff, Browne, Russell, Merkouris, & Dowling, 2019).

Conclusion

The Executive Summary provides an overview of the study results, and this conclusion will not reiterate these key findings. Instead, this conclusion section highlights trends that can inform future research, prevention and treatment efforts. This conclusion suggests changes in the gambling environment that should be monitored closely for their future impact on gambling problems and harm. The report details the prevalence of problem gambling as a mental health condition affecting a small proportion of adults (0.7%, or an estimated 36,123 Victorians). Importantly, however, this report uses new methods and measures from public health literature to document gambling harms in the Victorian community. The conclusion highlights that these findings supplement and confirm earlier results by Browne et al. (2016) in discovering wide-spread harms outside of the small group of people who suffer from gambling disorders. Lastly, the conclusion argues that a new metric for gambling harm, Years of Life Lost to Disability (YLD), is a superior metric for tracking progress in the prevention of gambling harm.

Limitations

In order to have a full understanding of the importance of the results, it is important to recognise that limitations are inherent in any study. For this research, the use of telephone contacts – inclusive of mobiles – excluded some special populations that do not have access to a personal telephone service. This includes incarcerated people and people living in group-home situations, such as assisted care living. Non-response to telephone surveys can also present a source of bias, since there is no guarantee that sample persons who are both contacted and agree to interviews are like people who either cannot be contacted or who refuse interviews. Lastly, of course, the study presumes that respondents are motivated to give full and honest answers to survey questions about a sensitive topic.

Changes to the gambling environment

The internet continues to be a small but rapidly growing vehicle for betting. A major change to the gambling environment is the ubiquity of sports betting on the internet, and in particular using mobile betting applications. In 2008, only 22.4% of sports-bettors placed wagers on the internet, whereas 78.1% of sports bettors used the internet to wager in 2018-19. The prevalence of betting on horse, harness or greyhound racing online has also increased from 2008 to 2018-19 from 6.8% to 34.7%. It is notable that these increases in online betting are on activities that are legal to offer to Australian consumers, whereas the forms that are not legal to offer have much lower uptake (e.g., 1.3% of Pokies players bet online in 2018-19, and 1.9% of Casino Table Game players). Any legislative changes that legalise other offerings might be expected to have a comparable impact on internet gambling uptake.

Fantasy sports and eSports betting are presently undertaken by only a very small proportion of adults (0.4% and 0.5%, respectively). Nevertheless, people who gamble on these forms are experiencing some of the highest average levels of gambling harm, which warrants close monitoring.

Interactive (internet) forms of gambling are growing in popularity, and therefore might reasonably occupy more attention in the form of research, prevention and treatment. While these forms of gambling are not entirely different from traditional gambling, the use of the internet to gamble places special burdens on providers to know their customers and to prevent underage gambling.

Problem gambling as a mental health condition

Understanding problem gambling as a mental health condition is clearly important for the purposes of funding treatment. Given the relatively small proportion of adults with gambling disorders, however, problem gambling rates are an inefficient proxy for tracking progress in reducing levels of gambling harm. Prevalence rates for problem gambling have been approximately unchanged for more than a decade. A dominant narrative in prevention work is framed around keeping people from becoming problem or disordered gamblers. While this is a desirable goal, it carries with it two unfortunate corollaries. First, it assumes that gambling problems are necessarily a progressive illness where people transition from non-problem to low risk, moderate risk and problem gambling. Although some gamblers follow this trajectory, many other skip steps and/or recover from gambling problems without progressing to a diagnosable mental illness. Second, this prevention model makes the implicit assumption that people without a mental illness are suffering essentially no harm. The present results, however, give the lie to this assumption. Even in consideration of the most severe harms, including ones that any reasonable observer can view as unambiguously negative consequences of gambling, over 50% of the nominated harms are NOT happening to problem gamblers. Thus, prevention aimed exclusively at preventing problem gambling as a mental health condition is ignoring the potential for reducing most of the harms that exist within the whole community. The present results describe the first truly population- representative sample with respect to understanding the distribution of harms across all groupings of gamblers: including non-problem, low risk, moderate risk, and problem gamblers. It provides firm evidence that a public-health and whole-of-population approach is needed for the effective reduction in gambling-related harm.

Tracking progress in harm-reduction: Years of Life Lost due to Disability (YLD)

As noted, problem-gambling prevalence rates are a poor proxy for tracking progress in reducing gambling-related harm in the whole community. Prevalence rates have remained largely unchanged for more than a decade, which could suggest that prevention efforts have failed to make any progress.

More likely, however, the prevalence of problem gambling is simply a statistically insensitive, and by degrees an inappropriate, measure for tracking progress in the outcome that most matters: gambling- related harm. One better alternative is Years of Life Lost to Disability (YLD). This metric is based on the Burden of Disease framework (Murray, 1994), employed by the World Health Organisation, with a long history of successful application in other areas of public health: including alcohol and drug use.

Orthodoxy in these related fields recognises that substance abuse creates harm not just for people who are “addicted” to substances, but to recreational users as well. For instance, people who drink too much, without necessarily having an Alcohol Use Disorder, may nevertheless get into fights, be injured, or have relationship problems. Our present results suggest that gambling produces the same pattern of harms distributed widely in the population.

Years of Life Lost to Disability employs a combination of harms counted within the population, but also weighted according to severity. Not all harms are equal in producing decrements to people’s health and well-being. Consequently, estimates of harmful consequences must be rated for their likely impact on decreasing people’s experience of quality of life. These estimates were made in Browne et al.’s (2016) study and summarised for different categories of gamblers: low risk, moderate risk and problem gamblers. In the current study, for the first time, it was possible to impute the decrements to quality of life resulting from the (rare) harms being experienced by non-problem gamblers (1% decrement). While this might seem like a contradiction in terms, the definition of non-problem gambling is made by the Problem Gambling Severity Index (PGSI, Ferris & Wynne, 2001) and is not

free from measurement error. Therefore, the 1% decrement to quality of life might be, arguably, resulting from a misclassification of some gamblers as non-problematic. Recognising these decrements to quality of life, across all PGSI groups, and in the whole population produced a figure of 1,510 lifetimes (or 123,809 YLD in 2018-19 alone). This corresponds to 2.5% of decrement per-capita to quality of life for Victorians; albeit exclusive of any recreational benefits from gambling. This figure can form a meaningful baseline metric for progress in gambling-harm reduction. Importantly, unlike the problem gambling prevalence rate, it does not perpetuate the myth that gambling-harm is in the exclusive province of problem-gambling as a mental health disorder. Therefore, YLD serves the purpose of both tracking harm, and informing the redirection of resources towards efforts that are more likely to improve the general welfare of the Victorian community.

Research, prevention and treatment

Lastly, the present study provides new directions for research, prevention and treatment. Gambling research should make greater strides in studying gambling under a public health approach. This arguably should start with a clear and unambiguous recognition that gambling harms are concentrated outside of problem-gambling as a mental health condition. Many researchers readily accept a vague conception that the public health approach is beneficial, but still concentrate their efforts and arguments in favour of viewing gambling problems exclusively through a mental health lens. Prevention should focus on efforts to reduce harm in non-clinical populations of gamblers. These efforts should not explicitly or implicitly attempt to *prevent* people from becoming “problem gamblers” (a limited narrative) but should instead help people in reducing the harm they experience from the use of the products.

Lastly, treatment and treatment-funding models that rely on a diagnosable mental illness denies a potentially useful role that treatment professionals can have on reducing gambling harm. Many clients present with complex case histories that might include some gambling-harms as only one element in a wider picture of dysfunction. Extending treatment approaches and treatment-funding to address gambling-harm in people who do not strictly qualify as disordered gamblers can have a positive impact on client outcomes.

Appendix A: Questionnaire

2018 Survey for the Victorian Population Gambling and Health Study (Clean) AU3000496

APPROVED 27/08/2018 Edited 10/09/2018 CQU/VRGF

If necessary texts

Button 1 Attrition risk
Button 2 Study information
Button 3 Mental distress
Button 4 Respondent anger
Button 5 Do not call list
Button 6 Which Government department?

Introduction

Pre-screen for survey (Spatial distribution of gambling in Victoria)

Gambling Behaviours

EFTPOS Use (per Hare, 2014)

Problem Gambling Severity Index (PGSI)

Gaming Participation (per NZ Gambling Study)

Risk for Problem Gambling – Lifetime; NODS-Clip 2

Short Harms Screen (Browne et al, 2017)

“Extra” Salient Harms to Self (Browne and Rockloff, 2018)

Short Harms to CSOs (Browne et al, Tasmanian Prevalence Study, 2017)

Legacy Harms

Alcohol Whilst Gambling (per Hare, 2014)

Australian Unity Wellbeing Index

Kessler Psychological Distress Scale (K6)

Alcohol Screen (AUDIT-C)

Smoking

Help Seeking (per Steering Committee, May 2nd)

Other Demographics

*SAMPLE VARIABLES TYP (1 = LANDLINE, 2 = MOBILE)

If necessary texts

Programmer Note: Display at top on CATI screen

Button 1 Attrition risk

We'd really appreciate you taking part. This is one of the world's few studies to explore a link between gambling and health and well-being.

So would you please take part? (pause).

Doesn't gamble

We're just as interested in people who don't gamble, as this study is also exploring why some people prefer not to gamble. IF GREAT RISK OF ATTRITION/REFUSAL – OFFER CONTACT BY RESEARCHER

Button 2 Study information

Study information line and web site

If you'd like more information on the study – www.orcgamblingandhealthstudy.com - or call Katherine Tran (03) 8639 5100

Button 3 Mental distress

Suicide line (24/7) - 1300 651 251

Problem gambling counselling for those affected or families (24/7) - 1800 858 858 gamblinghelponline.org.au (Online counselling)

Lifeline 13 11 14

Button 4 Respondent anger

Perhaps it may be useful if I get one of the study researchers to call you directly.

(If consent – Please select respondent anger in the disposition list and record name and phone number) Button 5 Do not call list

We'd really appreciate you taking part but if you wish to be removed, we can add you to our do not call register. This means you won't receive calls from our company, but this doesn't stop other market research companies from contacting you.

Button 6 Which Government department?

"The Victorian Responsible Gambling Foundation is a statutory authority created by the Victorian Parliament specifically to address the challenge of gambling harm in the Victorian Community. The Department of Justice and Regulation is the Foundation's home department."

Introduction

***(LANDLINE SAMPLE)**

“Good morning/afternoon/evening, my name is [interviewer name] from ORC International (Engine Group), an independent research company.”

“This call is on behalf of the Victorian Government. We are conducting a study on public health. It’s very important we speak to a broad range of people for this study, and the best way for us to do this is to randomly select people by using birthdays. May I speak to the adult in your household aged 18 years and older with the most recent birthday?”

IF NECESSARY: Which Government department?

“The Victorian Responsible Gambling Foundation is a statutory authority created by the Victorian Parliament specifically to address the challenge of gambling harm in the Victorian Community. The Department of Justice and Regulation is the Foundation’s home department.”

{*After recent birthday person identified – repeat as needed*}

“This is a major study on health and gambling. Taking part in the survey is voluntary and confidential. The survey will take around 12 minutes to complete on average.”

X1. Can I please continue?

“Let me know if you need to go somewhere private to talk”

{If no response – assume happy to continue and code ‘1’}

Happy to continue	**1**
Wants further information (PROVIDE STUDY WEBSITE AND SET CALL BACK)	2

FURTHER INFO: READ IF RESPONDENT ASKS FOR MORE DETAIL: “We are looking at how

gambling affects public health. The study will look at both people who don’t gamble as well as those who do to see how gambling affects health.”

Study website: www.orcgamblingandhealthstudy.com

{*INSERT DISPOSITION FRAME AND SELECT CALL OUTCOME AS APPROPRIATE (codes per ORC)*}

***(MOBILE SAMPLE)**

“Good morning/afternoon/evening. My name is [interviewer name] from Engine Group, an independent research company. This call is on behalf of the Victorian Government. We are conducting a study on public health with Victorian residents aged 18 years and over. Would that be you?

“This is a major study on health and gambling. Taking part in the survey is voluntary and confidential. The survey will take around 12 minutes to complete on average.”

IF NECESSARY: Which Government department?

"The Victorian Responsible Gambling Foundation is a statutory authority created by the Victorian Parliament specifically to address the challenge of gambling harm in the Victorian Community. The Department of Justice and Regulation is the Foundation's home department."

X2. Firstly, may I just check are you able to take this call at the moment? You're not driving are you?

Yes, able to take call	**1**
No, not able to take call – but OK to call back	2
Refused	3

Ref X3. And could I just **<IF CODES 2-3 AT X2>** quickly ask, do you live in VIC and are aged 18 years or over?

Yes [Continue, make appointment or thank & close as appropriate]	**1**
No [Terminate & Thank]	2
Refused [Terminate & Thank]	3

[TERMINATE & THANK] - Thank you for your time, however for this survey we are just wanting to talk to people aged 18 years and over who are living in Victoria**.**

ASK IF X1 = Happy to continue (1)

X4. Can I please continue?

"Let me know if you need to go somewhere private to talk"

{If no response – assume happy to continue and code '1'}

Happy to continue	**1**
Wants further information (PROVIDE STUDY WEBSITE AND SET CALL BACK)	2

FURTHER INFO, READ IF RESPONDENT ASKS FOR MORE DETAIL: "We are looking at how

gambling affects public health. The study will look at both people who don't gamble as well as those who do to see how gambling affects health."

Monitor

ASK ALL

This interview is being recorded for quality control and training purposes. Please let me know if you do not wish for this to occur.

Recording allowed	1
Recording not permitted	2

TS1 TIMESTAMP1

Screener

To check whether you are eligible for this survey could you please answer a couple of questions before we start.

ASK ALL

S1. Do you live in Victoria? SR

DO NOT READ OUT

Yes	1	Continue
No	2	Thank & Close

Thank and close - If other state, then “Sorry this study is only for people living in Victoria. Thanks anyway for your time.”

ASK ALL

S2. What is your current age please? SR/NUM

RECORD AGE IN YEARS

Age given _ _ _ (RANGE 18 TO 120)	1	Continue
RESPONDENTS IS 17 OR YOUNGER	2	Thank & Close
Refused	3	Go to S3

Thank and close - “Sorry this study is only for people over the age of 17. Thanks anyway for your time.”

ASK IF S2 = Refused (3), OTHERS GO TO S4

S3. What is your broad age group please? SR

PROBE TO CLARIFY

18 to 19	1	Continue
20 to 24	2	Continue
25 to 29	3	Continue
30 to 34	4	Continue
35 to 39	5	Continue
40 to 44	6	Continue
45 to 49	7	Continue
50 to 54	8	Continue
55 to 59	9	Continue
60 to 64	10	Continue
65 to 69	11	Continue
70 to 74	12	Continue
75 to 79	13	Continue
80 to 84	14	Continue

85 years and over	15	Continue
Refused	98	Thank & Close

Thank and close - “Sorry this study is only for people who can answer this question about their age. Thanks anyway for your time.”

ASK ALL

S4. Record sex SR

DO NOT READ OUT

Male	1	Continue
Female	2	Continue
Other (DO NOT PROMPT)	96	Continue

SPATIAL DISTRIBUTION OF GAMBLING IN VICTORIA ASK ALL

S5. What is the postcode of the suburb/area where you live? SR/NUM

Record postcode _ _ _ _ (VALIDATE)	1	Continue
IF INVALID		RECORD IN DATA CODE 2
Refused	98	Continue
Don’t know	99	Continue

ASK IF S5 = Invalid (2), Refused (98) or Don’t know (99), OTHERS GO TO Q1 S6. What is the suburb?

SR/TEXT

Record suburb	1	Continue
Refused	98	Continue
Don’t know	99	Continue

S7. In which of the following areas do you live? SR

READ OUT

Melbourne	1	Continue
Victoria not Melbourne	2	Continue
Refused (DO NOT READ OUT)	98	Thank & Close
Don’t know (DO NOT READ OUT)	99	Thank & Close

Thank and close - “Sorry this study is only for people who can answer this question about where they live. Thanks anyway for your time.”

TS2 TIMESTAMP2

Gambling Behaviours

ASK ALL

Now on the actual survey…

Q1a. In the last 12 months, have you spent any money on informal private betting like playing cards at home?

DO NOT READ OUT SR

Yes	1
No	2
Refused	98
Don’t know	99

ASK IF Q1a = Yes (1), OTHERS GO TO Q1b

Q2a. In the past 12 months, how often did you take part? SR/NUM

PROGRAMMER NOTE: VALIDATED TO MINIMUM OF 1

_ _ per week	1
_ _ _ per month	2
_ _ _ per year	3
Refused	98
Don’t know	99

ASK ALL

Q1b. In the last 12 months, have you spent any money on playing pokies or electronic gaming machines?

DO NOT READ OUT SR

Yes	1
No	2
Refused	98
Don’t know	99

ASK IF Q1b = Yes (1), OTHERS GO TO Q1c

Q2b. In the past 12 months, how often did you take part? SR/NUM
PROGRAMMER NOTE: VALIDATED TO MINIMUM OF 1

_ per week	1
_ _ per month	2
_ _ per year	3
Refused	98
Don't know	99

Q3b. Did you play the pokies at…? READ OUT

MR

Victorian pub, club or hotel	1
Crown Casino	2
Online	3
Elsewhere (SPECIFY)	96
Interstate pub, club or hotel (DO NOT READ OUT)	4
Interstate casino (DO NOT READ OUT)	5
Overseas pub, club or hotel (DO NOT READ OUT)	6
Overseas casino (DO NOT READ OUT)	7
Cruise ship (DO NOT READ OUT)	8
Facebook – no cash wins (DO NOT READ OUT)	9
Refused (DO NOT READ OUT)	98
Don't know (DO NOT READ OUT)	99

Q4b. Over the past 12 months, on a typical day in which you played the pokies, how much time did you spend playing?

READ OUT IF NECESSARY

SR

Less than 30 minutes	1
30 minutes or more but less than 1 hour	2
1 hour or more but less than 2 hours	3
2 hours or more but less than 3 hours	4
3 hours or more	5
Refused (DO NOT READ OUT)	98
Don't know (DO NOT READ OUT)	99

EFTPOS Use (Per Hare, 2014)

Q5b. Over the past 12 months and in a typical session, how many times did you get EXTRA money for gambling on pokies through EFTPOS (after you had already started gambling)?

SR/NUM

Note: Make sure zero means that the EFTPOS card was not used

_ _ _._ _ times per gambling session	1
Refused (DO NOT READ OUT)	98
Don't know (DO NOT READ OUT)	99

ASK IF Q5b = extra money for gambling (>0), OTHERS GO TO Q1c

Q6b. Over the past 12 months, when you have withdrawn extra money, how much did you typically withdraw per session?

SR/NUM

RECORD VALUE TO 2 DECIMAL PLACES

$_ _ _ _ . _ _	1
Refused (DO NOT READ OUT)	98
Don't know (DO NOT READ OUT)	99

ASK ALL

Q1c. (In the last 12 months), have you spent any money betting on casino table games such as blackjack, roulette, and poker?

DO NOT READ OUT SR

Yes	1
No	2
Refused	98
Don't know	99

ASK IF Q1c = Yes (1), OTHERS GO TO Q1d

Q2c. In the past 12 months, how often did you take part? SR/NUM

PROGRAMMER NOTE: VALIDATED TO MINIMUM OF 1

_ per week	1
_ _ per month	2
_ _ per year	3
Refused	98
Don't know	99

Q3c. Did you place your bets at...? READ OUT

MR

Crown Casino	1
Online	2
Elsewhere (SPECIFY)	96
Interstate casino (DO NOT READ OUT)	3
Overseas casino (DO NOT READ OUT)	4
Cruise ship (DO NOT READ OUT)	5
Facebook – no cash wins (DO NOT READ OUT)	6
Refused (DO NOT READ OUT)	98
Don't know (DO NOT READ OUT)	99

ASK ALL

INTERVIEWER NOTE: Reinforce 'in the last 12 months' to remind respondents of the timeframe

Q1d. In the last 12 months, have you spent any money betting on horse or harness racing or greyhounds – including the Melbourne Cup, Spring racing or on trackside virtual racing, but NOT including all sweeps?

DO NOT READ OUT SR

Yes	1
No	2
Refused	98
Don't know	99

ASK IF Q1d = Yes (1), OTHERS GO TO Q1e

Q2d. In the past 12 months, how often did you take part? SR/NUM

PROGRAMMER NOTE: VALIDATED TO MINIMUM OF 1

_ per week	1
_ _ per month	2
_ _ per year	3
Refused	98
Don't know	99

Q3d. Did you place your bets at...? READ OUT

MR

Victorian racetrack with a bookmaker	1
On-track at a Victorian TAB	2
Off-track at a Victorian TAB, or TAB outlet in a pub, club or casino	3
Australian-licensed bookmaker by phone call	4
Australian-licensed bookmaker online or with a mobile app **NOTE: if asked: "use your best guess as to whether your bookmaker is Australian"**	5
Overseas bookmaker online or with a mobile app	6
Elsewhere (SPECIFY)	96
Interstate (DO NOT READ OUT)	7
Overseas (DO NOT READ OUT)	8
Refused (DO NOT READ OUT)	98
Don't know (DO NOT READ OUT)	99

ASK ALL

Q1e. (In the last 12 months), have you spent any money betting on sports – such as AFL or cricket, but NOT including all sweeps, fantasy sports, and eSports?

IF NECESSARY: What's fantasy sport?

Fantasy Sports are leagues composed of real athletes from real teams who are rearranged by players into pretend "fantasy" teams.

What's eSport?

eSports betting are bets placed on video game tournaments – usually played by professional "athlete" players. Occasionally, people will bet on non-professional play too.

DO NOT READ OUT SR

Yes	1
No	2
Refused	98
Don't know	99

ASK IF Q1e = Yes (1), OTHERS GO TO Q1f

Q2e. In the past 12 months, how often did you take part? SR/NUM

PROGRAMMER NOTE: VALIDATED TO MINIMUM OF 1

_ per week	1
_ _ per month	2
_ _ per year	3
Refused	98
Don't know	99

Q3e. Did you place your bets at...? READ OUT

MR

Victorian TAB, or TAB outlet in a pub, club or casino	1
Australian-licensed bookmaker by phone call	2
Australian-licensed bookmaker online or with a mobile app **NOTE: if asked: "use your best guess as to whether your bookmaker is Australian"**	3
Overseas bookmaker online or with a mobile app	4
Elsewhere (SPECIFY)	96
Interstate (DO NOT READ OUT)	5
Overseas (DO NOT READ OUT)	6
Refused (DO NOT READ OUT)	98
Don't know (DO NOT READ OUT)	99

ASK ALL

Q1f. (In the last 12 months), have you spent any money betting on eSports?

IF NECESSARY: eSports betting are bets placed on video game tournaments – usually played by professional "athlete" players. Occasionally, people will bet on non-professional play too.

DO NOT READ OUT SR

Yes	1
No	2
Refused	98
Don't know	99

ASK IF Q1f = Yes (1), OTHERS GO TO Q1g

Q2f. In the past 12 months, how often did you take part? SR/NUM

PROGRAMMER NOTE: VALIDATED TO MINIMUM OF 1

_ per week	1
_ _ per month	2
_ _ per year	3
Refused	98
Don't know	99

ASK ALL

Q1g. (In the last 12 months), have you spent any money betting on fantasy sports?

IF NECESSARY: Fantasy Sports are leagues composed of real athletes from real teams who are rearranged by players into pretend "fantasy" teams.

DO NOT READ OUT SR

Yes	1
No	2
Refused	98
Don't know	99

ASK IF Q1g = Yes (1), OTHERS GO TO Q1h

Q2g. In the past 12 months, how often did you take part? SR/NUM

PROGRAMMER NOTE: VALIDATED TO MINIMUM OF 1

_ per week	1
_ _ per month	2
_ _ per year	3
Refused	98
Don't know	99

ASK ALL

INTERVIEWER NOTE: Reinforce 'in the last 12 months' to remind respondents of the timeframe Q1h. In the last 12 months, have you spent any money betting on keno?

DO NOT READ OUT SR

Yes	1
No	2
Refused	98
Don't know	99

ASK IF Q1h = Yes (1), OTHERS GO TO Q1i

Q2h. In the past 12 months, how often did you take part? SR/NUM

PROGRAMMER NOTE: VALIDATED TO MINIMUM OF 1

_ per week	1
_ _ per month	2
_ _ per year	3
Refused	98
Don't know	99

Q3h. Where did you play keno...? READ OUT

MR

Victorian pub, club or hotel	1
Crown Casino	2
TAB agency	3
Online	4
Elsewhere (SPECIFY)	96
Refused (DO NOT READ OUT)	98
Don't know (DO NOT READ OUT)	99

ASK ALL

Q1i. (In the last 12 months), have you spent any money on Australian lotteries, such as Tattslotto, Oz Lotto, Powerball or Pools?

DO NOT READ OUT

Yes	1
No	2
Refused	98
Don't know	99

ASK IF Q1i = Yes (1), OTHERS GO TO Q1j

Q2i. In the past 12 months, how often did you take part? SR/NUM

PROGRAMMER NOTE: VALIDATED TO MINIMUM OF 1

_ per week	1
_ _ per month	2
_ _ per year	3
Refused	98
Don't know	99

Q3i. Did you buy your tickets online? DO NOT READ OUT

SR

Yes	1
No	2
Both Online and not online [DO NOT READ OUT]	3
Refused	98
Don't know	99

ASK ALL

Q1j. (In the last 12 months), have you spent any money on scratch tickets? DO NOT READ OUT

SR

Yes	1
No	2
Refused	98
Don't know	99

ASK IF Q1j = Yes (1), OTHERS GO TO Q1k

Q2j. In the past 12 months, how often did you take part? SR/NUM

PROGRAMMER NOTE: VALIDATED TO MINIMUM OF 1

_ per week	1
_ _ per month	2
_ _ per year	3
Refused	98
Don't know	99

Q3j. Did you buy your tickets online? DO NOT READ OUT

SR

Yes	1
No	2
Both Online and not online [DO NOT READ OUT]	3
Refused	98
Don't know	99

ASK ALL

Q1k. (In the last 12 months), have you spent any money betting on bingo? DO NOT READ OUT

SR

Yes	1
No	2
Refused	98
Don't know	99

ASK IF Q1k = Yes (1), OTHERS GO TO Q1L

Q2k. In the past 12 months, how often did you take part? SR/NUM

PROGRAMMER NOTE: VALIDATED TO MINIMUM OF 1

_ per week	1
_ _ per month	2
_ _ per year	3
Refused	98
Don't know	99

Q3k. Where did you play bingo? READ OUT

MR

Victorian bingo centre or bingo hall	1
Crown Casino	2
Elsewhere (SPECIFY) **NOTE: to our understanding, bingo is not available in pubs and clubs**	96
Interstate (DO NOT READ OUT)	3
Overseas (DO NOT READ OUT)	4
Cruise ship (DO NOT READ OUT)	5
Refused (DO NOT READ OUT)	98
Don't know (DO NOT READ OUT)	99

ASK ALL

INTERVIEWER NOTE: Reinforce 'in the last 12 months' to remind respondents of the timeframe

Q1L. In the last 12 months, have you entered a prize-draw competition by phone where there was a phone-charge for entry?

DO NOT READ OUT SR

Yes	1
No	2
Refused	98
Don't know	99

ASK IF Q1L = Yes (1), OTHERS GO TO Q1m

Q2L. In the past 12 months, how often did you take part? SR/NUM

PROGRAMMER NOTE: VALIDATED TO MINIMUM OF 1

_ per week	1
_ _ per month	2
_ _ per year	3
Refused	98
Don't know	99

ASK ALL

Q1m. (In the last 12 months), have you spent any money on buying raffle tickets, sweeps or other competitions. This includes sweeps on the Melbourne Cup, spring racing carnival or sporting events?

DO NOT READ OUT SR

Yes	1
No	2
Refused	98
Don't know	99

ASK IF Q1m = Yes (1), OTHERS GO TO Q1n

Q2m. In the past 12 months, how often did you take part? SR/NUM

PROGRAMMER NOTE: VALIDATED TO MINIMUM OF 1

_ per week	1
_ _ per month	2
_ _ per year	3
Refused	98
Don't know	99

Q3m. Did you buy your tickets online? DO NOT READ OUT

SR

Yes	1
No	2
Both Online and not online [DO NOT READ OUT]	3
Refused	98
Don't know	99

ASK ALL

Q1n. (In the last 12 months), have you spent any money betting on anything else?

DO NOT READ OUT SR

Yes (SPECIFY)	1
No	2
Refused	98
Don't know	99

ASK IF Q1n = Yes (1), OTHERS GO TO DEFINE NEW VARIABLE GAMBLER_STATUS

Q2n. In the past 12 months, how often did you take part? SR/NUM

PROGRAMMER NOTE: VALIDATED TO MINIMUM OF 1

_ per week	1
_ _ per month	2
_ _ per year	3
Refused	98
Don't know	99

Q3n. Was this online? DO NOT READ OUT SR

Yes	1
No	2
Both Online and not online [DO NOT READ OUT]	3
Refused	98
Don't know	99

PROGRAMMER: DEFINE NEW VARIABLE GAMBLER_STATUS

IF NO WAS SELECTED FOR ALL ACTIVITES (Q1a, Q1b, Q1c…Q1n), THEN DEFINE GAMBLER_STATUS AS "NON-GAMBLER" OTHERWISE AS "GAMBLER"

ASKED OF GAMBLER_STATUS = "GAMBLER", OTHERWISE GO TO DEFINING SUB-SAMPLE

Q7. Over the past 12 months, on which single gambling activity did you spend the most money?

PROGRAMMER ONLY DISPLAY ACTIVITIES CODED YES FROM Q1 IF ONLY ONE ACTIVITY, AUTOFILL

READ OUT ACTIVITY IF NECESSARY SR

	Activity
a	Informal private betting for money – like playing cards at home?
b	Playing pokies or electronic gaming machines
c	Betting on casino table games such as blackjack, roulette, and poker
d	Betting on horse or harness racing or greyhounds – including any bets at the Melbourne Cup, Spring racing or on trackside virtual racing, but NOT including all sweeps
e	Betting on sports – such as AFL or cricket, but NOT including all sweeps, fantasy sports, and eSports
f	Betting on eSports
g	Betting on fantasy sports
h	On keno
i	On Australian lotteries, such as Tattslotto, Oz Lotto, Powerball or Pools
j	On scratch tickets
k	On bingo
l	Competitions where you enter by phone or SMS to be part of a prize draw and there is charge to your phone
m	Buying raffle tickets, sweeps and other competitions. This includes sweeps on the Melbourne Cup, spring racing carnival and sporting events
n	Betting on anything else (SPECIFY)
98	Refused (DO NOT READ OUT)
99	Don't know (DO NOT READ OUT)

Q8. Thinking about the last 12 months, how much money, not including winnings, did you spend typically on <INSERT HIGHEST SPEND ACTIVITY / IF ONLY ONE ACTIVITY AUTOFILL>?

INTERVIEWER NOTE: PLEASE CONSIDER THE PAST 12 MONTHS ONLY SR/NUM

RECORD VALUE TO 2 DECIMAL PLACES

$ per week	1
$ per month	2
$ per year	3
Refused (DO NOT READ OUT)	98
Don't know (DO NOT READ OUT)	99

PROGRAMMER: AUTOFILL Q8 INTO Q9

ASK IF MORE THAN ONE ACTIVITY IS SELECTED AT Q1a, Q1b, Q1c…Q1n, OTHERS GO TO DEFINING SUB-SAMPLE

Q9. How much money, not including winnings, did you spend typically on ALL GAMBLING ACTIVITIES?

SR/NUM

RECORD VALUE TO 2 DECIMAL PLACES

$ per week	1
$ per month	2
$ per year	3
Refused (DO NOT READ OUT)	98
Don't know (DO NOT READ OUT)	99

TS3 TIMESTAMP3

Problem Gambling Severity Index (PGSI)

ASK IF GAMBLER_STATUS = "GAMBLER", OTHERWISE GO TO DEFINING SUB-SAMPLE

IF NECESSARY: The next questions measure the gambling harm. I understand that the following questions may not apply to you but we have to ask everyone. The answers you provide is still important information for us to capture.

Q10a. Thinking about the past 12 months, how often have you bet more than you could really afford to lose? (PROMPT): WOULD YOU SAY

READ OUT SR

Never	0
Sometimes	1
Most of the time	2
Almost always	3
Refused (DO NOT READ OUT)	98
Don't know (DO NOT READ OUT)	99

Q10b. In the past 12 months, how often have you needed to gamble with larger amounts of money to get the same feeling of excitement? (PROMPT): WOULD YOU SAY

READ OUT SR

Never	0
Sometimes	1
Most of the time	2
Almost always	3
Refused (DO NOT READ OUT)	98
Don't know (DO NOT READ OUT)	99

Q10c. In the past 12 months, WHEN YOU GAMBLED, how often have you gone back another day to try to win back the money you lost? (PROMPT): WOULD YOU SAY

READ OUT SR

Never	0
Sometimes	1
Most of the time	2
Almost always	3
Refused (DO NOT READ OUT)	98
Don't know (DO NOT READ OUT)	99

Q10d. In the past 12 months, how often have you borrowed money or sold anything to get money to gamble? (PROMPT): WOULD YOU SAY

READ OUT

SR

Never	0
Sometimes	1
Most of the time	2
Almost always	3
Refused (DO NOT READ OUT)	98
Don't know (DO NOT READ OUT)	99

Q10e. In the past 12 months, how often have you felt that you might have a problem with gambling? (PROMPT): WOULD YOU SAY

READ OUT SR

Never	0
Sometimes	1
Most of the time	2
Almost always	3
Refused (DO NOT READ OUT)	98
Don't know (DO NOT READ OUT)	99

Q10f. In the past 12 months, how often have people criticized your betting or told you that you had a gambling problem, regardless of whether or not you thought it was true? (PROMPT): WOULD YOU SAY

READ OUT SR

Never	0
Sometimes	1
Most of the time	2
Almost always	3
Refused (DO NOT READ OUT)	98
Don't know (DO NOT READ OUT)	99

Q10g. In the past 12 months, how often have you felt guilty about the way you gamble, or what happens when you gamble? (PROMPT): WOULD YOU SAY

READ OUT SR

Never	0
Sometimes	1
Most of the time	2
Almost always	3
Refused (DO NOT READ OUT)	98
Don't know (DO NOT READ OUT)	99

Q10h. In the past 12 months, how often has your gambling caused you any health problems, including stress or anxiety? (PROMPT): WOULD YOU SAY

READ OUT SR

Never	0
Sometimes	1
Most of the time	2
Almost always	3
Refused (DO NOT READ OUT)	98
Don't know (DO NOT READ OUT)	99

Q10i. In the past 12 months, how often has your gambling caused any financial problems for you or your household? (PROMPT): WOULD YOU SAY

READ OUT SR

Never	0
Sometimes	1
Most of the time	2
Almost always	3
Refused (DO NOT READ OUT)	98
Don't know (DO NOT READ OUT)	99

PGSI VARIABLE TO BE DEFINED

IF GAMBLER_STATUS = "Non-gambler" THEN PGSI = NG (Non-gambler)

IF GAMBLER_STATUS = "Gambler" Then sum the responses to the 9 questions Q10a to Q10i, excluding 98 or 99 values, and use this sum to create the PGSI as follows:

If SUM = 0, PGSI = NPG (NON-PROBLEM GAMBLER) If SUM = 1-2, PGSI = LRG (LOW RISK GAMBLER)

If SUM = 3-7, PGSI = MRG (MODERATE RISK GAMBLER) If SUM = 8-27, PGSI = PG (PROBLEM GAMBLER)

PROGRAMMER: IF SOMEONE RESPONDS TO ALL OF Q10a TO Q10i WITH EITHER 98 OR 99 THEN THE PGSI VALUE SHOULD BE 99 (REFUSED/DON'T KNOW). HOWEVER, IF SOMEONE PROVIDES AT LEAST ONE VALUE FOR Q11a TO Q11i THEN ALL THE 98 OR 99 VALUES SHOULD BE TREATED AS ZERO WHEN CALCULATING THE PGSI

TS4 TIMESTAMP4

DEFINING SUB-SAMPLE

Create new variable SUB-SAMPLE WITH VALUES "Sub-sampled" or "Not sub-sampled" using the following rules based on the PGSI, GAMBLER-STATUS AND RAND (RAND IS A PRE- DETEREMINED VALUE BETWEEN 0 AND 1 FOR EACH RECORD LOADED ONTO THE INITIAL CATI FILE)

Gaming Participation

GAMBLER_STATUS	PGSI	RAND	SUB_SAMPLE
NON_GAMBLER	N/A	<=0.315	Sub-sampled
NON_GAMBLER	N/A	>0.315	Not sub-sampled
GAMBLER	NPG	<=0.114	Sub-sampled
GAMBLER	NPG	>0.114	Not sub-sampled
GAMBLER	LRG	N/A	Sub-sampled
GAMBLER	MRG	N/A	Sub-sampled
GAMBLER	PG	N/A	Sub-sampled

ASK IF SUB-SAMPLE = "Sub-sampled", OTHERWISE GO TO RISK FOR PROBLEM GAMBLING – LIFETIME; NODS-CLIP 2

Q11. Over the last 12 months, have you played any of the following activities ONLINE - NOT for money or prizes, e.g. for points, virtual currency or goods?

READ OUT

PROGRAMMER: DO NOT RANDOMISE CODES

	Activity	Yes	No	Don't know (DO NOT READ OUT)
		1	2	99
A	Fantasy sports	1	2	99
B	Social casino games (such as Slotomania, DoubleDown Casino, Heart of Vegas)	1	2	99
C	Free-to-play casino table games (such as blackjack, roulette or poker)	1	2	99
D	Any other online gambling or lottery activity NOT for money or prizes	1	2	99

TS5 TIMESTAMP5

Risk for problem gambling – lifetime; NODS-Clip 2

IF NECESSARY: I understand that the following questions may not apply to you but we have to ask everyone.

ASK ALL

Q12. Now thinking about gambling across the whole of your life may I ask… READ OUT

SR

PROGRAMMER: DO NOT RANDOMISE CODES

	Statement	**Yes**	**No**	**Refused (DO NOT READ OUT)**	**Don't know (DO NOT READ OUT)**
		1	**2**	**98**	**99**
A	Have you ever tried to stop, cut down, or control your gambling?	1	2	98	99
B	Have there ever been periods lasting 2 weeks or longer when you spent a lot of time thinking about your gambling experiences, or planning out future gambling ventures or bets?	1	2	98	99
C	Have you ever lied to family members, friends, or others about how much you gamble or how much money you lost on gambling?	1	2	98	99
D	Has there ever been a period when, if you lost money gambling one day, you would often return another day to get even?	1	2	98	99
E	Have you ever gambled as a way to escape from personal problems?	1	2	98	99
These next questions (f-p) are only asked of people who say 'yes' to any of the first five items (a-e)					
F	(IF YES to "Q12a"): On one or more of the times when you tried to stop, cut down, or control your gambling, were you restless or irritable?	1	2	98	99
G	Have you ever tried but not succeeded in stopping, cutting down, or controlling your gambling?	1	2	98	99
H	(IF YES TO "Q12g"): Has this happened three or more times?	1	2	98	99

	Statement	Yes	No	Refused (DO NOT READ OUT)	Don't know (DO NOT READ OUT)
		1	2	98	99
I	(IF NO TO "Q12b" BUT YES TO Q12a, c, d or e): Have there ever been periods lasting 2 weeks or longer when you spent a lot of time thinking about ways of getting money to gamble with?	1	2	98	99
J	(IF YES TO "Q12c"): Have you lied about gambling three or more times?	1	2	98	99
K	(IF NO TO "Q12e" BUT YES TO Q12a, b, c or d): Have you ever gambled to relieve uncomfortable feelings such as guilt, anxiety, helplessness, or depression?	1	2	98	99
L	Have there ever been periods when you needed to gamble with increasing amounts of money or with larger bets than before in order to get the same feeling of excitement?	1	2	98	99
M	Have you ever written a BAD cheque or taken money that didn't belong to you form family members or anyone else in order to pay for your gambling?	1	2	98	99
N	Has your gambling ever caused serious or repeated problems in your relationships with any of your family members or friends?	1	2	98	99
O	(IF NO TO "Q12n") Has your gambling ever caused you any problems in school, to have trouble with your job, or to miss out on an important job or career opportunity?	1	2	98	99
P	Have you ever needed to ask family members or anyone else to loan you money or otherwise bail you out of a desperate money situation that was largely caused by your gambling?	1	2	98	99

TS6 TIMESTAMP6

Short Harms Screen (Browne et al., 2017)

ASK IF GAMBLER_STATUS = "GAMBLER", OTHERWISE GO TO SHORT HARMS FOR CSO

Q13. These next questions are about how gambling can affect people in a negative way. In the last 12 months, have you experienced any of the following issues as a result of your gambling…

READ OUT SR

PROGRAMMER: RANDOMISE CODES

	Statement	Yes	No	Refused (DO NOT READ OUT)	Don't know (DO NOT READ OUT)
		1	2	98	99
A	reduction of your available spending money	1	2	98	99
B	reduction of your savings	1	2	98	99
C	less spending on recreational expenses such as eating out, going to movies or other entertainment	1	2	98	99
D	had regrets that made you feel sorry about your gambling	1	2	98	99
E	felt ashamed of your gambling	1	2	98	99
F	sold personal items	1	2	98	99
G	increased credit card debt	1	2	98	99
H	spent less time with people you care about	1	2	98	99
I	felt distressed about your gambling	1	2	98	99
J	felt like a failure	1	2	98	99
TS7 TIMESTAMP7 **"Extra" salient harms to self (Browne and Rockloff, 2018)**					
K	FINANCIAL Spent less on essential expenses such medication, health care, and food	1	2	98	99
L	RELATIONSHIPS Experienced greater conflict in my relationships (arguing, fighting, ultimatums)	1	2	98	99
M	SOCIAL DEV/OTHER Been a victim of family/domestic violence	1	2	98	99
N	Didn't fully attend to needs of children **{NOTE: Not attending to the needs of children, arguably a harm to "others" also is a felt failure in social responsibilities}**	1	2	98	99

TS8 TIMESTAMP8

Short Harms for CSO (Browne et al., Tasmanian Prevalence Study, 2017)

ASKED OF "Sub-sampled" OTHERWISE GO TO LEGACY HARMS

Q14. These next questions are about how another person's gambling can affect you in a negative way.

In the past 12 months, have you been personally affected by another person's gambling?

{INTERVIEWER NOTE: By "affected" we mean in regards to finances, relationships, emotional and mental health, physical health, work or study}

DO NOT READ OUT SR

Yes	1
No	2
Refused	98
Don't know	99

ASK IF Q14 = yes (1), OTHERS GO TO LEGACY HARM

Q15. Thinking about the other person who affected you most…

In the last 12 months, have you been impacted by this person's gambling in any of the following ways READ OUT

SR

PROGRAMMER: RANDOMISE CODES

Statement Yes No Refused (DO NOT READ OUT) Don't know

(DO NOT READ OUT)

	Statement	Yes	No	Refused (DO NOT READ OUT)	Don't know (DO NOT READ OUT)
		1	2	98	99
A	Reduction of your available spending money	1	2	98	99
B	Got less enjoyment from time spent with people you care about	1	2	98	99
C	Spent less time attending social events (non-gambling related)	1	2	98	99
D	Experienced greater tension in your relationships (suspicion, lying, etc.)	1	2	98	99
E	Felt distressed about their gambling	1	2	98	99
F	Felt angry about not controlling their gambling	1	2	98	99
G	Feelings of hopelessness about their gambling	1	2	98	99
H	Used your work or study time to attend to issues caused by their gambling	1	2	98	99
I	Petty theft, including taking money or items from you without asking first	1	2	98	99
J	Reduction of your savings	1	2	98	99
K	Been a victim of family/domestic violence	1	2	98	99

TS9 TIMESTAMP9

Legacy Harms

ASKED OF "Sub-sampled", OTHERS GO TO ALCHOL WHILST GAMBLING

Q16. Have you had any issues or problems arise in the last 12 months that resulted from your past gambling? That is, issues that resulted from your gambling that took place more than 1 year ago?

DO NOT READ OUT SR

Yes	1
No	2
Never gambled	3
Don't know	99

Q17. Have you had any issues or problems arise in the last 12 months that resulted from another person's past gambling? That is, issues that resulted from another person's gambling that took place more than 1 year ago?

DO NOT READ OUT SR

Yes	1
No	2
Don't know	99

TS10 TIMESTAMP10

Alcohol Whilst Gambling (per Hare, 2014)

ASK IF GAMBLER_STATUS = "GAMBLER", OTHERWISE GO TO AUSTRALIAN UNITY WELLBEING INDEX

IF NECESSARY: I understand that this question may not apply to your situation, however, I must ask. Q18. During the past 12 months, how often did you drink alcohol while gambling?

READ OUT SR

Never	1
Rarely	2
Sometimes	3
Often	4
Always	5
Refused (DO NOT READ OUT)	98
Don't know (DO NOT READ OUT)	99

TS11 TIMESTAMP11

Australian Unity Wellbeing Index

ASKED OF "Sub-sampled", OTHERWISE GO TO KESSLER PSYCHOLOGICAL DISTRESS SCALE (K6)

Q19. I am going to ask how satisfied you feel, on a scale of zero to 10 where zero means you feel 'not satisfied at all' and 10 means 'completely satisfied' and the middle of the scale is 5.

Would you like me to go over this again for you?

READ OUT SR/NUM

PROGRAMMER: DO NOT RANDOMISE CODES

	Statement	NUM _ _ RANGE CHECK 0-10	Refused (DO NOT READ OUT)	Don't know (DO NOT READ OUT)
		_ _	98	99
A	Thinking about your own life and personal circumstances, how satisfied are you with your life as a whole?	_ _	98	99
"Turning now to various areas of your life. How satisfied are you…?"				
B	with your standard of living?	_ _	98	99
C	with your health?	_ _	98	99
D	with what you are currently achieving in life?	_ _	98	99
E	with your personal relationships?	_ _	98	99
F	with how safe you feel?	_ _	98	99
G	with feeling part of your community?	_ _	98	99
H	with your future security?	_ _	98	99

TS12 TIMESTAMP12

Kessler Psychological Distress Scale (K6)

ASKED OF "Sub-sampled", OTHERWISE GO TO ALCOHOL SCREEN (AUDIT-C)

The next questions are about health and well-being and ask how you have been feeling during the past 30 days.

Q20. About how often during the past 30 days did you **[insert statement]** - would you say all of the time, most of the time, some of the time, a little of the time, or none of the time?

READ OUT STATEMENT A IN FULL

REPEAT QUESTION FOR STATEMENT D TO REMIND RESPONDENT: Still thinking about the past 30 days

REPEAT SCALE IF NECESSARY SR

PROGRAMMER: DO NOT RANDOMISE CODES

	Statement	All	Most	Some	A little	None	Refused (DO NOT READ OUT)	Don't know (DO NOT READ OUT)
		1	2	3	4	5	98	99
A	Feel nervous	1	2	3	4	5	98	99
B	Feel hopeless	1	2	3	4	5	98	99
C	Feel restless or fidgety	1	2	3	4	5	98	99
D	Feel so depressed that nothing could cheer you up	1	2	3	4	5	98	99
E	Feel that everything was an effort	1	2	3	4	5	98	99
F	Feel worthless	1	2	3	4	5	98	99

TS13 TIMESTAMP13

Alcohol Screen (AUDIT-C)

ASKED OF "Sub-sampled", OTHERWISE GO TO SMOKING

{INTERNAL NOTE: to be psychometrically valid and cross-country comparable, we recommend sticking to the original scale guidelines}

Now I am going to ask you some questions about your use of alcoholic beverages during **the last 12 months…**

Q21a. How often did you have a drink containing alcohol (in the last 12 months)? Consider a "drink" to be a can or bottle of beer, a glass of wine, a wine cooler, or one cocktail or a shot of hard liquor (like scotch, gin or vodka).

READ OUT SR

Never	0
Monthly or less	1
2 to 4 times a month	2
2 to 3 times a week	3
4 or more times a week	4
Refused (DO NOT READ OUT)	98
Don't know (DO NOT READ OUT)	99

IF Q21a = "never", AUTO-CODE "0 drinks" AT Q21b

Q21b. How many drinks did you have on a typical day when you were drinking (in the last 12 month)? READ OUT

SR

0 drinks	0
1 to 2 drinks	1
3 to 4 drinks	2
5 to 6 drinks	3
7 to 9 drinks	4
10 or more drinks	5
Refused (DO NOT READ OUT)	98
Don't know (DO NOT READ OUT)	99

IF Q21a = "never", AUTO-CODE "never" AT Q21c

Q21c. How often do you have six or more drinks in one occasion (in the last 12 months)? READ OUT

SR

Never	0
Less than monthly	1
Monthly	2
Weekly	3
Daily or almost daily	4
Refused (DO NOT READ OUT)	98
Don't know (DO NOT READ OUT)	99

TS14 TIMESTAMP14

Smoking

ASKED OF "Sub-sampled", OTHERWISE GO TO HELP SEEKING

Q22. How often do you smoke? READ OUT

SR

Don't smoke **Never smoker has smoked less than 100 cigarettes (manufactured and/or roll-your-own) or the equivalent amount of tobacco in their life}**	0
Ex-smoker **Note: Ex-smokers have smoked at least 100 cigarettes (manufactured and/or roll-your-own) or the equivalent amount of tobacco in their life and reported no longer smoking.**	1
Daily	2
At least weekly	3
Less than weekly	4
Refused (DO NOT READ OUT)	98
Don't know (DO NOT READ OUT)	99

TS15 TIMESTAMP15

Help Seeking (per Steering Committee, May 2nd)

ASKED OF "Sub-sampled", OTHERWISE GO TO OTHER DEMOGRAPHCS

{Awareness of Gambler's Help, modified from SA 2018 Prevalence}

{Awareness of what GH offers}

Q23. What services are you aware of in Victoria to assist people with gambling problems? DO NOT READ OUT

MR

National Gambling Helpline (phone counselling)	1
Gambling Help Online (website for self-help)	2
Gamblers Help (face-to-face counselling)	3
Financial Counselling (face-to-face financial help)	4
Gamblers Anonymous/Pokies Anonymous	5
Other (SPECIFY)	96
None	97
Refused (DO NOT READ OUT)	98
Don't know/can't say (DO NOT READ OUT)	99

Q24. Have you used any help services for gambling for your own or someone else's gambling issues? What were they?

DO NOT READ OUT MR

National Gambling Helpline (phone counselling)	1
100 day challenge	2
CBT online	3
Other Gambling Help Online (a website for self-help, but excluding 100 day and CBT)	4
Gamblers Help (face-to-face counselling)	5
Financial Counselling (face-to-face financial help)	6
Gamblers Anonymous/Pokies Anonymous	7
Gam-Anon	8
Other (SPECIFY)	96
None	97
Refused (DO NOT READ OUT)	98
Don't know/can't say (DO NOT READ OUT)	99

TS16 TIMESTAMP16

Other Demographics

These next few questions are now about you, to make sure that we are speaking to a good cross- section of people. Your answers will of course be treated in the strictest of confidence.

Some questions may be considered sensitive. (These include questions on cultural background and income.) If you do not wish to answer a particular question, please let me know and we will skip over that one.

ASK ALL

Q25. Do you speak a language other than English at home? DO NOT READ OUT

SR

Yes	1
No	2
Refused	98
Don't know	99

ASK IF Q25 = yes (1), OTHERS GO TO Q27a

Q26. Which single main language (other than English) do you speak at home? DO NOT READ OUT

SR

Italian	1
Greek	2
Mandarin	3
Vietnamese	4
Cantonese	5
Arabic	6
Turkish	7
Hindi	8
Punjabi	9
Macedonian	10
Spanish	11
Sinhalese	12
Croatian	13
German	14
Other (SPECIFY)	96

ASK ALL

For statistical purposes…

Q27a. Are you of Aboriginal or Torres Strait Islander origin? DO NOT READ OUT

SR

Yes	1
No	2
Refused	98
Don't know	99

ASK IF Q27a = Yes (1), OTHERS GO TO Q28a

Q27b. Are you of Aboriginal origin, Torres Strait Islander origin, or both? DO NOT READ OUT

SR

Aboriginal	1
Torres Strait Islander	2
Both Aboriginal and Torres Strait Islander	3
Refused	98
Don't know	99

ASK ALL

Q28a. What is your approximate total personal income? (weekly, fortnightly or annual personal income

- before tax – including any government payments) SR/NUM

RECORD VALUE TO WHOLE NUMBERS

Nil or negative income	0
$ PER WEEK	1
$ PER FORTNIGHT	2
$ PER YEAR	3
Refused (DO NOT READ OUT)	98
Don't know (DO NOT READ OUT)	99

ASK IF Q28a = Refused (98) OR Don't know (99), OTHERS GO TO LANDLINE SAMPLE Q29 / MOBILE SAMPLE

Q28b. What is your approximate total personal income? (weekly, fortnightly or annual personal income - before tax – including any government payments)

READ OUT CATEGORIES SR

Per week	Per fortnight	Per year	Code
$1-$399	$1-$799	$1-20,799	2
$400-$799	$800-$1599	$20,800-$41,599	3
$800-$1,499	$1600-$2999	$41,600-$77,999	4
$1,500-$2,999	$3000-$5999	$78,000-$155,999	5
$3000 or more per week	$6000 or more per fortnight	$156,000 or more per year	6
Refused (DO NOT READ OUT)			98
Don't know (DO NOT READ OUT)			99

ASK LANDLINE SAMPLE ONLY

{NOTE: Household size is required for the Landline sample.

For the Landline sample we need to know the in-scope household size for household size weighting. We used to collect the number of landlines for weighting purposes but the occurrence of multiple landline numbers is now so rare it's not really necessary accounting for in the weighting. See below}

Q29. How many people aged 18 years and over usually live in your household? (Don't forget to count yourself and any children aged 18 and over)

SR/NUM

_ _	1
Refused (DO NOT READ OUT)	98
Don't know (DO NOT READ OUT)	99

ASK LANDLINE SAMPLE ONLY

Q30. Do you have an active mobile number that you use for either personal or business purposes? DO NOT READ OUT

SR

Yes	1
No	2
Refused	98

ASK MOBILE SAMPLE ONLY

Q31. Do you have an active landline telephone at home, that is, at your usual place of residence?

DO NOT READ OUT SR

Yes	1
No – mobile only	2
Refused	98

ASK MOBILE SAMPLE ONLY

Q32. Including this one, how many active mobile **numbers** do you have? SR/NUM

_ _ [ALLOWABLE RANGE 1-10]	1
Refused	98

TS17 TIMESTAMP17 THANK AND CLOSE

Q33. In case my supervisor needs to call back to check my work, would you mind giving me your first name?

Name: [enter text]

And may I confirm that I've called you on is: [pre-load phone number from sample]?

If necessary: This is purely for quality control purposes, and will not be linked to your survey data. All records are de-identified after fieldwork is complete, and your participation is anonymous

Q34. Would you like a link to find out the study results once published in 18 months? DO NOT READ OUT

SR

Yes – provide link www.orcgamblingandhealthstudy.com	1
No	2

ASK IF GAMBLER_STATUS = "GAMBLER" OR PEOPLE WITH LEGACY HARM ONLY (Q16, Q17)

Q35. Regardless of your answers, we are obliged to provide details for free confidential services through Gambler's Help. Is this of interest?"

DO NOT READ OUT SR

Yes, if requested – Gambler's Help Line 1800 858 858 or gamblinghelponline.org.au	1
No	2

"Thank you for participating in this survey. This research is being conducted in keeping with the Australian Privacy Principles and the industry Privacy Code. If you have any concerns, Our privacy policy is available on our website (www.orcinternational.com)"

Just in case you missed it my name is (…) and this survey was conducted by ORC International (Engine Group) on behalf of the Victorian Government."

IF NECESSARY: Which Government department?

"The Victorian Responsible Gambling Foundation is a statutory authority created by the Victorian Parliament specifically to address the challenge of gambling harm in the Victorian Community. The Department of Justice and Regulation is the Foundation's home department."

TS18 TIMESTAMP18

TYPE	TARGET	SOURCE
LANDLINE MELBOURNE	4,077	SamplePages RDD landline
LANDLINE REST OF VIC	1,238	SamplePages RDD landline
MOBILE	5,315	SamplePages RDD mobile

Appendix B: Methodology

Fieldwork

Questionnaire design

The Victorian Responsible Gambling Foundation (the Foundation) commissioned this study to build on previous prevalence studies, and to allow for comparisons over time. Therefore, the questionnaire was designed with the following potentialities in mind:

- potential for trend analysis with previous prevalence studies;
- potential for comparison with other recent prevalence studies across different states; and
- potential for comparison with future population studies in Victoria.

The questionnaire was designed by Central Queensland University's (CQU) Experimental Gambling Research Laboratory (EGRL) in consultation with Steering Committee members. An initial questionnaire was drafted by the research team, with the content and relevant issues reviewed and discussed where needed with the Foundation.

Ethics considerations and approval

The study obtained ethics approval by Central Queensland University from the Human Research Ethics Committee (Application Reference 21134).

Specific approaches used to manage survey sensitivities included:

- Being mindful when speaking with respondents, as issues associated with problem gambling can often be traumatic, not only for gamblers themselves but also for their friends and family members.
- Immediate termination of the survey if respondents became distressed.
- Provision of support service numbers (i.e. Suicide Line or Problem gambling counselling, as appropriate). These service numbers were included on the introduction page and throughout the survey as pop-up menus. This was a Computer Assisted Telephone Interview (CATI) survey, and therefore interviewers were able to access support numbers at any point during the interview.
- Respondents who were contacted via their mobile phone were first asked whether it was a safe time for them to take the call.
- Both landline and mobile respondents were asked if they wanted to go somewhere private to talk before commencing the survey.

Occupational health and safety risks to interviewers were minimised through a personal briefing that clearly explained the content of the survey before assigning work, and through using specially selected and experienced interviewers. ENGINE also put in place a 'buddy' system where interviewers had a contact (a supervisor or another interviewer) whom they were encouraged to talk to if they were finding the interviews distressing. They were also encouraged to take breaks after difficult interviews before proceeding to the next.

The final draft questionnaire, CATI programming and operational procedures were tested prior to the main fieldwork through a pilot survey (n=104) between 13–14 August 2018. A detailed debrief with interviewers was conducted at the completion of the pilot and feedback was provided on the questionnaire length, content and sequential order.

All interviewing was conducted from ENGINE's two dedicated CATI facilities in Melbourne. After the pilot, the questionnaire and operational procedures were finalised. The main fieldwork was launched on 3 September 2018; this fieldwork included a two-day dress rehearsal where survey data and protocols were closely monitored. No issues with the survey or data collection procedures were found. The fieldwork period was from 3 September 2018 to 31 January 2019.

The required sample size was N = 10,630, and this target was exceeded with N = 10,638 surveys. The quota breakdown was as follows: n = 4,082 Landline Melbourne, n = 1,240 Landline in rest of Victoria, and n = 5,316 Mobile. In Landline households, an individual aged 18 years or over was randomly selected using the most recent birthday method. For the mobile phone sample, the eligible respondent was a Victorian resident aged 18 years or over who answered the mobile phone and agreed to be interviewed.

Field team briefing

ENGINE implemented a comprehensive briefing and training program for all interviewers and supervisors who worked on the project. The team of interviewers selected were briefed by the ENGINE project team prior to the commencement of the fieldwork, and covered the following:

- Project background, objectives and procedures;
- All aspects of administering the survey questionnaire, including specific data quality issues;
- Overview of respondent liaison issues, including refusal avoidance techniques; and
- Special procedures for calling mobile phone numbers such as ensuring safety and offering to call back.

A total of 91 interviewers were briefed on the survey.

Following the briefing, the selected interviewers conducted a full practice 'dummy' interview using the CATI terminal to ensure that they were comfortable with the interview before commencing fieldwork. Supervisors closely monitored each interviewer. Interviewers who appeared to require additional instruction on any point were further briefed individually as necessary.

Call times and call back procedure

For the landline sample, calling times (based on Australian Central Daylight Time) were between 4:30 pm and 8:30 pm Monday to Friday, and 10:00 am to 4:30 pm on weekends.

The mobile sample calling times were 2:30 pm to 8:30 pm Monday to Friday, and 10:00 am to 4:30 pm on weekends. Appointments for rescheduled interviews, as requested by respondents, were made at any time within the hours of operation of the call centre.

The CATI call back protocols were as follows:

- From the sample, calls were first made to new or 'virgin' numbers. If no contact was made for a particular number, the CATI telephone management system (using a customised algorithm) re- allocated that number for the next day at a different time. This meant interviewers were able to work on both 'virgin' samples as well as call backs and non-contacts.
- A maximum of five call attempts were made to 'no answers', 'answering machines' and 'busy' numbers.

Additional calls were made if call backs or appointments were scheduled through the life of the record.

- All appointments for call backs were presented to the interviewer who made the appointment, at least one minute before the appointment time. If the interviewer who made the original appointment was not available, it was presented to the next available interviewer.
- Engaged numbers were rescheduled to be recalled in 15 minutes. If still engaged the number was again rescheduled in another 15 minutes.
- Numbers which were not answered were rescheduled to be called back in eight hours' time and then on another day.

Once fieldwork was finished, all phone numbers that were selected for the survey were placed in one of the following final call outcome categories for use in calculating the cooperation rates and the response rates:

Table 49: Final call outcomes

Final call outcome category	Description
Answer machine/Voicemail	Contact not made at all – answer machine or voicemail on all required contact attempts made
Business	Out of scope - business phone number
Complete	Interview completed
Final language/not available	Contact made, call-back arranged with respondent but language/availability issues on final call
Final non-contact	Contact made, call-back arranged with respondent but non-contact on final call
Invalid/disconnected	Invalid or disconnected phone number
Language/not available	Contact made – no interview (language barrier, not available during fieldwork period, other)
Non-contact	Contact not made at all – no answer on all required contact attempts made
Not NSW/Under 18	Contact made – mobile sample not in Victoria and/or aged 17 or younger
Refusal	Contact made – refusal

Sample design

Dual frame sample design

Random digit dialling (RDD) sampling for both the landline and mobile sample was used. The sample for both landline and mobile was provided by *SamplePages*.

The SamplePages fixed landline RDD sample was derived from a database of all fixed landline prefixes in Australia (maintained by the Australian Communication and Media Authority (ACMA)). Random suffixes were then generated and the resulting numbers pinged (rung silently at the exchanges) to determine if they were live. These randomly generated phone numbers were then assigned to part-of- state (capital city/rest of state splits) and generated in proportion to their ABS Estimated Resident Population (ERP) count of those areas.

SamplePages also provide pinged RDD mobile phone samples. They were obtained in a similar way to the fixed landline sample through the ACMA-based list of all possible mobile phone prefixes in Australia and the generation of random suffixes.

An overlapping dual sampling frame approach was used, whereby interviews were conducted via landline sample and via mobile phone sample. The sampling frames are overlapping in that those with both a landline and a mobile phone are able to be selected from either frame. The particular benefit of this design is that it provides access to those people, particularly younger people, who do not have a fixed landline at home and are thus "mobile only".

Weighting

The survey data were weighted to enable weighted estimates to be representative of the adult Victorian population.

The use of sub-sampling meant that two sets of weights were required. Main weights were calculated to enable weighted estimates based on the core data (common to both the short and long version of the questionnaire and administered to all respondents) to be representative of the adult Victorian population.

Additionally, sub-sample weights were calculated to enable data from the additional data items (only on the long questionnaire and only administered to the sub-sampled respondents) to also be representative of the adult Victorian population.

The sub-sample weights were required to account for the fact that the extra data items had been obtained from a random sub-sample of respondents.

In calculating the main weights, it was necessary to:

- adjust for unequal probabilities of selection of respondents within the landline and mobile samples;
- account for the duplication of coverage of the dual population (people with both a landline and a mobile phone) when combining the landline and mobile data; account for the differential non-response rates by age, gender and part-of state (Melbourne/Rest of Victoria); and provide weighted estimates which were consistent with the ABS Estimated Resident Population (ERP) data for Victoria, classified by age, gender and part-of-state (Melbourne, Rest of Victoria); and
- in calculating the sub-sample weights, it was additionally necessary to adjust for sub-sampling of non-problem gamblers and non-gamblers.

The weighting process for the main weights was as follows:

1. Initial probabilities of selection were calculated. For the landline sample, given the last birthday method was used for respondent selection, the initial probabilities of selection were inversely proportional to the household size (inclusive of persons aged 18+). For the mobile sample the initial probabilities of selection were proportional to the number of active mobile phones used by the mobile phone respondent.
2. Initial weights were calculated as the inverse of the initial probabilities of selection.
3. Three initial weighting cells were defined as: Landline Melbourne; Landline Rest of Victoria; and Mobile. The population values of these three cells for persons 18 years and over in September, 2018 were estimated as shown in Table 50 below.

Table 50: Estimated ERP of initial weighting strata

Stratum	Estimated Resident Population (ERP), Persons 18 years and over, December, 2018
Melbourne, landline	1,144,544.6
Rest of Victoria, landline	390,745.6
Victoria mobile	4,910,530.8

4. The above estimates were calculated from the ERP values for Melbourne and the Rest of Victoria by using estimated rates of landline ownership and mobile phone ownership available from published ACMA reports [41]. It was also necessary to estimate the number of active mobile phones per mobile phone owner. This was estimated from field statistics maintained by ENGINE.
5. The initial weights were then calibrated to create adjusted weights so that the aggregate of the adjusted weights within the three initial weighting cells was equal to the estimated ERP values set out in Table 50 above.
6. In order to combine the landline sample and the mobile sample it was necessary to account for the duplication of coverage of the dual population (people with both a landline and a mobile phone). This was effected by creating weights for the combined sample which were equal to half the adjusted weights for the *dual sample* (landline sample which also had a mobile phone, or mobile sample with a landline). For the remainder of the sample (the landline only and mobile only samples) the combined weights were identical to the adjusted weights.
7. Final weighting strata were defined by part-of-state, age and gender. The combined weights were calibrated so that within each final weighting cell the aggregate of the weights was equal to the ABS ERP for December 2018 for that stratum. The weighting strata and their ERP values are set out in Table 51 below.

Table 51: Weighting strata and their ERP values

Region	Gender	Age range	ERP Dec 2018 18+
Melbourne	Female	18-19	55,304
Melbourne	Female	20-24	170,904
Melbourne	Female	25-29	195,070
Melbourne	Female	30-34	202,213
Melbourne	Female	35-39	186,262
Melbourne	Female	40-44	163,666
Melbourne	Female	45-49	167,971
Melbourne	Female	50-54	149,467
Melbourne	Female	55-59	141,644
Melbourne	Female	60-64	125,183
Melbourne	Female	65-69	107,342
Melbourne	Female	70-74	92,826
Melbourne	Female	75-79	66,733

41 https://acma.gov.au/theACMA/communications-report

Region	Gender	Age range	ERP Dec 2018 18+
Melbourne	Female	80-84	50,218
Melbourne	Female	85+	58,129
Melbourne	Male	18-19	57,501
Melbourne	Male	20-24	173,665
Melbourne	Male	25-29	193,916
Melbourne	Male	30-34	202,240
Melbourne	Male	35-39	187,102
Melbourne	Male	40-44	162,638
Melbourne	Male	45-49	162,828
Melbourne	Male	50-54	143,960
Melbourne	Male	55-59	134,981
Melbourne	Male	60-64	116,597
Melbourne	Male	65-69	97,462
Melbourne	Male	70-74	83,537
Melbourne	Male	75-79	58,202
Melbourne	Male	80-84	39,466
Melbourne	Male	85+	35,604
Rest of Victoria	Female	18-19	17,677
Rest of Victoria	Female	20-24	35,619
Rest of Victoria	Female	25-29	37,756
Rest of Victoria	Female	30-34	42,624
Rest of Victoria	Female	35-39	43,909
Rest of Victoria	Female	40-44	44,014
Rest of Victoria	Female	45-49	48,856
Rest of Victoria	Female	50-54	47,392
Rest of Victoria	Female	55-59	51,864
Rest of Victoria	Female	60-64	50,068
Rest of Victoria	Female	65-69	45,977
Rest of Victoria	Female	70-74	39,807
Rest of Victoria	Female	75-79	28,755
Rest of Victoria	Female	80-84	20,573
Rest of Victoria	Female	85+	24,212
Rest of Victoria	Male	18-19	18,766
Rest of Victoria	Male	20-24	39,499
Rest of Victoria	Male	25-29	37,113
Rest of Victoria	Male	30-34	40,528
Rest of Victoria	Male	35-39	42,006

Region	Gender	Age range	ERP Dec 2018 18+
Rest of Victoria	Male	40-44	42,428
Rest of Victoria	Male	45-49	46,919
Rest of Victoria	Male	50-54	45,959
Rest of Victoria	Male	55-59	50,180
Rest of Victoria	Male	60-64	49,309
Rest of Victoria	Male	65-69	45,839
Rest of Victoria	Male	70-74	39,263
Rest of Victoria	Male	75-79	27,165
Rest of Victoria	Male	80-84	17,634
Rest of Victoria	Male	85+	14,947

The base sizes shown throughout the report are unweighted bases.

Margin of error of totals

The survey results are based on a sample and are therefore subject to sample error. Sample error is measured by the standard error and consequential margin of error. Knowledge of the standard error, or the margin of error, enables the 95% confidence intervals to be constructed around survey results and also enables statistical significance testing to be carried out.

The 95% confidence interval for a survey result is calculated as the survey result plus or minus 1.96x the standard error. For example, if a survey result of 100,000 has a standard error of 10,000 then the 95% confidence interval is 100,000 +/- 1.96x10,000 = 100,000 +/- 19,600 = (80,400 – 119,600).

The amount 1.96x the standard error is called the margin of error (MOE). It can be seen from the previous paragraph that knowledge of the margin of error is sufficient to calculate the 95% confidence intervals. For this reason of redundancy, the sampling error values are presented as margin of error values, not standard error values. Standard error values can be calculated by dividing the margin of error values by 1.96.

Another way of summarising the sample error is to calculate the relative margin of error (RMOE) which is the margin of error divided by the survey result, expressed as a percentage.

The margin of error and the relative margin of error of survey results for estimates of total prevalence from the 2018-19 Victorian gambling prevalence survey are summarised in Table 52 below.

The following example demonstrates the use of these tables. Consider a survey result of 200,000. The table below shows that the margin of error for this result is 8,990. This means the 95% confidence interval for the survey result is 200,000 +/- 8,990 = (191,010 – 208,990).

Table 52: MOE and RMOE of estimates of total

MOE		RMOW	
Size of estimate	**Margin of error**	**Size of estimate**	**Relative margin of error of estimates of total**
1,000	690	1,000	69.0%
2,000	970	2,000	48.5%
5,000	1,530	5,000	30.6%
10,000	2,160	10,000	21.6%
20,000	3,050	20,000	15.3%
30,000	3,720	30,000	12.4%
40,000	4,280	40,000	10.7%
50,000	4,770	50,000	9.5%
75,000	5,790	75,000	7.7%
100,000	6,620	100,000	6.6%
150,000	7,950	150,000	5.3%
200,000	8,990	200,000	4.5%
250,000	9,840	250,000	3.9%
300,000	10,540	300,000	3.5%
400,000	11,590	400,000	2.9%
500,000	12,290	500,000	2.5%
750,000	12,760	750,000	1.7%
1,000,000	11,500	1,000,000	1.2%
1,250,000	7,690	1,250,000	0.6%

Margin of error of proportions

The above margin of error table allows for the margins of error to be calculated for estimates of total prevalence estimates (e.g. 200,000 people have participated in a particular form of gambling). These tables may also be used to calculate the margins of error of estimates of proportions (e.g. 18% of people have participated in a particular form of gambling). To calculate the margins of error of survey proportions the steps needed to be taken are shown by means of a hypothetical example.

Consider an example in which an estimated 10% of people adults in a particular category have participated in a particular form of gambling:

1. Step 1 – determine the numerator and denominator values which give rise to the estimate of proportion. For example, if there are an estimated 200,000 estimated people in the category of interest and of those 20,000 (10%) have participated in the particular form of gambling.
2. Use Table 52 above to determine the relative margins of error of the numerator and denominator totals. From Table 52 it can be seen that the relative margin of error of the numerator (20,000) is 15.3% and for the denominator (200,000) is 4.5%

3. The relative margin of error of the proportion (10%) is then calculated by squaring the two relative margin of error values (15.3%2 = 0.023409 and 4.5%2 = 0.002025) and subtracting the squared value for the denominator from the squared value of the numerator; resulting in 0.021324 (0.023409-0.002025).
4. Finally, the relative margin of error of the proportion is the square root of the final figure obtained (0.021324) which is 0.146233 or 14.6%. This figure is the relative margin of error of the estimate of 10%. The margin of error of the estimate of 10% is then 14.6% x 10% = 1.5%; since the margin of error is the relative margin of error divided by the estimate.
5. From the above we can then conclude that the 95% confidence interval for the estimate of 10% is 10% +/- 1.5% = (8.5% -11.5%).

Appendix C: Response Rates

Cooperation Rates and Response Rates

The response rates and cooperation rates were calculated based on the internationally recognised American Association for Population Opinion Research (AAPOR) standards. The cooperation rates for the landline and mobile frames were 19.2% and 42.8%, respectively. The response rates for the landline and mobile frames were 6.0% and 12.6%, respectively.

Table 53: Call outcomes, response rate and cooperation rate for the landline sample

Call outcomes - landline frame	Count	% of total
(A) Contact not made - Eligibility unknown	**82,261**	**60.6%**
Non-contact	73,135	53.9%
Answering machine/voicemail	9,126	6.7%
(B) Contact not made - Not eligible	**5,005**	**3.7%**
Invalid/disconnected	5,005	3.7%
(C) Contact made - Eligibility unknown	**7,472**	**5.5%**
Final non-contact	3,570	2.6%
Language/not available	2,838	2.1%
Answering machine/voicemail	841	0.6%
Refusal	223	0.2%
(D) Contact made - Not eligible (out-of- scope)	**13,280**	**9.8%**
Business	12,658	9.3%
Not Vic/Under 18	622	0.5%
(E) Contact made - Eligible (non-complete)	**22,432**	**16.5%**
Refusal	22,358	16.5%
Final non-contact	46	0.0%
Language/not available	28	0.0%
(F) Complete	**5,322**	**3.9%**
Complete	5,322	3.9%
Grand Total	**135,772**	**100.0%**

Eligible sample contacted (K=E+F)	27,754	
landline sample cooperation rate (F/K)	**19.2%**	

Eligibility rate (G=(E+F)/(D+E+F))	67.6%	
Estimated eligible of contacts/non-contacts with unknown eligibility (H=(G x (A+C)))	60,692	
Estimated total eligible (J=(H+E+F))	89,145	
Landline sample response rate (F/J)	**6.0%**	

Table 54: Call outcomes and response rate for the mobile sample

Call outcomes - mobile frame	Count	% of total
(A) Contact not made - Eligibility unknown	**160,009**	**60.1%**
Answer machine/Voicemail	156,238	58.7%
Non-contact	3,771	1.4%
(B) Contact not made - Not eligible	**1,354**	**0.5%**
Invalid/disconnected	1,333	0.5%
Non-contact	21	0.0%
(C) Contact made - Eligibility unknown	**26,724**	**10.0%**
Final refusal	16,976	6.4%
Answer machine/Voicemail	7,231	2.7%
Language/not available	1,993	0.7%
Final non-contact	512	0.2%
Non-contact	12	0.0%
(D) Contact made - Not eligible (out-of-scope)	**65,653**	**24.7%**
Not Vic/Under 18	61,465	23.1%
Business	4,188	1.6%
(E) Contact made - Eligible (non-complete)	**7,097**	**2.7%**
Refusal	6,824	2.6%
Final non-contact	173	0.1%
Final language/not available	100	0.0%
(F) Complete	**5,316**	**2.0%**
Complete	5,316	2.0%
Total	**266,153**	**100.0%**

Eligible sample contacted (K=E+F)	12,413	
Mobile sample cooperation rate (F/K)	**42.8%**	

Eligibility rate (G=(E+F)/(D+E+F))	15.9%	
Estimated eligible of contacts/non-contacts with unknown eligibility (H=(G x (A+C)))	29,692	
Estimated total eligible (J=(H+E+F))	42,105	
Mobile sample response rate (F/J)	**12.6%**	

For the mobile sample, there is an inevitable degree of ambiguity in determining the eligibility of refusals. This is because it was not always possible to determine a refusal's state of residence before the end of the call. For this reason, a proportion of records with a call outcome of "Refusal", which were originally coded as "(C) Contact made - Eligibility unknown – Refusal", have been recoded to "(E) Contact made - Eligible (non-complete) – Refusal". The proportion of records with a call outcome of "Refusal", now classified as "(E) Contact made - Eligible (non-complete) – Refusal" (27%) was based on the proportion of Victorian records in similar national RDD surveys conducted by ENGINE.

The low response rates observed in this survey are consistent with a global decline in response rates from telephone surveys. A 2017 AAPOR task force on this very topic [42] reported that:

"The survey that the Task Force conducted of recent cell phone RDD and landline RDD response rate trends for survey organizations in the United States suggests that DFRDD surveys are continuing to see response rate declines. Landline rates declined from an average of 15.7 percent in 2008 to an average of 9.3 percent in 2015 (a relative decline of 41 percent), and cell phone response rates declined at the same rate, from an average of 11.7 percent to an average of 7.0 percent (a relative decline of 40 percent).

Comparison of response rates with 2014

It is not possible to provide a direct comparison with the response rates from the 2014 survey as the method for calculating the response rates are different from those used in this report. The response rates for the 2018-19 survey use the standard AAPOR definition and method of calculation. It is not clear what method was used to calculate the 2014 survey response rates but, from the information provided in the 2014 report, but it does not appear that the AAPOR approach was used. A key component of AAPOR-based calculations of response rates is the calculation of an estimated eligibility rate and the use of this rate to estimate the number of eligible non-contacts from the non-contacts with unknown eligibility. It would appear that this approach was not taken in calculating the response rates for the 2014 survey.

42 Lavrakas P., (2017) Report from the AAPOR task force on "The Future of U.S. General Population Telephone Survey Research"

Appendix D: Problem gambling by sociodemographic characteristics, proportion based on gamblers

The proportion of problem gambling by sociodemographic characteristics, within the population, is shown in Table 13, in Section 2 - Problem Gambling. The following table provides the equivalent data for gamblers; that is, the proportion of **gamblers** who are problem gamblers, by sociodemographic characteristics.

Table 55: Moderate risk and problem gamblers, by sociodemographic characteristics, as a proportion of gamblers

	MRG (Moderate risk gambler)	PG (Problem gambler)	MR/PG (Moderate risk and problem gambler combined)
All Victorian gamblers	**3.5%**	**1.1%**	**4.5%**
Gender			
Male (n=4,888)	4.8%*	1.4%*	**6.3%***
Female (n=5,750)	2.1%*	0.7%*	**2.8%***
Age			
18 to 24 years (n=858)	10.2%*	0.9%	**11.2%***
25 to 34 years (n=1,224)	4.1%	1.1%	**5.1%**
35 to 44 years (n=1,271)	2.8%	1.6%	**4.4%**
45 to 54 years (n=1,575)	3.1%	1.4%	**4.6%**
55 to 64 years (n=2,016)	1.8%*	1.0%	**2.8%***
65 to 74 years (n=2,160)	2.4%	0.5%	**2.9%***
75 years or older (n=1,534)	2.2%	0.2%*	**2.4%***
Part of state			
Melbourne (n=8,012)	3.6%	1.1%	**4.7%**
Rest of Victoria (n=2,626)	3.2%	0.8%	**4.1%**
Speaks language other than English (LOTE) at home			
LOTE speaker (n=1,856)	5.9%	1.1%	**7.0%***
English only (n=8,773)	3.0%	1.0%	**4.0%**
Aboriginal and / or Torres Strait Islander origin			
Yes (n=92)	5.8%	3.5%	**9.3%**
No (n=10,507)	3.4%	1.0%	**4.4%**
Personal income, per year			
Nil or negative income (n=515)	5.8%	0.4%	**6.1%**
$1 - $20,799 (n=1,226)	3.8%	1.3%	**5.1%**
$20,800 - $41,599 (n=2,067)	4.6%	1.9%*	**6.5%***

	MRG (Moderate risk gambler)	PG (Problem gambler)	MR/PG (Moderate risk and problem gambler combined)
$41,600 - $77,999 (n=1,999)	3.7%	1.2%	**4.9%**
$78,000 - $155,999 (n=1,799)	2.9%	1.0%	**3.9%**
$156,000+ or more (n=475)	2.3%	0.0%	**2.3%***

Base: Respondents who gambled in the last 12 months (n=7,631)

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