NORTHERN TERRITORY GOVERNMENT

menzies school of health research

NORTHERN TERRITORY GAMBLING PREVALENCE AND WELLBEING SURVEY REPORT, 2018

November 2019

2018 Northern Territory Gambling Prevalence and Wellbeing Survey

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PREFACE

This report presents data from the 2018 Northern Territory (NT) Gambling Prevalence and Wellbeing Survey. Comparisons are made with the 2005 NT Gambling Prevalence Survey (participation in activities) and the 2015 NT Gambling Prevalence and Wellbeing Survey where data is comparable. The 2018 survey used dual frame sampling, like the 2015 survey, though the ratio of mobile phone interviews to landline interviews was different to the 2015 survey. Specifically, for the 2018 survey 71% of the sample was contacted using a mobile phone, compared with 24% in the 2015 survey. Using a much larger proportion of mobile phones has improved the representativeness of the sample, and because of this improvement, the 2018 estimates for gambling participation, problem gambling risk, and gambling-related harms can be considered the best estimates up to now on gambling behaviour in the NT.

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CONFLICTS OF INTEREST

The research team do not have any conflicts of interest to declare.

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EXECUTIVE SUMMARY

Background

This report presents findings from the 2018 Northern Territory (NT) Gambling Prevalence and Wellbeing Survey, carried out from October to December in 2018. The survey was commissioned by the Northern Territory Government (NTG) Department of Attorney General and Justice. The gambling industry is a fast evolving one, particularly in online (interactive) gambling, which includes racetrack and sports betting. Changes in gambling policy and regulation can have significant impacts on problem gambling risk and gambling losses.

Aims of survey

The primary aim of the 2018 Gambling Prevalence and Wellbeing Survey is to inform government on the latest patterns of gambling participation, problem gambling prevalence, gambling harm and community attitudes to gambling policy and regulation in the NT, and to compare with findings from the 2015 survey.

The results will be of interest to regulators, government policy makers, public health and public policy researchers, counselling services , non-government organisations, industry, and the broader community.

Methods

As with the 2015 survey, the 2018 survey used a dual frame telephone sampling approach. However, the 2018 survey had a much larger sample frame of mobile phone numbers, resulting in 71% of respondents being interviewed on a mobile phone, compared with just 24% in the 2015 survey. The survey included a full and sub-sample, with sub-sample respondents receiving additional questions. The full sample (n_{2015}=4,945; n_{2018}=5,000) was larger than the 2015 survey, as was the sub-sample (n_{2015}=1,546; n_{2018}=2,016). The larger sub-sample included all at-risk gamblers, regular gamblers, monthly or more EGM gamblers and all Indigenous respondents, thereby ensuring improved accuracy of estimates for these population segments. The survey data was weighted to the Australian Bureau of Statistics (ABS) 2018 estimated adult (18 or more years) resident population for the Northern Territory, with separate population weights developed for non-Indigenous and Aboriginal and Torres Strait Islander samples. See Chapter 2 and Appendix A for more detail on sampling and population weighting.

All data in the report, except that in Chapter 10, comes from either the 2005 Gambling Prevalence Survey or the 2015 or 2018 Gambling Prevalence and Wellbeing Survey. Electronic gambling machine (EGM) data (number of venues, number of EGMs, and user losses) used in Chapter 10 was obtained from the NTG Department of Attorney General and Justice.

The survey contained over 100 questions covering the following domains: gambling participation, problem gambling risk, EGM gambler specific questions, questions on gambling policy and regulation and impacts, negative consequences (harms) because of own gambling and help-seeking behaviour, negative consequences (harms) because of another person's gambling (relationship to person and type of gambling) and help-seeking behaviour, community attitudes to gambling, EGM load-up limits and EGM numbers in hotels, and clubs, health risk factors, and socio-demographic and socioeconomic factors.

Results

Gambling participation

Annual gambling participation declined significantly between 2015 and 2018 in the NT adult population for any gambling (including raffles) from 76% to 72%, raffles from 43% to 37%, EGMs from 23% to 19%, keno from 25% to 22%, racetrack betting from 23% to 17% and casino table games from 13% to 9%. Annual gambling participation increased significantly between 2015 and 2018 in the NT adult population for non-sport betting (e.g. betting on events such as an election outcome or Logie winner) from 0.3% to 0.7%. There was no statistically significant change in annual gambling participation between 2015 and 2018 in the NT adult population for lotteries (increased from 46% to 48%), instant scratch tickets (decreased from 18% to 16%), sports betting (decreased from 8% to 7%), informal games such as cards or pool (steady at 3%), bingo (steady at 2%), and other gambling (decrease from 0.5% to 0.3%). Compared with other jurisdictions in Australia, participation in keno (except Tasmania) and casino table games was higher in the Northern Territory.

Problem gambling risk in the NT

Problem gambling risk was measured using the Problem Gambling Severity Index (PGSI) in its original form. That is, screening questions are asked with a reference period of the last 12 months, and using the Likert scale: Never (0), Some of the time (1), Most of the time (2), and Almost always (3), with low risk problem gambling scoring one or two, moderate risk of problem gambling scoring three to seven and problem gambling scoring eight or more [1].

In 2018, 15% (25,850) of NT adults were at risk of problem gambling. The 2018 problem gambling prevalence in the NT adult population was 1.37% (95% CI 0.83% to 2.26%) or approximately 2,500 adults. Adult population prevalence of moderate risk of problem gambling was 3.55% (95% CI 2.71% to 4.64%) or about 6,400 adults, and low risk of problem gambling 9.36% (95% CI 7.92% to 11.03%) or about 16,900 adults. Problem gambling risk increased significantly from 2015 to 2018, with 0.7% of NT adults classified as experiencing problem gambling in 2015 and 1.4% in 2018. Among gamblers, 1.9% or 1 in 52 gamblers were classified as experiencing problem gambling. The NT has the highest rates of problem gambling, moderate risk and low risk problem gambling compared with the most recent estimates from other Australian jurisdictions.

Demographic and socioeconomic factors associated with a significantly increased risk of problem gambling among gamblers were being male (2.7%), 18-30 years (2.8%), 50-64 years (2.9%), Aboriginal (5.3%), unemployed (2.4%), and living in a group household (4.3%). Health risk factors associated with a significant increase in problem gambling among gamblers were having an alcohol problem (3.7%), smoking inside most or all the time (8%), very high psychological distress (5.3%), and using drugs illicitly (2.9%). All gambling activities, except lotto, raffles and other gambling were associated with a significant increased risk of problem gambling. More than 50% of weekly EGM gamblers were classified as experiencing problem gambling or moderate risk of problem gambling.

Negative consequences (or harms) from own gambling for at-risk gamblers and help-seeking

Negative consequences or harms were classified as either financial (e.g. run out of money for food, raided savings), psychological/emotional (e.g. felt ashamed or had

regrets, felt depressed) relationships and family (e.g. relationship problem with family or friends, physical or verbal violence towards you), and work/study (e.g. missed work or study classes, underperformed). All gamblers who scored one or more on the PGSI were classified as at risk of problem gambling and were asked additional questions on negative consequences (or harms) occurring as a result of their own gambling. In 2018, 76% of at-risk gamblers identified at least one negative consequence that occurred because of their own gambling, up from 56% in 2015. Experience of a negative consequence from own gambling was significantly associated with problem gambling risk, with 100%, 68% and 27% of people experiencing problem, moderate and low risk gambling respectively identifying at least one negative consequence.

Negative consequences associated with psychological/emotional distress were most endorsed by at-risk gamblers, with 22% endorsing 'felt ashamed or had regrets' as occurring monthly and a further 11% less than monthly, which equates to 8,300 at-risk gamblers endorsing this harm. Ten percent 'felt stressed or anxious at least monthly, and 6% 'felt depressed' at least monthly.

Sports betting, racetrack betting and EGMs were significantly associated with an increased likelihood of experiencing a negative consequence because of own gambling among at-risk gamblers. Gamblers experiencing problem gambling endorsed all negative consequences at significantly higher rates than gamblers experiencing moderate or low risk problem gambling.

Only 2% (approximately 500 people) of at-risk gamblers sought some type of help for their gambling, and this was significantly associated with problem gambling risk, increasing to 13% for those experiencing problem gambling. Given there are around 2,500 gamblers in the NT experiencing problem gambling, there is significant opportunity to better educate gamblers about the services available.

Negative consequences (or harms) because of another person's gambling

Respondents were asked whether someone else's gambling negatively affected them in the last year, and 8% (14,500) of NT adults indicated they had been negatively affected. This was significantly less than in 2015, where 13% of adults indicated they were negatively affected by someone else's gambling. The negative consequences most endorsed by people harmed by someone else's gambling were related to psychological distress, with 'felt stressed or anxious' the most endorsed with 4% (7,200 adults). Relationship problems with family or friends was next most endorsed at 3.9% (7,000 adults), followed by 'ran out of money for rent or mortgage' at 2.9% (5,300 adults), 'ran out of money for bills' at 2.8%, 'borrowed money from family or friends' at 2.6% (4,700 adults), and 'felt ashamed or had regrets' at 2.5% (4,550 adults).

The most common relationship to the person whose gambling caused the harm was friend (23%), followed by parent (15%), spouse (12%), ex-partner (10%), sibling (8%) and son or daughter (6%). Of those people negatively affected by someone else's gambling, the type of gambling most implicated was EGMs (71%), followed by racetrack betting (17%), sports betting (6%) and casino table games (6%).

Of those harmed by another's gambling, 21% sought help, and this was significantly higher among women (28%), compared with men (14%). The most common types of

help sought for those affected by someone else's gambling were friend (11%), social worker or psychologists (7%), family member (7%), and general practice doctor (6%).

Community attitudes to gambling and EGM numbers in the NT

The 2018 survey included additional questions to the 2015 survey on community attitudes to gambling. The same questions were used to ascertain community attitudes to the number of EGMs in hotels and clubs. There was a significant increase from 50% in 2015 to 56% in 2018 in the percentage of adults indicating they want a decrease in the number of EGMs located in hotels. The increase in percentage was significant for men, increasing from 45% in 2015 to 51% in 2018. For EGMs in clubs, there was a non-significant increase in the percentage who want a decrease in the number of EGMs from 53% to 55%. Women were significantly more likely than men to want to see a decrease in EGM numbers in hotels (51% men and 60% women) and clubs (51% men and 58% women). People who were negatively affected by someone else's gambling were significantly more likely to want a decrease in EGM numbers in hotels (73%) and clubs (76%). Over 60% of adults agreed or strongly agreed with the statement *there is too much gambling in NT hotels*, with women (68%) significantly more likely than men (55%) to agree or strongly agree. People who were negatively affected by someone else's gambling compared with those not affected were significantly more likely to agree or strongly agree that *there is too much gambling in NT clubs* (74% *cf*. 60%) *and hotels* (69% *cf*. 60%).

Respondents were asked *whether people in the NT should have to set limits on time and money spent playing the pokies?* Just over 70% of adults agreed or strongly agreed with the statement. Women (75%) were significantly more likely than men (62%) to agree or strongly agree that EGM gamblers should have to set limits on time and money when gambling.

Effects of gambling policy and regulation on gamblers and EGM gamblers

When monthly EGM gamblers were asked whether the installation of note acceptors on EGMs in clubs and hotels affected their spending, 30% indicated that they are spending more money as a result of the change. Among monthly EGM gamblers classified as problem gamblers, this increased to 68%, and it was significantly higher among EGM gamblers aged 18-29 years (49%) and 30-39 years (40%). Monthly EGM gamblers who endorsed at least one harm because of their own gambling (49%) were also more likely to say the change to note acceptors increased their spending.

Monthly EGM gamblers were asked about their largest load-up into an EGM in the past year, with 77% indicated it was $100 or less, and 10% endorsed $301 or more. Of those monthly EGM gamblers that loaded up $301 or more, 42% were classified as experiencing problem gambling, compared with 4% among EGM gamblers that had a largest load up of $100 or less. More than half (53%) of EGM gamblers with a largest load-up of $300 or more indicated that they had experienced significant negative effects from this event, dropping to 22% for those with a largest load up of $101 to $299, and 13% for those with a largest load up of $100 or less.

Electronic Gambling Machine (EGM) user losses and self-reported expenditure

The introduction of note acceptors on EGMs located in community venues in 2013/2014 led to a 48% increase in real EGM user losses from 2014 to 2017, and in 2015 saw the amount of EGM user losses in community venues (hotels and clubs) surpass user losses in casino EGMs for the first time in the NT. In 2017, total EGM user losses in

hotels and clubs were $96.2 million, while in the casino it was $73.5 million. In 2015 the cap on EGM numbers in hotels and clubs was raised, with clubs allowed 55 EGMs (up from 45) and hotels allowed 20 (up from 10). Hotels and clubs with the maximum allowable number of EGMs prior to the lift in cap were the fastest to install note acceptors, and therefore increase their profits from EGM gamblers, and were also the fastest to install additional EGMs. The top 10 hotels in terms of user losses had a 112% increase in user losses after note acceptor installation (2013-2017), compared with a 60% increase across all hotels, while the top 10 clubs experienced a 30% increase in real user losses after the installation of note acceptors, compared with a 26% increase across all clubs. The top 10 hotels (from 44) accounted for 58% of all EGM user losses, while the top 10 clubs (from 30) accounted for 81% of user losses.

Weekly EGM gamblers made up 10% of all EGM gamblers, but accounted for 69% of self-reported EGM expenditure, with an annual self-reported expenditure of $12,361, compared with $2,180 for monthly and $248 for less than monthly EGM gamblers. EGM gamblers experiencing problem gambling made up 6% of EGM gamblers, but accounted for 38% of self-reported EGM expenditure, with annual self-reported expenditure of $10,755, compared with $4,422, $1,292, and $507 for moderate risk, low risk and non-risk gamblers respectively. The 31% of monthly or more EGM gamblers who indicated that they had increased their spending after the installation of note acceptors accounted for 49% of self-reported EGM expenditure, and had a self-reported annual spend of $9,469, compared with $4,447 for EGM gamblers indicating that the change did not affect how much they spend on EGMs.

Conclusions

Patterns of gambling in the NT are changing, with fewer people gambling, but with increases in the number of people experiencing problem gambling and a significant number of people being harmed by someone else's gambling. EGMs continue to be the most dangerous form of gambling to undertake, with over 50% of weekly EGM gamblers classified as experiencing problem gambling or moderate risk of problem gambling. Furthermore, EGMs were identified as the gambling activity for those that were harmed by someone else's gambling in over 70% of those harmed. Online gambling was also significantly associated with more problem gambling and harm from gambling. The findings also show that the Aboriginal population in the NT experience a much greater burden of harm from gambling, compared with the non-Indigenous population, and that innovative policy solutions are needed to reduce the harms associated with gambling in this more vulnerable population and across the NT.

1 INTRODUCTION

1.1 Background

This report presents findings from the 2018 Northern Territory Gambling Prevalence and Wellbeing Survey, the third population gambling prevalence survey in the NT, with previous surveys conducted in 2005 and 2015. Previous surveys have found that Territorians have similar gambling participation rates as other jurisdictions in Australia, though levels of at-risk gambling were among the top three across Australian states and territories [2]. The gambling industry is a fast evolving one, particularly in online (interactive) gambling, which mostly includes racetrack and sports betting. Changes in gambling policy and regulation can have significant impacts on problem gambling risk and gambling losses. For example, two recent changes in EGM policy in the NT (installation of note acceptors on EGMs, and an increase in the cap on number of EGMs in hotels from 10 to 20, and clubs from 45 to 55) have led to increases in user EGM losses in hotels and clubs, and this has very likely lead to an increase in problem gambling among EGM gamblers [3]. Changes in the prevalence of problem gambling, harms from gambling and gambling participation can provide important information about the effectiveness of policies implemented to mitigate harms from gambling [4]. Given the fast-changing environment of online gambling, and the changes in EGM policy, a repeat of the 2015 surveys was commissioned to occur three years after the last survey.

Conducting population prevalence surveys using landline telephones has become more difficult in the last decade as more people move from landline telephones, to mobile phones, and landline samples being less representative of the characteristics of the general population (see Chapter 2 Methodology for more on landline, mobile ownership in the NT and Australia). The 2005 NT gambling survey was a landline only Computer Aided Telephone Interview (CATI) survey, while the 2015 survey included both mobile and landlines in the sample frame, though just 24% of the final sample was contacted by mobile phone. The 2018 survey aimed to increase the proportion the sample contacted and interviewed via mobile phone, to improve the representativeness of the sample by better reflecting the distribution of mobile phone use in the general population.

The 2018 survey is largely comparable with the 2015 survey with regards to the content, though the final sample included greater than 70% mobile phone contacts, which while better reflecting the NT adult population use of mobile phones, means the sample frame is somewhat different to that used in the 2015 survey. Characteristics of mobile and landline respondents are therefore assessed to assist in understanding how the 2018 and 2015 samples differ. Also, see Chapter Methodology for more detail on how comparisons with the 2015 survey assessed if the change in ratio of landline to mobile phones may have affected changes over time.

1.2 Aims of the survey

The primary aim of the 2018 Gambling Prevalence and Wellbeing Survey is to inform government on the latest patterns of gambling participation, problem gambling prevalence and gambling harm in the NT, and to compare with findings from the 2015 survey. The report will also be of interest to service providers, industry, councils and the broader community.

1.3 Survey objectives

- Produce estimates of gambling participation and patterns of gambling by activity and compare these with the 2005 and 2015 estimates.
- Produce estimates of problem gambling prevalence (and moderate and low-risk gambling prevalence) for the NT and compare with the 2015 estimates.
- Determine risk factors for at-risk gamblers and for different gambling activities.
- Identify the prevalence of harms experienced because of a person's own gambling for at-risk gamblers and compare with 2015 estimates.
- Identify the prevalence of harms experienced because of another person's gambling and compare with 2015 estimates.
- Identify the relationship between problem gambling risk, harm from gambling, and other health risk factors including problematic alcohol use, smoking, drug use and domestic or family violence.
- Measure community attitudes to gambling and the number and regulation of EGMs.

1.4 Ethics approval

The research project and draft questionnaire were reviewed and approved by the joint Department of Health and Menzies School of Health Research Human Research Ethics Committee (approval 2018-3212).

1.5 Structure of the report

Chapter 2 provides an overview of the survey methodology including the domains of information collected, survey sampling design, population weighting, and conventions for reporting data and statistical testing of associations in tables and figures.

Chapter 3 examines the sample characteristics (socio-demographic, socioeconomic and health risk factors) for weighted and unweighted data, by phone type (mobile/landline) and survey (2015 and 2018). Additional tables comparing weighted and unweighted data, phone type and survey by Indigenous status are included in Appendix B.

Chapter 4 presents an overview of patterns of gambling participation (and frequency) by activity and includes statistical associations between gambling participation and socio-demographic, socioeconomic, and health-related variables. Comparisons are made with the 2005 and 2015 survey.

Chapter 5 presents problem gambling prevalence estimates for the PGSI, including estimates and statistical associations with different activities, socio-demographic, socioeconomic, gambling motivations, and health-related variables. It also includes data on the types of negative consequences (harms) at-risk gamblers experienced because of their own gambling and the frequency they occurred. Comparisons are made with the 2015 survey.

Chapter 6 focusses on at-risk, regular and monthly EGM gamblers, and provides information on use of ATM withdrawals while gambling, staff approaches checking on their gambling, and self-exclusion. Some comparisons are made with the 2015 survey.

Chapter 7 presents data on negative consequences experienced because of another person's gambling, how the person was related to them, type of gambling, and the types of and frequency of negative consequences resulting from the other person's gambling and whether the person sought help. Negative consequences are also examined in relation to socio-demographic, socioeconomic, health risks, and gambling participation variables.

Chapter 8 provides information on community attitudes towards gambling in the NT, including the Attitudes to Gambling Scale, community preferences for changes in EGM numbers, setting limits when gambling on EGMs, and on the amount of gambling in NT hotels and clubs.

Chapter 9 includes information on EGM gamblers and potential policy levers to reduce harm. It presents information on changes in spend on EGMs since the installation of note acceptors in clubs and hotels, largest load up into an EGM and whether they experienced any negative consequences because of this.

Chapter 10 reports on real EGM user losses (NTG data) and examines changes in user losses before and after the recent EGM policy changes (note acceptor installation and lifting on the cap in hotels from 10 to 20 EGMs and 45 to 55 EGMs in clubs). It also includes self-reported expenditure by EGM gamblers and shows how this is distributed by EGM gambling frequency and problem gambling risk.

Chapter 11 includes sections on limitations, and a summary and conclusions.

Appendix A includes detailed survey methodology. Appendix B presents sample characteristics (demographic and socioeconomic) for unweighted and weighted data by Indigenous status and survey. Lastly, Appendix C contains a copy of the survey instrument used for the 2018 Gambling Prevalence and Wellbeing Survey.

2 SURVEY METHODOLOGY AND ACCURACY

An overview of the 2018 Gambling Prevalence and Wellbeing Survey methodology is provided in this chapter, with Appendix A containing detailed information on the survey methodology. A pilot study was conducted from 8-12 October 2018, while the main survey was carried out between 19 October and 23 December 2018.

2.1 Survey development and information collected

The 2018 survey instrument was developed to ensure key estimates were comparable with the 2015 survey, though additional questions were added including questions on domestic/family violence, and drug use. The 2018 survey collected information on psychological distress using the Kessler-5, with these questions replacing the exposure to personal stressors module from 2015. Additional questions were asked of electronic gambling machine (EGM) gamblers regarding their experience with installation of note acceptors on community venue EGMs and spending. Lastly, additional questions were added to better gauge community attitudes to gambling and EGM numbers were included in the 2018 survey. The questionnaire in its entirety can be found in Appendix C.

Domain	Data items
Socio-demographic factors	Region, age, gender, Indigenous status, main language spoken at home English, and household type.
Socioeconomic factors	Highest education, labour force status, personal income, Fly-in Fly-out and Drive-in Drive-out employment status, and student status.
Gambling participation and highest spend activity (except for EGMs gamblers where all were asked about spending patterns)	Participation, frequency of play, and where/how gambled for EGMs (pokies), racetrack betting, instant scratch tickets, keno, lotteries, bingo, casino table games, sports betting, non-sports betting, raffles/sweeps/SMS competitions, informal private games, EGM gamblers spend, and highest spend activity and average spend per session.
Problem gambling	The Problem Gambling Severity Index (PGSI in original format)
Negative consequences from own gambling (for at-risk, monthly EGM and regular gambler), negative consequences from another person's gambling and help-seeking behaviour	Frequency of negative consequences in the last year: Ran out of money for rent or mortgage, ran out of money for food, ran out of money for bills, raided savings account, borrowed money, debt collectors repossessed something, sold/hocked possessions, relationship problems with family/friends, physical or verbal violence towards you, kids did not attend school/missed out on something, felt stressed or anxious, felt depressed, felt ashamed or had regrets, did something illegal, missed work or study, underperformed at work or study, lost job or kicked/dropped out of study, and whether sort help and where got help. For those negatively affected by another person's gambling, the relationship they had to the person who's gambling was affecting them, the main activity of gambling the person was doing, and the same set of negative consequences and help-seeking behaviour question as for at-risk gamblers.
EGM gambler policy changes in change in spending, and largest load-up	Change in spending after note acceptor installation, largest amount loaded and negative consequences from this.
ATM access and in-venue approach by staff for at-risk gamblers, and self-exclusion	Access to ATM in a gambling session, how often usually accesses ATM in gambling session, whether staff member of venue/betting company ever asked if okay while gambling, whether person asked to be self-excluded, and the outcome of this.

Domain	Data items
Community attitudes to gambling and setting limits on EGM gambling	The Attitudes to Gambling-8 Scale, should there be an increase, no change or decrease in EGMs in hotels and clubs, is there too much gambling in NT hotels and clubs, should EGM gamblers have to set limits on time and money when gambling on EGMs.
Health, health risk factors, and social and emotional wellbeing	Self-assessed health, smoking status, smoke-free home status, problematic alcohol consumption (CAGE), frequency of drug use, Kessler-5, financial stress, experience of domestic or family violence.

2.2 Survey scope and sample design

As with most gambling prevalence surveys in Australia, CATI telephone sampling was used to collect information from NT resident adults (18 years and over). The same survey company that did interviewing for the 2005 and 2015 surveys, Roy Morgan, were again the preferred provider for the 2018 survey. A sample size of 5,000 was chosen as adequate to produce robust estimates of problem gambling risk and other variables and enable the detection of change in estimates between 2015 and 2018. The same survey design was used as in 2015; a stratified sampling design using region (Darwin/Palmerston, Alice Springs, Katherine, Tennant Creek/Nhulunbuy and the Rest of NT), gender (male, female) and age (18-34, 35-49, 50-64 and 65 or more years), with broad Territory wide proportional quotas set for region, age and gender.

Dual frame (mobile and landline) sampling was again used in 2018 and is now the method most widely used for gambling prevalence surveys in Australia. However, compared with the 2015 survey, the 2018 survey used a much larger set of mobile phone numbers, which resulted in *71% of 2018 survey respondents being contacted on a mobile phone, compared with just 24% in the 2015 survey*. The below table, provided by Roy Morgan Research outlines changes in mobile, landline and mixed mobile landline dwellings for the NT and Australia for 2005, 2015 and 2018. It shows that the representation of landlines in the 2015 sample was not reflective of the distribution in the NT population.

	Australia			Northern Territory		
	2005	**2015**	**2018**	**2005**	**2015**	**2018**
Have a Landline	94.1%	70.0%	55.5%	86.9%	58.0%	29.1%
Have a Mobile Phone	70.2%	94.6%	96.6%	77.8%	93.0%	97.0%
Landline only	29.8%	5.4%	3.4%	22.2%	7.0%	3.0%
Mobile only	5.9%	30.0%	44.5%	12.1%	42.0%	70.9%
Both Landline & Mobile	64.3%	64.6%	52.1%	65.7%	51.0%	26.1%

For the mobile sample, the interview was conducted with the person who answered the phone, but for the landline sample, the last birthday method for selecting one person from a household was used, though later in the fieldwork this was changed to ask for the male with the most recent birthday, as too few males were being interviewed.

The survey used a two-stage sample. That is, there is a set of questions all respondents were asked, and a further set of questions that was asked of a selection of respondents. In addition to this two-stage approach, some questions were only asked of monthly EGM gamblers, and a further set that were only asked of gamblers that were either deemed at-risk of problem gambling, or monthly EGM gamblers, or regular gamblers. The regular gamblers category refers to anyone who gambled weekly, excluding instant scratch tickets or lotto, with this definition the same as that used in

the New South Wales (NSW) gambling prevalence survey [5]. The below flow diagram outlines how respondents were filtered through the survey and what questions they were asked.

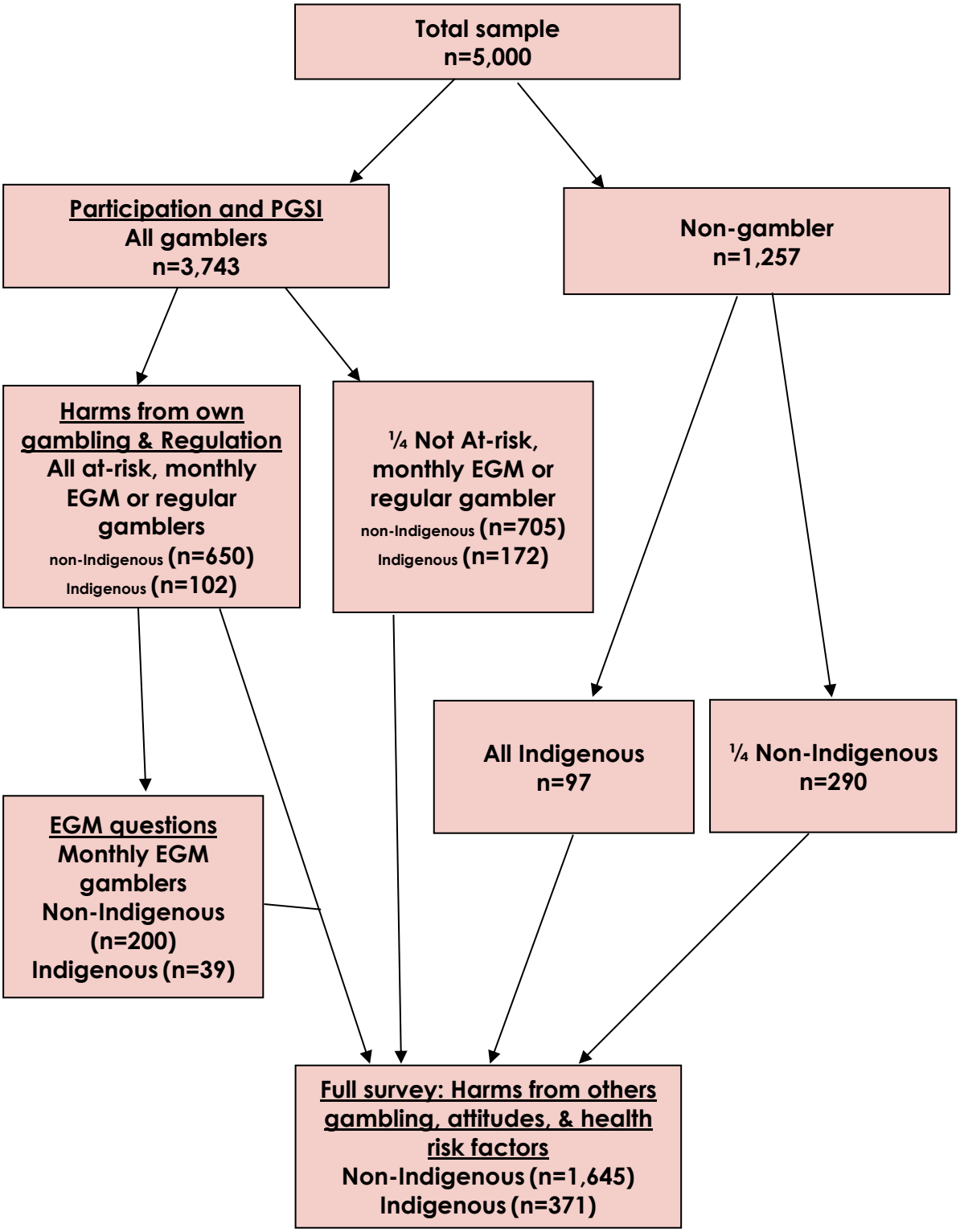


Figure 1: Flowchart of survey design and sample size for different sets of questions in the 2018 survey

2.3 Consent rate

Over 330,000 phone calls were made during the fieldwork period, with up to five calls made on a single number in order to establish contact, and up to five once contact had been made (unless there was an outcome such as being a fax number, business phone number or not being connected). Most completed interviews were achieved within three phone calls, with 89% of landline and 80% of mobile interviews completed in three calls. After one week of interviewing, the introduction was modified to try to improve consent rates, which were around 25% (landline only) at this stage. The changes emphasised that the survey was very important and was on behalf of the Northern Territory Government, after which, consent rates hovered at or just under 30%.

From the 330,000 plus calls made, 148,288 landline and 9,582 mobile numbers were included in the phone number frame. Just over half (50.5%) of landline numbers were unobtainable/not connected, a further 0.5% were on the Roy Morgan list of not ever to be called and another 3.8% were modem or fax numbers. From 67,124 useable landline line numbers, contact was made with 26,550 with 34,419 being no answer and 5,152 answering machines. Of the 26,550 landline numbers where some form of contact was made, 37% were unusable (31.1% business numbers, and 5.8% failed screener questions). Refusals accounted for 36.2% of contacts and completed interviews accounted for 14.2% of contacts. Of the 9,582 mobile numbers called, 8,494 turned out to be usable (9.2% not connected/obtainable and 1.1% on the Roy Morgan list not ever to be called), with contact made with 4,156, though 20.3% of these failed the screener questions, failed quotas or were otherwise out of scope. Refusals accounted for 36% of contacts and completed interviews accounted for 28.5% of contacts.

In total 4,945 participants completed the survey. Most respondents (76%, 3,760 people) who completed the survey were contacted by landline, while 24% (1,185) were contacted by mobile. Of the 1,185 people contacted by mobile, 60% (712) had mobile and landline numbers, and the remainder were mobile only (473).

The consent rate using the formula:

$$\text{consent rate} = \text{consents}/(\text{consents} + \text{refusals}) \times 100$$

for landlines was 28%, and 44% for mobile phones, with an overall consent rate of 31%. Including other in-scope contacts (i.e. language/hearing difficulty terminations, other terminations and refusals) in the denominator, the consent rates drop to 22% and 37% for landline and mobiles respectively, with an overall consent rate of 25%.

2.4 Population weights

To improve the accuracy of estimates from population surveys, raw data is 'weighted' to the total adult population. Population weights most often adjust for age, gender and regional population distributions, using estimated resident population counts generated by the Australian Bureau of Statistics [6]. The weights ensure that survey estimates are representative of the NT population (by age, gender and region for example).

The final weighting design for the 2018 survey was the same used for the 2015 survey. Separate weights were developed for Aboriginal and non-Indigenous samples. This is important in the NT compared with other jurisdictions, as the Aboriginal population

make up around a quarter of the total adult population, and experience more gambling related harms and socioeconomic disadvantage relative to the non-Indigenous population [2, 7-11]. The population weights take account of the differing probabilities of selection between the landline and mobile samples, in addition to age, gender, and region. A separate set of weights was also required for respondents receiving the full survey (including separate weights for Indigenous and non-Indigenous samples). This set of weights make proportional adjustments for the one in four sampling of no risk gamblers and non-gamblers that received the full survey. Appendix A contains the full technical specifications and formulas used in creating population weights for the 2018 survey.

2.5 Data analysis and reporting

2.5.1 Data sources

Most of the data included in this report is from either the 2018 Gambling Prevalence and Wellbeing Survey, with data from the 2005 Gambling Prevalence Survey, and the 2015 Gambling Prevalence and Wellbeing Survey used for comparisons. Some estimates from other jurisdictional prevalence surveys are also included for comparison with NT gambling estimates. Data on EGMs obtained from the NT Government is presented in Chapter 10.

2.5.2 Data cleaning and management

RMR provided the data in Stata format and all data management and analysis was carried out using Stata v15.1 [12]. Population weight variables and strata (age, gender and region) were set up within Stata using the SVY commands, which ensures estimates (and standard errors) account for the sample design and population weights. Exploratory data analysis was carried out to determine cut-points for continuous or semi-continuous variables and identify outliers or mistakes in the data. For example, annual/weekly gambling frequency was converted to an ordinal variable with categories (1) 1 or more times per week, (2) 1-3 times per month, and (3) Less than monthly per year. Some care needs to be taken in deriving these frequency categories. For this report, weekly gamblers were gamblers that indicated that they gambled either one or more times per week, 4 or more times per month, and 52 or more times per year. Similarly, for regular gamblers (gambling weekly on all activities, except instant scratch tickets and lotto products), data was converted to weekly gambling, before being broken up into (1) 1 or more times per week, (2) 1-3 times per month, and (3) Less than monthly per year. These were calculated by the authors, as the survey company's derivation incorrectly converted these to annual, rather than weekly frequency which resulted in some gamblers being incorrectly classified between weekly and monthly categories.

Personal income data was imputed with the Stata 'impute' command for 9% of respondents who refused to answer and a further 6% who did not know, using variables that had a strong correlation with personal income. Some extreme outliers were identified in the expenditure (player loss) data associated with highest spend activity and an examination of these extreme values indicated that they were a result of mistakes in data entry, and these were consequently adjusted accordingly (e.g. extra digit in record for how much they usually spend when they gamble). Additionally, for questions identifying negative consequences of gambling for both at-risk, and for those affected by another person's gambling, 'other' responses were re-coded back into available responses where appropriate. The frequency of harms data also

required some cleaning, with outliers adjusted to fit within accepted levels (e.g. someone cannot run out of money for rent every day). There was a problem with the filtering of respondents through two questions that were specific to monthly EGM gamblers (about social networks and EGM gambling), so no data will be presented for these items in this report.

2.5.3 Statistical tests between 2005, 2015 and 2018 surveys

All analyses in this report use weighted data, with standard errors adjusted for the stratified survey design using Stata's SVY commands. A note under tables where relative standard errors were large (i.e. 30% or more) advises caution in interpreting estimates. Statistical differences between estimates were done using Chi Squared Tests of Independence, with asterisks denoting the statistical significance of associations throughout the report using the following convention: *** $p<0.001$, ** $p<0.01$, * $p<0.05$, with foot notes of figures and tables identifying the survey variables being tested for statistical significance. However, some caution is still advised in over-interpreting statistical differences, given the different ratio of mobile to landline respondents between the 2015 and 2018 surveys, which has likely affected estimated of some variables more than others. Changes over time in primary outcomes (i.e. PGSI, harm from others gambling) were also assessed, while controlling (in a multivariable model) for phone type; however, significant differences for primary outcomes did not change, and these results are therefore not included.

A range of regression models were used cross-sectionally for various outcome variables in assessing multivariable significance of predictor variables, while controlling for survey design and population weights. These included the Negative Binomial model for the PGSI and harms from someone else's gambling, and logistic regression for EGM highest spend, online gambling and regular gambling.

3 SAMPLE CHARACTERISTICS AND CHANGES BETWEEN 2015 AND 2018 SURVEYS

3.1 Background

As noted in the previous chapter, the sample frame used in 2018 was different from that used for the 2015 survey, in that 71% of respondents were contacted through their mobile phone, compared with 24% in 2015. This chapter will explore differences between the 2015 and 2018 surveys for weighted and unweighted samples for socio-demographic and socioeconomic variables, and health risk factors for the total sample. It will also compare distributions for weighted and unweighted 2018 samples between mobile and landline contacted respondents. Understanding differences in the distribution of the variables will help users of the data to understand the accuracy and reliability of estimates. Additional tables containing the distribution of the sample broken down by Indigenous status (by time and mobile phone type for 2018) can also be found in Appendix B.

3.2 Chapter highlights

- There were statistically significant differences in the unweighted distribution of socio-demographic variables between the 2015 and 2018 surveys were present for:
    - Indigenous status, language spoken at home, number of adults in the house, and household type
- The Aboriginal and Torres Strait Islander population had improved coverage in the 2018 sample, due to the use of mobile phones for contacting respondents, particularly in the Darwin/Palmerston and Alice Springs regions. Though this population was still very much under-sampled in Regional Towns and the Rest of the NT.
- The 2018 survey also had improved coverage of hard to get segments of the population including:
    - People 18-29 years, males, people who don't speak English at home, and single person households.
- For the Rest of NT, 45% of the sample was contacted by mobile phone, compared with 77%, 65% and 61% in Darwin/Palmerston, Alice Springs and Regional Towns respectively.
- 77% of people aged less than 40 years were interviewed by mobile phone, while 57% of people aged 65 years or more were interviewed by mobile phone.
- It would be expected that the 2018 sample is an improvement on the 2015 sample, due to the more realistic proportion of mobile to landline contacts, and many population segments not using landlines (e.g. Indigenous, younger people) anymore.

3.3 Changes in sample characteristics from 2015 to 2018

3.3.1 Unweighted and weighted total sample comparisons from 2015 to 2018

Tables 1 to 3 show the distribution of socio-demographic and socioeconomic variables, and health risk factors, respectively. Comparing unweighted data between the 2015 and 2018 surveys, region (more Rest of NT respondents in 2018, and less from Alice Springs), Indigenous status (more Indigenous respondents in 2018), language spoken at home (more respondents not speaking English at home in 2018), number of adults in the house (more respondents were the only adult in the house), and household type (less couple with children households, and more other households) showed significant differences in the distribution between the two surveys. For the weighted comparison, there were significant differences in the distribution between 2015 and 2018 for language spoken at home (9.8% non-English speakers in 2018 *cf*. 6.6% in 2015), and number of adults in the house (24% respondents who were the only

adult in the house in 2018 *cf*. 17% in 2015, while there was 51% of respondents that lived in houses with two adults in the house in 2018 *cf*. 56% in 2015).

Table 1: Unweighted and weighted distribution of socio-demographics variables for total sample, 2015 to 2018

	Unweighted data			Weighted data		
	2018 % (n)	2015 % (n)	Sig. Diff.	2018 % (SE)	2015 % (SE)	Sig. Diff.
Region			**			ns
Darwin/Palmerston	69.8 (3,491)	67.7 (3,346)		61.0 (1.1)	60.8 (1.4)	
Alice Springs	14.8 (739)	17.3 (857)		16.9 (0.9)	18.6 (1.1)	
Regional towns	7.1 (354)	7.8 (384)		10.8 (0.9)	9.8 (1.0)	
Rest of NT	8.3 (416)	7.2 (358)		11.3 (1.0)	10.8 (1.2)	
Age			ns			ns
18-29	9.0 (450)	7.8 (386)		21.8 (1.1)	19.8 (1.4)	
30-39	16.9 (847)	17.3 (855)		26.0 (1.1)	28.2 (1.4)	
40-49	22.9 (1,144)	23.5 (1,164)		20.6 (0.8)	20.0 (0.9)	
50-64	34.6 (1,729)	34.8 (1,722)		22.2 (0.6)	22.3 (0.8)	
65+	16.6 (830)	16.5 (818)		9.5 (0.6)	9.6 (0.5)	
Sex			ns			ns
Female	53.5 (2,674)	54.6 (2,699)		48.7 (1.0)	47.7 (1.3)	
Male	46.5 (2,326)	45.4 (2,246)		51.3 (1.0)	52.3 (1.3)	
Indigenous status			***			ns
Non-Indigenous	92.6 (4,629)	94.6 (4,678)		75.5 (1.4)	78.3 (1.7)	
Indigenous	7.4 (371)	5.4 (267)		24.5 (1.4)	21.7 (1.7)	
Language spoken at home			***			**
English	93.3 (4,662)	95.3 (4,709)		90.2 (0.8)	93.4 (0.9)	
Not English	6.7 (333)	4.7 (231)		9.8 (0.8)	6.6 (0.9)	
Adults in house			***			***
One	24.5 (1,225)	20.5 (1,010)		24.2 (1.1)	17.3 (1.2)	
Two	54.6 (2,728)	58.5 (2,886)		50.9 (1.2)	55.9 (1.4)	
Three or more	20.9 (1,047)	21.1 (1,041)		24.9 (1.1)	26.8 (1.2)	
Household type			***			ns
Couple with children	35.6 (1,782)	40.3 (1,988)		36.6 (1.1)	38.9 (1.3)	
Couple with no children	29.9 (1,494)	30.2 (1,491)		25.1 (1.0)	26.7 (1.2)	
Single parent	7.0 (350)	6.2 (306)		7.4 (0.6)	7.9 (1.1)	
Single person	17.1 (854)	15.7 (774)		14.8 (0.8)	13.0 (1.0)	
Group house	6.5 (327)	5.1 (251)		11.2 (0.8)	10.1 (1.0)	
Other	3.9 (193)	2.6 (127)		4.8 (0.6)	3.4 (0.6)	
Total	**100.0 (5,000)**	**100.0 (4,945)**		**100.0**	**100.0**	
Weighted population (N)	**-**	**-**		**180,956**	**176,916**	

*** p<0.001; ** p<0.01; * p<0.05: Significant difference in distribution between 2015 and 2018; ns: Not significant

Three socioeconomic variables showed a significant difference in the unweighted distribution between the 2015 and 2018 surveys. Labour force status (more unemployed, and less not in the labour force/other), highest educational attainment (less year 10 highest attainment in 2018), and personal income (less $30,000 to $49,000 in 2018 and more $100,000 to $119,000 in 2018).

Table 2: Unweighted and weighted distribution of socioeconomic variables for total sample, 2015 to 2018

	Unweighted data			Weighted data		
	2018 % (n)	2015 % (n)	Sig. Diff.[1]	2018 % (SE)	2015 % (SE)	Sig. Diff.
Student status			ns			ns
Full-time student	2.6 (128)	2.6 (126)		4.0 (0.4)	4.7 (0.8)	
Part-time student	8.7 (435)	8.6 (425)		11.3 (0.8)	9.5 (0.8)	
Not-studying	88.7 (4,429)	88.8 (4,385)		84.7 (0.9)	85.9 (1.0)	
Labour force status			***			***
Full-time work	59.7 (2,981)	60.2 (2,972)		62.1 (1.2)	66.6 (1.3)	
Part-time/Casual	16.6 (827)	15.1 (745)		17.4 (0.9)	13.5 (1.0)	
Unemployed	4.0 (198)	2.6 (126)		6.6 (0.8)	3.9 (0.7)	
NILF/other	19.8 (987)	22.2 (1,096)		14.0 (0.7)	16.0 (0.9)	
FIFO/DIDO Status [2]			ns			*
Not FIFO/DIDO	89.3 (3,381)	87.9 (3,230)		87.1 (1.0)	83.3 (1.5)	
FIFO/DIDO	10.7 (404)	12.1 (443)		12.9 (1.0)	16.7 (1.5)	
Highest education			***			**
Bachelor or more	36.1 (1,802)	37.9 (1,864)		30.7 (1.0)	33.1 (1.2)	
Certificate 3/Diploma	31.7 (1,582)	30.1 (1,481)		31.4 (1.0)	30.2 (1.3)	
Year 12	13.9 (693)	15.4 (760)		18.0 (1.1)	15.4 (0.9)	
Year 10	14.6 (726)	12.1 (597)		16.3 (1.0)	14.6 (1.3)	
Less than year 10	3.8 (188)	4.5 (220)		3.6 (0.5)	6.6 (0.8)	
Personal income			**			ns
Less than $20,000	9.2 (460)	9.7 (478)		10.5 (0.9)	9.8 (0.8)	
$20,000-$29,000	8.4 (418)	7.8 (385)		8.6 (0.8)	7.0 (0.8)	
$30,000-$49,000	13.3 (667)	15.1 (747)		12.0 (0.7)	14.0 (1.1)	
$50,000-$69,000	15.6 (779)	16.2 (802)		18.0 (1.0)	18.2 (1.1)	
$70,000-$99,000	22.5 (1,127)	23.8 (1,177)		22.9 (1.0)	25.5 (1.3)	
$100,000-$119,000	14.5 (725)	12.4 (614)		12.8 (0.7)	10.6 (0.7)	
$120,000 or more	16.5 (824)	15.0 (742)		15.2 (0.7)	14.9 (1.0)	
Total	**100.0 (5,000)**	**100.0 (4,945)**		**100.0**	**100.0**	
Weighted population (N)	**-**	**-**		**180,956**	**176,916**	

[1] Significant difference; [2] FIFO/DIDO Fly in-Fly out or Drive in-Drive out worker; Not in labour force, other and unemployed excluded.

*** p<0.001; ** p<0.01; * p<0.05: Significant difference in distribution between 2015 and 2018

ns: Not significant

A comparison of health risk factors between 2018 and 2015 for unweighted data shows that significantly more respondents were classified as experiencing alcohol problems in 2015, while in 2018 there were more smokers (22% *cf*. 18%), more people living in houses where someone smoked in the house most or all the time (6.5% *cf*. 4.5%), less people reporting their health as excellent (14% *cf*. 17%) or very good (29% *cf*. 32%), more people reporting their health as fair (14.5% *cf*. 11.6%), and more respondents experiencing financial difficulty (10% *cf*. 7%). For the weighted data comparison between 2018 and 2015, only self-assessed health showed a significant difference in the distribution with a similar pattern observed for the unweighted data.

Table 3: Unweighted and weighted distribution of health risk factors for total sample, 2015 to 2018

	Unweighted data			Weighted data		
	2018 % (n)	2015 % (n)	Sig. Diff.	2018 % (SE)	2015 % (SE)	Sig. Diff.
Drank alcohol last 12 months			ns			ns
No	15.3 (308)	16.4 (254)		16.2 (1.2)	15.7 (1.7)	
Yes, drank alcohol	84.7 (1,706)	83.6 (1,291)		83.8 (1.2)	84.3 (1.7)	
CAGE Alcohol problems [1]			***			ns
No problem	82.4 (1,406)	81.0 (1,046)		81.8 (1.4)	82.2 (2.0)	
Alcohol problem	17.6 (300)	19.0 (246)		18.2 (1.4)	17.8 (2.0)	
Smoking status			**			ns
Never smoker	44.4 (895)	49.8 (769)		48.8 (1.6)	52.6 (2.6)	
Ex-/non-daily smoker	33.7 (679)	32.5 (502)		29.2 (1.4)	27.4 (2.0)	
Daily smoker	21.9 (440)	17.7 (273)		22.0 (1.3)	20.0 (2.4)	
Smoke free home status			*			ns
Never smokes inside	88.6 (1,781)	90.4 (1,395)		87.6 (1.1)	88.9 (1.7)	
Sometimes smokes inside	4.9 (99)	5.1 (79)		5.1 (0.7)	6.6 (1.4)	
Most/all the time	6.5 (130)	4.5 (69)		7.3 (0.9)	4.5 (1.2)	
Self-assessed health status			**			*
Excellent	14.3 (288)	17.0 (262)		16.2 (1.2)	20.2 (2.4)	
Very good	29.2 (588)	32.1 (495)		29.2 (1.4)	31.0 (2.3)	
Good	37.4 (753)	35.3 (544)		36.8 (1.5)	37 (2.6)	
Fair	14.5 (292)	11.6 (178)		13.7 (1.1)	9.2 (1.3)	
Poor	4.5 (90)	4.0 (61)		4.0 (0.7)	2.7 (0.5)	
Ran out of money for essentials			***			ns
Not in last year	89.7 (1,807)	93.4 (1,439)		87.6 (1.1)	90.9 (2.1)	
Yes, in the last 12 months	10.3 (208)	6.6 (102)		12.4 (1.1)	9.1 (2.1)	
Total	**100.0 (2,016)**	**100.0 (1,546)**		**100.0**	**100.0**	
Weighted population (N)	**-**	**-**		**180,956**	**176,916**	

[1] CAGE [13]; Non-drinkers in last 12 months excluded

*** p<0.001; ** p<0.01; * p<0.05: Significant difference in distribution between 2015 and 2018

ns: Not significant

3.3.2 Unweighted and weighted sample comparison by phone type for 2018

Tables 4 to 6 show the unweighted and weighted comparison between phone type (mobile or landline) for socio-demographic and socioeconomic variables, and health risk factors respectively. For the unweighted sample, more people were contacted by mobile lining in Darwin/Palmerston, and less in all other geographic areas, more people less than 30 were contacted by mobile, less people 65 years and over were contacted by mobile, and more people living in group houses were contacted by mobile. For the weighted comparison between phone types the following variables differed significantly: age (more mobile contacts for people 30 to 39 years, less 40 to 49 years, and less 65 years and over), number of adults in house (more households with one and two adults and less households with three or more adults), and household type (more single person and single parent households, and less other households).

Table 4: Unweighted and weighted distribution of socio-demographics variables by phone type for total sample, 2018

	Unweighted data			Weighted data		
	Mobile % (n)	Landline % (n)	Sig. Diff.	Mobile % (SE)	Landline % (SE)	Sig. Diff.
Region			***			***
Darwin/Palmerston	75.2 (2677)	56.5 (814)		67.7 (1.1)	34.6 (2.2)	
Alice Springs	13.4 (477)	18.2 (262)		16.5 (0.9)	18.5 (2.2)	
Regional towns	6.1 (217)	9.5 (137)		9.2 (0.8)	17.1 (2.5)	
Rest of NT	5.3 (187)	15.9 (229)		6.6 (0.8)	29.8 (3.3)	
Age			***			*
18-29	9.8 (348)	7.1 (102)		21.3 (1.1)	23.4 (3.4)	
30-39	19.2 (683)	11.4 (164)		27.8 (1.1)	19.0 (2.9)	
40-49	22.9 (813)	23.0 (331)		19.7 (0.7)	24.0 (2.2)	
50-64	34.9 (1,240)	33.9 (489)		22.5 (0.6)	20.9 (1.7)	
65+	13.3 (474)	24.7 (356)		8.7 (0.6)	12.7 (1.0)	
Sex			ns			ns
Female	53.5 (1,904)	53.4 (770)		48.3 (0.9)	50.0 (2.9)	
Male	46.5 (1,654)	46.6 (672)		51.7 (0.9)	50.0 (2.9)	
Indigenous status						
Non-Indigenous	92.8 (3,300)	92.2 (1329)		81.5 (1.5)	51.8 (3.2)	
Indigenous	7.3 (258)	7.8 (113)		18.5 (1.5)	48.2 (3.2)	
Language spoken at home			ns			ns
English	93.1 (3,310)	94.0 (1,352)		90.6 (0.8)	88.8 (2.4)	
Not English	6.9 (246)	6.1 (87)		9.4 (0.8)	11.2 (2.4)	
Adults in house			ns			*
One	24.2 (861)	25.2 (364)		25.2 (1.2)	20.6 (2.6)	
Two	54.3 (1,932)	55.2 (796)		52.1 (1.2)	46.3 (3.1)	
Three or more	21.5 (765)	19.6 (282)		22.7 (1.0)	33.2 (3.2)	
Household type			***			**
Couple with children	36.0 (1,282)	34.7 (500)		36.4 (1.2)	37.4 (3.0)	
Couple with no children	29.2 (1,039)	31.6 (455)		25.5 (1.0)	23.8 (2.4)	
Single parent	7.5 (265)	5.9 (85)		7.7 (0.7)	6.1 (1.5)	
Single person	16.2 (577)	19.2 (277)		15.5 (0.9)	12.3 (1.7)	
Group house	7.4 (264)	4.4 (63)		11.3 (0.8)	10.7 (2.6)	
Other	3.7 (131)	4.3 (62)		3.6 (0.4)	9.6 (2.3)	
Total	**100.0 (3,558)**	**100.0 (1,442)**		**100.0**	**100.0**	-
Weighted population (N)	-	-		**143,913**	**37,043**	-

*** p<0.001; ** p<0.01; * p<0.05: Significant difference in distribution between mobile and landlines samples; ns: Not significant

Comparisons between phone type for socioeconomic variables show that mobile phone respondents were more likely to be employed, and less likely to be not in the labour force (e.g. retired/pensioners), less likely to be of lower education, and less likely to be on lower personal incomes. The pattern observed for the unweighted data was like that observed in the weighted data, with labour force status, highest education, and personal income all showing significant differences in distributions by phone type.

Table 5: Unweighted and weighted distribution of socioeconomic variables by phone type for total sample, 2018

	Unweighted data			Weighted data		
	Mobile % (n)	**Landline % (n)**	**Sig. Diff.[1]**	**Mobile % (SE)**	**Landline % (SE)**	**Sig. Diff.**
Student status			**			ns
Full-time student	2.8 (98)	2.1 (30)		4.2 (0.5)	3.1 (0.8)	
Part-time student	9.5 (339)	6.7 (96)		11.9 (0.9)	8.9 (2.0)	
Not-studying	87.7 (3,115)	91.3 (1,314)		83.9 (0.9)	87.9 (2.1)	
Labour force status			***			***
Full-time work	62.5 (2,219)	52.9 (762)		65.2 (1.2)	50.0 (3.2)	
Part-time/Casual	17.1 (609)	15.1 (218)		17.4 (0.9)	17.3 (2.6)	
Unemployed	3.9 (140)	4.0 (58)		4.8 (0.7)	13.4 (3.0)	
NILF/other	16.5 (585)	27.9 (402)		12.6 (0.7)	19.3 (2.1)	
FIFO/DIDO Status [2]			ns			ns
Not FIFO/DIDO	89.4 (2,511)	89.2 (870)		87.2 (1.0)	86.9 (2.9)	
FIFO/DIDO	10.6 (299)	10.8 (105)		12.8 (1.0)	13.1 (2.9)	
Highest education			***			***
Bachelor or more	36.2 (1,288)	35.8 (514)		32.4 (1.1)	23.8 (2.1)	
Certificate 3/Diploma	33.5 (1,190)	27.3 (392)		33.0 (1.1)	25.1 (2.6)	
Year 12	13.5 (478)	15.0 (215)		17.8 (1.2)	18.8 (2.7)	
Year 10	14.0 (498)	15.9 (228)		13.8 (0.9)	26.0 (3.2)	
Less than year 10	2.8 (101)	6.1 (87)		3.0 (0.5)	6.2 (1.5)	
Personal income			***			***
Less than $20,000	8.0 (286)	12.1 (174)		8.5 (0.7)	18.4 (3.0)	
$20,000-$29,000	7.0 (249)	11.7 (169)		6.9 (0.7)	15.1 (2.6)	
$30,000-$49,000	12.7 (452)	14.9 (215)		12.1 (0.7)	11.7 (1.7)	
$50,000-$69,000	15.5 (553)	15.7 (226)		18.2 (1.1)	17.1 (2.4)	
$70,000-$99,000	24.2 (861)	18.5 (266)		24.5 (1.0)	16.9 (2.2)	
$100,000-$119,000	15.1 (536)	13.1 (189)		13.0 (0.7)	11.7 (1.8)	
$120,000 or more	17.5 (621)	14.1 (203)		16.8 (0.9)	9.2 (1.1)	
Total	**100.0 (3,558)**	**100.0 (1,442)**		**100.0**	**100.0**	-
Weighted population (N)	-	-		**143,913**	**37,043**	-

[1] Significant difference; [2] FIFO/DIDO Fly in-Fly out or Drive in-Drive out worker; Not in labour force, other and unemployed excluded.

*** p<0.001; ** p<0.01; * p<0.05: Significant difference in distribution between mobile and landline samples; ns: Not significant

For unweighted data, only drinking alcohol showed a significant difference between mobile and landline samples, with 87% drinking alcohol amongst mobile contacts, compared with 78% for those contacted by landline. This difference for drinking alcohol was the same for the weighted sample, while for the weighted sample significantly less of the mobile sample had ran out of money for essentials, compared with the landline sample.

Table 6: Unweighted and weighted distribution of health risk factors by phone type for total sample, 2018

	Unweighted data			Weighted data		
	Mobile % (n)	**Landline % (n)**	**Sig. Diff.**	**Mobile % (SE)**	**Landline % (SE)**	**Sig. Diff.**
Drank alcohol last 12 months			***			***
No	12.7 (186)	22.4 (122)		13.3 (1.3)	27.6 (3.3)	
Yes, drank alcohol	87.4 (1,284)	77.6 (422)		86.7 (1.3)	72.4 (3.3)	
CAGE Alcohol problems [1]			ns			ns
No problem	81.9 (1,051)	84.1 (355)		81.4 (1.5)	83.8 (3.1)	
Alcohol problem	18.2 (233)	15.9 (67)		18.6 (1.5)	16.2 (3.1)	
Smoking status			ns			ns
Never smoker	44.4 (654)	44.5 (241)		49.3 (1.8)	46.7 (3.6)	
Ex-/non-daily smoker	33.4 (491)	34.7 (188)		29.1 (1.6)	29.5 (3.0)	
Daily smoker	22.2 (327)	20.9 (113)		21.5 (1.4)	23.8 (3.1)	
Smoke free home status			ns			**
Never smokes inside	88.7 (1,302)	88.4 (479)		89.0 (1.1)	81.7 (3.2)	
Sometimes smokes inside	5.4 (79)	3.7 (20)		5.2 (0.7)	4.8 (1.7)	
Most/all the time	5.9 (87)	7.9 (43)		5.8 (0.8)	13.5 (3.0)	
Self-assessed health status			ns			ns
Excellent	15.6 (229)	10.9 (59)		16.8 (1.4)	14.0 (2.7)	
Very good	28.8 (424)	30.3 (164)		29.6 (1.6)	27.6 (3.0)	
Good	37.1 (546)	38.3 (207)		36.4 (1.7)	38.6 (3.4)	
Fair	14.4 (211)	15.0 (81)		13.4 (1.2)	14.9 (2.4)	
Poor	4.1 (60)	5.6 (30)		3.8 (0.7)	4.9 (1.6)	
Kessler-5			ns			ns
Low/no distress	87.0 (1,260)	87.1 (453)		85.8 (1.3)	81.1 (3.2)	
High/very high distress	13.0 (188)	12.9 (67)		14.2 (1.3)	18.9 (3.2)	
Ran out of money for essentials			ns			*
Not in last year	89.7 (1,320)	89.7 (487)		88.6 (1.2)	83.0 (2.9)	
Yes, in the last 12 months	10.3 (152)	10.3 (56)		11.4 (1.2)	17.0 (2.9)	
Total	**100.0 (3,558)**	**100.0 (1,442)**	-	**100.0**	**100.0**	-
Weighted population (N)	-	-	-	**143,913**	**37,043**	-

[1] CAGE [13]; Non-drinkers in last 12 months excluded

*** p<0.001; ** p<0.01; * p<0.05: Significant difference in distribution between mobile and landline samples; ns: Not significant

4 GAMBLING PARTICIPATION

4.1 Background

This chapter presents information on the eleven types of betting and wagering, and 'other' gambling as listed below.

- Lotto or Powerball
- Raffles, sweeps, footy tipping or email/ internet/mail/SMS/phone-in competitions
- Keno
- Electronic gambling machines (EGMs) or pokies
- Instant scratch tickets
- Bingo
- Racetrack betting (horses and dogs)
- Casino table games
- Sports betting
- Non-sports betting (e.g. Logies, fantasy sports, elections)
- Informal betting (e.g. cards, darts, pool)
- Other gambling

Respondents were asked about gambling participation, frequency of gambling, and where/how (e.g. hotel, club, online) they gambled for each activity. In addition to reporting on individual gambling activities, information from where/how people gambled was used to create an online gambling indicator, which included gamblers who gambled online in either sports betting, racetrack betting, EGMs, keno, or casino table games. Some data on regular gamblers is also presented.

4.1.1 Chapter contents

Specifically, this chapter contains:

- Estimates of participation and frequency of play for 11 gambling activities for the NT, broken down by region, age and sex;
  - including statistical tests of association between each gambling activity and regional, socio-demographic, and socioeconomic factors.
- Comparisons with 2005 and 2015 estimates for participation and frequency of play for all comparable activities and broken down by selected demographic variables;
  - including statistical tests of difference between the 2005 and 2015, and 2015 and 2018 estimates,
  - comparisons with other jurisdictions most recent gambling participation estimates,
- Estimates of how and where people gambled for EGMs, racetrack betting, sports betting and keno, and
- Estimates of regular gambling and online gambling, with multivariable logistic regression models using socio-demographic and socioeconomic variables.

4.2 Chapter highlights

- The downward trend in gambling participation has continued across all activities except lotto, informal betting, and non-sports betting, with 72% NT adults having gambled in the past year in 2018, down from 76% in 2015 and 85% in 2005.
- Declines in participation between 2015 and 2018 were statistically significant for raffles (43% to 37%), keno (25% to 22%), EGMs (23% to 19%), racetrack betting (23% to 17%) and casino table games (13% to 9%).
- In 2018 Darwin/Palmerston (75%) and Alice Springs (74%) had the highest gambling participation, and the Rest of NT region (58%) had the lowest.

- In 2018 men were significantly more likely than women to gamble on keno, racetrack betting, casino table games, sports betting and informal betting. Women were significantly more likely than men to gamble on raffles, instant scratch tickets, and bingo.
- Annual online gambling participation remained steady between 2015 and 2018, with 9% of adults gambling online on at least one activity. Men, younger people, those on higher income, and with higher level of education were more likely to gambling online.
- In 2018 any gambling participation increase with age with 64% of those aged 18-29 years participating, increasing to 78% of those aged 50-64 years and 76% for those aged 65 years or more.
- There was a significant increase from 2015 to 2018 in the percentage gamblers gambling weekly for EGMs (6% to 10%) and sports betting (8% to 16%). There was a significant increase from 2015 to 2018 in the percentage gamblers gambling monthly for EGMs (12% to 17%), keno (13% to 19%) and lotto (11% to 25%).

4.3 Gambling participation in the Northern Territory, 2005, 2015 and 2018

Table 1 shows the number and percentage of people participating in the eleven activities, other gambling and any gambling in the last 12 months for all three prevalence surveys carried out in the NT. All activities, except lotto, bingo, informal betting and non-sport betting showed a decrease in the number of people gambling.

Table 7: Number of people participating in gambling activities, 2005, 2015 and 2018 adult population

	2018 N	2015 N	2005 N	2018 %	2015 %	2005 %
Any gambling	129,467	134,524	117,523	71.5	76.0	85.0
Lotto	86,785	81,592	72,915	48.0	46.1	52.8
Raffles/sweeps	66,703	75,537	89,951	36.9	42.7	65.1
Keno	39,865	44,902	31,178	22.0	25.4	22.6
EGMs	35,160	40,571	37,307	19.4	22.9	27.0
Racetrack betting	29,797	40,251	26,323	16.5	22.8	19.0
Instant scratch tickets	28,338	30,972	39,518	15.7	17.5	28.6
Casino table games	16,681	23,759	14,496	9.2	13.4	10.5
Sports betting	12,803	13,227	7,243	7.1	7.5	5.2
Informal betting	5,205	4,625	5,046	2.9	2.6	3.7
Bingo	3,630	3,601	2,623	2.0	2.0	1.9
Non-sports betting	1,337	467	-	0.7	0.3	-
Other gambling	547	792	1,475	0.3	0.4	1.1
NT Population	**180,956**	**176,916**	**138,225**	**100.0**	**100.0**	**100.0**

Sources: 2005 NT Gambling Prevalence Survey, and the 2015 and 2018 NT Gambling Prevalence and Wellbeing Surveys [2, 14]

Figure 2 shows change in gambling participation between 2005 and 2018 for eleven activities, other gambling and any gambling in the last 12 months. The trend in any gambling in the last 12 months continued to decline, with a statistically significant drop from 76% to 71.6% between 2015 and 2018. There were also significant declines in participation between 2015 and 2018 for raffles (42.7% to 36.9%), keno (25.4% to 22%), EGMs (22.9% to 19.4%), racetrack betting (22.8% to 16.5%), and casino games (13.4% to 9.2%). Non-sports betting was the only gambling activity that showed a significant increase between 2015 and 2018, increasing from 0.3% to 0.7%.

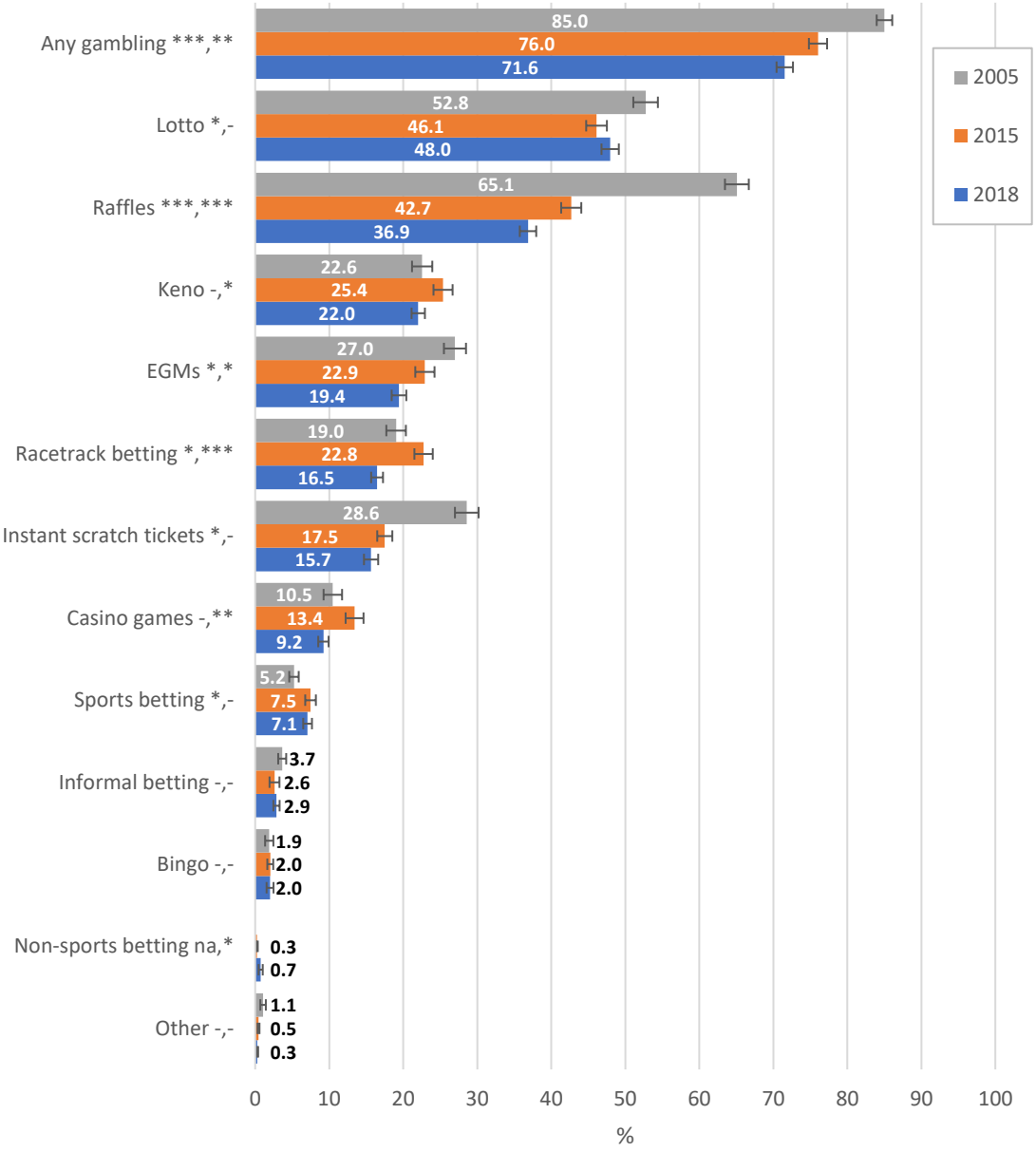


Figure 2: Percentage participation in gambling activities by time, 2005, 2015 and 2018 NT Adult population

Significant difference between 2005 and 2015, and 2015 and 2018 for activity: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Sources: 2005 NT Gambling Prevalence Survey , and the 2015 and 2018 NT Gambling Prevalence and Wellbeing Surveys [2, 14]

Figure 3 shows the number of activities gambled on for those that gambled in the past 12 months. There was no statistically significant difference in the distribution of number of activities gambled on, though there does appear to be an increase over time for people to gamble on only one activity, with 25% of adults gambling on just one activity in 2005, compared to 31.9% in 2018.

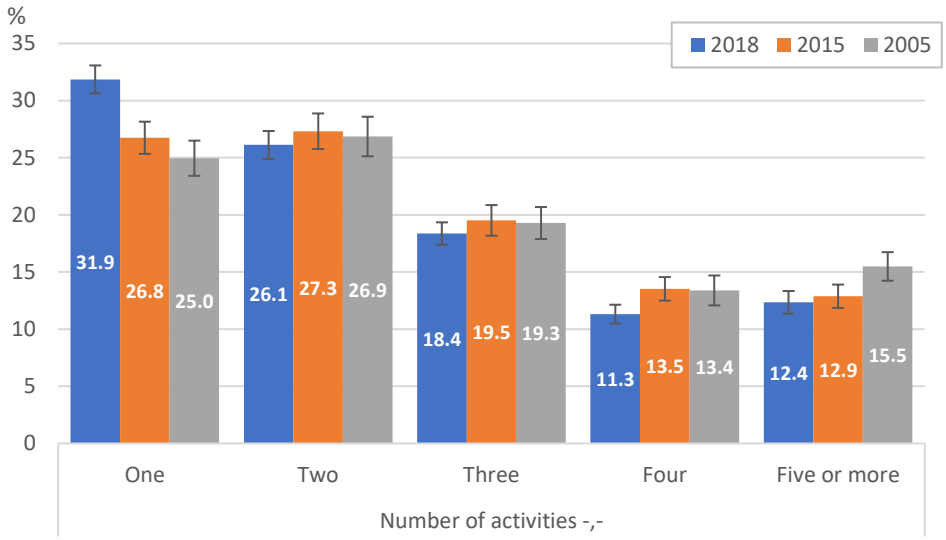


Figure 3: Number of activities gambled on by time, 2005, 2015 and 2018, NT gamblers

Significant difference between 2005 and 2015, and 2015 and 2018: *** p < 0.001, ** p < 0.01, * p < 0.05

4.4 Gambling participation in the Northern Territory and other jurisdictions

Table 10 shows a comparison of participation by activity with seven of the eight jurisdictions in Australia (excluding Western Australia), along with an unweighted average participation. Statistical tests comparing gambling activity estimates between jurisdictions were not done for this table, though participation was higher in the NT compared with the average across jurisdictions for any gambling (72% cf. 64%), lotto (48% cf. 45%), keno (22% *cf*. 13%), and casino table games (9% *cf*. 6%).

Table 8: Participation in gambling by selected activities for seven jurisdictions in Australia, adult population

Gambling activity	NT (2018) %	ACT[1] (2018) %	SA[2] (2016) %	NSW[3] (2018) %	VIC[4] (2014) %	QLD[5] (2016/17) %	TAS[6] (2017) %	Un-weighted average %
Any gambling activity	72	60	65	53	70	71	59	64
Lotto	48	44	48	37	47	55	39	45
Raffles/sweeps	37	43	26	-	42	-	-	37
Keno	22	5	8	9	4	15	26	13
EGMs	19	20	19	16	17	25	19	19
Racetrack betting	16	14	12	13	21	18	10	15
Instant scratch tickets	16	21	-	13	11	-	21	16
Casino table games	9	6	6	5	5	6	5	6
Sports betting	7	10	7	6	5	7	4	7
Informal betting	3	3	3	5	3	3	3	3
Bingo	2	2	3	2	3	3	2	2

Notes: [1] [15] [2] [16], [3] [5] , [4] [17], [5] [18], [6] [19]

4.5 Gambling participation by time, region, age and sex

Figure 4 presents change in any gambling in the last 12 months by region. Only one region, Darwin and Palmerston showed a statistically significant decline in any gambling, though the decline in Regional Towns was marginally non-significant, and

there was a clear down trend in the Rest of NT. Alice springs was the only region where there was an increase in any gambling, though this was not statistically significant.

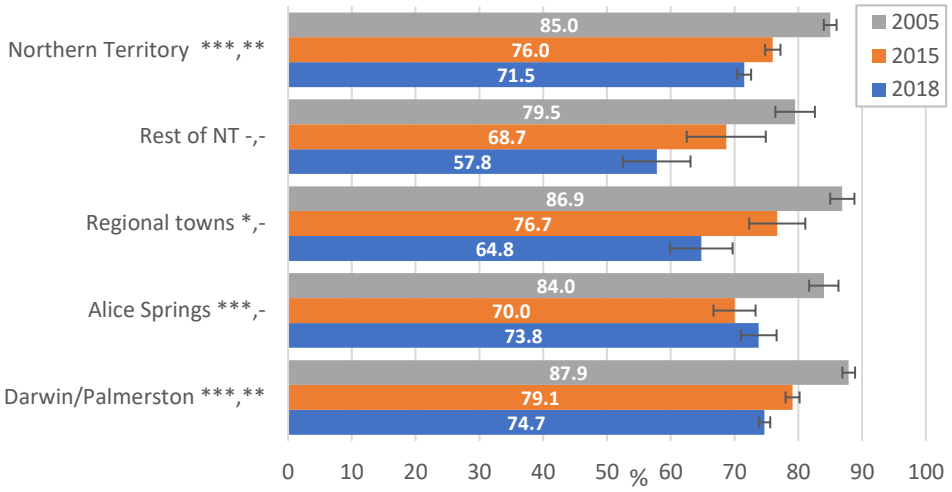


Figure 4: Participation in any gambling activity by time within region, NT Adult population

Significant difference between 2005 and 2015, and 2015 and 2018 within region:
*** p < 0.001, ** p < 0.01, * p < 0.05

Figure 5 shows there was significant variation in any gambling across regions in 2005, 2015 and 2018, and the variation between regions was the largest for the 2018 survey, ranging from 57.8% in the Rest of NT to 74.7% in Darwin and Palmerston.

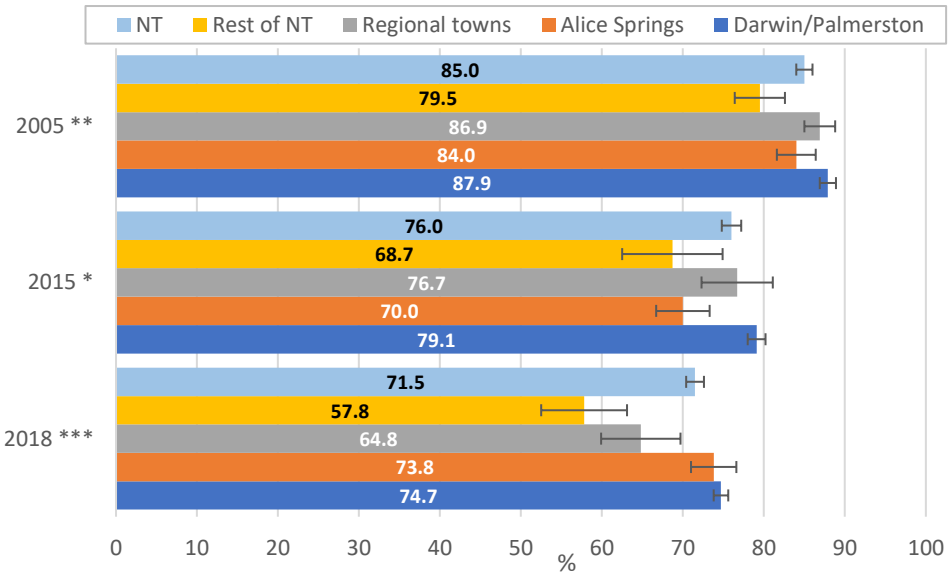


Figure 5: Participation in any gambling activity by region within time, NT Adult population

Significant variation between regions within time: *** p < 0.001, ** p < 0.01, * p < 0.05

Table 9 shows the number of people who gambled in the last 12 months by region and time. There were declines in the number of people gambling between 2015 and 2018 for all regions in the NT.

Table 9: Number of people gambling in last year by region within time, 2005, 2015 and 2018 NT Adult population

	No gambling	Gambled	Total
2018			
Darwin & Palmerston	27,940	82,367	110,307
Alice Springs	8,012	22,581	30,593
Regional towns	6,876	12,681	19,557
Rest of NT	8,660	11,838	20,498
Total	**51,489**	**129,467**	**180,956**
2015			
Darwin & Palmerston	22,469	85,044	107,512
Alice Springs	9,899	23,068	32,967
Regional towns	4,013	13,237	17,250
Rest of NT	6,012	13,175	19,187
Total	**42,392**	**134,524**	**176,916**
2005			
Darwin & Palmerston	8,484	61,922	70,406
Alice Springs	2,564	13,507	16,071
Regional towns	1,689	11,180	12,869
Rest of NT	7,966	30,913	38,879
Total	**20,702**	**117,523**	**138,225**

Figure 6 shows that there was significant variation in the distribution of number of activities across regions in 2018. Adults living in the Rest of the NT were more likely to gamble on two activities, compared with other regions, while residents in Darwin, Palmerston and Alice Springs were more likely to gamble on five or more activities, reflecting the greater accessibility of gambling options in these regions.

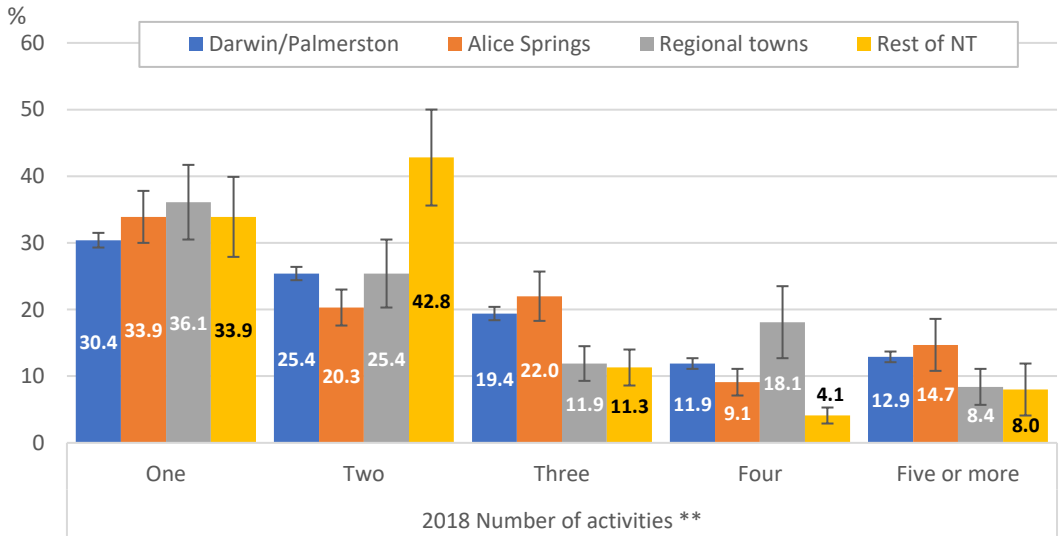


Figure 6: Number of gambling activities by region, 2018 NT Adult gamblers

Significant variation between regions: *** p < 0.001, ** p < 0.01, * p < 0.05

Figure 7 shows the variation across regions for participation in each gambling activity for 2018. There was statistically significant variation in participation in most gambling activities across regions in 2018. Generally, participation was highest for activities in Darwin and Palmerston, and Alice Springs, and lowest in the Rest of the NT, though

EGMs were more popular in Alice Springs and Regional Towns than in the Darwin and Palmerston region.

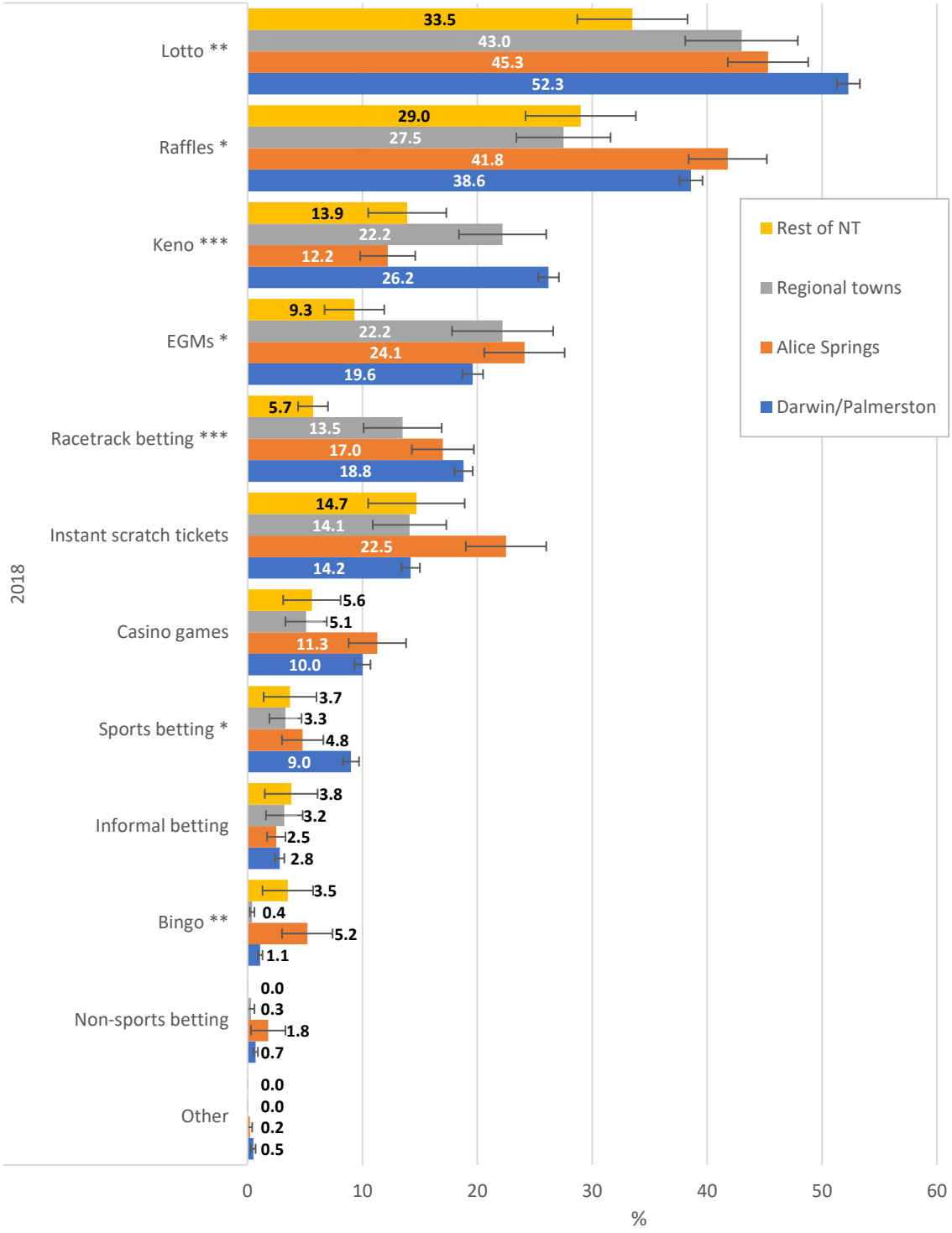


Figure 7: Gambling activities by region, 2018 NT Adult population

Significant variation between regions: *** p < 0.001, ** p < 0.01, * p < 0.05

Table 10 shows gambling participation for all activities by sex. Men had significantly higher participation than women in keno (26% *cf*. 18%), racetrack betting (19% *cf*. 14%), casino table games (13% *cf*. 5%), sports betting (12% *cf*. 2%), and informal betting

(5% *cf*. 1%). Women had significantly higher participation than men in raffles (42% *cf*. 32%), instant scratch tickets (18% *cf*. 13%), and bingo (3% *cf*. 1%).

Table 10: Gambling participation by activity and sex, 2018 NT adult population

	Female % (SE)	Male % (SE)	Persons % (SE)
Any gambling	71.7 (1.5)	71.4 (1.6)	71.5 (1.1)
Lotto	48.0 (1.6)	47.9 (1.6)	48.0 (1.2)
Raffles ***	42.2 (1.6)	31.8 (1.5)	36.9 (1.1)
Keno ***	18.3 (1.0)	25.6 (1.4)	22.0 (0.9)
EGMs	18.6 (1.3)	20.2 (1.4)	19.4 (1.0)
Racetrack betting ***	13.6 (0.9)	19.2 (1.3)	16.5 (0.8)
Instant scratch tickets **	18.3 (1.5)	13.2 (1.2)	15.7 (1.0)
Casino table games ***	5.1 (0.5)	13.2 (1.2)	9.2 (0.7)
Sports betting ***	2.1 (0.3)	11.8 (1.1)	7.1 (0.6)
Informal betting ***	1.0 (0.3)	4.6 (0.8)	2.9 (0.4)
Bingo ***	3.4 (0.9)	0.7 (0.3)	2.0 (0.5)
Other gambling	0.2 (0.1)	0.4 (0.2)	0.3 (0.1)

Significant difference between men and women: *** p < 0.001, ** p < 0.01, * p < 0.05

Table 11 presents gambling participation for all activities by age. There was significant variation across age groups for any gambling, lotto, raffles, keno, casino table games, sports betting and informal betting. Older people were significantly more likely to gamble on any gambling and lotto, while younger people were significantly more likely to gamble on EGMs, casino table games, sports betting and informal betting.

Table 11: Gambling participation by activity and age, 2018 NT adult population

	18-29 % (SE)	30-39 % (SE)	40-49 % (SE)	50-64 % (SE)	65+ % (SE)	Persons % (SE)
Any gambling ***	64.1 (3.3)	67.8 (2.5)	74.7 (2.0)	78.3 (1.4)	76.3 (2.1)	71.5 (1.1)
Lotto ***	30.6 (3.1)	43.4 (2.5)	53.7 (2.1)	59.8 (1.6)	60.1 (2.8)	48.0 (1.2)
Raffles **	29.2 (3.1)	36.2 (2.4)	40.6 (2.0)	41.5 (1.5)	37.4 (3.2)	36.9 (1.1)
Keno ***	19.2 (2.6)	16.7 (1.7)	27.9 (1.8)	26.2 (1.4)	20.6 (2.0)	22.0 (0.9)
EGMs	22.8 (2.8)	16.7 (2.0)	18.8 (1.8)	20.5 (1.4)	18.3 (3.3)	19.4 (1.0)
Racetrack betting	13.3 (2.3)	17.3 (1.6)	18.2 (1.6)	18.7 (1.3)	12.8 (1.5)	16.5 (0.8)
Instant scratch tickets	17.0 (2.6)	16.2 (2.0)	15.0 (1.5)	13.7 (1.2)	17.2 (4.3)	15.7 (1.0)
Casino table games ***	16.8 (2.4)	10.4 (1.3)	8.6 (1.3)	4.4 (0.8)	**1.3 (0.5)**	9.2 (0.7)
Sports betting ***	12.0 (2.1)	7.7 (1.1)	6.7 (1.0)	4.1 (0.7)	1.8 (0.5)	7.1 (0.6)
Informal betting ***	6.2 (1.5)	3.0 (0.8)	1.6 (0.4)	**1.5 (0.5)**	**1.0 (0.4)**	2.9 (0.4)
Bingo	**1.8 (1.1)**	1.7 (0.5)	**1.8 (0.7)**	**1.6 (0.5)**	**4.6 (3.4)**	2.0 (0.5)
Other gambling	**0.7 (0.4)**	**0.2 (0.1)**	**0.2 (0.2)**	**0.2 (0.1)**	0.0 (0.0)	**0.3 (0.1)**

Significant variation across age groups: *** p < 0.001, ** p < 0.01, * p < 0.05
NOTES: Bold font indicates relative standard error greater than 30%

The next two figures show changes over time within regions for gambling activities. Figure 8 shows that for lotteries, most of the decline in participation occurred between 2005 and 2015, with no regions showing a statistically significant change in lotteries participation between 2015 and 2018. There was similar pattern for raffles as lotteries, though Darwin and Palmerston region did show a statistically significant decline in raffles participation between 2015 and 2018. The Rest of the NT region was the only one that showed statistically significant decline in keno participation between 2015

and 2018, dropping from 28.7% to 13.9%. EGM participation declined statistically significantly for Darwin and Palmerston between 2015 (24.3%) and 2018 (19.6%), while the rest of the NT regions had a declining trend over time.

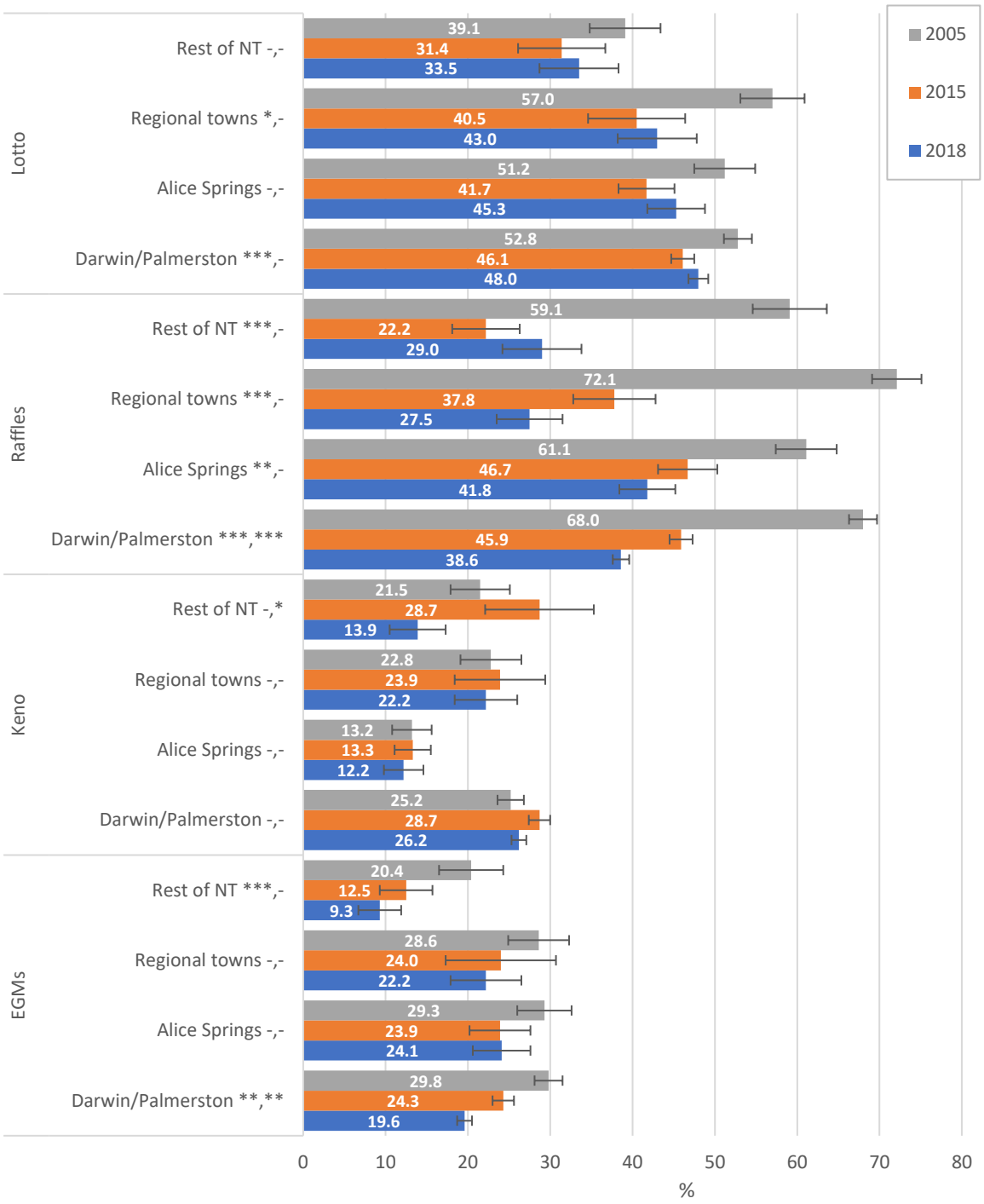


Figure 8: Gambling participation on EGMs, keno, lotteries and raffles by time within region, NT adult population

Significant difference between 2005 and 2015, and 2015 and 2018 within region:
*** p < 0.001, ** p < 0.01, * p < 0.05

Figure 9 shows changes over time within regions in gambling participation for racetrack betting, instant scratch tickets, casino table games and sports betting. The Rest of the NT region showed a large statistically significant decline in racetrack betting

between 2015 (19.9%) and 2018 (5.7%), as did Darwin and Palmerston (24% to 18.8%), and Regional Towns (29.5% to 13.5%). Gambling on instant scratch tickets declined significantly from 2015 (19%) to 2018 (14.2%) for Darwin and Palmerston, but no other regions, while participation in casino table games also declined for Darwin/Palmerston (14.2% to 10%). There were no statistically significant changes between 2015 and 2018 in sports betting participation.

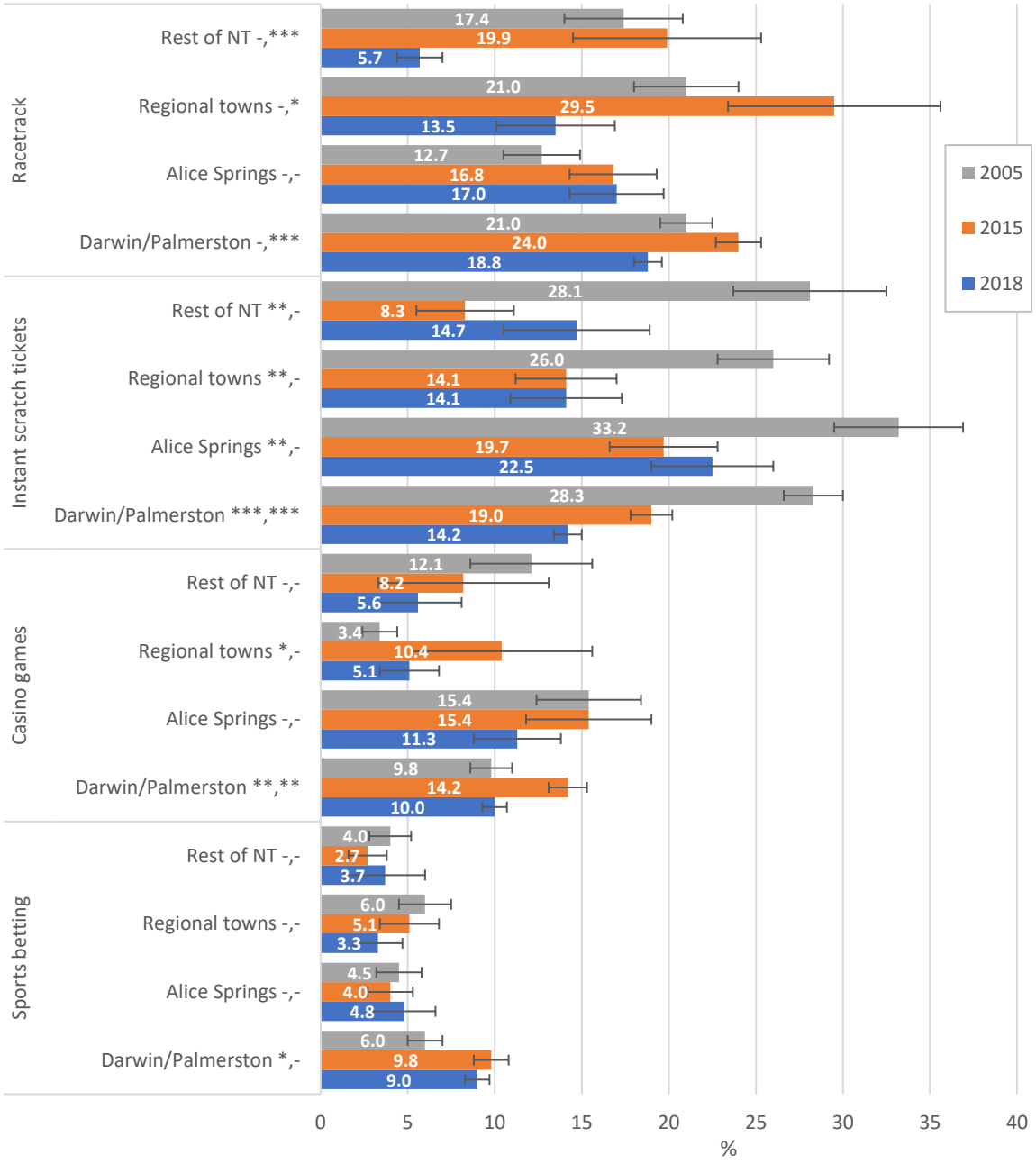


Figure 9: Gambling participation on sports betting, casino games, instant scratch tickets and racetrack betting by time within region, NT adult population

Significant difference between 2005 and 2015, and 2015 and 2018 within region:
*** p < 0.001, ** p < 0.01, * p < 0.05

4.6 Frequency of gambling in the Northern Territory

Figures 10 and 11 present frequency of gambling by activity from 2005 to 2018 as a population prevalence. That is, the percentage represents the percentage of the adult population gambling weekly, monthly or less than monthly, with data for not gambling on the activity and non-gamblers not presented. Figures 12 and 13 present frequency also, but only for people who gambled on that activity. Significance tests indicate a difference in the distribution of frequency of gambling between two surveys (i.e. 2005 to 2015, or 2015 to 2018). Using a population prevalence highlights the small fraction of the population that gambles weekly or monthly for each activity. For all gambling, the was a significant difference in the distribution of frequency of gambling, which was due to a reduction in weekly gambling from 25% to 17%. There was also a significant difference in the distribution of frequency of gambling between 2015 and 2018, though this was predominantly due to a decline in less than monthly gambling from 39% to 34%. For EGMs between 2015 and 2018 there was a small increase in the percentage of people gambling weekly (1.4% to 1.9%), and monthly (2.7% to 3.2%), while less than monthly EGM gambling declined from 19% to 14%. Weekly keno gambling remained steady at 2% between 2015 and 2018, while there was an increase in monthly keno gambling (3% to 4%), and a decrease in less than monthly keno gambling (20% to 16%). Weekly gambling on lotto products was steady at 10% between 2015 and 2018, but increased for monthly lotto from 5% to 12%, and declined for less than monthly lotto gambling from 31% to 26%.

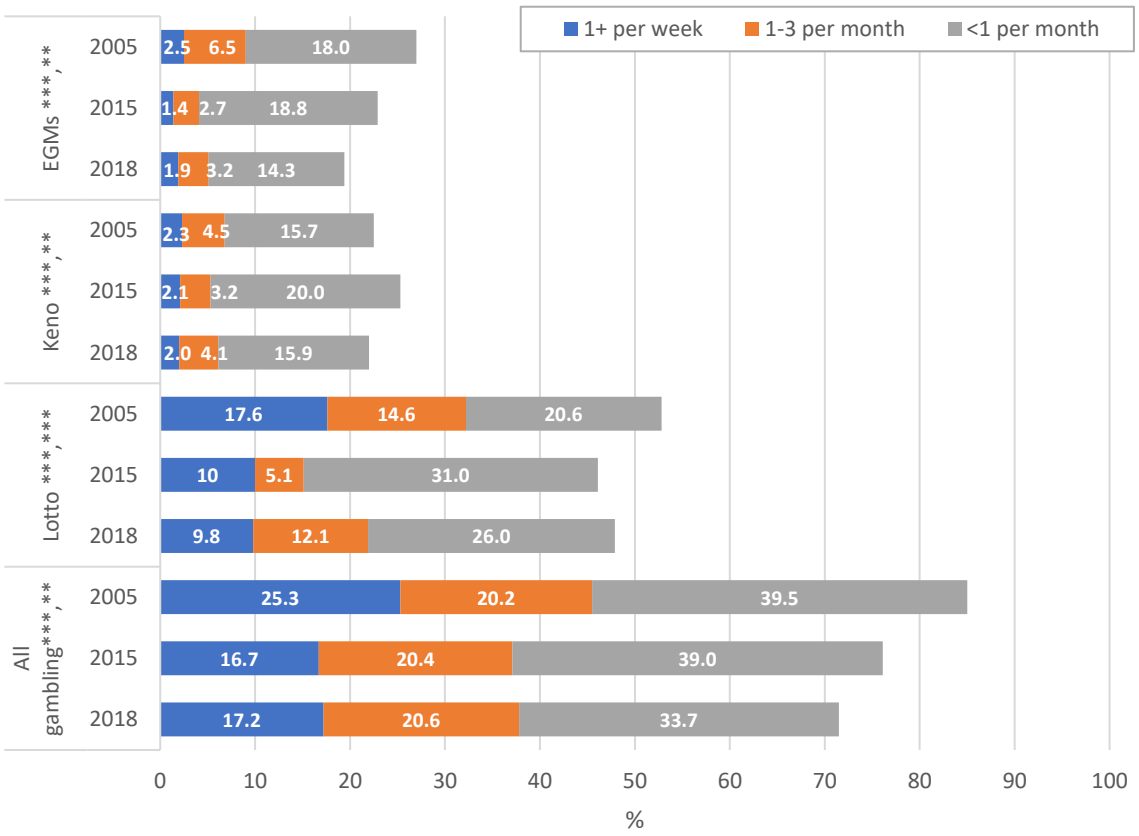


Figure 10: Frequency of gambling for selected activities by time, 2005, 2015 and 2018 NT Adult population

Significant difference in frequency for activity between 2005 and 2015, and 2015 and 2018:
*** p < 0.001, ** p < 0.01, * p < 0.05

There was a significant decline in weekly (2.3% to 1.8%), monthly (2.2% to 1.8%) and less than monthly (18% to 13%) ractrack betting between 2015 and 2018. For casino tables games, the percentage weekly (0.6% to 0.1%), and less than monthly (13% to 8%) gambling declined singificantly between 2015 and 2018. Sports betting had a significant increase in weekly gambling from 0.6% to 1.1%, and there was no significant change in frequency of gambling on instant scratch tickets.

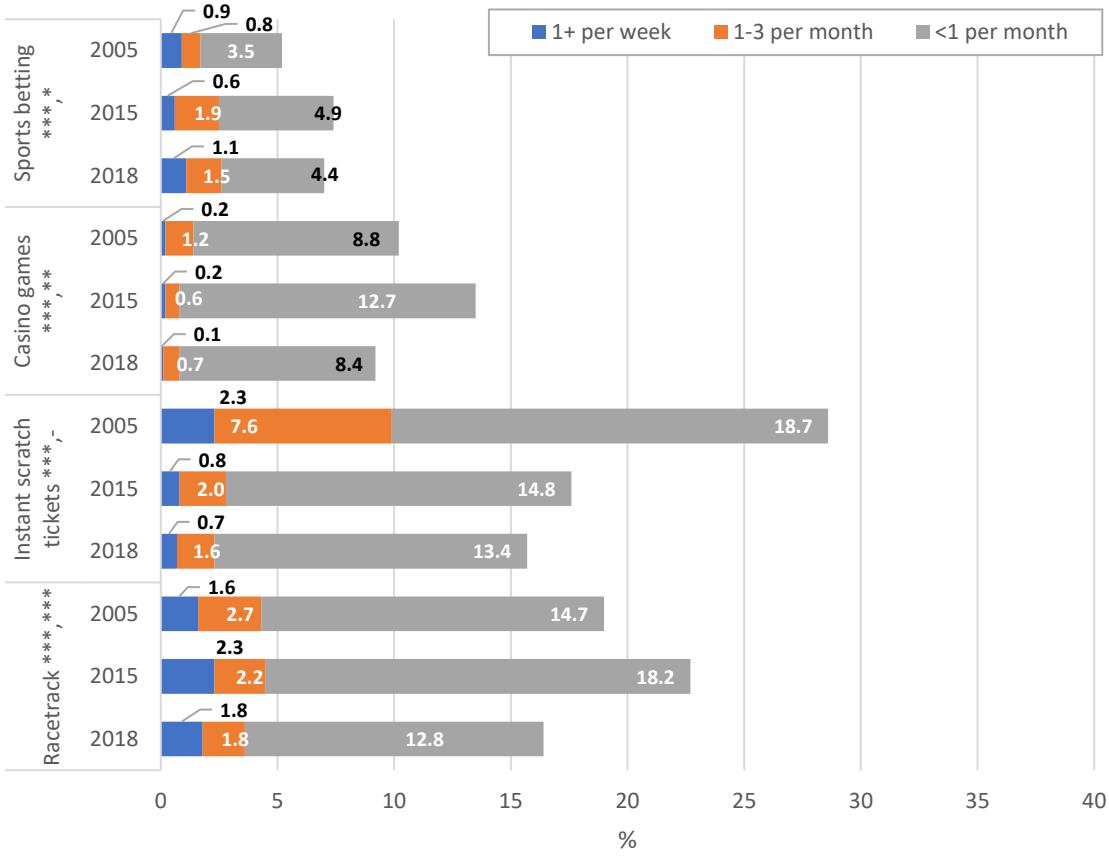


Figure 11: Frequency of gambling for selected activities by time, 2005, 2015 and 2018 NT Adult population

Significant difference in frequency for activity between 2005 and 2015, and 2015 and 2018:
*** p < 0.001, ** p < 0.01, * p < 0.05

Table 12 presents population counts by frequency of play for all gambling activities and any gambling.

Table 12: Number of people gambling by activity and frequency, 2005, 2015 and 2018 NT Adult population

Activity	Year	1+ per week N	1-3 per month N	<1 per month N	Not play activity N	Non-gambler N	Total N
All gambling	2018	31,080	37,191	60,932	-	51,489	180,692
	2015	29,537	36,069	68,918	-	42,392	176,916
	2005	34,913	27,869	54,563	-	20,702	138,047
Lotto	2018	17,814	21,880	47,091	42,683	51,489	180,956
	2015	17,717	9,023	54,852	52,932	42,392	176,916
	2005	24,293	20,203	28,419	44,608	20,702	138,225
Raffle	2018	1,600	9,111	55,992	62,765	51,489	180,956
	2015	1,254	5,778	68,505	58,987	42,392	176,916
	2005	-	-	-	-	-	-
Keno	2018	3,618	7,470	28,777	89,603	51,489	180,956
	2015	3,777	5,672	35,452	89,622	42,392	176,916
	2005	3,184	6,259	21,735	86,345	20,702	138,225
EGMs	2018	3,470	5,871	25,819	94,307	51,489	180,956
	2015	2,498	4,784	33,288	93,953	42,392	176,916
	2005	3,391	9,019	24,898	80,215	20,702	138,225
Racetrack betting	2018	3,277	3,344	23,177	99,670	51,489	180,956
	2015	4,060	3,978	32,213	94,273	42,392	176,916
	2005	2,258	3,798	20,267	91,200	20,702	138,225
Instant scratch tickets	2018	1,260	2,844	24,234	101,130	51,489	180,956
	2015	1,331	3,452	26,189	103,552	42,392	176,916
	2005	3,167	10,538	25,813	78,004	20,702	138,225
Casino table games	2018	120	1,346	15,215	112,786	51,489	180,956
	2015	309	1,063	22,388	110,765	42,392	176,916
	2005	264	1,716	12,231	103,312	20,702	138,225
Sports betting	2018	2,071	2,776	7,956	116,664	51,489	180,956
	2015	1,076	3,405	8,747	121,297	42,392	176,916
	2005	1,299	1,164	4,780	110,279	20,702	138,225

Figures 12 and 13 show frequency of gambling by activity, for people who gambled on the activity. These two figures tell us whether frequency changed within the activity, whereas the previous two figures also reflected changes in participation in the activity. There was a significant change in the distribution of frequency of gambling for EGM gamblers between 2015 and 2018, with an increase in the proportion gambling weekly (6% to 10%) and monthly (12% to 17%), and a decrease in less than monthly from 82% to 73%. The distribution of keno frequency of gambling differed significantly between 2015 and 2018, with weekly gambling remained steady, monthly gambling increasing 13% to 19% and less than monthly keno gambling decreasing from 79% to 72%. Of the lotto gamblers, significantly more were gambling on lotto monthly from 2015 to 2018, (11% to 25%), while a smaller percentage gambled less than monthly, and weekly lotto remained steady. There was no significant change in the distribution of frequency of gambling for all gambling.

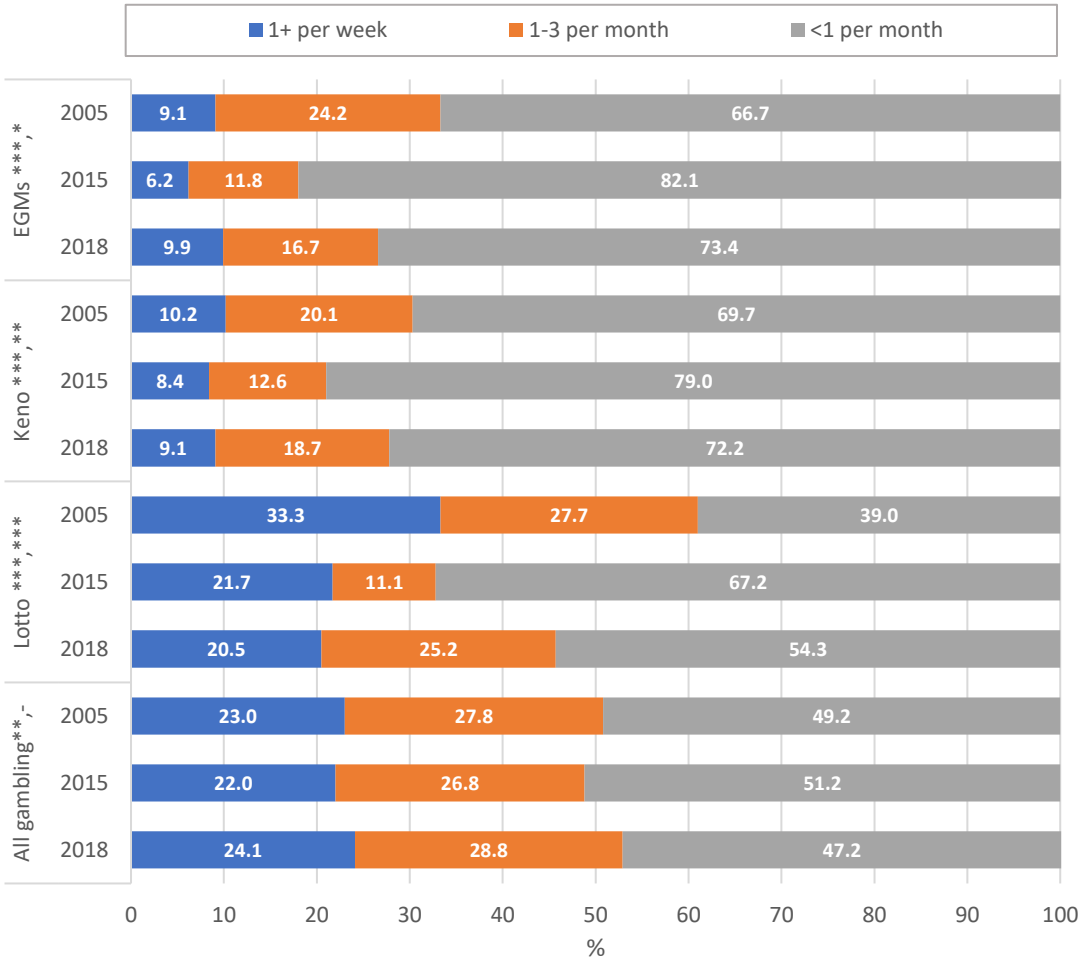


Figure 12: Frequency of participation for all gambling, lotteries, keno and EGMs by time, 2005, 2015 and 2018, NT gamblers who gambled on activity

Significant difference from 2005 to 2015, and 2015 to 2018 in frequency of play
*** p < 0.001, ** p < 0.01, * p < 0.05

Figure 13 shows the distribution of frequency of gambling for people who gambled on that activity by time. There were no significant changes between 2015 and 2018 in the distribution of frequency of gambling for sports betting, casino table games, instant scratch tickets or racetrack betting. While the change in the distribution of frequency of gambling was statistically significant for sports betting, the proportion gambling weekly increased between 2015 and 2018 from 8% to 16%, which was offset in a small decline in both the proportion of monthly and less than monthly sports bettors. There was a decline in the proportion of casino table gamblers gambling weekly (1.3% to 0.7%), and an increase in monthly casino table games gambling (4.5% to 8%), yet this was not statistically significant.

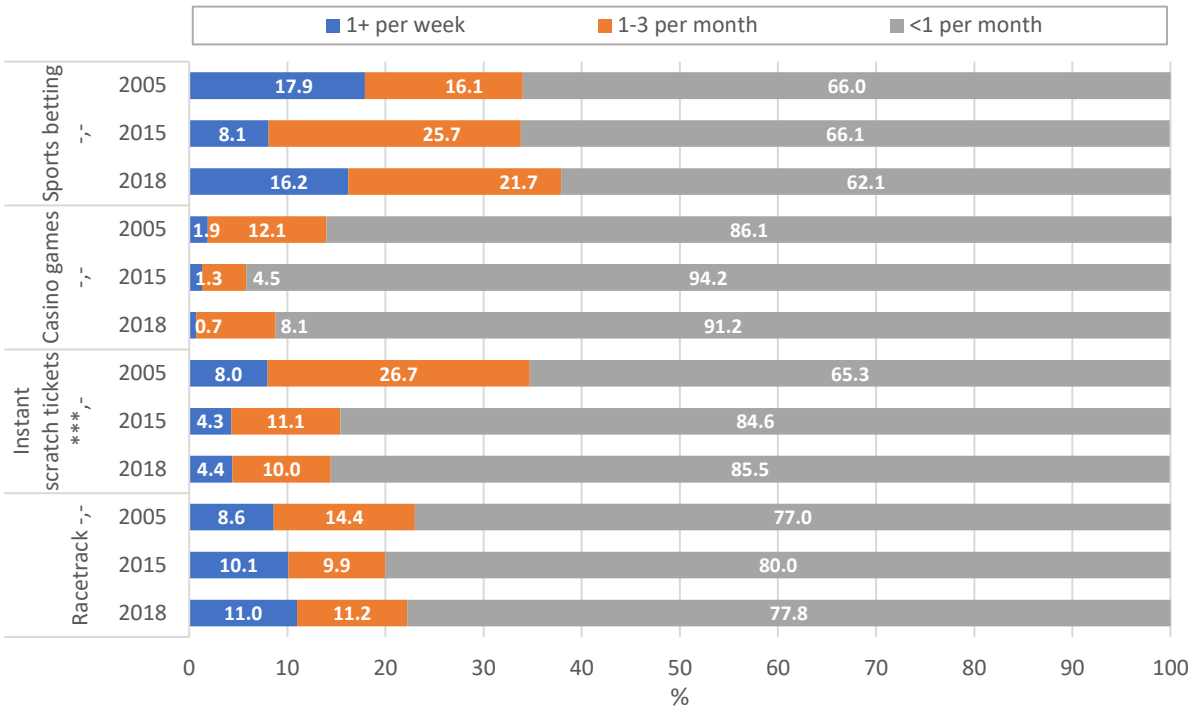


Figure 13: Frequency of participation in sports betting, EGMs, instant scratch tickets, bingo and casino table games by time, 2005, 2015 and 2018 NT gamblers who gambled on activity

Significant difference from 2005 to 2015, and 2015 to 2018 in frequency of play:
*** p < 0.001, ** p < 0.01, * p < 0.05

Figure 14 shows the significant association between number of activities gambled on and frequency of any gambling. More than 60% of people who gambled on five or more activities gambled at least once per week, while this declined for those gambling on less activities, with 9% of people who gambled on one activity only, gambling weekly.

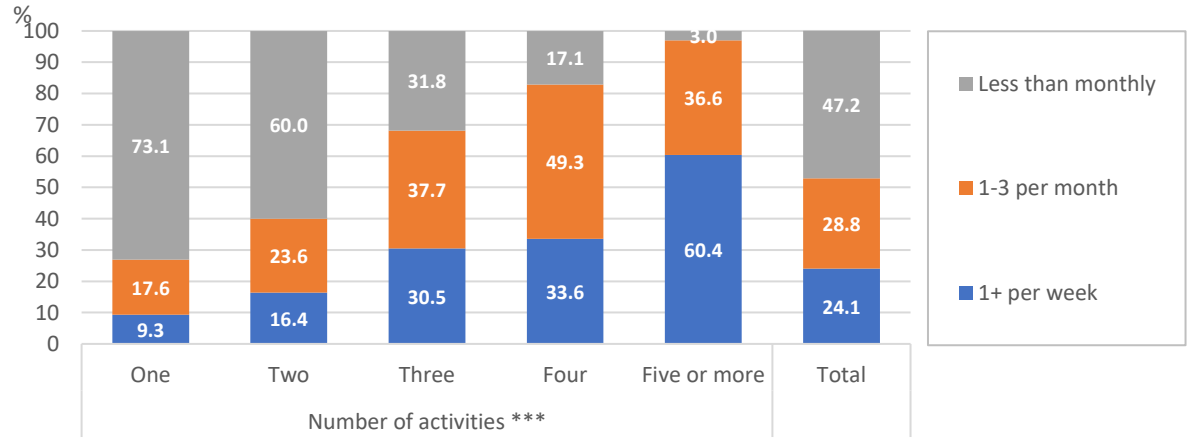


Figure 14: Number of activities by frequency of gambling, 2018 NT gamblers

Significant association between number of activities and frequency of play:
*** p < 0.001, ** p < 0.01, * p < 0.05

4.7 Regular gamblers

Regular gamblers were those people who gambled weekly, not including weekly instant scratch tickets or lotto gambling. This group of people have been found to be at higher problem gambling risk than other gamblers. There was no significant change in the distribution of regular gamblers in the gambling population between 2015 and 2018, with 10% of gamblers classified as regular gamblers (Figure 15).

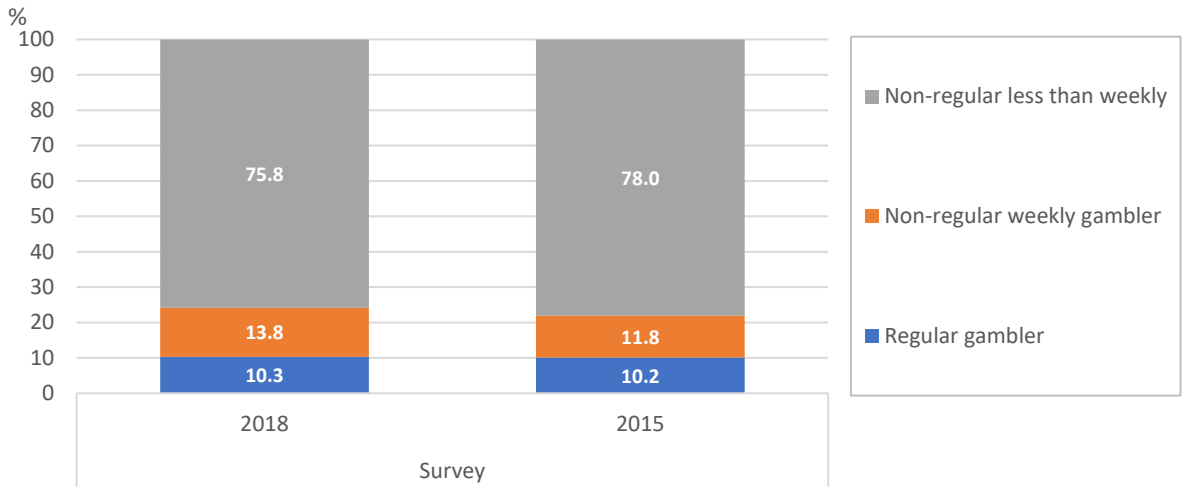


Figure 15: Regular, non-regular weekly and less than weekly gamblers, 2015 and 2018 NT gamblers

Table 13 shows population counts by regular gambling status. There was a small decrease in the number of regular gamblers between 2015 and 2018, and an increase of 2,000 people for non-regular weekly gamblers.

Table 13: Regular gambler status, 2015 and 2018 NT Adult Population

	Regular gambler Population (N)	Non-regular weekly gambler Population (N)	Non-regular less than weekly gambler Population (N)	Non-gambler Population (N)	Total Population (N)
2018	13,371	17,915	98,123	51,447	**180,956**
2015	13,669	15,935	104,920	42,392	**176,916**

4.7.1 Multivariable model for regular gambling

Figure 16 presents socio-demographic and socioeconomic variables that had a significant multivariable adjusted association with regular gambling. Gamblers aged 50-64 years were significantly more likely to be regular gamblers (14%), while those aged 30-39 years were less likely to be regular gamblers (8%). Males (14%) were significantly more likely to be regular gamblers compared with females (6%). Gamblers living in single person (15%), group (16%) and other (21%) household types were significantly more likely to be regular gamblers, while those living in couple with children houses (7%) were less likely to be regular gamblers. Part-time students (3%) and people with a bachelor's degree or higher (6%) were significantly less likely to be regular gamblers, while people with less than Year 10 (20%), and Year 12 (16%) highest level of education were more likely to be regular gamblers. Further, gamblers from a non-English speaking background (5%) were significantly less likely to be regular gamblers compared with those from an English-speaking background (11%).

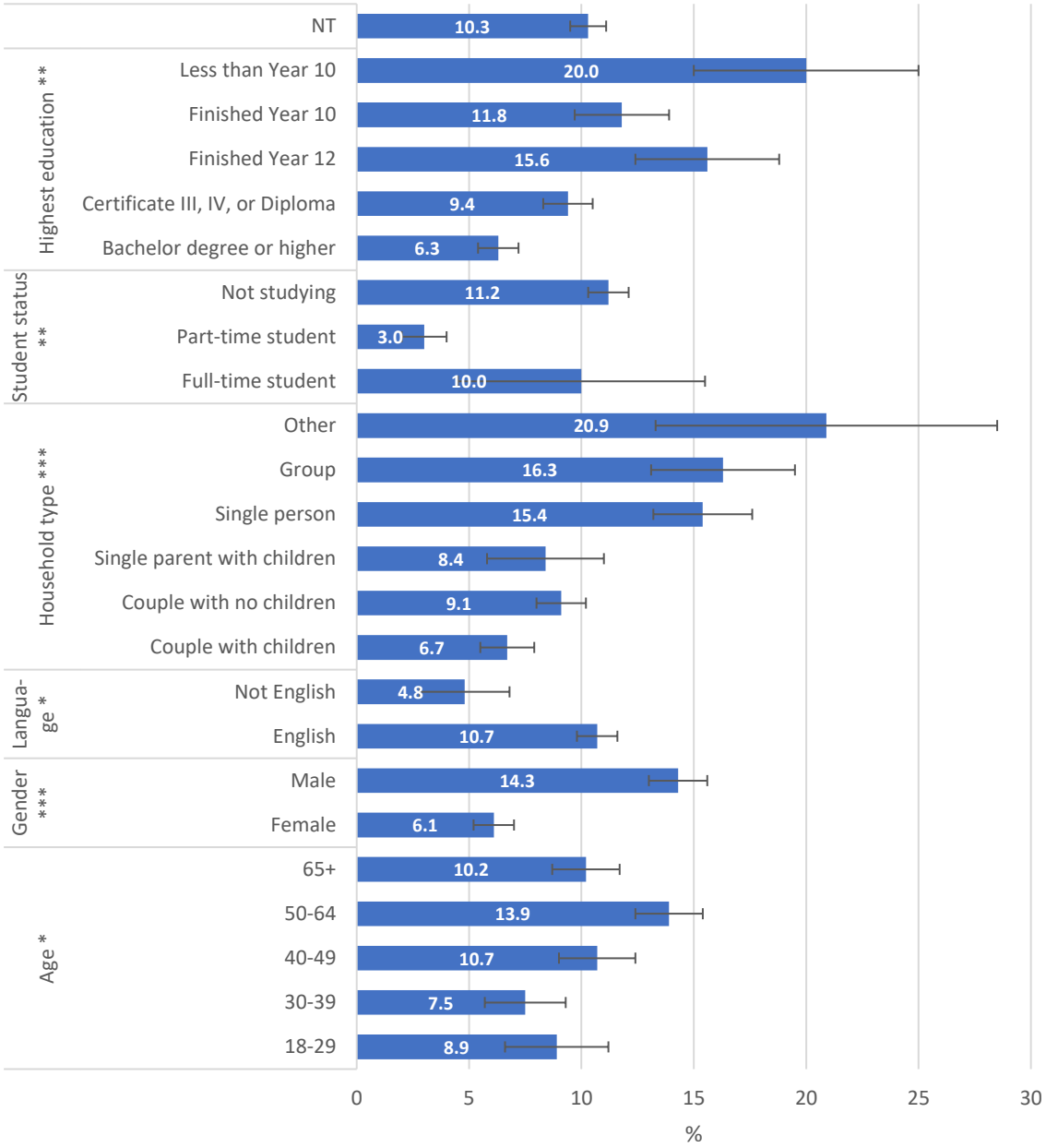


Figure 16: Multivariable adjusted significant associations between regular gambling and socio-demographic and socioeconomic variables, 2018 NT gambler population

Multivariable adjusted significant difference across socio-demographic and socioeconomic variable for regular gambling:
*** p < 0.001, ** p < 0.01, * p < 0.05

Table 14 shows that seven gambling activities were significantly associated with regular gamblers, along with people who gambled online. Just under 38% of people who participated in sports betting were classified as a regular gambler (compared with 10% among all gamblers). This was followed by informal betting (35%), online gambling (33%), bingo (31%), casino table games and EGMs (24%), racetrack betting (22%) and keno (21%).

Table 14: Gambling activities significantly (p<0.01) associated with being a regular gambler, 2018 NT gamblers

Gambling activity/ type	Regular gambler % (SE)	OR[1] (95% CI)
Any gambling	10.3 (0.8)	-
Sports betting	37.6 (4.4)	7.59 (5.00-11.5)
Informal betting	34.8 (7.9)	5.20 (2.56-10.6)
Online gambling	33.0 (4.0)	6.62 (4.43-9.92)
Bingo	31.2 (9.5)	4.22 (1.74-10.2)
Casino table games	24.0 (3.3)	3.47 (2.31-5.21)
EGMs	23.6 (2.4)	5.44 (3.87-7.67)
Racetrack betting	22.3 (2.0)	3.99 (2.79-5.69)
Keno	21.0 (1.8)	4.49 (3.09-6.52)

[1] OR = Odd Ratio (unadjusted) for activity/type of gambling for being a regular gambler (reference category is does not gamble on that activity)

4.8 Mode of gambling for selected activities

Table 15 presents modes and venues where people gambled on EGMs and keno in NT venues. In 2018 the most common venue for EGM gamblers was in casinos (53%), followed by hotels (51%), clubs (49%) and online (6%). There was a small decline in online and casino EGM gambling between 2015 and 2018, while a greater percentage of EGM gamblers gambled on EGMs at clubs and hotels in 2018 compared with 2015. A similar pattern was observed for keno gambling as that seen for EGMs, with an increase in gambling on keno in hotels from 2015 to 2018 (51% to 59%), clubs (42% to 47%), and a decline in casino keno gambling (26% to 25%), but there was an increase in online keno gambling (0.7% to 2%). Between 2015 and 2018 and greater percentage of EGM gamblers gambled on two (17% to 27%) or three modes (10% to 14%). The same pattern was observed for keno gambling, with the percentage of keno gamblers playing on two modes (13% to 23%) and three modes (4% to 5%) increasing.

Table 15: Mode of gambling for EGMs and keno by time, 2015 and 2018 NT population gambling on activity

Where/how gambled	2018 EGMs % (SE)	2015 EGMs % (SE)	2018 Keno % (SE)	2015 Keno % (SE)
Hotel	50.8 (2.8)	40.3 (3.3)	58.9 (2.1)	50.7 (2.8)
Club	48.7 (2.8)	36.0 (3.2)	46.7 (2.1)	42.3 (2.8)
Casino	52.6 (2.8)	56.6 (3.2)	24.6 (2.0)	26.2 (2.3)
Online	5.6 (1.9)	7.8 (2.1)	1.8 (0.5)	0.7 (0.3)
TAB	NA	NA	NA	NA
Racetrack (on-track)	NA	NA	NA	NA
Phone	NA	NA	NA	NA
Other	0.3 (0.2)	0.3 (0.1)	0.0 (0.0)	0.8 (0.4)
Number of betting modes				
One	59.2 (3.0)	73.2 (2.7)	72.9 (2.1)	83.6 (1.7)
Two	26.6 (2.7)	16.8 (2.1)	22.5 (2.0)	12.5 (1.5)
Three or more	14.2 (2.4)	10.0 (2.1)	4.7 (0.7)	3.9 (0.8)
Population playing (N)	35,160	40,571	39,865	44,902

Table 16 shows modes of gambling for racetrack and sports betting in 2015 and 2018. There was an increase in the percentage of racetrack bettors who made a bet at a hotel between 2015 and 2018 (21% to 21%), a small decrease in clubs (20% to 17%) and casinos (10% to 9%), an increase in online (26% to 36%) and on-track (28% to 39%), a decrease in telephone (verbal) betting (11% to 6%), while betting at a TAB shop remained steady. The percentage of people carrying out sports betting in a hotel decreased between 2015 and 2018 (18% to 13%), and increased for betting in a club (5% to 13%), casino (3% to 6%), online (59% to 71%), phone (verbal) betting (7% to 15%), and was steady for land based TAB shop betting. There was an increase in the percentage of people racetrack gambling on two or more modes, while for sports betting, there was a large increase in the percentage of sports bettors gambling on three or more different modes.

Table 16: Mode of gambling for racetrack and sports betting, 2015 and 2018 NT population gambling on activity

Where/how gambled	2018 Racetrack betting % (SE)	2015 Racetrack betting % (SE)	2018 Sports betting % (SE)	2015 Sports betting % (SE)
Hotel	31.2 (2.3)	20.6 (2.2)	12.6 (2.9)	17.9 (4.4)
Club	17.2 (2.0)	19.7 (3.1)	13.4 (3.1)	5.0 (1.9)
Casino	9.0 (2.0)	9.9 (2.7)	5.9 (3.9)	3.0 (3.0)
Online	35.8 (2.6)	26.2 (2.5)	71.1 (4.2)	58.9 (5.1)
TAB (venue)	38.6 (2.4)	38.9 (2.8)	14.2 (2.9)	14.8 (3.8)
Racetrack (on-track)	38.5 (2.5)	27.7 (2.5)	NA	NA
Phone	6.0 (1.2)	10.7 (2.2)	14.6 (3.0)	7.2 (2.7)
Other	3.2 (0.7)	0.9 (0.3)	2.0 (0.7)	1.9 (1.1)
Number of betting modes				
One	61.7 (2.5)	75.7 (2.4)	83.9 (3.2)	91.8 (3.2)
Two	19.0 (1.9)	13.4 (1.7)	7.7 (1.9)	8.1 (3.2)
Three or more	19.2 (2.2)	10.9 (1.8)	8.4 (2.7)	0.1 (0.1)
Population playing (N)	29,797	40,251	12,803	13,227

4.9 Online gambling

Figure 17 shows that there was a small non-significant increase in the population prevalence of online betting (sports, racetrack, casino table games, keno, or EGMs) from 2015 (9%) to 2018 (9.3%). There was a larger, but not significant increase in online gambling in the gambler population, due to a reduction in the percentage of adults gambling in the NT between 2015 and 2018. Just less than 12% of gamblers in the NT had made a bet online in 2015, compared with 13% in 2018.

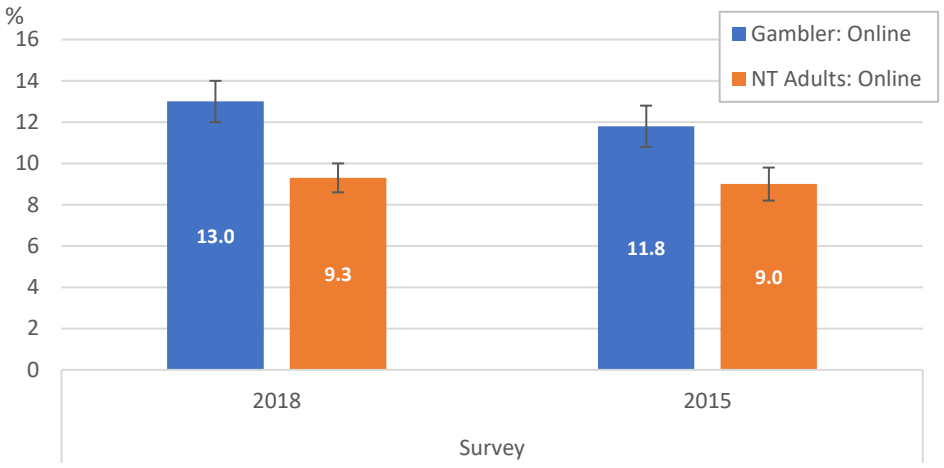


Figure 17: Online gambling by time, 2015 and 2018 Adult and gambler population

Figure 18 shows that among gamblers who gambled online, there was a non-significant increase the proportion betting online on two or more different activities. In 2015 34% of online gamblers gambled on two or more different activities, increasing to 38% in 2018.

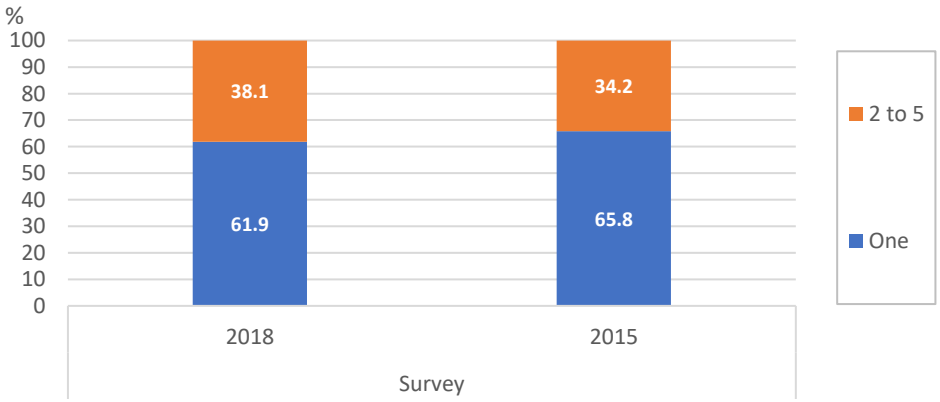


Figure 18: Number of online activities gambled on by time, 2015 and 2018 NT gambler population

4.9.1 Multivariable model for online gambling

Figure 19 presents the multivariable adjusted logistic regression model for online gambling with significant socio-demographic and socioeconomic variables. There was a linear negative association between age and online gambling, with 20% of gamblers aged 18-29 years gambling online, decreasing through the age with only 5% of gamblers 65 years and older gambling online. Men (19%) were more than twice as likely as women (7%) to gamble online. Online gambling was significantly lower among gamblers with highest education of Year 10 (5%) or below (8%) and was significantly higher for gamblers who had finished Year 12 (20%). Gamblers with a gross personal income of less than $30,000 per annum (5%) were less likely to gamble online, while those on $120,00 or more per annum were more likely to gamble online (19%).

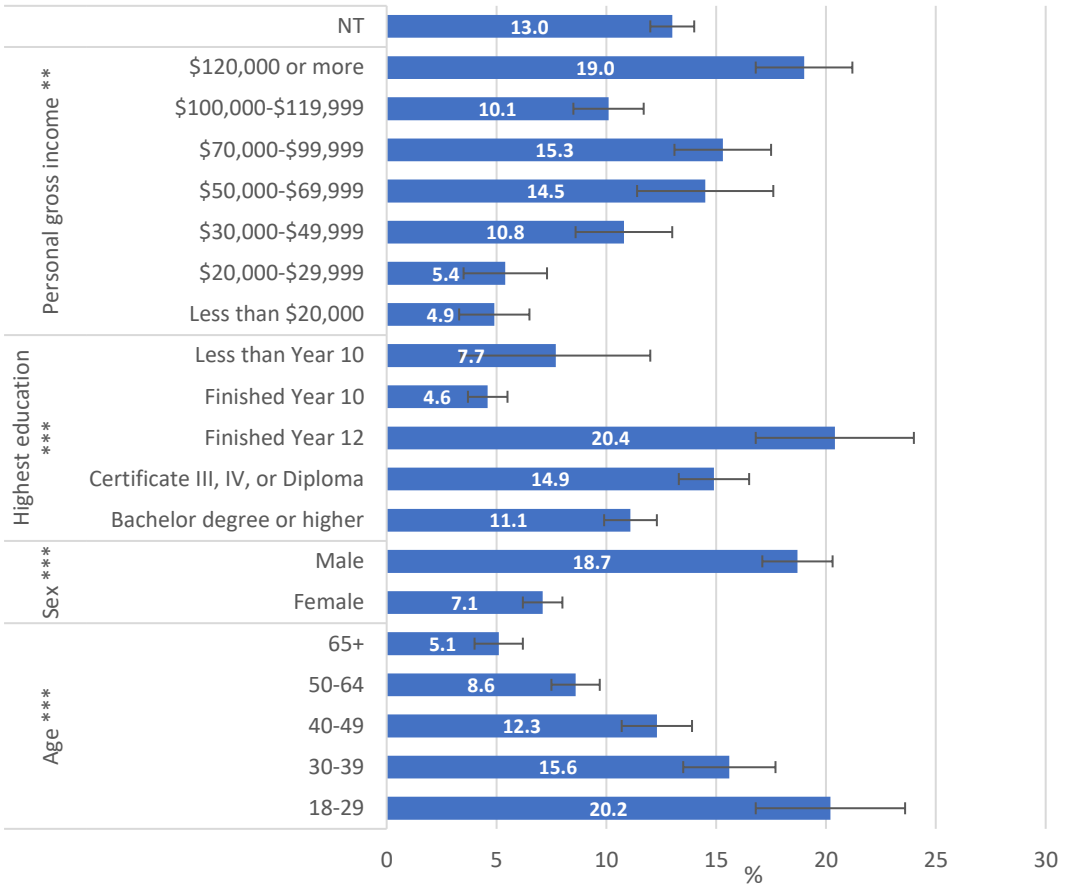


Figure 19: Multivariable adjusted significant associations between online gambling and socio-demographic and socioeconomic variables, 2018 NT gambler population

Significant multivariable adjusted difference across socio-demographic or socioeconomic variable in online gambling
*** p < 0.001, ** p < 0.01, * p < 0.05

Table 17 shows the percentage of gamblers who bet online by activity and for regular gamblers. More than three quarters of sports bettors had made a bet online, while 42% of regular gamblers had bet online. For racetrack betting, casino table games, EGMs and keno, 41%, 32%, 21% and 18% respectively had gambled online.

Table 17: Gambling activities significantly (p<0.01) associated with being an online gambler, 2018 NT gambler population

Gambling activity/ type	Gambled online % (SE)	OR (95% CI)
Any gambling	13.0 (1.0)	-
Sports betting	77.6 (3.1)	55.22 (35.7-85.5)
Regular gambling	41.6 (4.4)	6.62 (4.43-9.92)
Racetrack betting	40.5 (2.6)	13.56 (8.98-20.5)
Casino table games	32.2 (3.9)	4.20 (2.82-6.27)
EGMs	21.4 (2.7)	2.49 (1.73-3.57)
Keno	18.0 (1.7)	1.83 (1.31-2.54)

NOTES: Online gambling collected for sports and racetrack betting, keno, EGMs and casino table games

Figure 20 shows that online gamblers gambled significantly more frequently than non-online gamblers in 2015 and 2018, with 50% or more of online gamblers gambling weekly, compared with 20% or less of non-online gamblers.

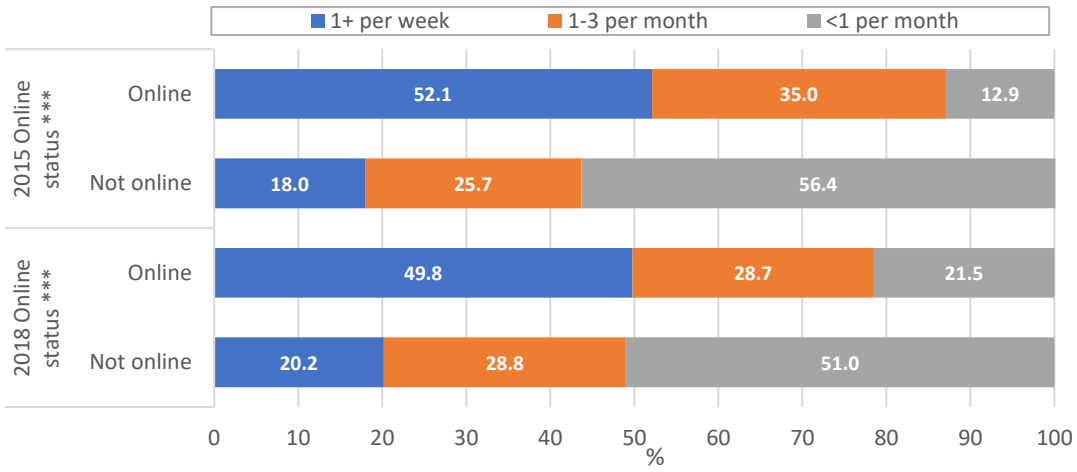


Figure 20: Online gambling status by gambling frequency, 2015 and 2018 NT gambler population

Significant difference between online and not online gambling frequency by time
*** p < 0.001, ** p < 0.01, * p < 0.05

4.10 Highest spend gambling activity

Figure 21 shows which activities gamblers nominated as their highest spend activity for 2015 and 2018. There was a significant difference between 2015 and 2018 in the percentage nominating highest spend activity as racetrack betting (12% to 9%), keno (8% to 5%), lotto (34% to 44%), and casino table games (7% to 5%).

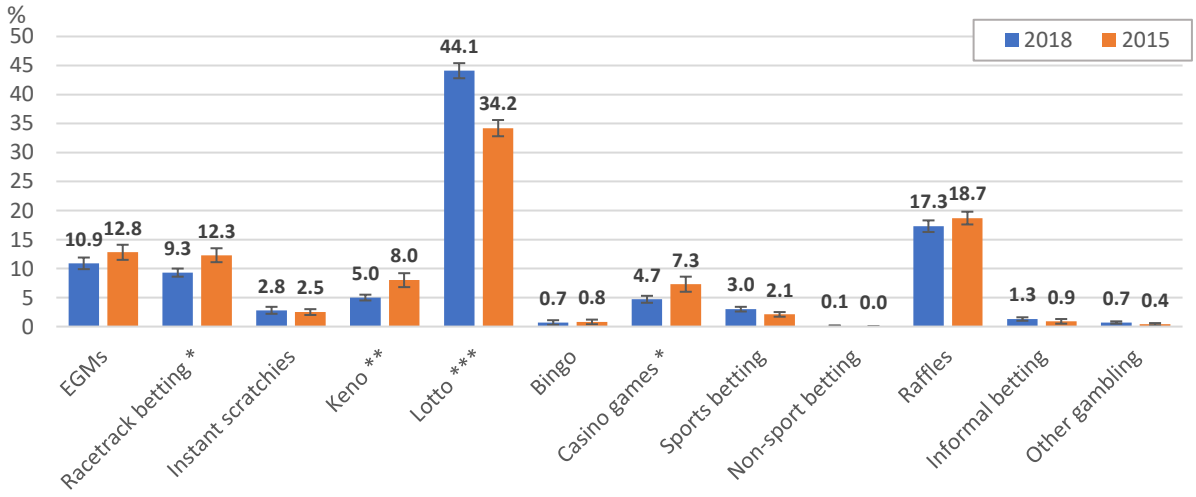


Figure 21: Highest spend activity by time, 2015 and 2018 NT gambler population

Significant difference between 2015 and 2018 for highest spend activity
*** p < 0.001, ** p < 0.01, * p < 0.05

5 PROBLEM GAMBLING AND HARMS FROM OWN GAMBLING

5.1 Background

Risk of problem gambling in Australian gambling prevalence surveys is most often measured using the Problem Gambling Severity Index [20]. The 2015 and 2018 NT Gambling Prevalence and Wellbeing Surveys used the PGSI to measure problem gambling risk, but also asked gamblers who scored one or more on the PGSI (at-risk gamblers) about negative consequence they experienced because of their own gambling. The list of 15 harms used in 2015 was expanded to 18 harms in the 2018 survey, with harms largely comparable to the previous survey.

5.1.1 Chapter contents

This chapter presents prevalence estimates for problem gambling, moderate-risk, and low-risk problem gambling using the PGSI. Specifically, it includes:

- prevalence for each question of the PGSI for 2015 and 2018
- comparison of 2018 NT prevalence estimates for PGSI categories with the most recent estimates from other jurisdictions
- prevalence estimates (and population counts) of PGSI categories by region, age and sex for 2015 and 2018
- prevalence estimates of PGSI categories by socio-demographic, socioeconomic and health risk factors
- prevalence estimates of PGSI categories by gambling activity, and frequency of gambling
- multivariable model of PGSI score including socio-demographic, socioeconomic, health risk factors and gambling activities
- prevalence estimates of PGSI categories by highest spend gambling activity
- prevalence of harm from own gambling among at-risk gamblers (1 or more on PGSI) and by PGSI categories for 2015 and 2018
- significant associations between harm from own gambling and gambling activities
- types of harms experienced because of own gambling for at-risk gamblers (and for 2015 and 2018)
- help-seeking behaviour by PGSI categories, and
- prevalence estimates of PGSI categories by harm from someone else's gambling.

5.2 Chapter highlights

- Prevalence of problem gambling risk for all PGSI categories increased significantly from 2015 to 2018, with problem gambling increasing from 0.7% to 1.4%, moderate risk gambling from 2.9% to 3.6% and low risk gambling from 8.1% to 9.4%.
- Between 2015 and 2018, the number of adults experiencing problem gambling increased from 1,200 to 2,500, moderate risk gambling from 5,100 to 6,400, and low risk gambling from 14,400 to 16,900.
- One in 52 gamblers in the NT are now classified as experiencing problem gambling, one in 20 are at moderate risk of problem gambling and one in 13 gamblers are at low risk of problem gambling, and one in five gamblers are at risk of problem gambling.
- Aboriginal gamblers were significantly more likely to experience problem gambling, with 5.3%, 8% and 21% classified as experiencing problem, moderate and low risk gambling respectively compared with 0.9%, 4.1% and 11% for non-Indigenous gamblers.

- Age and gender were significantly associated with problem gambling risk in 2018, with 2.7% of male gamblers classified as experiencing problem gambling, compared with 1.1% of female gamblers, while problem gambling was highest among gamblers aged 18-30 years (2.8%) and 50-64 years (2.9%), compared with 1.9% for all gamblers.
- There was a statistically significant increase in problem gambling risk between 2015 and 2018 for male gamblers for all PGSI categories (problem gambling from 1% to 2.7%, moderate risk gambling from 3.9% to 5.6% and low risk gambling from 12% to 17%). Problem gambling risk increased for female gamblers in all categories of PGSI, but not significantly.
- Annual participation in gambling activities, except lotto, other gambling and raffles, were significantly associated with an increased risk of problem gambling risk. Problem or moderate risk gambling estimates for all gamblers was 6.9%, compared with 34% for informal gambling, 32% for regular gambling (weekly gambler excluding lotto and instant scratch tickets), 18% for sports betting and EGMs, and 16% for casino table games and online gambling.
- People who gambled on five or more activities had significant increased risk of problem (9.7% *cf*. 1.9%), moderate (13.8% *cf*. 5%) and low risk (28% *cf*. 13%) gambling, compared with all gamblers.
- Among gamblers between 2015 and 2018, there was a significant increase in EGM gamblers categorised as experiencing problem/moderate risk (10.5% to 17.5%) and low risk (18.6% to 23.1%) gambling. Keno gamblers and sports bettors also had a significant increase in problem gambling risk between 2015 and 2018.
- A multivariable model between PGSI score and gambling frequency for all activities included EGMs, racetrack betting, instant scratch tickets, sports betting and informal betting. The largest effect size was for EGM frequency of gambling and informal betting frequency, with 33% weekly and 24% of monthly EGM gamblers experiencing problem and moderate risk gambling respectively.
- A multivariable model for PGSI score with all significant socio-demographic, socioeconomic, health risk and gambling activities included: Indigenous status, language spoken at home, labour force status, personal alcohol problems, psychological distress, illicit drug use, EGM, racetrack, sports betting, instant scratch tickets and informal betting frequency.
- There was a significant increase between 2015 and 2018 in at-risk gamblers reporting a harm because of their own gambling from 25% to 44%.
- 100% of people experiencing problem gambling identified at least one harm because of their own gambling, decreasing to 68% for moderate risk gambling, and 27% for low risk gambling.
- Informal betting (64%), sports betting (61%), casino table games (57%), racetrack betting (55%), and EGM gambling (54%) were significantly associated with experiencing harm form own gambling among at-risk gamblers.
- Feeling ashamed or having regrets (32% or 8,500 people) was the harm most commonly endorsed by at-risk gamblers, followed by raided savings (13%), feeling stressed or anxious (12% or 3,000 people), feeling depressed (8% or 2,100 people), borrowing money (7%), running out of money for food (7%).
- 13% (about 320 people) of problem gamblers sought help for their own gambling, compared with 1.8% (110 people) for moderate risk, and 0.2% (40 people) for low risk gambling.

5.3 Problem gambling risk in the NT 2018 to 2015

Table 18 shows 2015 and 2018 responses for individual PGSI questions for all gamblers. All questions were scored using 0=never, 1=sometimes, 2=most of the time, and 3=almost always and scores added to give a PGSI score. Respondents whose scores add to between 1 and 2 were classified as low risk gamblers, 3 to 7 as moderate risk gamblers and those with scores 8 or higher, as problem gamblers. The most endorsed item from the PGSI for both 2015 and 2018 was about feeling guilty (Q7) about their gambling, with 8.6% of people endorsing this for sometimes or more in 2015, compared with 10.3% in 2018, and this difference was marginally non-significant. The next most highly endorsed item was question 1, betting more than you could afford to lose, with significantly more people endorsing it some or more of the time in 2018 (8.6%, compared with 2015 (5.6%). Between 2015 and 2018, Question 9, your gambling caused you or your household financial problems approach statistical significance, with 1.1% endorsing in some or more of the time in 2015, compared with 2.4% in 2018.

Table 18: PGSI questions used to determine problem gambling risk categories, 2015 and 2018 Gamblers

Thinking about the past 12 months, how often have…	Survey	Never % (SE)	Sometimes % (SE)	Most of the time % (SE)	Almost always % (SE)
1. you bet more than you could really afford to lose? *	2015	94.4 (0.8)	4.6 (0.7)	0.5 (0.2)	0.6 (0.2)
	2018	91.4 (0.9)	6.6 (0.8)	1.2 (0.3)	0.8 (0.2)
2. you needed to gamble with larger amounts of money to get the same feeling of excitement?	2015	95.8 (0.7)	3.9 (0.7)	0.1 (0.0)	0.2 (0.1)
	2018	96.0 (0.5)	3.1 (0.4)	0.6 (0.2)	0.4 (0.1)
3. you gone back another day to try to win back the money you lost?	2015	95.8 (0.7)	3.7 (0.7)	0.3 (0.2)	0.2 (0.1)
	2018	94.2 (0.8)	4.8 (0.8)	0.5 (0.2)	0.4 (0.2)
4. you borrowed money or sold anything to get money to gamble?	2015	99.2 (0.3)	0.8 (0.3)	0.0 (0.0)	0.0 (0.0)
	2018	98.8 (0.3)	1.0 (0.3)	0.1 (0.1)	0.1 (0.1)
5. you felt that you might have a problem with gambling?	2015	96.6 (0.6)	2.2 (0.4)	0.5 (0.3)	0.8 (0.4)
	2018	95.5 (0.7)	2.8 (0.5)	0.7 (0.3)	1.0 (0.4)
6. people criticised your betting or told you that you had a gambling problem, regardless of whether or not you thought it was true?	2015	96.9 (0.6)	2.2 (0.4)	0.6 (0.4)	0.3 (0.2)
	2018	95.5 (0.7)	3.4 (0.5)	0.5 (0.4)	0.5 (0.4)
7. you felt guilty about the way you gamble, or what happens when you gamble?	2015	91.4 (1.1)	7.6 (1.0)	0.4 (0.2)	0.7 (0.2)
	2018	89.7 (1.0)	7.9 (0.8)	1.3 (0.4)	1.1 (0.4)
8. gambling caused you any health problems, including stress or anxiety?	2015	97.9 (0.5)	1.9 (0.5)	0.2 (0.1)	0.1 (0.0)
	2018	97.1 (0.5)	2.2 (0.5)	0.6 (0.2)	0.1 (0.1)
9. your gambling caused any financial problems for you or your household?	2015	98.9 (0.3)	0.9 (0.2)	0.1 (0.1)	0.1 (0.0)
	2018	97.6 (0.4)	1.8 (0.3)	0.4 (0.2)	0.2 (0.1)

*** p < 0.001, ** p < 0.01, * p < 0.05: Significant difference between 2015 and 2018 for PGSI question

Table 19 shows PGSI prevalence estimates for the 2018 NT adult population. PGSI risk estimates for the NT were: problem gambling (1.37% [95% CI 0.83-2.26]); moderate-risk gambling (3.55% [95%CI 2.71-4.64]); and low-risk gambling (9.36% [95% CI 7.92%-11.03]). Approximately 2,500 adults were classified as problem gamblers, 6,400 as moderate risk gamblers and 16,900 as low risk gamblers. People classified as experiencing problem or moderate risk gambling made up 4.93% of the NT adult population, or approximately 8,900 adults.

Table 19: Problem gambling risk (PGSI) prevalence, 2018 NT adult population

PGSI group (score)	Prevalence %	Prevalence +/- SE	Prevalence +/- 95% CI	Population N
Problem gambling (8+)	1.37	1.02 - 1.72	0.83 - 2.26	2,487
Moderate risk gambling (3-7)	3.55	3.06 - 4.04	2.71 - 4.64	6,426
Low risk gambling (1-2)	9.36	8.57 - 10.15	7.92 - 11.03	16,938
Non-risk gambling (0)	57.26	56.08 - 58.44	54.93 - 59.56	103,616
Non-gambler	28.45	27.34 - 29.56	26.32 - 30.68	51,489
Total	**100.00**	**100.00**	**100.00**	180,956
Moderate risk & problem gambling (3+)	4.93	4.34 - 5.52	3.89 - 6.22	8,914

Figure 22 shows there was an increase in all risk categories of the PGSI between 2015 and 2018. The largest increase was in the problem gambling group, which doubled from 0.7% in 2015 to 1.4% in 2018, while moderate risk and low risk gambling increased 24% (2.9% to 3.6%) and 16% (8.1% to 9.4%) respectively.

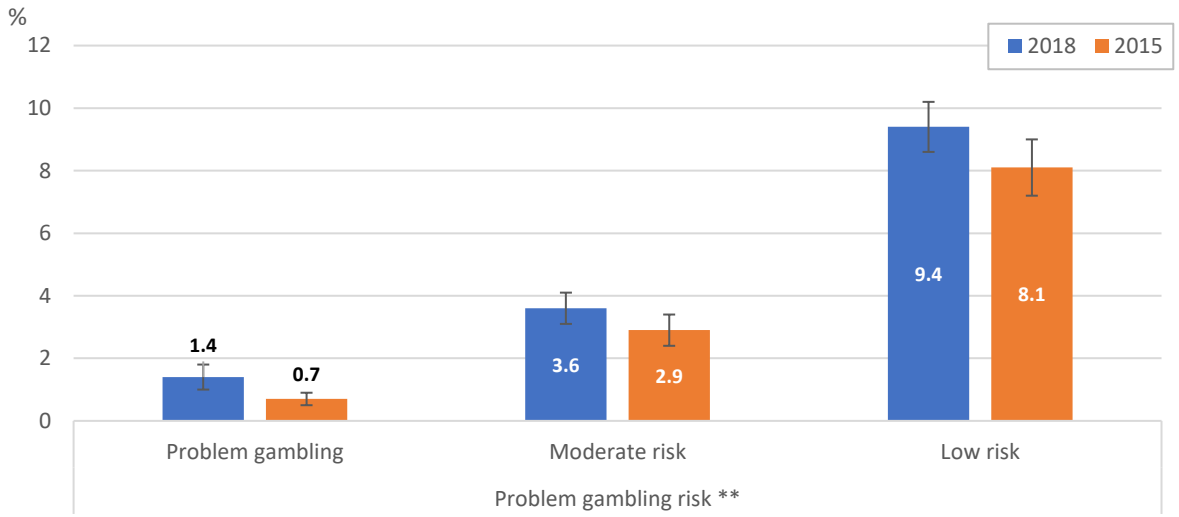


Figure 22: PGSI prevalence by time, 2015 and 2018 NT Adult Population

*** p < 0.001, ** p < 0.01, * p < 0.05: Significant difference between PGSI distribution, 2015 to 2018

Table 20 shows the 2015 and 2018 PGSI prevalence and population counts for each category of the PGSI and for non-gamblers.

Table 20: PGSI prevalence and population by time, 2015 to 2018

	Problem Gambling % (SE)	Moderate risk Gambling % (SE)	Low risk Gambling % (SE)	Non-problem Gambling % (SE)	Non-gambler % (SE)	Total % (SE)
2018	1.4 (0.4)	3.6 (0.5)	9.4 (0.8)	57.3 (1.2)	28.5 (1.1)	**100.0**
2015	0.7 (0.2)	2.9 (0.5)	8.1 (0.9)	64.3 (1.4)	24.0 (1.2)	**100.0**
	Population N	**Population N**	**Population N**	**Population N**	**Population N**	**Population N**
2018	2,487	6,426	16,938	103,616	51,489	**180,956**
2015	1,206	5,128	14,383	113,807	42,392	**176,916**

Figure 23 shows PGSI prevalence in the NT adult gambler population of the NT, which gives a more realistic measure of problem gambling, as it excludes non-gamblers. Just under 2% of people who gambled in the last 12 months in 2018 were classified as experiencing problem gambling, which was a significant increase from 0.9% in 2015. In 2018, 20% of all people who gambled in the last 12 months were classified as at risk of experiencing problem gambling.

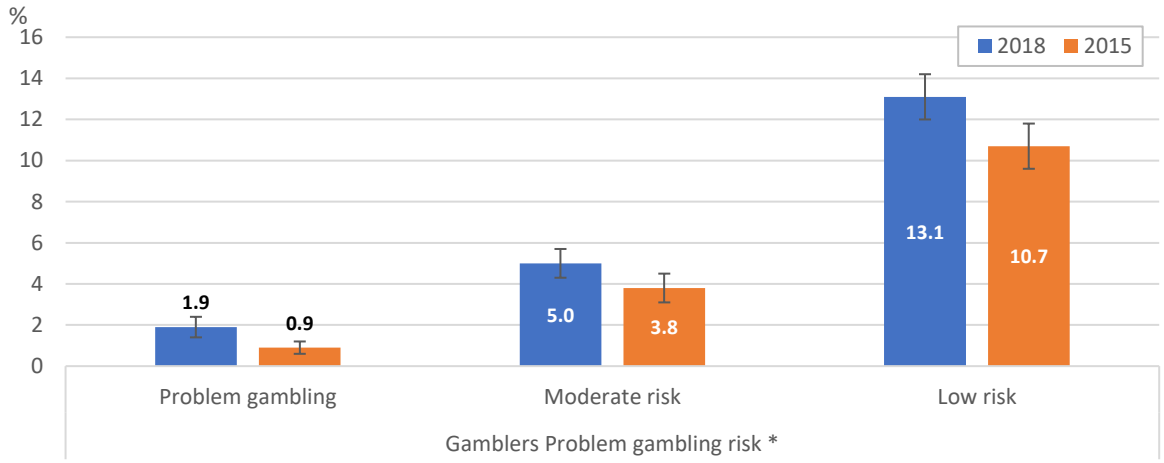


Figure 23: PGSI prevalence by time, 2015 and 2018 NT Gamblers

*** p < 0.001, ** p < 0.01, * p < 0.05: Significant difference between PGSI distribution, 2015 to 2018

5.4 Problem gambling risk in the NT compared with other jurisdictions

Table 21 shows comparisons between Australian jurisdictions that have carried out gambling prevalence surveys in the past 5 years that used a similar methodology to the 2015 NT Gambling Prevalence and Wellbeing Survey. That is, all gamblers and not a subset were screened for problem gambling using the PGSI. The table does not include PGSI estimates for Western Australia (WA) (which were 15 years old), though when WA last carried out a gambling prevalence survey the problem gambling prevalence was the lowest in Australia [21].

Estimates of problem gambling were ranged from 0.5% in Queensland to a high of 1.4% in the NT. The NT has the highest estimates for all risk levels of problem gambling as measured by the PGSI, with NSW the jurisdiction with the second highest problem gambling prevalence.

Table 21: Most recent PGSI estimates by jurisdictions across Australia, adult population

	Problem gamblers (8 or more) %	Moderate risk gamblers (scores 3-7) %	Low risk gamblers (scores 1-2) %	Moderate risk and problem gamblers (3 or more) %
Northern Territory 2018 [1]	1.4	3.6	9.4	5.0
Northern Territory 2015 [1]	0.7	2.9	8.1	3.6
New South Wales 2018 [1]	1.0	2.8	6.6	3.8
Australian Capital Territory 2018 [1]	0.8	2.5	7.0	3.3
Victoria 2014 [2]	0.8	2.8	8.9	3.6
South Australia 2018 [2]	0.7	2.2	4.6	2.9
Tasmania 2017 [1]	0.6	1.4	4.8	2.0
Queensland 2016-17 [2]	0.5	2.5	6.4	3.0
Australia [3]	0.5 – 1.0	1.4 – 2.1	-	1.9 – 3.1

[1] Victoria, New South Wales, Northern Territory, Tasmania, South Australia and Australian Capital Territory utilised the standard four response on the PGSI (Never=0, Sometimes=1, Often=2, Always=3)
[2] Queensland utilised a modified five response scale on the PGSI (Never=0, Rarely=1, Sometimes=1, Often=2, Always=3)
[3] Productivity Commission, 2010a. Gambling: Productivity Commission Inquiry, Volume 1, Report No. 50. Canberra: Productivity Commission.

The next three sub-sections compare PGSI estimates between 2015 and 2018 by socio-demographic characteristics, and present separate PGSI estimates for all gamblers.

5.5 Problem gambling risk by time, socio-demographic and socioeconomic variables

Figure 24 shows the regional variation in PGSI prevalence for 2018. While there were some large differences between PGSI prevalence across regions the differences were not statistically significant. Regional Towns (4.7%) had the highest percentage of gamblers classified in problem gambling, and the largest percentage of gamblers classified as at-risk at 29%.

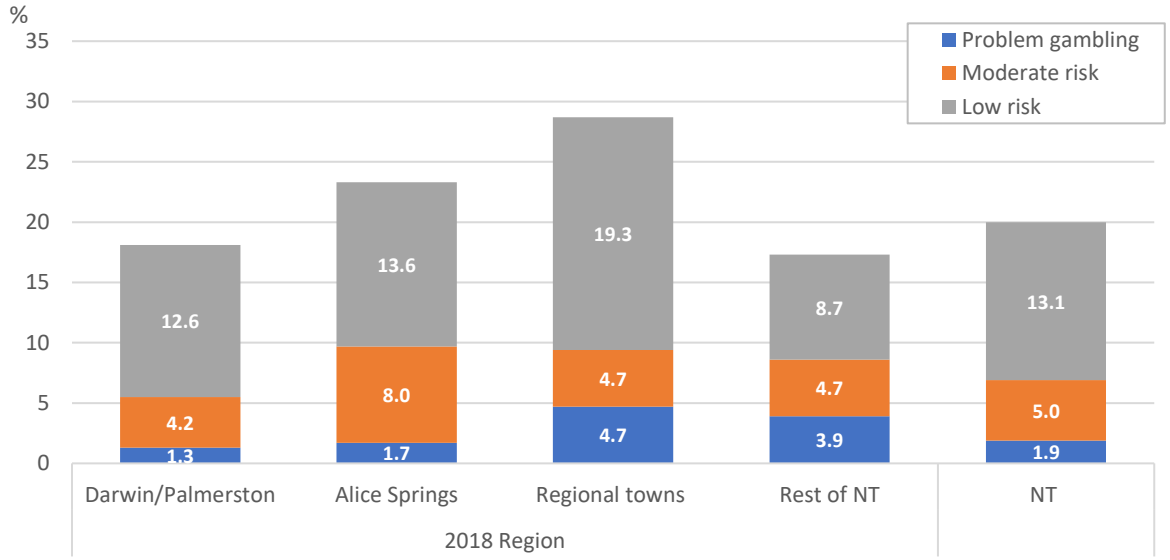


Figure 24: Problem gambling risk by region, 2018 NT gambler population

Figure 25 shows changes in PGSI estimates between 2015 and 2018 by region for the NT adult gamblers population, while Table 19 shows population counts for the PGSI by region, age and sex by time for gamblers. The percentage of at-risk gamblers was

higher in 2018 compared with 2015 for all regions and the NT, though only Regional Towns showed a statistically significant difference in the PGSI distribution between 2015 and 2018. There were large increases in problem gambling in Alice Springs (0.2% to 1.7%), Regional Towns (0.3% to 4.7%) and Rest of NT (1.3% to 3.9%).

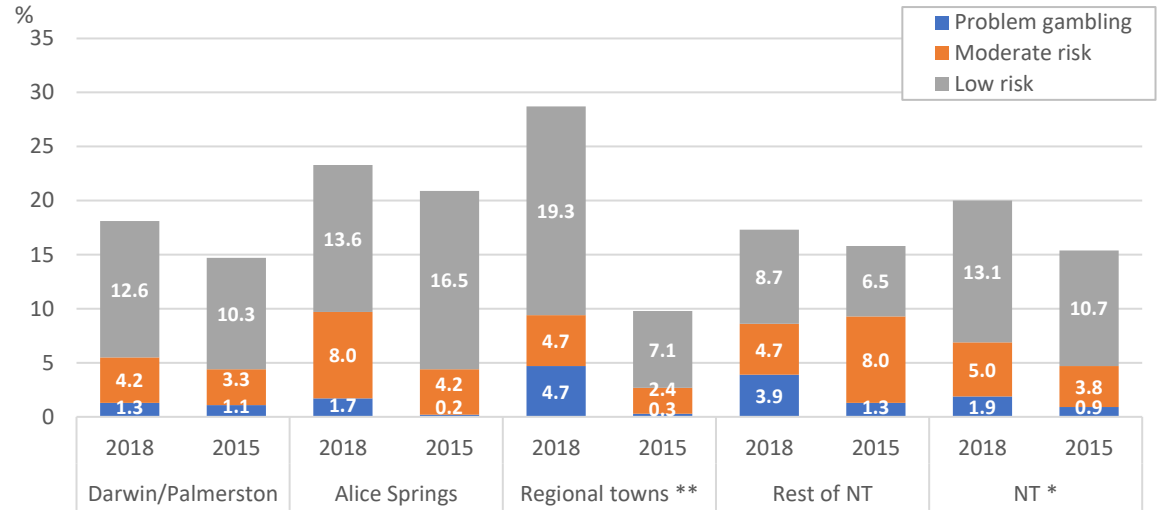


Figure 25: PGSI prevalence by time within region, 2015 and 2018 NT gambler population

*** p < 0.001, ** p < 0.01, * p < 0.05: Significant difference between PGSI distribution from 2015 to 2018

Figure 26 shows that there was statistically significant variation across age groups in PGSI estimates. People less than 30 years were the most likely to be classified as experiencing problem gambling, and most likely to be classified as at-risk of problem gambling, with the percentage classified as at risk declining with age.

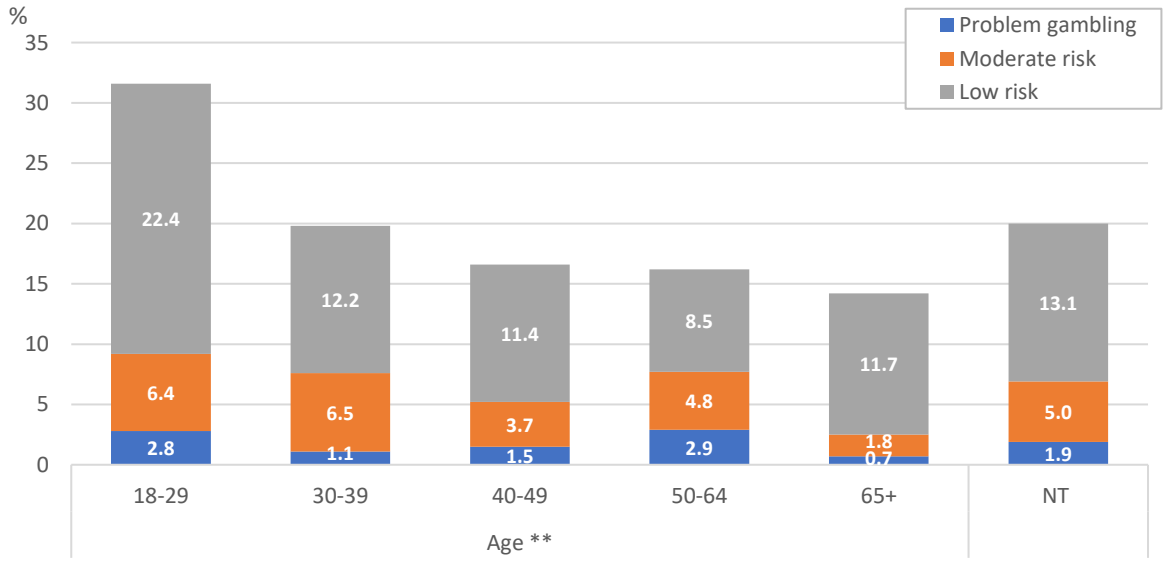


Figure 26: PGSI prevalence by age, 2018 NT gambler population

*** p < 0.001, ** p < 0.01, * p < 0.05: Significant association between PGSI and age

In all age groups, except 40-49 years, there was an increase in problem gambling, though this increase was only statistically significant for the 18-29 years group (Figure 26). Moderate risk gambling was also higher in 2018 in most age groups, except 65

years or more and 40-49 years. The total at risk group of gamblers was higher for all age groups in 2018 compared with 2015.

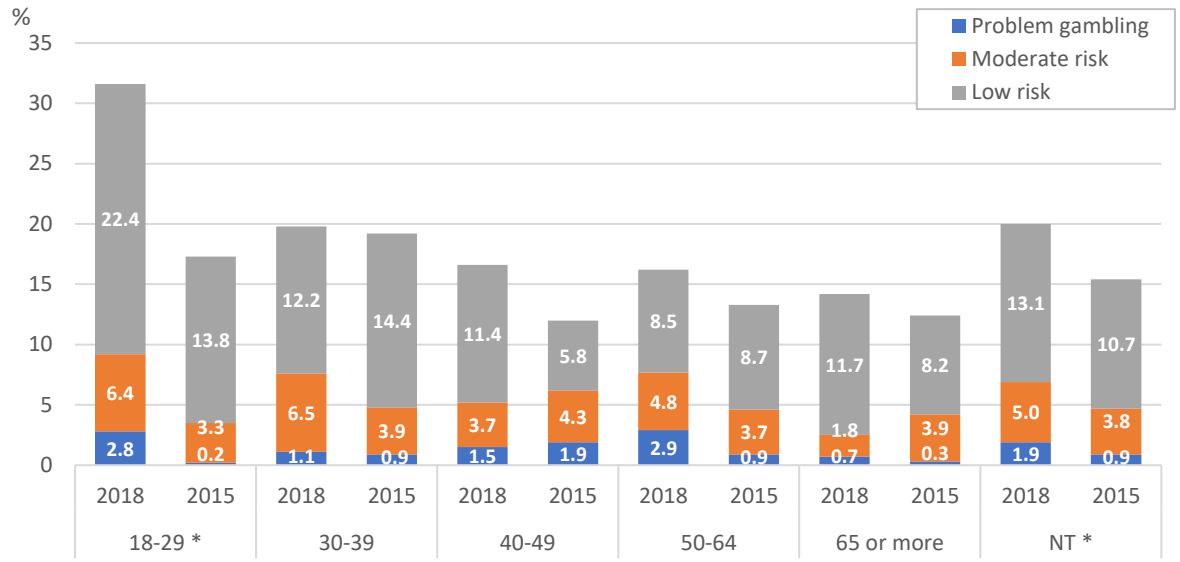


Figure 27: PGSI prevalence by time within age, 2015 and 2018 NT gambler population

*** p < 0.001, ** p < 0.01, * p < 0.05: Significant difference between PGSI distribution from 2015 to 2018

Figure 28 shows there was a significant difference in PGSI categories between males and females, with male gamblers having higher prevalence than females in problem gambling (2.7% *cf*. 1.1%), moderate risk gambling (5.6% *cf*. 4.3%) and low risk gambling (17% *cf*. 9%).

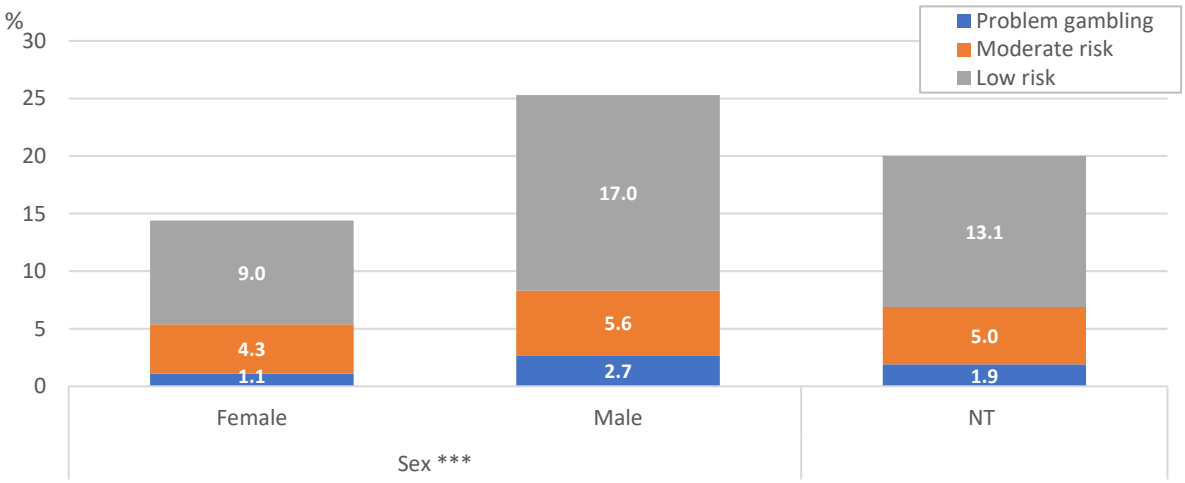


Figure 28: PGSI prevalence by sex, 2018 NT gambler population

*** p < 0.001, ** p < 0.01, * p < 0.05: Significant difference between PGSI distribution for male and female

Figure 29 shows 2015 and 2018 PGSI prevalence by sex. There was a significant increase in problem gambling risk for males between 2015 and 2018 (1% to 2.7%), while for females the increase in problem gambling was not statistically significant (0.7% to 1.1%). For males, there was a large increase in at risk gambling from 17% in 2015 to 25% in 2018.

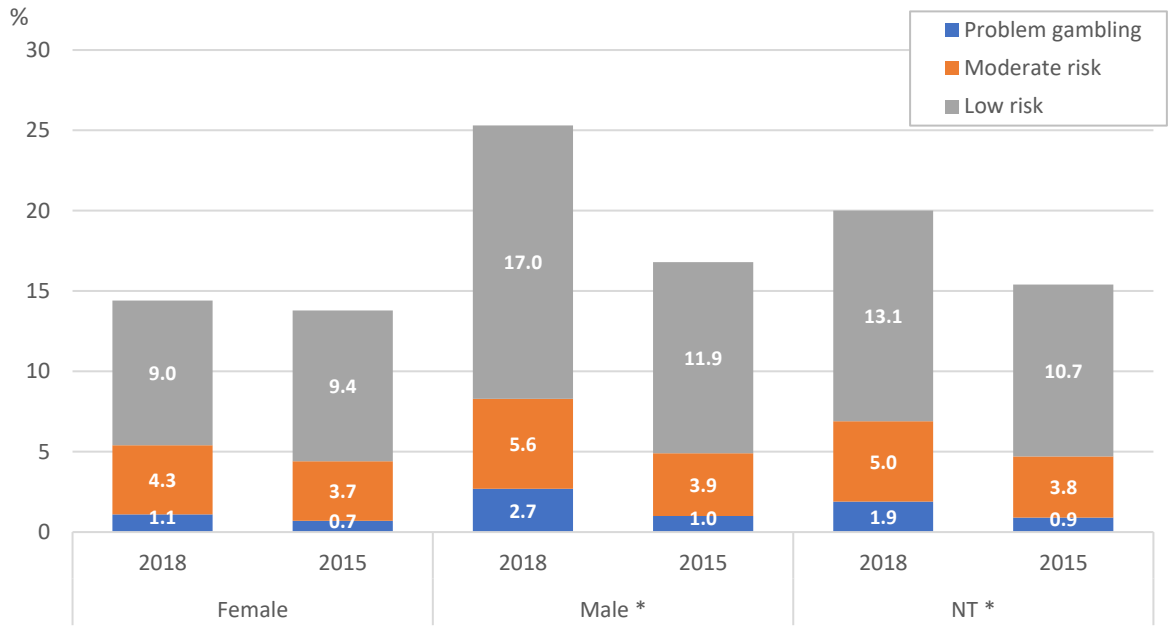


Figure 29: PGSI prevalence by time within sex, 2015 and 2018 NT gambler population

*** p < 0.001, ** p < 0.01, * p < 0.05: Significant difference between PGSI distribution from 2015 to 2018

Table 22 presents population counts for region, age and sex by problem gambling risk. There was a decrease in the number of adult NT residents that gambled in the previous 12 months to the survey from 134,524 to 129,467, while the number of people classified as experiencing problem gambling increased from 1,206 to 2,487. All regions showed an increase the number of people scoring one or more on the PGSI.

Table 22: PGSI categories population counts by region and survey, 2015 and 2018 NT gambler population

Region	Year	Problem gambling N	Moderate risk gambling N	Low risk gambling N	Non-problem gambling N	Total N
Northern Territory	2018	2,487	6,426	16,938	103,616	**129,467**
	2015	1,206	5,128	14,383	113,807	**134,524**
Darwin/Palmerston	2018	1,049	3,456	10,397	67,465	**82,367**
	2015	946	2,780	8,784	72,533	**85,044**
Alice Springs	2018	379	1,817	3,065	17,321	**22,581**
	2015	44	979	3,801	18,245	**23,068**
Regional towns	2018	594	592	2,450	9,046	**12,681**
	2015	44	315	941	11,937	**13,237**
Rest of NT	2018	466	561	1,027	9,784	**11,838**
	2015	172	1,055	856	11,092	**13,175**
18-29	2018	696	1,614	5,658	17,280	**25,248**
	2015	54	854	3,591	21,444	**25,943**
30-39	2018	352	2,061	3,893	25,536	**31,841**
	2015	348	1,468	5,482	30,736	**38,035**
40-49	2018	426	1,018	3,165	23,215	**27,825**
	2015	498	1,146	1,540	23,224	**26,406**
50-64	2018	919	1,492	2,676	26,300	**31,387**
	2015	274	1,161	2,726	27,236	**31,396**
65 or more	2018	94	241	1,546	11,285	**13,166**
	2015	32	500	1,044	11,167	**12,743**
Female	2018	707	2,718	5,661	54,079	**63,165**
	2015	478	2,393	6,022	55,237	**64,130**
Male	2018	1,780	3,708	11,277	49,537	**66,302**
	2015	728	2,736	8,361	58,569	**70,394**

5.5.1 PGSI multivariable model for socio-demographic and socioeconomic variables

Figure 30 shows socio-demographic and socioeconomic variables that had a multivariable adjusted significant association with PGSI score. Being male, Indigenous, not speaking English at home, living in group/other household type, and being unemployed were all significantly associated with increased PGSI scores (or problem gambling risk). More than one in twenty (5%) Indigenous respondents who gambled were classified as experiencing problem gambling, and just under 35% of the Indigenous respondents who gambled scored one or more on the PGSI. Gamblers who did not speak English at home compared with English speakers were significantly more likely to be classified as experiencing moderate risk gambling (15% *cf*. 4%) and low risk gambling (18% *cf*. 13%). Unemployed gamblers compared with all gamblers were significantly over-represented in problem gambling (5% *cf*. 1.9%) and moderate risk gambling (19% *cf*. 5%).

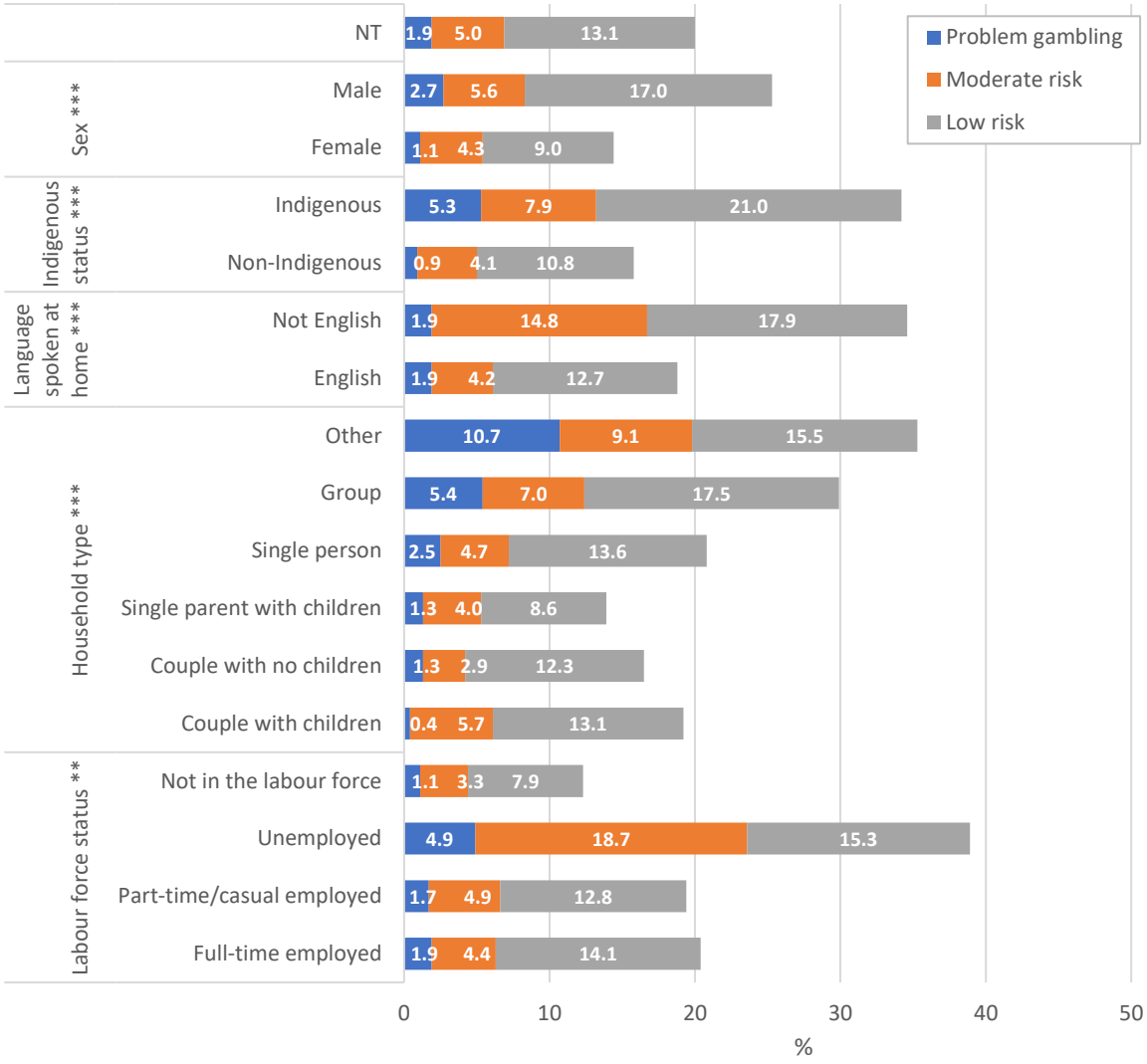


Figure 30: Multivariable model of PGSI score and socio-demographic and socioeconomic variables, 2018 NT gambler population

*** p < 0.001, ** p < 0.01, * p < 0.05: Significant association between PGSI score and socio-demographic or socioeconomic variable

5.6 Problem gambling risk by health and health risk factors

Table 23 shows the tabulation of the PGSI by self-assessed health and health risk factors and shows unadjusted statistical associations (see section 5.6.1 for multivariable adjusted model). Note that variables included in this table were part of the sub-sample, which results in higher standard errors due to the smaller sample size. Estimates in bold font indicate that the relative standard error is greater than 30%. All health risk factors showed a significant association with problem gambling risk, except self-assessed health status. The largest effect on problem gambling was observed for smoke-free home status, with people indicating that they live in a home where people smoke inside most of the time or always having a problem gambling prevalence of 10.1% and moderate risk gambling of 11%. People scoring as being in high or very high psychological distress using the Kessler-5 had around double the risk of problem gambling for all PGSI categories.

Table 23: Health risk factors by problem gambling risk, 2018 NT gamblers

	Problem gambling % (SE)	Moderate risk % (SE)	Low risk % (SE)	Non-risk % (SE)	Population N
NT	1.9 (0.5)	4.9 (0.7)	13.1 (1.1)	80.1 (1.3)	129,533
Self-assessed health status					
Excellent	**0.8 (0.8)**	**2.4 (0.8)**	10.5 (2.2)	86.3 (2.4)	20,298
Very good	**2.6 (1.3)**	**4.3 (1.5)**	13.4 (2.1)	79.8 (2.6)	37,058
Good	**1.5 (0.5)**	6.4 (1.3)	12.7 (1.6)	79.3 (2.0)	47,920
Fair	**3.1 (1.5)**	4.9 (1.2)	15.4 (4.0)	76.5 (4.2)	19,178
Poor	**0.9 (0.6)**	**6.9 (3.0)**	**16.2 (5.3)**	76.0 (6.2)	4,844
CAGE Alcohol screen ***					
No alcohol problems	**1.2 (0.4)**	3.4 (0.6)	11.3 (1.3)	84.1 (1.4)	93,749
Probable alcohol problem	**4.3 (2.1)**	9.5 (2.4)	18.3 (3.0)	67.9 (3.9)	23,548
Does not drink alcohol	**3.0 (1.2)**	8.2 (2.3)	16.3 (3.1)	72.4 (4.0)	12,235
Smoking status *					
Never smoker	**1.6 (0.6)**	4.4 (1.0)	14.2 (1.9)	79.8 (2.1)	59,620
Ex-smoker	**2.4 (1.3)**	3.2 (0.6)	10.0 (1.3)	84.4 (1.8)	39,478
Daily smoker	**1.9 (0.6)**	8.4 (2.0)	14.8 (2.4)	74.9 (3.0)	30,397
Smokes inside home ***					
Never	1.3 (0.3)	4.1 (0.7)	12.8 (1.2)	81.8 (1.4)	112,292
Sometimes	0.0 (0.0)	**9.9 (3.2)**	15.2 (3.9)	74.9 (5.0)	6,998
Mostly or always	**10.7 (5.2)**	**11.0 (3.6)**	13.2 (3.4)	65.1 (6.5)	9,994
Kessler-5 ***					
Low/None distress	1.7 (0.5)	4.2 (0.6)	11.9 (1.1)	82.3 (1.3)	111,867
High/very high distress	**3.6 (1.2)**	**9.9 (3.2)**	20.7 (4.2)	65.8 (4.9)	17,666
Financial stress **					
No money for essentials	**5.9 (2.2)**	**5.9 (1.9)**	12.7 (2.5)	75.5 (3.8)	15,647
Did not run out of money	**1.4 (0.5)**	4.8 (0.7)	13.1 (1.2)	80.7 (1.4)	113,873
Illicit drug use ***					
Did not use drugs illicitly	**1.6 (0.5)**	4.0 (0.7)	10.5 (1.1)	83.9 (1.4)	107,089
Used drugs illicitly	**3.6 (1.2)**	9.4 (1.9)	25.3 (3.6)	61.7 (4.0)	22,171
Type of drugs used					
Cannabis ***	**3.6 (1.3)**	9.4 (2.1)	26.7 (4.1)	60.3 (4.4)	19,219
Inhalant	**8.0 (8.0)**	**4.3 (4.3)**	**25.0 (15.)**	62.8 (18.)	674
Illicit use of legal drugs **	0.0 (0.0)	**19.1 (8.4)**	**27.4 (9.3)**	53.5 (12.)	2,236
Methamphetamine	**3.4 (2.3)**	**4.0 (2.4)**	**30.0 (12.)**	62.6 (12.)	3,256
Ecstasy ***	**1.2 (1.0)**	**5.1 (2.5)**	37.3 (7.8)	56.4 (7.9)	6,382
Cocaine	**3.7 (2.2)**	**5.3 (2.6)**	22.0 (5.3)	69.0 (6.5)	6,563
Heroin	**9.6 (9.8)**	0.0 (0.0)	**33.5 (20.)**	**56.9 (22.)**	530
LSD/Mushrooms *	**2.7 (2.5)**	**11.5 (6.0)**	**35.9 (14.)**	49.9 (14.)	2,742
Domestic/family violence **					
None	**1.9 (0.6)**	4.5 (0.6)	11.1 (1.0)	82.4 (1.3)	106,896
Experienced in last year	**1.8 (0.9)**	**6.8 (2.4)**	22.3 (4.0)	69.0 (4.4)	22,251

Significant association between health risk factor and PGSI: *** p<0.001, ** p<0.01, * p<0.05
NOTES: **Bold font** indicates relative standard error greater than 30% - caution interpreting estimate

5.6.1 PGSI multivariable model for health and health risk factor variables

Associations between problem gambling risk and health risk factors in Table 23 are unadjusted, while Figure 31 shows health risk factors with a significant multivariable adjusted association with problem gambling risk. Using drugs illicitly, experiencing psychological distress (Kessler-5), smoke-free home status and experiencing alcohol problems (CAGE) all had a significant multivariable adjusted association with problem gambling risk. People who used drugs had around double the problem gambling risk across all PGSI categories compared with people who didn't use drugs illicitly, and this pattern was similar for people experiencing high or very high psychological distress. Eleven percent of people living in houses where someone smoked inside most or all the time were classified as experiencing problem gambling, while people with an alcohol problem also had elevated problem gambling risk.

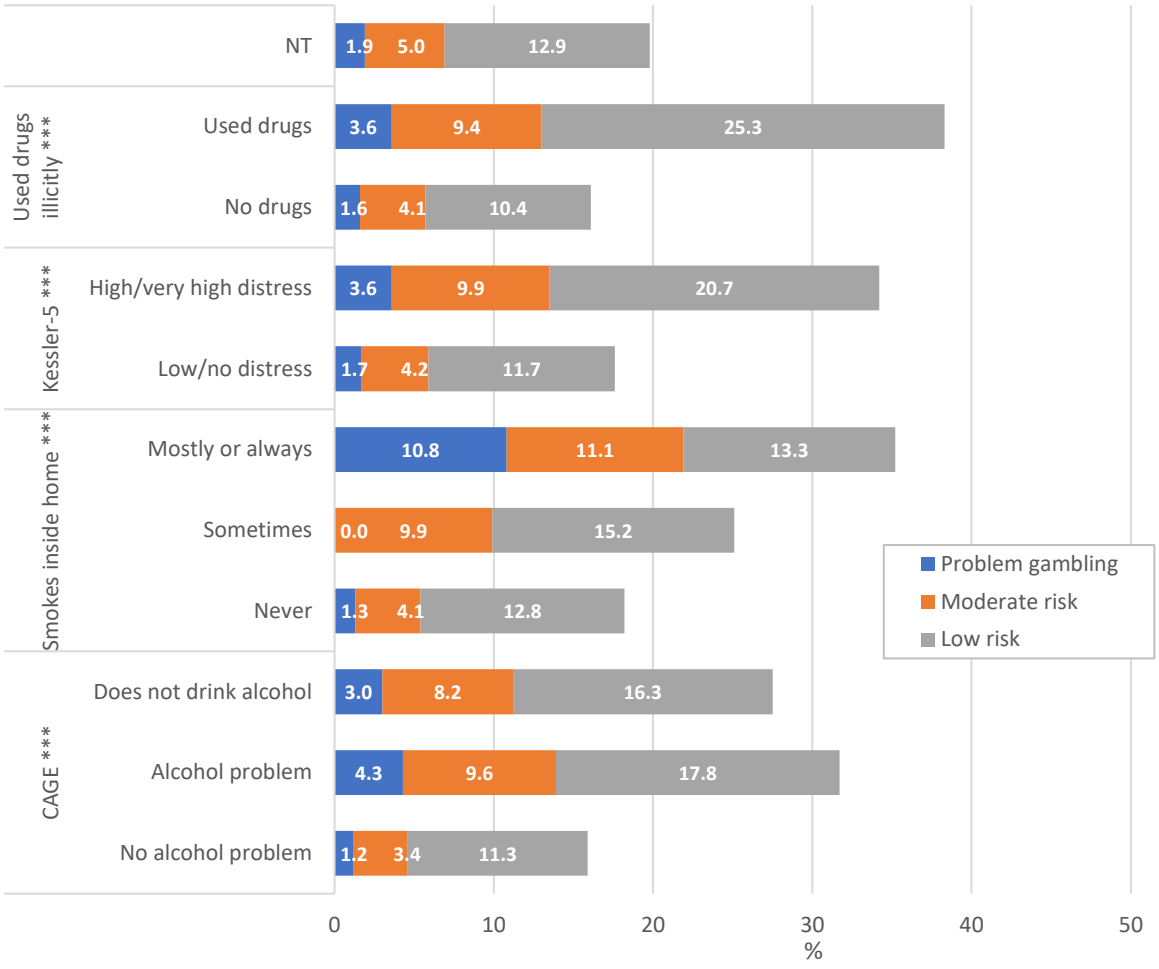


Figure 31: Multivariable model of PGSI score and health and health risk factor variables, 2018 NT gamblers

*** p < 0.001, ** p < 0.01, * p < 0.05: Significant multivariable adjusted association between PGSI score and health or health risk factor variable

5.7 Problem gambling risk by gambling activity

Table 24 shows problem gambling risk by activity and number of activities gambled on for all gamblers. All activities were significantly associated with increased problem gambling risk, except lotto, other gambling and raffles. Problem and moderate risk gambling combined was highest for people gambling on informal betting (33.7%),

followed by regular gamblers (31.9%). Number of activities gambled on was also significantly associated with problem gambling risk and was significantly high for gamblers betting on five or more activities.

Table 24: Gambling activity by problem gambling risk, 2018 NT gambler population

	Problem/ MR gambler % (SE)	Problem gambler % (SE)	Moderate risk gambler % (SE)	Low risk gambler % (SE)	No or little risk gambler % (SE)	Population gambling on activity N
NT all gamblers	6.9 (0.8)	1.9 (0.5)	5.0 (0.7)	13.1 (1.1)	80.0 (1.2)	129,467
Informal betting ***	33.7 (8.3)	**12.7 (8.4)**	21.0 (5.9)	23.9 (5.3)	42.4 (6.9)	5,205
Regular gambler ***	31.9 (4.5)	14.4 (4.0)	17.4 (3.6)	21.6 (3.3)	46.6 (4.1)	13,371
Sports betting ***	17.7 (4.1)	**6.9 (3.9)**	10.8 (2.3)	31.4 (4.3)	50.9 (4.4)	12,803
EGMs ***	17.5 (2.5)	6.2 (1.7)	11.3 (2.0)	23.1 (2.7)	59.4 (3.0)	35,160
Bingo **	**17.0 (7.7)**	**12.5 (7.1)**	**4.5 (3.0)**	**27.8 (13.)**	55.2 (12.)	3,630
Casino games ***	16.5 (3.4)	**4.3 (1.7)**	12.2 (3.1)	25.3 (3.7)	58.2 (4.1)	16,681
Online gambler ***	16.4 (3.9)	**6.4 (3.1)**	10.0 (2.9)	26.1 (3.7)	57.5 (4.2)	16,841
Instant scratchies***	14.1 (2.7)	**4.2 (1.3)**	9.9 (2.5)	17.5 (2.9)	68.4 (3.5)	28,338
Keno ***	12.4 (1.9)	**4.4 (1.4)**	8.0 (1.4)	16.4 (1.8)	71.2 (2.3)	39,865
Racetrack betting **	10.3 (1.6)	**3.3 (1.1)**	7.0 (1.3)	17.1 (2.2)	72.6 (2.5)	29,797
Lottery	7.3 (1.4)	1.8 (0.4)	5.5 (0.9)	14.4 (1.4)	78.3 (1.6)	86,785
Other gambling	**5.6 (5.6)**	0.0 (0.0)	**5.6 (5.6)**	**5.6 (5.6)**	88.7 (8.0)	547
Raffles	5.3 (0.9)	**1.8 (0.8)**	3.4 (0.6)	12.6 (1.4)	82.1 (1.6)	66,703
Number of activities ***						
One	1.9 (0.5)	**0.3 (0.2)**	**1.5 (0.5)**	5.1 (1.3)	93.1 (1.4)	41,247
Two	2.9 (0.8)	**0.5 (0.5)**	2.4 (0.7)	11.5 (2.0)	85.6 (2.1)	33,822
Three	9.8 (2.3)	**1.9 (0.8)**	8.0 (2.2)	14.3 (1.8)	75.9 (2.7)	23,777
Four	7.5 (2.0)	**1.3 (0.5)**	**6.3 (2.0)**	21.3 (3.6)	71.2 (3.8)	14,638
Five or more	23.5 (4.2)	**9.7 (3.3)**	13.8 (3.2)	27.8 (4.6)	48.7 (4.3)	15,983

NOTES: Bold font indicates estimate has relative standard error > 30% - caution interpreting estimate
*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$: Significant association between gambling activity and PGSI

Figure 32 shows the percentage of gamblers at risk of problem gambling and association with each activity for 2015 and 2018. At-risk prevalence was significantly associated with all activities in both 2015 and 2018, except for informal betting, which was not significantly associated with at-risk gambling in 2015. Informal betting had the highest percentage of gamblers at risk of problem gambling (58%), followed by sports betting (49%), bingo (45%), online gambling (43%), casino table games (42%), and EGMs (41%). Lotto, raffles and other gambling were the only activities that had a lower percentage of at-risk gamblers compared with all gambling (less than 24%). Activities that had a significant change in the percentage of at-risk gamblers are presented in Figure 33.

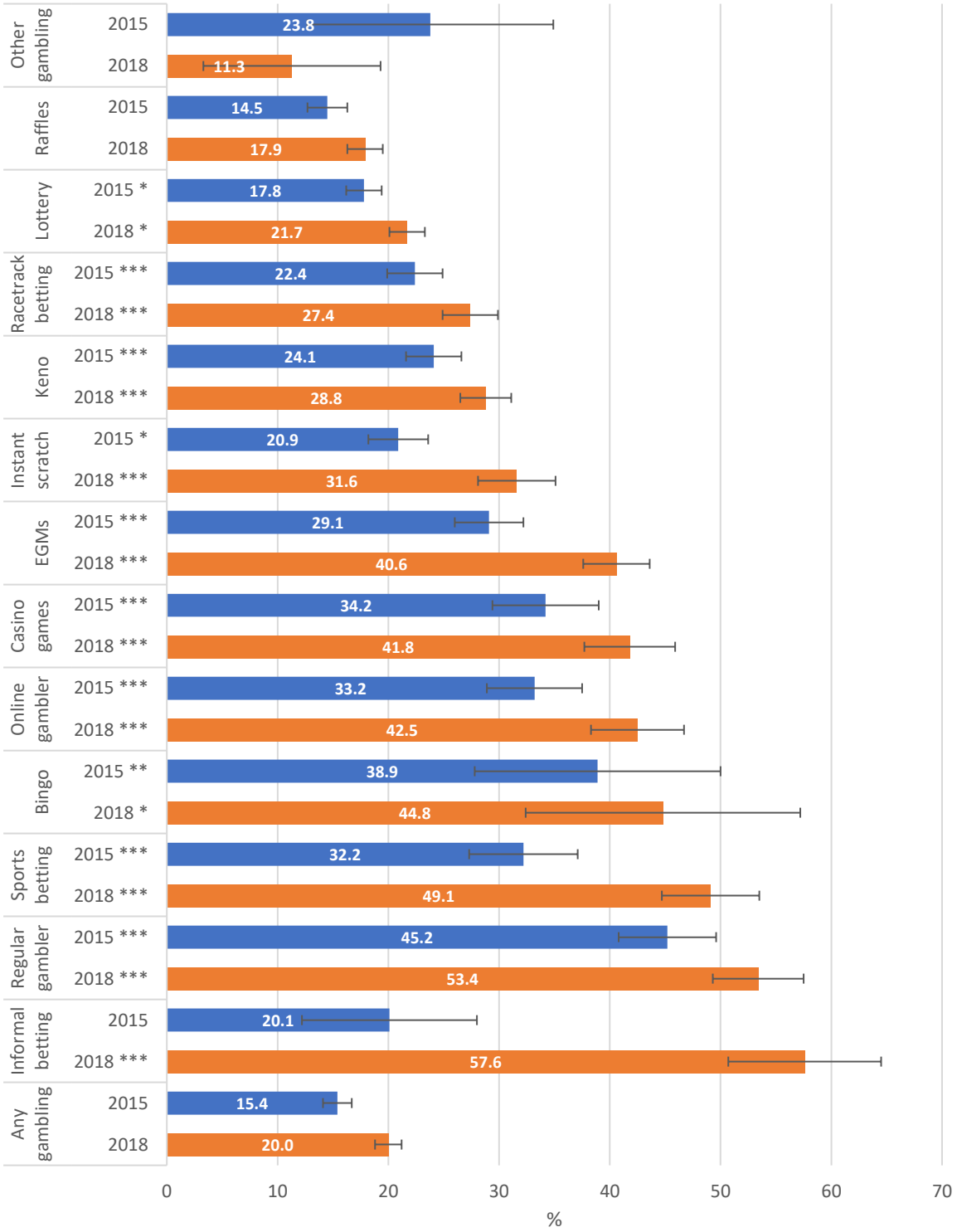


Figure 32: At-risk of problem gambling for activities, 2015 and 2018 NT gambling population

Significant association between activity and at-risk gambling within time
*** p < 0.001, ** p < 0.01, * p < 0.05

Figure 33 shows whether there was a significant change in the distribution of problem gambling risk between 2015 and 2018 for selected gambling activities, and regular and online gamblers. There was a significant increase in problem/moderate risk gambling between 2015 and 2018 for regular gamblers (18% to 32% for problem gambling), sports betting (14% to 18% for problem/moderate risk gambling, and 19%

to 31 for low risk gambling), keno (9% to 12% for problem/moderate risk gambling), and EGMs (11% to 18% for problem/moderate risk gambling, and 19% to 24% for low risk gambling).

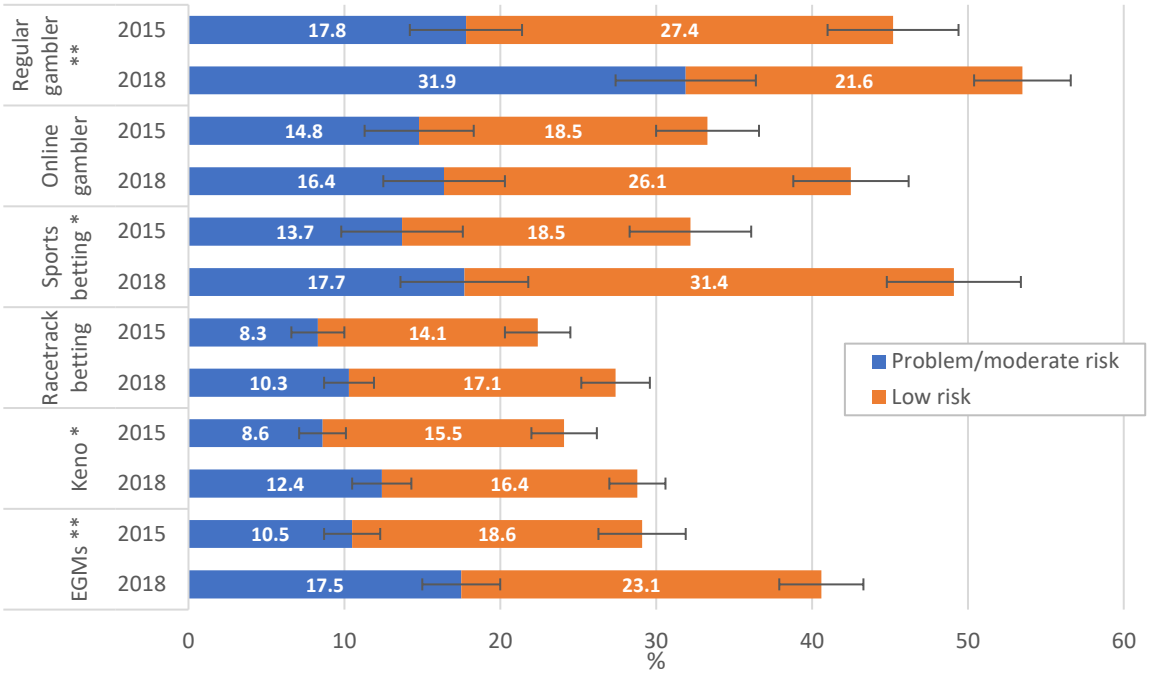


Figure 33: At-risk of problem gambling by time for selected activities, 2015 and 2018 NT gambling population

Significant difference between 2015 and 2018: ** p < 0.05, * p < 0.10

Figure 34 shows the significant association between number of activities gambled on and problem gambling risk. Those people who gambled on one or two activities had reduced problem gambling risk compared with those gambling on three or more activities. Problem gambling risk increases noticeably once people gamble on five or more activities, with 24% classified as experiencing problem or moderate risk gambling, and 28% low risk gambling, compared with 6.9% and 13.1% amongst all gamblers in the NT.

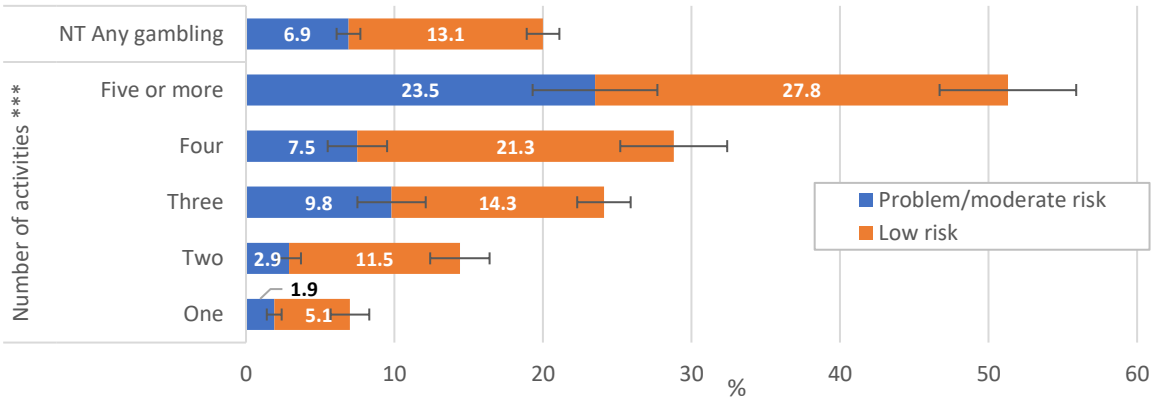


Figure 34: Number of gambling activities by problem gambling risk, 2018 NT gamblers

Significant association between number of activities and PGSI: *** p < 0.001, ** p < 0.01, * p < 0.05

5.8 Problem gambling risk by gambling frequency

Figure 35 shows associations between gambling frequency and problem gambling risk. Frequency of gambling on EGMs, keno, raffles and any gambling were significantly associated with increased problem gambling risk, with increases in risk particularly notable for weekly and monthly gambling. For example, 57% of weekly EGM gamblers were classified as problem or moderate risk gamblers, dropping to 24% for monthly EGM gamblers, which compares to 7% across all gamblers. Monthly and weekly keno gamblers had a higher problem gambling risk, while for raffle gamblers and any gambling, only weekly gamblers had an increased problem gambling risk.

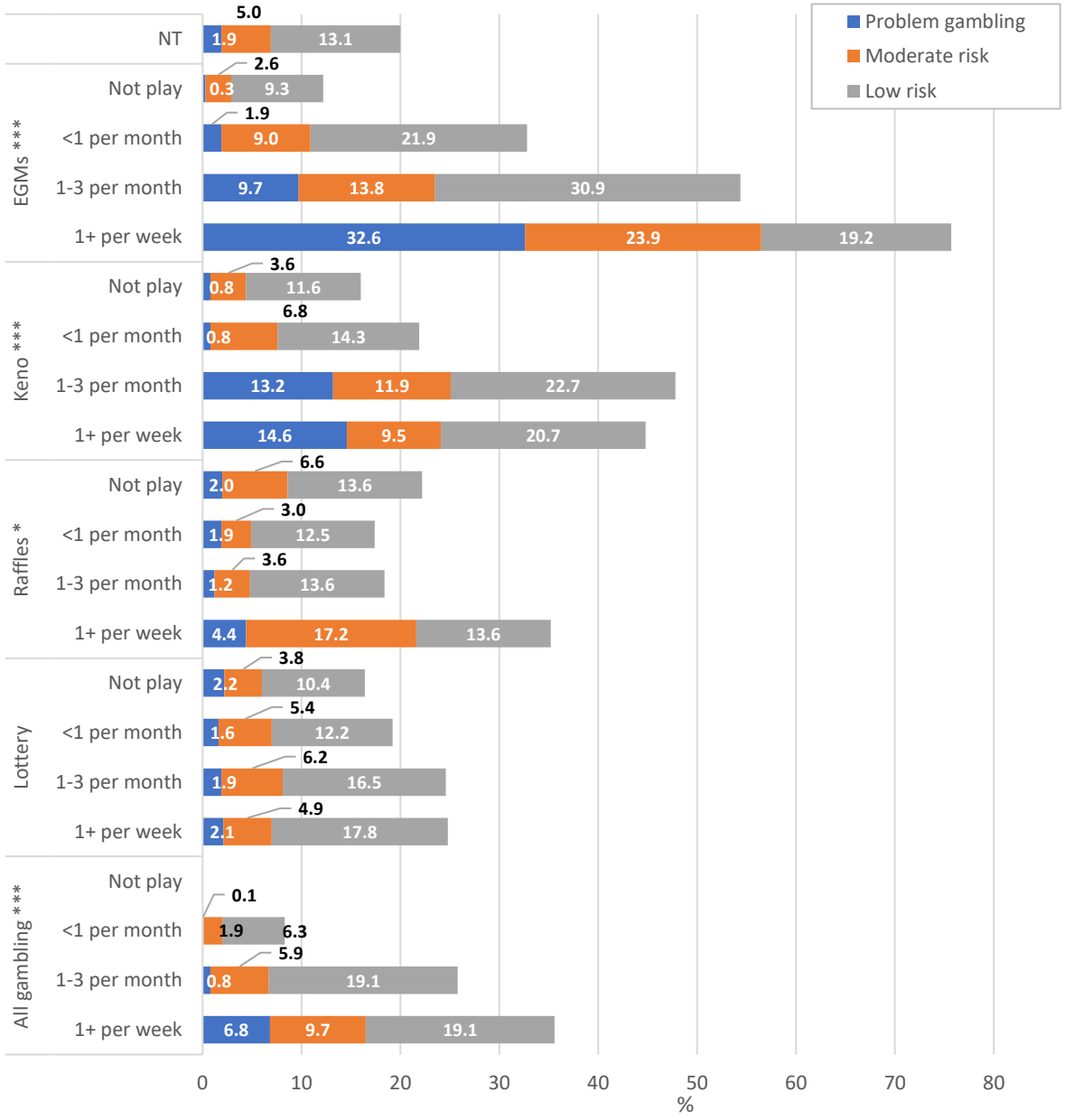


Figure 35: Frequency of any gambling and selected activities by problem gambling risk, 2018 NT gamblers

Significant association between frequency of gambling and PGSI: *** p < 0.001, ** p < 0.01, * p < 0.05

Figure 36 shows the association between gambling frequency and problem gambling risk for activities not shown in the previous figure. All activities shown had a significant

increased risk of problem gambling with increased frequency of gambling on the activity. Gambling weekly on casino games and informal betting had problem and moderate risk gambling prevalence of 78% and 82% respectively, while for weekly sports bettors, 44% were classified as experiencing problem or moderate risk gambling.

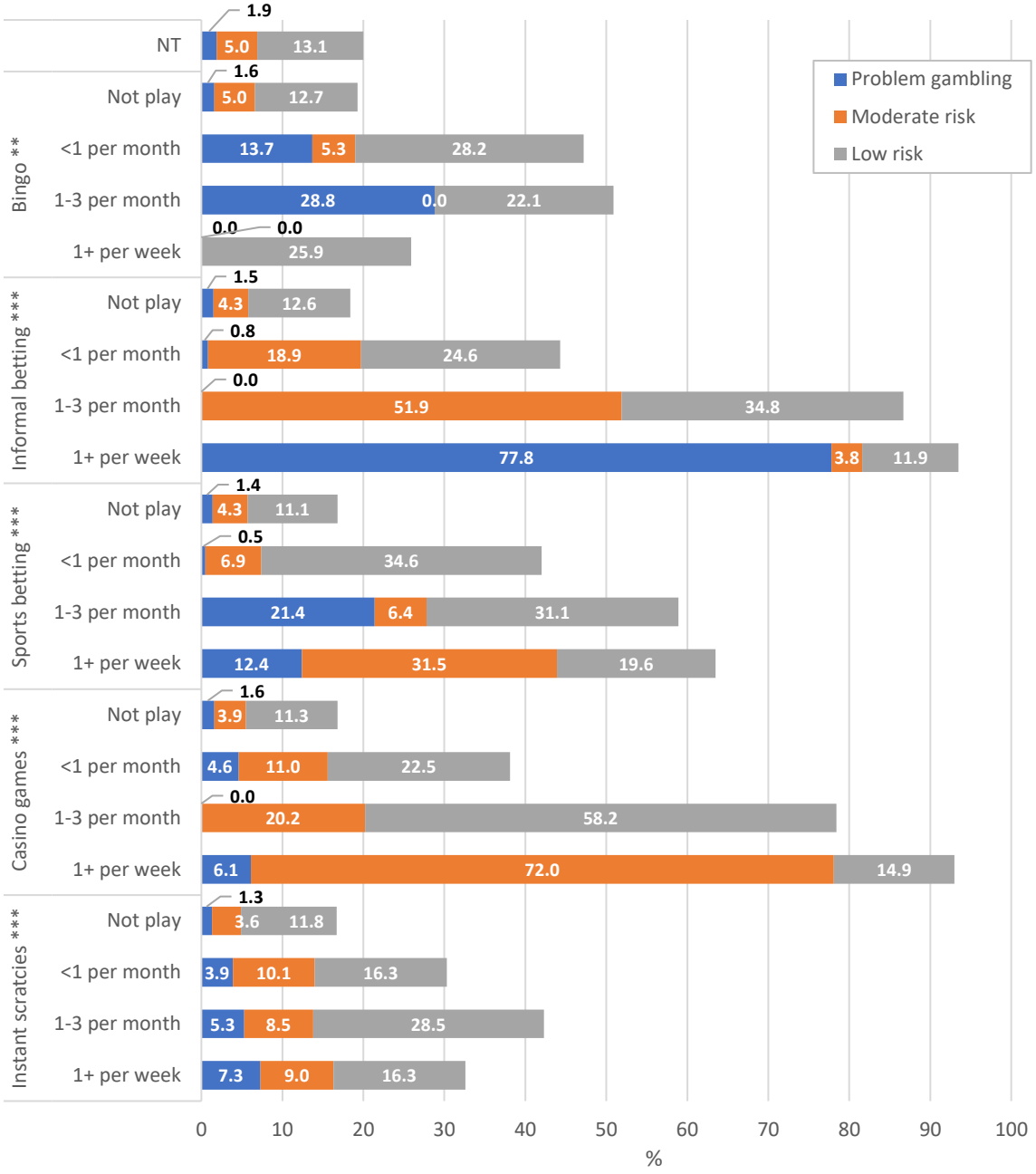


Figure 36: Frequency of any gambling and selected activities by problem gambling risk, 2018 NT gambler population

Significant association between frequency of gambling and PGSI: *** p < 0.001, ** p < 0.01, * p < 0.05

5.9 PGSI score multivariable model: Activities model

Figure 37 shows the multivariable adjusted model for frequency of gambling by activity and PGSI score for NT gamblers. Frequency of gambling on EGMs, racetrack betting, instant scratch tickets, sports betting and informal betting all had a significant multivariable adjusted association with PGSI score. The exclusion of weekly instant

scratch ticket gambling from the regular gambler definition may need revisiting, given it shows a significant multivariable adjusted association with increased problem gambling risk, with more frequent gambling. In any case, weekly gambling in all activities (except lotto) is associated with a sharp increase in problem gambling risk.

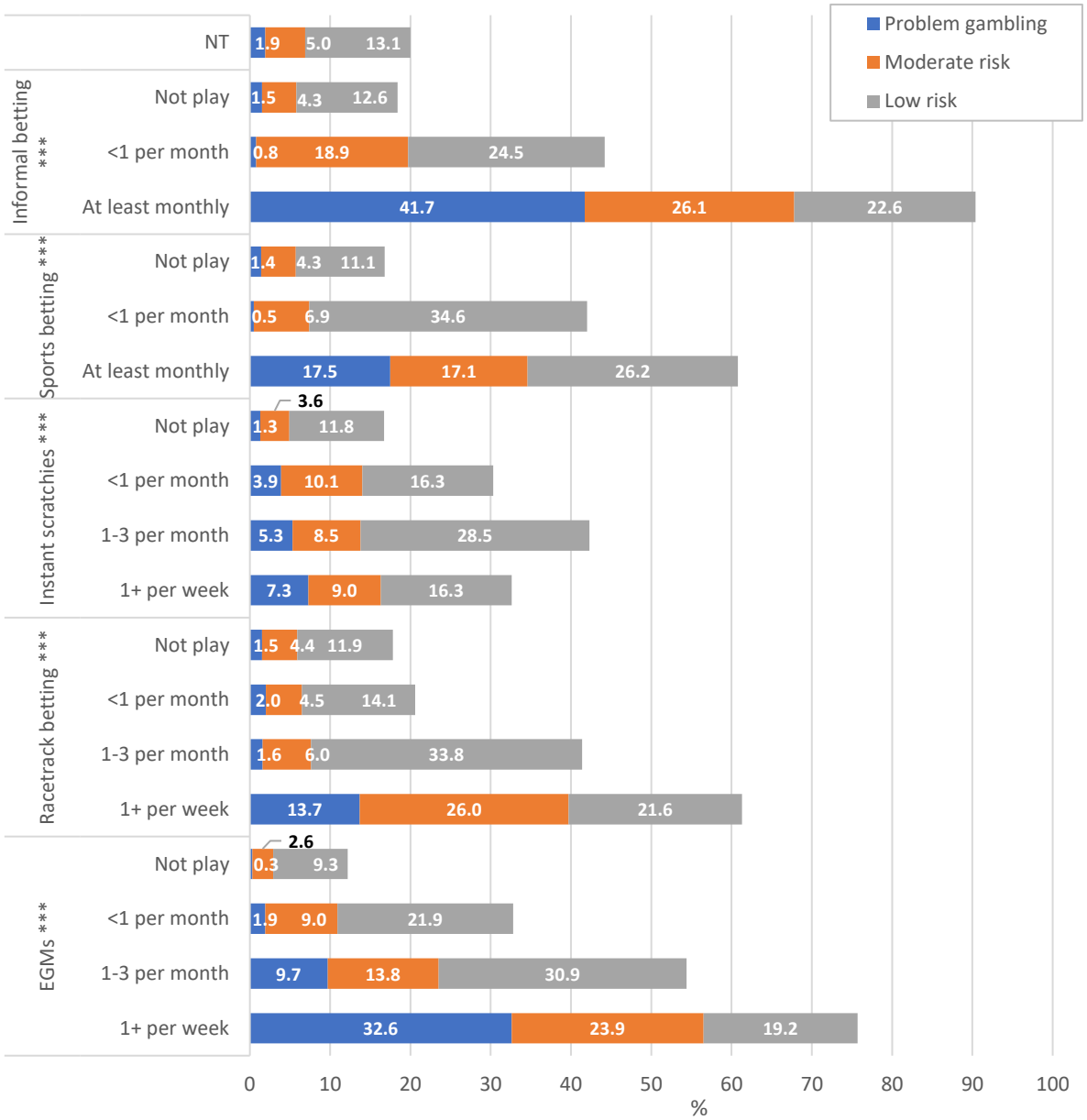


Figure 37: Multivariable model of PGSI score and gambling frequency for activities, 2018 NT gamblers

*** p < 0.001, ** p < 0.01, * p < 0.05: Significant multivariable adjusted association between PGSI score and frequency of gambling activity

Because frequency of gambling is highly correlated amongst activities, a separate multivariable model for problem gambling risk was developed but using a factor analysis of 7 activities (EGMs, instant scratch tickets, keno, racetrack betting, sports betting and casino games). The factor analysis produced two clear factors with factor 1 including games of chance (keno, EGMs and instant scratch tickets) and factor 2 including games of skill (racetrack betting, sports betting and casino games). A score was created for each factor, and the median used to divide people into either low or

high frequency gamblers for either skill- or chance-based gambling. Bingo, lotto, raffles and informal betting were excluded from the factor analysis, as they only loaded on one factor (i.e. less correlated with activities included), though these activities were included in the multivariable model if they showed a significant unadjusted association with PGSI score. Significant variables in this model are shown in Figure 38. This model also included regular gambling and online gambling, and both remained significant in the multivariable adjusted model. The skill-chance composite variable shows that the people who gamble more frequently on both skill and chance-based games have the highest problem gambling risk. Gambling on bingo and informal betting also remained significant in this model and were associated with increased problem gambling risk. Informal betting and gambling on bingo also remained significant in the multivariable adjusted model for activities. Regular gamblers had the highest problem gambling risk in the model, followed by informal gamblers, and bingo.

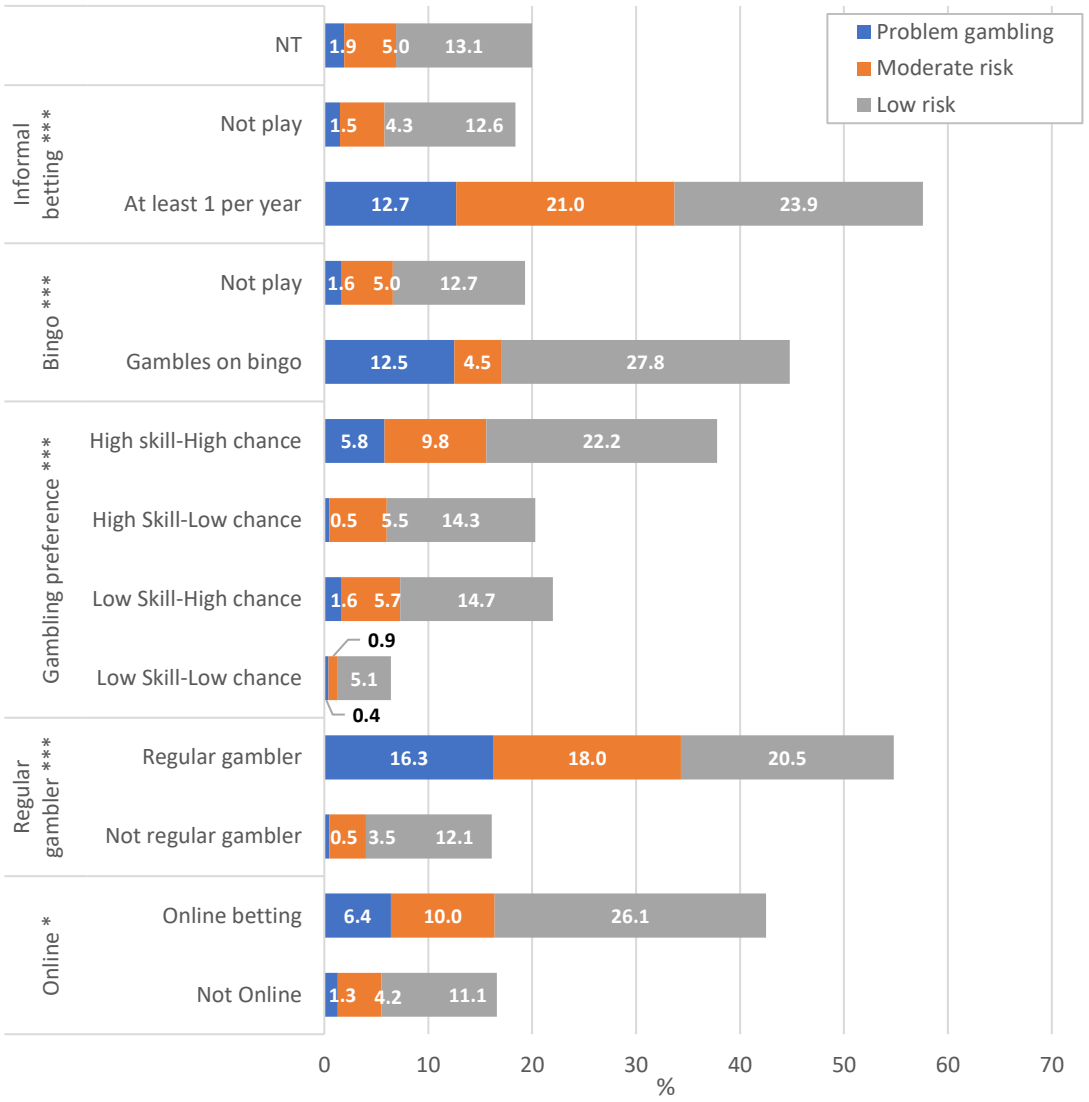


Figure 38: Multivariable model of PGSI score and gambling activities and type of gambler, 2018 NT gambler population

Notes: Gambling preference = Low & High refer to the frequency of gambling on games of skill (casino games, sports & racetrack betting), & games of chance (keno, EGMs and instant scratch tickets)
*** p < 0.001, ** p < 0.01, * p < 0.05: Significant multivariable adjusted association between PGSI score and gambling activity

5.10 Full multivariable adjusted model of PGSI score

The full multivariable model was developed by first including all variables that remained in the multivariable models for socio-demographic and socioeconomic model, health and health risk factor model, and gambling activities model, as presented in previous sections of this chapter. From this, a stepwise backward selection approach was applied, with removal of variables set at p>0.05. So, variables were eliminated from this model sequentially based on having significance greater than 0.05, starting with the highest p-value. Two separate models were developed, one using the activities model with individual gambling activities (model 1), while the other includes the composite gambling activity variable (model 2), indicating gamblers preference for skill or chance-based gambling. Multivariable model 1 is shown in Table 25, and significant variables from this model are plotted in Figure 39. Gambling activities that remained significant in the full model included Instant scratch tickets, informal betting, sports betting, racetrack betting and EGM gambling remained significant in this model. Health risk factors in this model included Kessler-5, problematic alcohol consumption, and illicit drug use. Lastly, socio-demographic and socioeconomic variables remaining significant in this model were labour force status, Indigenous status and language spoken at home. The largest effect on problem gambling risk is for weekly EGM gambling, with just under a quarter of weekly EGM gamblers screening as experiencing problem gambling, and a further 17% for moderate risk gambling. Indigenous, unemployed, and not speaking English were associated with increased problem gambling risk, as was experiencing alcohol problems, high psychological distress, and using illicit drugs. The fact that instant scratch tickets remained as a significant risk factor for problem gambling risk in this model, would bring into question excluding gambling on this in regular gamblers definitions for future surveys.

Final multivariable model 2 is shown in Table 26, and significant variables from this model are plotted in Figure 40. The same socio-demographic (Indigenous status and language spoken at home), socioeconomic (labour force status) and health risk factor variables (illicit drug use, psychological distress and alcohol problems) all remained significant in model 2. Gambling activity variables for the skill-chance composite gambling preference variable (skill games were casino games, racetrack and sports betting, while chance games were EGMs, keno and instant scratch tickets), regular and online gambler variables, and informal betting remained significant in this model. The large effect on problem gambling risk in this model was for informal betting, followed by being a regular gambler.

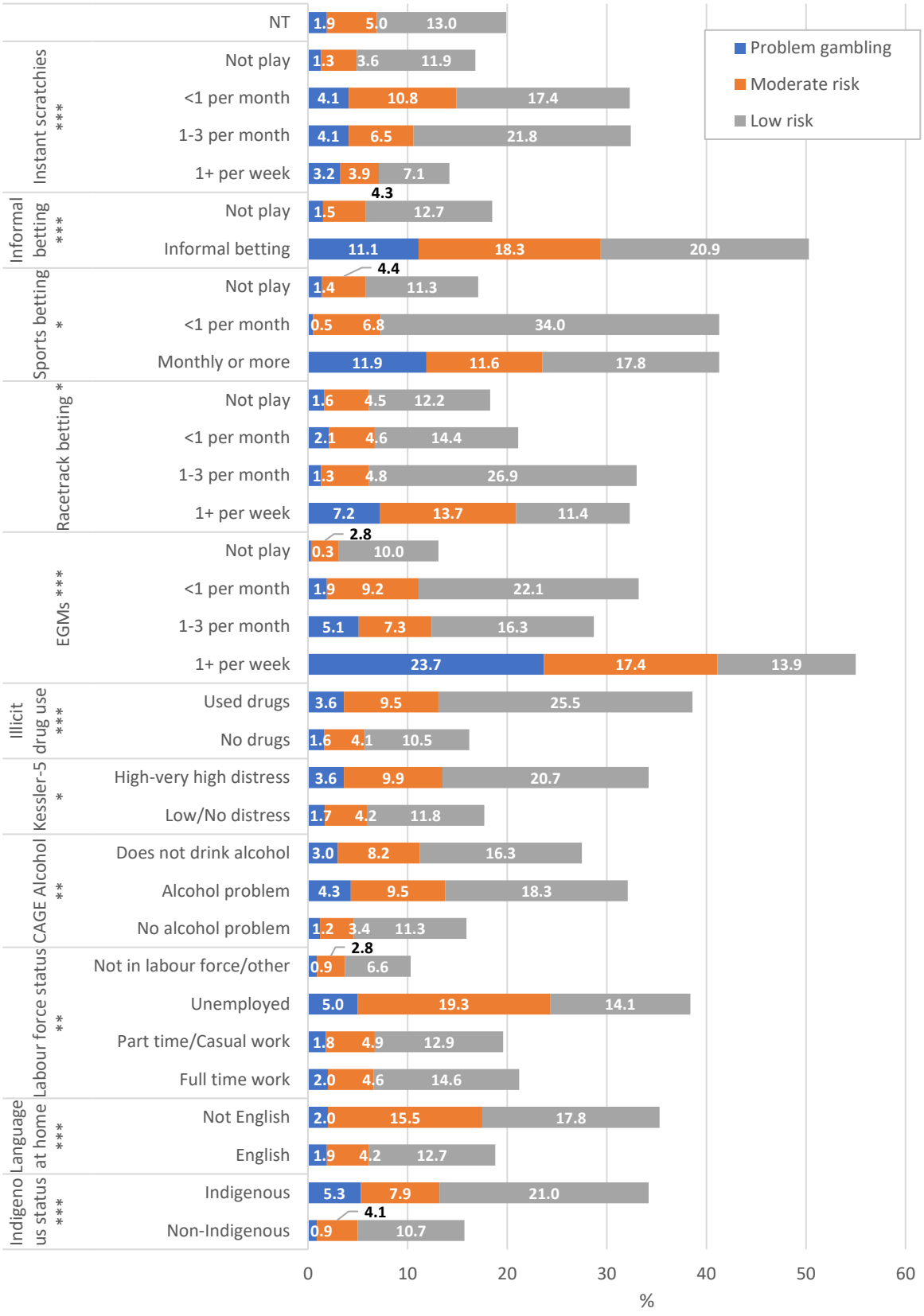


Figure 39: Full multivariable model 1 of PGSI score, 2018 NT gambler population

*** p < 0.001, ** p < 0.01, * p < 0.05: Significant multivariable adjusted association between PGSI score and variable

Table 25: Full multivariable model 1 of PGSI score, variable distributions and problem/moderate risk gambling, 2018 gamblers

	Distribution % (SE)	Problem & Moderate risk gambling % (SE)	PGSI Score Ratio (95% CI)	p-value
Sex ***				
Female	48.9 (1.1)	5.4 (1.0)	1.0	
Male	51.1 (1.1)	8.3 (1.3)	1.64 (1.23-2.18)	0.001
Indigenous status ***				
Non-Indigenous	77.1 (1.7)	5.0 (0.5)	1.0	
Indigenous	22.9 (1.7)	13.2 (3.1)	1.98 (1.42-2.77)	<0.001
Language at home ***				
language	93.0 (1.0)	6.1 (0.8)	1.0	
Not English	7.0 (1.0)	17.5 (4.4)	2.80 (1.66-4.71)	<0.001
CAGE Alcohol **				
No alcohol problem	72.3 (1.6)	4.6 (0.8)	1.0	
Probable alcohol problem	18.2 (1.4)	13.8 (3.1)	1.25 (0.90-1.73)	0.183
Does not drink alcohol	9.5 (1.0)	11.3 (2.6)	2.23 (1.44-3.45)	<0.001
Kessler-5 *				
Low/no distress	86.4 (1.3)	5.9 (0.8)	1.0	
High/very high distress	13.6 (1.3)	13.5 (3.4)	1.50 (1.07-2.11)	0.019
Illicit drug use ***				
Did not use	82.8 (1.3)	5.6 (0.9)	1.0	
Used drugs	17.2 (1.3)	13.0 (2.2)	2.05 (1.44-2.93)	<0.001
Informal betting **				
Not play	95.4 (0.7)	5.8 (0.7)	1.0	
At least once per year	4.6 (0.7)	29.4 (7.9)	3.43 (1.43-8.23)	0.006
Sports betting *				
Not play	88.2 (1.1)	5.8 (0.8)	1.0	
<1 per month	6.3 (0.8)	7.2 (2.4)	1.80 (1.17-2.78)	0.008
1-3 per month	2.4 (0.5)	25.0 (12.)	2.03 (0.88-4.69)	0.098
1+ per week	3.1 (0.7)	22.3 (7.7)	1.24 (0.56-2.74)	0.595
Instant scratchies ***				
Not play	77.3 (1.6)	4.9 (0.7)	1.0	
<1 per month	17.6 (1.5)	14.9 (3.4)	1.98 (1.41-2.78)	<0.001
1-3 per month	2.9 (0.6)	10.6 (3.7)	2.48 (1.39-4.42)	0.002
1+ per week	2.2 (0.5)	7.1 (3.2)	0.70 (0.24-2.08)	0.525
Racetrack betting *				
Not play	74.3 (1.5)	6.1 (1.0)	1.0	
<1 per month	17.6 (1.3)	6.6 (1.4)	1.09 (0.77-1.55)	0.640
1-3 per month	3.3 (0.7)	6.1 (2.6)	1.41 (0.67-2.95)	0.368
1+ per week	4.8 (0.7)	20.9 (5.4)	2.67 (1.48-4.82)	0.001
EGMs ***				
Not play	68.3 (1.7)	3.1 (0.5)	1.0	
<1 per month	19.4 (1.5)	11.2 (2.5)	2.69 (1.97-3.66)	<0.001
1-3 per month	8.6 (0.9)	12.4 (2.7)	4.57 (2.98-7.00)	<0.001
1+ per week	3.7 (0.7)	41.1 (9.7)	11.25 (6.86-18.5)	<0.001

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$: Significant multivariable adjusted association between PGSI score and variable

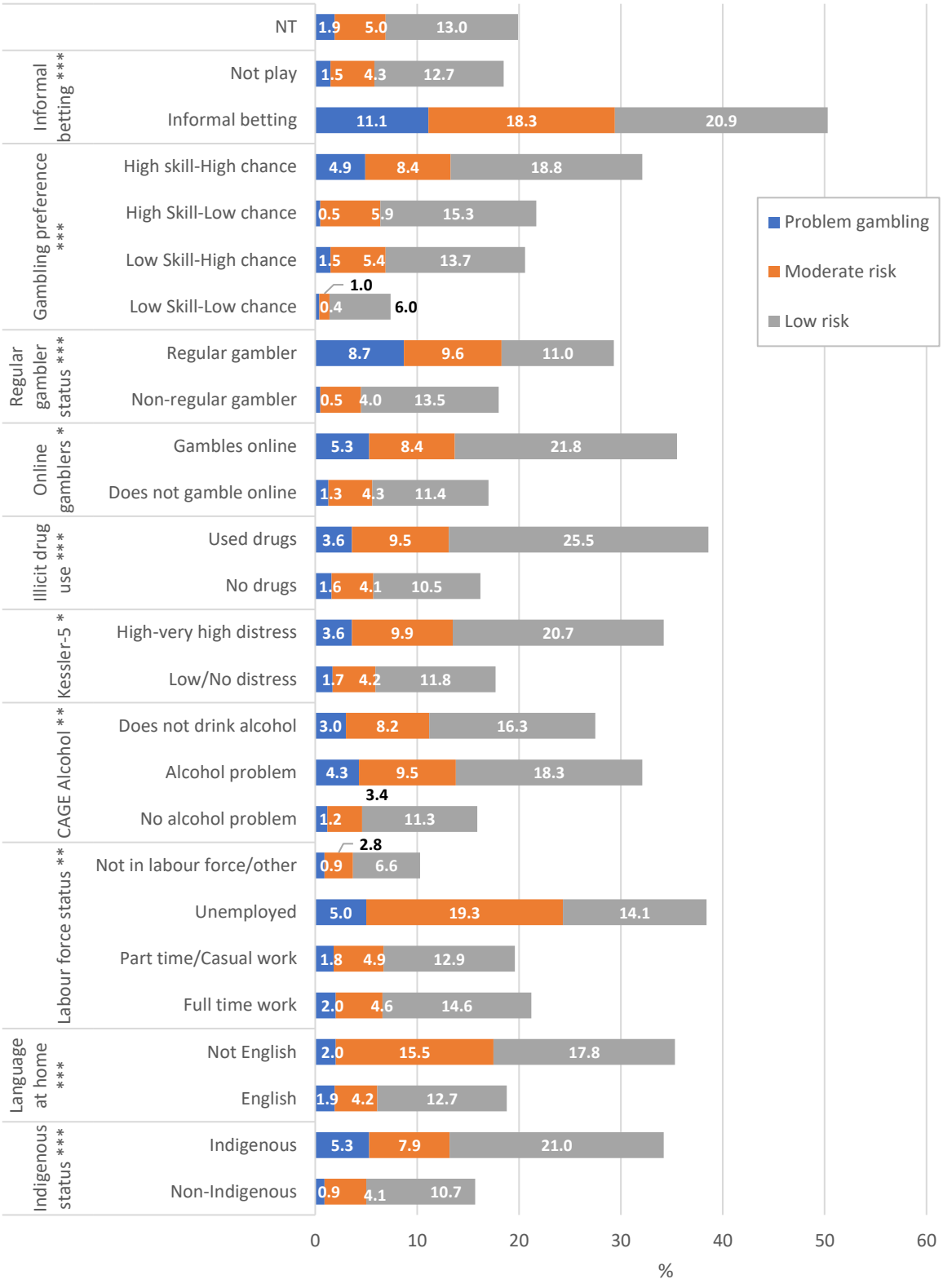


Figure 40: Full multivariable model 2 of PGSI score, 2018 NT gambler population

*** p < 0.001, ** p < 0.01, * p < 0.05: Significant multivariable adjusted association between PGSI score and variable

Table 26: Full multivariable model 2 of PGSI score, 2018 gamblers

	Distribution % (SE)	PG-MR % (SE)	PGSI Score Ratio (95% CI)	p-value
Indigenous status ***				
Non-Indigenous	77.1 (1.7)	5.0 (0.5)	1.0	
Indigenous	22.9 (1.7)	13.2 (3.1)	2.48 (1.77-3.47)	<0.001
Language at home ***				
language	93.0 (1.0)	6.1 (0.8)	1.0	
Not English	7.0 (1.0)	17.5 (4.4)	2.84 (1.63-4.93)	<0.001
Labour force status ***				
Full-time employed	64.7 (1.6)	6.6 (1.0)	1.0	
Part-time/casual employed	14.4 (1.2)	6.7 (1.5)	1.27 (0.86-1.86)	0.228
Unemployed	4.4 (0.8)	24.3 (8.0)	2.03 (1.20-3.44)	0.008
Not in the labour force/other	16.5 (1.1)	3.7 (0.9)	0.59 (0.39-0.90)	0.014
CAGE Alcohol **				
No alcohol problem	72.3 (1.6)	4.6 (0.8)	1.0	
Probable alcohol problem	18.3 (1.4)	13.8 (3.1)	1.34 (0.96-1.88)	0.088
Does not drink alcohol	9.5 (1.0)	11.3 (2.6)	2.21 (1.39-3.51)	0.001
Kessler-5 *				
Low/no distress	86.3 (1.3)	5.9 (0.8)	1.0	
High/very high distress	13.7 (1.3)	13.5 (3.4)	1.42 (1.00-2.01)	0.05
Illicit drug use ***				
Did not use	82.9 (1.3)	5.6 (0.9)	1.0	
Used drugs illicitly	17.1 (1.3)	13.1 (2.2)	2.28 (1.61-3.24)	<0.001
Online gambling *				
Not online gambler	84.4 (1.3)	5.6 (0.7)	1.0	
Gambles online	15.6 (1.3)	13.7 (3.4)	1.44 (1.01-2.07)	0.046
Regular gambling ***				
Not regular gambler	82.2 (1.3)	4.4 (0.7)	1.0	
Regular gambler	17.8 (1.3)	18.4 (3.2)	2.75 (1.94-3.90)	<0.001
Gambling preference ***				
Low skill-Low chance	29.1 (1.6)	**1.4 (0.6)**	1.0	
Low skill-High chance	28.5 (1.5)	6.9 (1.5)	4.26 (2.67-6.80)	<0.001
High skill-Low chance	15.9 (1.3)	6.4 (1.5)	2.40 (1.44-4.01)	0.001
High skill-High chance	26.4 (1.5)	13.2 (2.3)	4.16 (2.56-6.74)	<0.001
Informal betting ***				
Not play	95.4 (0.7)	5.8 (0.7)	1.0	
Does informal betting	4.6 (0.7)	29.4 (7.9)	3.03 (1.58-5.81)	0.001

*** p < 0.001, ** p < 0.01, * p < 0.05: Significant multivariable adjusted association between PGSI score and variable

5.11 Problem gambling by highest spend activity

Table 27 shows the association between highest spend activity and problem gambling risk. Informal betting, EGMs, sports betting, and casino games as highest spend activities were significantly associated with higher problem gambling risk, while lotto and raffles were associated with reduced problem gambling risk.

Table 27: Highest spend activity by problem gambling risk, 2018 NT gambler population

	Problem or moderate risk gambling % (SE)	Low risk gambling % (SE)	Non-risk gambling % (SE)	Population Gambling on activity N
Any gambling	6.9 (0.8)	13.1 (1.1)	80.0 (1.2)	129,633
Informal betting ***	**32.8 (13.)**	**18.5 (8.3)**	48.7 (12.)	1,664
EGMs ***	31.7 (5.0)	18.7 (3.8)	49.6 (4.7)	14,170
Sports betting **	**12.6 (5.1)**	28.2 (6.8)	59.2 (7.2)	3,862
Other	**11.0 (10.)**	**23.7 (11.)**	65.3 (13.)	1,046
Racetrack betting	10.8 (2.7)	16.8 (3.3)	72.5 (3.8)	12,058
Casino games **	**10.3 (3.4)**	24.9 (5.0)	64.8 (5.8)	6,126
Keno	**4.0 (1.5)**	11.2 (3.1)	84.7 (3.4)	6,478
Instant scratchies	**2.2 (2.0)**	**11.8 (5.0)**	86.0 (5.4)	3,683
Lottery ***	1.6 (0.4)	12.1 (1.8)	86.3 (1.9)	57,045
Raffles ***	**0.5 (0.4)**	4.0 (1.2)	95.4 (1.2)	22,381
Bingo	0.0 (0.0)	**9.6 (6.6)**	90.4 (6.6)	958
Non-sport betting	0.0 (0.0)	**44 (27.9)**	**56.0 (27.)**	164

Significant association between highest spend activity and PGSI: *** p<0.001, ** p<0.01, * p<0.05
NOTES: Bold font estimates indicate relative standard error > 30% - caution interpreting

Table 28 shows the association between highest spend and problem gambling risk from the 2015 survey, with problem gambling risk estimates higher in 2018 compared with 2015. Note that relative standard errors on both tables often exceeds 30%, and estimates should be interpreted with caution.

Table 28: Highest spend activity by problem gambling risk, 2015 NT gambler population

	Problem or moderate risk gambling % (SE)	Low risk gambling % (SE)	Non-risk gambling % (SE)	Population Gambling on activity N
Any gambling	4.7 (0.7)	10.7 (1.1)	84.6 (1.3)	134,524
Informal betting	**2.2 (2.4)**	**14.8 (13.)**	83.1 (13.)	1,153
EGMs ***	15.6 (3.2)	19.2 (3.8)	65.2 (4.7)	17,185
Sports betting *	**10.0 (4.8)**	**22.5 (9.0)**	67.4 (9.3)	2,881
Other	0.0 (0.0)	**18.8 (13.)**	81.2 (13.)	593
Racetrack betting	**5.2 (2.3)**	9.3 (2.6)	85.6 (3.4)	16,501
Casino games	**7.0 (3.4)**	**22.2 (8.7)**	70.8 (8.9)	9,887
Keno	**2.7 (1.3)**	**12.6 (5.2)**	84.7 (5.3)	10,772
Instant scratchies	**1.0 (0.8)**	**11.1 (5.5)**	87.9 (5.5)	3,339
Lottery ***	**1.7 (0.7)**	8.0 (1.3)	90.2 (1.4)	46,006
Raffles ***	**0.8 (0.6)**	**3.6 (1.6)**	95.7 (1.7)	25,139
Bingo ***	**47.2 (25.)**	**10.3 (7.5)**	**42.5 (21.)**	1,011
Non-sport betting	0.0 (0.0)	0.0 (0.0)	100.0 (0.0)	58

Significant association between highest spend activity and PGSI: *** p<0.001, ** p<0.01, * p<0.05
NOTES: Bold font estimates indicate relative standard error > 30% - caution interpreting

5.12 Harms because of own gambling for at-risk gamblers

There was a significant increase in the percentage of at-risk gamblers who endorsed one of the harms from their own gambling, with 44% identifying at least in harm in 2018, compared with 25% in 2015 (Figure 41).

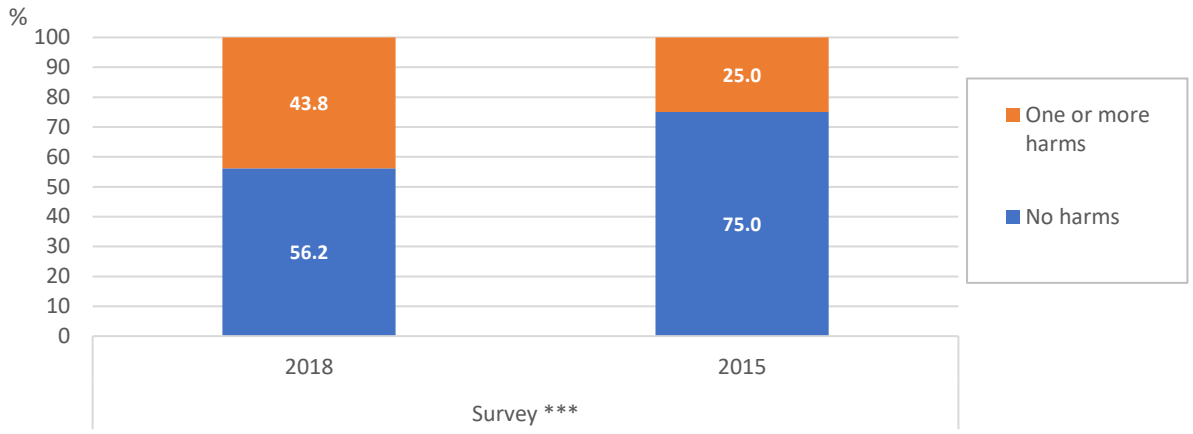


Figure 41: Experienced at least one harm from own gambling by time, 2015 and 2018 NT at-risk gamblers

Significant difference between 2015 and 2018: *** p<0.001, ** p<0.01, * p<0.05

Figure 42 shows there was a significant difference in the distribution of number of harms between 2015 and 2018, with 34% of at-risk gamblers identifying one or two harms in 2018 compared with 13% in 2015, while 10% identified three or more harms in 2018, compared with 12% in 2015.

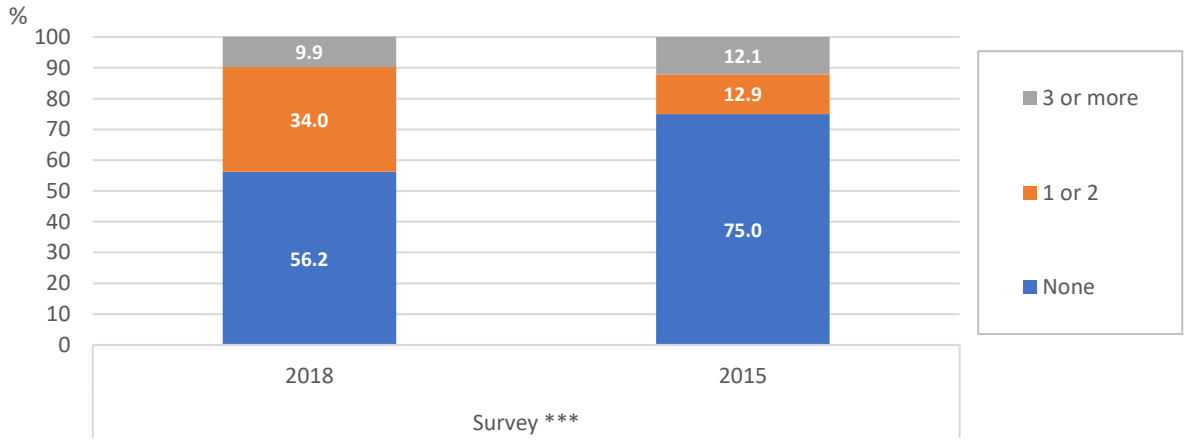


Figure 42: Number of harms experienced from own gambling by time, 2015 and 2018 NT at-risk gambling population

Significant difference between 2015 and 2018: *** p<0.001, ** p<0.01, * p<0.05

Table 29 shows the population of at-risk gamblers by the number of harms for 2015 and 2018. More than 10,000 at-risk gamblers from 25,852 experienced harm from their own gambling in 2018, compared with 3,100 from 20,717 in 2015.

Table 29: Number of harms from own gambling by time, 2015 and 2018 NT at-risk gamblers

	Number of harms from own gambling			
	No harms	One or two	Three or more	
	N	N	N	Total
2018	14,517	8,788	2,547	25,852
2015	15,547	2,665	2,505	20,717

5.11.2 Harms from own gambling by problem gambling risk

Figure 43 shows that there was no significant difference in the distribution of problem gambling risk between 2015 and 2018 among at-risk gamblers, through 10% were classified as experiencing problem gambling in 2018, compared with 6% in 2015.

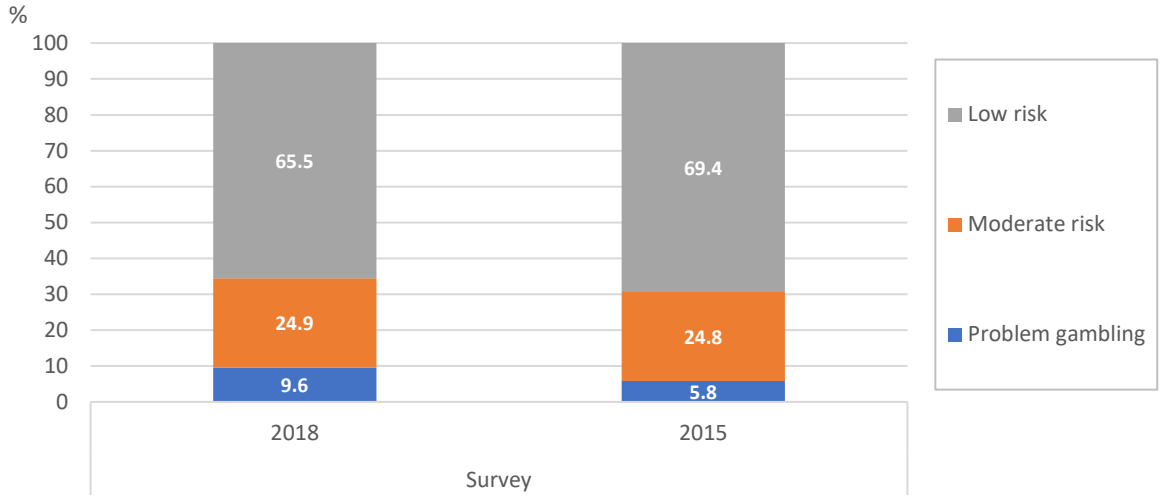


Figure 43: At-risk gamblers distribution of problem gambling risk by survey, 2015 and 2018 NT at-risk gambling population

Significant difference between 2015 and 2018: *** p<0.001, ** p<0.01, * p<0.05

Table 30 shows population counts for problem gambling risk by survey for at-risk gamblers.

Table 30: Problem gambling risk, 2015 and 2018 NT at-risk gambler population

	Problem gambling risk			
	Problem Gambling N	Moderate risk N	Low risk N	Total N
2018	2,487	6,426	16,938	**25,852**
2015	1,206	5,128	14,383	**20,717**

Figure 44 shows the significant association between experience of harm from own gambling and problem gambling risk for at-risk gamblers. There were no problem gamblers who did not identify at least one harm from their own gambling, while 22% of at-risk gamblers experiencing one or more harms were also experiencing problem gambling, 38% were experiencing moderate risk gambling, and 40% low risk gambling, compared with the no harms group, where 0%, 14% and 86% for problem, moderate and low risk gambling respectively.

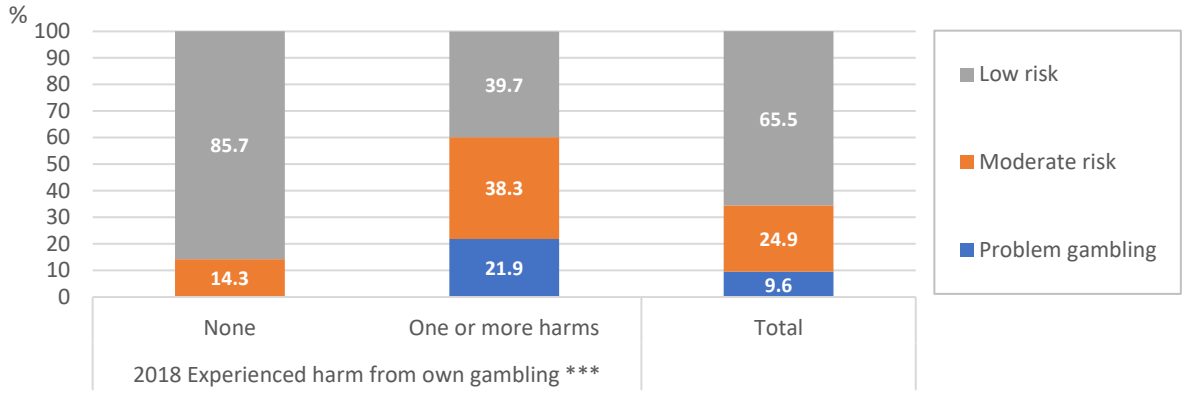


Figure 44: Experienced harm from own gambling by problem gambling risk, 2018 NT at-risk gamblers

Significant association between harm from own gambling and problem gambling risk:
*** p<0.001, ** p<0.01, * p<0.05

Figure 45 shows the same association as Figure 44 but for the 2015 survey. The association between problem gambling risk and harm from own gambling was significant, though the distribution of problem gambling risk among those experiencing no harm from their own gambling and those that did, was different to 2018. Only 14% of at-risk gamblers experiencing one or more harm from their own gambling were classified as experiencing problem gambling risk, compared with 3% in the no harms group.

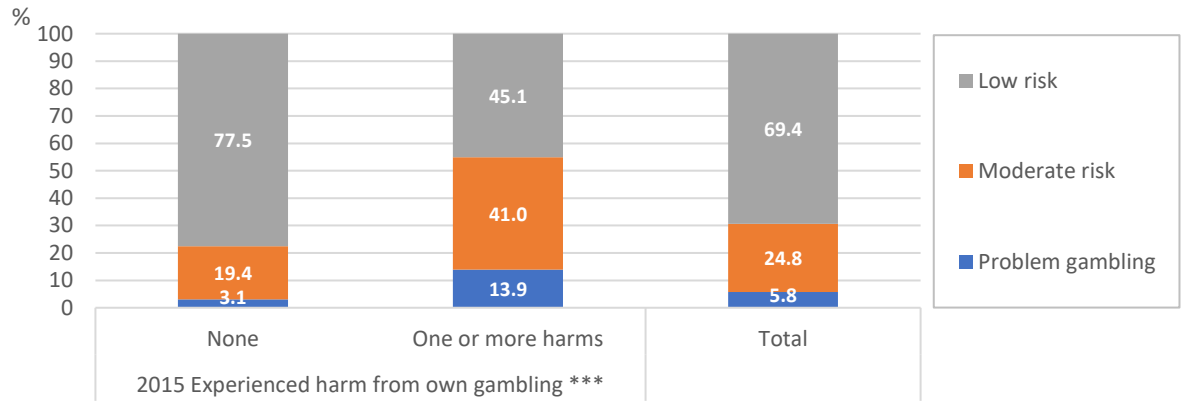


Figure 45: Experienced harm from own gambling by problem gambling risk, 2015 NT at-risk gamblers

Significant association between problem gambling risk and harm from own gambling:
*** p<0.001, ** p<0.01, * p<0.05

Table 31 shows population counts for problem gambling risk by harm from own gambling for at-risk gamblers. There were higher numbers of at-risk gamblers in all problem gambling risk categories in 2018, compared with 2015. Figure 46 shows the significant association between number of harms from own gambling and problem gambling risk for at-risk gamblers in 2018. Of those at-risk gamblers experiencing three or more harms, 61% were classified as experiencing problem gambling, compared to 11% in the one or two harms group. This shows that the PGSI does identify people who experience more harms form their own gambling, in addition to the clinical attributes that the PGSI measures (e.g. addictive behaviours such as chasing losses).

Table 31: PGSI by number of harms from of own gambling, at-risk gamblers

	2018 Experienced harm from own gambling ***			2015 Experienced harm from own gambling ***		
	No harms N	One or more harms N	Total N	No harms N	One or more harms N	Total N
Problem gambling	0	2,487	2,487	485	721	1,206
Moderate risk	2,082	4,345	6,426	3,009	2,120	5,128
Low risk	12,435	4,503	16,938	12,053	2,329	14,383
Total	**14,517**	**11,335**	**25,852**	**15,547**	**5,170**	**20,717**

Significant association between number of harms and PGSI: *** p<0.001, ** p<0.01, * p<0.05

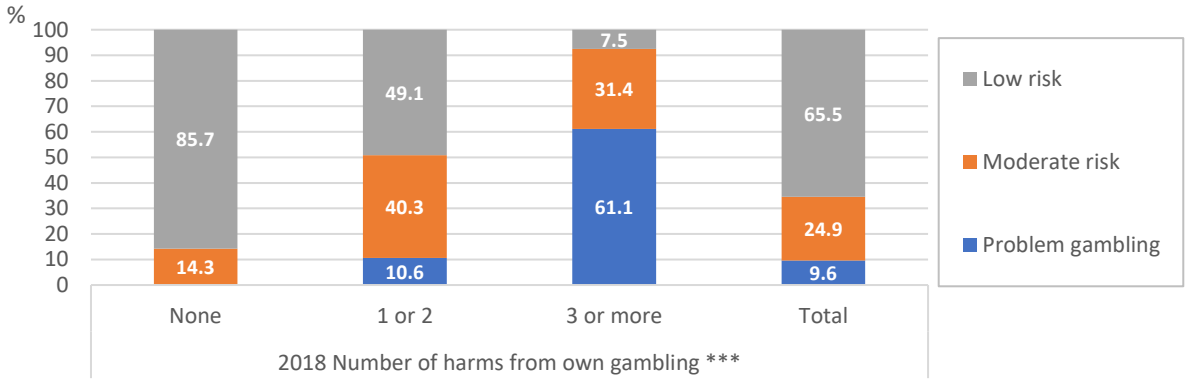


Figure 46: Number of harms from own gambling by problem gambling risk, 2018 at-risk gamblers

Significant association between problem gambling risk and harm from own gambling: *** p<0.001, ** p<0.01, * p<0.05

Figure 47 shows the distribution of problem gambling risk by number of harms from own gambling among at-risk gamblers in 2015. In 2015 23% of at-risk gamblers who identified three or more harms from their own gambling were experiencing problem gambling (compared with 61% in 2018), while 5% of those identifying one or two harms were classified as experiencing problem gambling.

Figure 47: Number of harms from own gambling by problem gambling risk, 2015 at-risk gamblers

Significant association between problem gambling risk and harm from own gambling: *** p<0.001, ** p<0.01, * p<0.05

Figure 48 flips the problem gambling risk and harms from own gambling around to what was seen in Figure 46. It shows that 37% of gamblers experiencing problem gambling identified one or two harms, compared with 55% of moderate risk gamblers

and 26% of low risk gamblers. So, all problem gamblers in 2018 identified at least one harm from their own gambling compared with 60% in 2015 (see Figure 49).

Figure 48: Problem gambling risk by number of harms from own gambling, 2018 at-risk gamblers

Significant association between problem gambling risk and number of harms from own gambling: *** p<0.001, ** p<0.01, * p<0.05

Figure 49 shows the same data as Figure 48, but for the 2015 survey. Interestingly, 40% of problem gamblers in 2015 identified no harms from their own gambling (compared with 0% in 2018), though the percentage of moderate and low risk gamblers experiencing no harm from their own gambling, showed the same trend and increase through problem gambling risk categories.

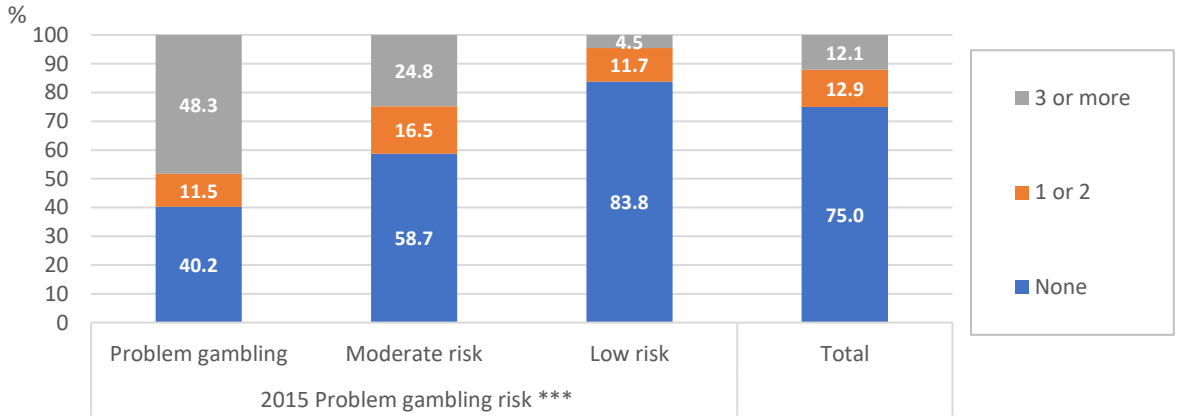


Figure 49: Problem gambling risk by number of harms from own gambling, 2015 NT at-risk gamblers

Significant association between problem gambling risk and number of harms from own gambling: *** p<0.001, ** p<0.01, * p<0.05

5.11.2 Harm from own gambling by type of gambling activity

Figure 50 shows significant associations between gambling activities and number of activities, and harm from own gambling for at-risk gamblers. Among at-risk gamblers, 64% of informal betting gamblers experienced harm from own gambling, compared with 44% among all at-risk gamblers. In descending order of the percentage experiencing harm from their own gambling, activities significantly associated with

harm were sports betting (61%), casino games (57%), racetrack betting (55%) and EGMs (54%). At-risk gamblers who gambled on five or more activities also has significantly increased risk of experiencing harm from their own gambling.

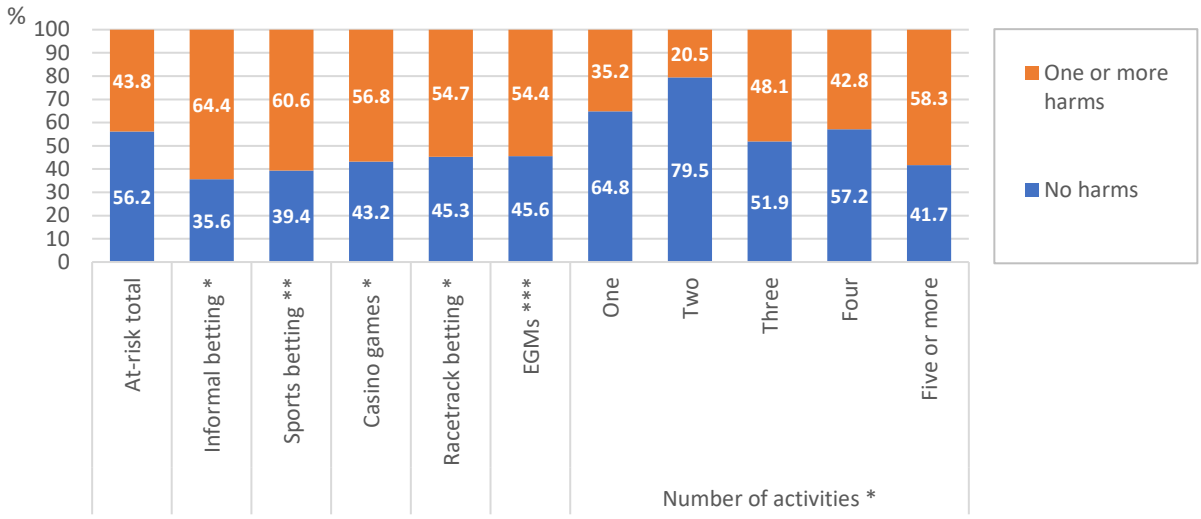


Figure 50: Participation in selected activities and number of activities by harm from own gambling, 2018 NT at-risk gamblers

Significant association between activity and harm from own gambling: *** p<0.001, ** p<0.01, * p<0.05

Figure 51 shows significant associations between number of harms from own gambling and type of gambling activity among at-risk gamblers. Racetrack betting (15%) and EGM (14%) gamblers were more likely to experience three or more harms than at-risk gamblers (10%), as well as one or two harms, while sports betting gamblers were more likely to experience one or two harms compared with other at-risk gamblers. At-risk gamblers gambling on five or more activities were also significantly more likely to experience three or more harms (16%) from their own gambling, and one or two harms (43%), compared with other at-risk gamblers (10% and 34% respectively).

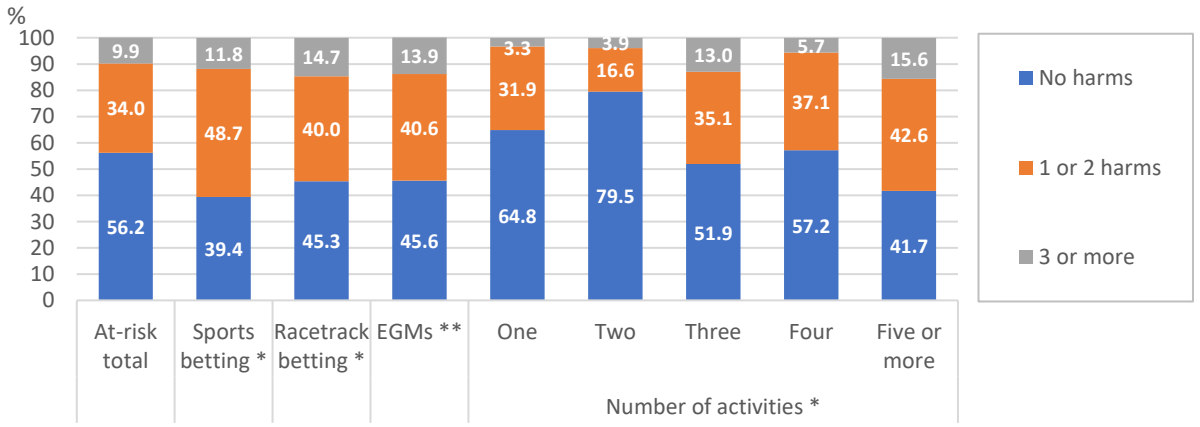


Figure 51: Participation in selected activities by number of harms from own gambling, 2018 NT at-risk gamblers

Significant association between activity and number of harms from own gambling: *** p<0.001, ** p<0.01, * p<0.05

5.11.3 Types of harms from own gambling and problem gambling risk

Figure 52 presents frequency of harms from own gambling for 2018 at-risk gamblers (N=25,822), while Table 32 contains population counts for the different harms. Three of the top five harms from own gambling were emotional/psychological with nearly a quarter (22%) of at-risk gamblers feeling shame or regret at least monthly, 10% feeling stressed or anxious at least monthly, and 6% feeling depressed at least monthly. Financial related harms were also prevalent, with 9% of at-risk gamblers raiding savings at least monthly, 4% borrowing money at least monthly, and 5% ran out of money for food at least monthly.

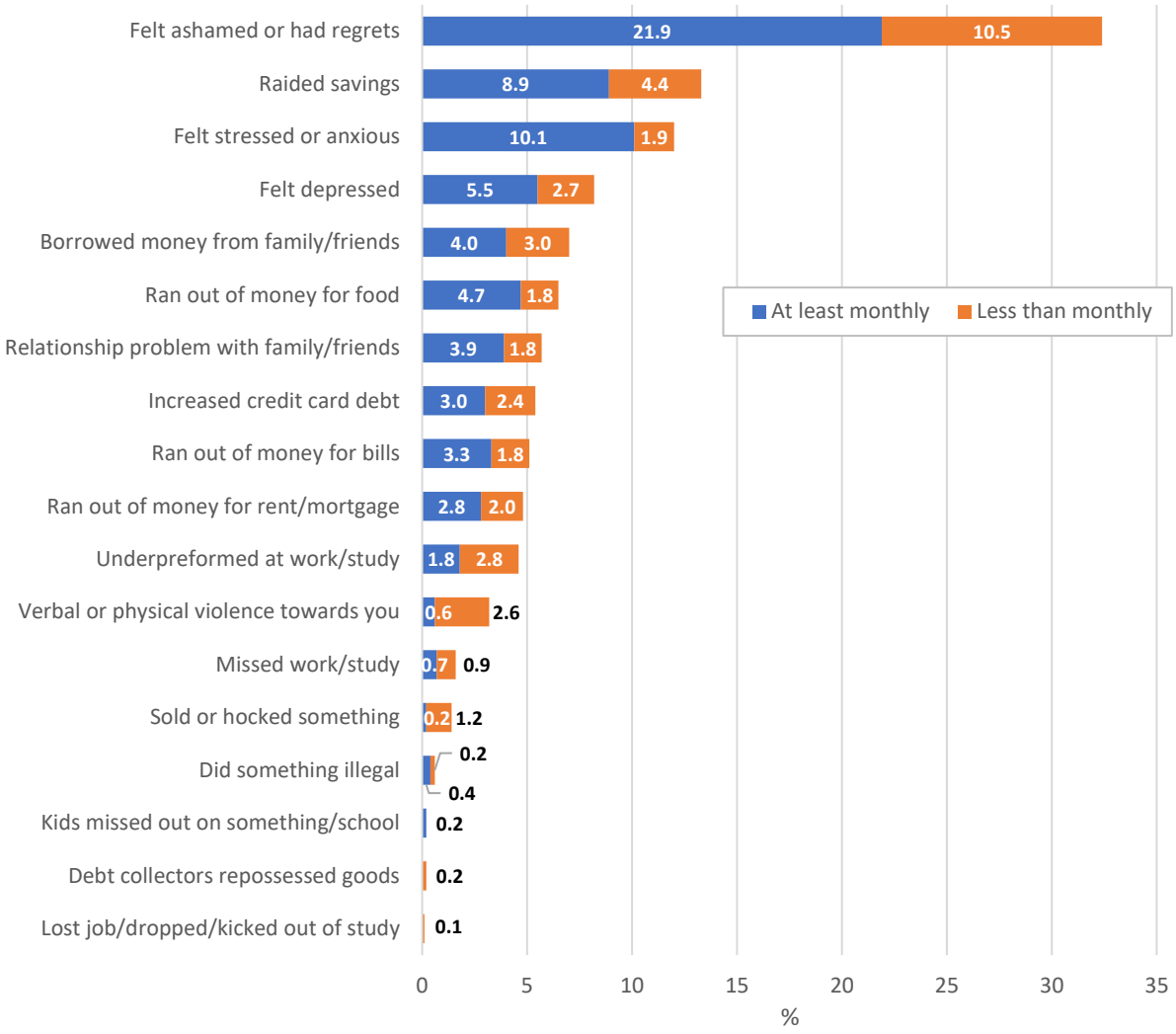


Figure 52: Type of harms from own gambling frequency, 2018 NT at-risk gamblers

Population counts of at-risk gamblers experiencing harm from their own gambling are shown in Table 32. More than 8,300 at-risk gamblers felt ashamed or had regrets, of which 5,600 were experiencing these feelings monthly or more. More than 2,000 at-risk gamblers raided their savings at least monthly, and over 2,500 reported feeling stressed or anxious at least monthly. More than 1,200 at-risk gamblers ran out of money for food at least monthly, while more than 1,000 reported relationship problems with family or close friends.

Table 32: Types of harms from own gambling frequency counts, 2018 NT at-risk gamblers

	At least Monthly N	Less than Monthly N	Did not experience harm N	Total at-risk N
Felt ashamed or had regrets	5,636	2,705	17,429	25,770
Raided savings	2,232	1,117	21,861	25,210
Felt stressed or anxious	2,570	491	22,276	25,337
Felt depressed	1,420	702	23,700	25,822
Borrowed money from family/friends	1,016	782	23,888	25,686
Ran out of money for food	1,202	476	24,143	25,821
Relationship problem with family/friends	1,011	451	24,257	25,719
Increased credit card debt	761	615	24,324	25,700
Ran out of money for bills	844	474	24,502	25,820
Ran out of money for rent	726	514	24,581	25,821
Underperformed at work/study	463	733	24,620	25,816
Verbal or physical violence towards you	162	671	24,989	25,822
Sold or hocked something	54	309	25,357	25,720
Missed work/study	176	231	25,444	25,851
Did something illegal	109	51	25,692	25,852
Kids missed out on something/school	54	-	25,667	25,721
Debt collectors repossessed goods	-	54	25,767	25,821
Lost job/dropped/kicked out of study	-	25	25,827	25,852

Table 33 shows the change between 2015 and 2018 in the percentage of at-risk gamblers identifying different types of harms from own gambling. This list does not include all the harms from Figure 52, as additional harms were asked in 2018 that could not be compared with 2015 data. As previously noted, there was a significant difference between the percentage of at-risk gamblers identifying at least one harm from their own gambling between 2015 (25%) and 2018 (44%). Only one other harm showed a significant change between 2015 and 2018, with at-risk gamblers less likely to identify that they had debt collectors repossess goods (3.3% in 2015 to 0.2% in 2018). Note that relative standard errors for many estimates in this table are greater than 30% and caution should be made in interpreting estimates.

Table 33: Harms experienced because of own gambling by year of survey, 2018 and 2015 NT at-risk gamblers

	Survey			
	2018 % (SE)	2015 % (SE)	2018 N	2015 N
One or more harms from own gambling ***	43.8 (3.7)	25.0 (3.9)	11,335	5,170
Raided savings accounts/funds	13.3 (1.9)	12.4 (2.5)	3,349	2,566
Felt stressed or anxious	12.1 (2.0)	11.9 (2.6)	3,061	2,475
Borrowed money from family or friends	7.0 (1.7)	**9.4 (3.1)**	1,798	1,957
Ran out of money for food	6.5 (1.8)	**6.4 (2.7)**	1,678	1,326
Relationship problems close friends or family	5.7 (1.7)	**7.8 (2.9)**	1,463	1,613
Ran out of money for other bills (e.g. electricity)	5.1 (1.4)	**8.8 (3.0)**	1,319	1,824
Work or study problems (e.g. absenteeism, lost job)	**5.1 (2.2)**	**4.9 (2.5)**	1,318	1,018
Ran out of money for rent/mortgage	**4.8 (1.6)**	**4.8 (2.5)**	1,240	1,002
Physical or verbal violence toward you	**3.2 (1.4)**	**2.7 (1.2)**	832	559

	Survey			
	2018 % (SE)	2015 % (SE)	2018 N	2015 N
Sold or hocked possessions	**1.4 (0.7)**	**2.1 (1.1)**	362	434
Did something outside the law/illegal	**0.6 (0.4)**	**0.5 (0.3)**	160	100
Debt collectors repossessed goods **	**0.2 (0.2)**	**3.3 (2.4)**	54	676
Children did not attend school/missed out on something	**0.2 (0.2)**	**1.3 (0.9)**	54	280

NOTES: Bolded estimates indicate relative standard error > 30% - caution interpreting
Significant difference between 2015 and 2018 in harm estimate: *** p<0.001, ** p<0.01, * p<0.05

Table 34 shows that unsurprisingly most harms were significantly associated with problem gambling risk. Note that bold font in this table indicates a relative standard error of greater than 30% of the estimate. People experiencing problem gambling were significantly more likely to endorse a harm than moderate or low risk gamblers. For example, 87% of problem gamblers endorsed feeling ashamed or anxious, compared with 52% and 17% of moderate and low risk gamblers. Problem gamblers were two to seven times more likely than moderate risk gamblers to endorse most harms.

Table 34: Type of harm by problem gambling risk, 2018 NT at-risk gamblers

	Problem gambling % (SE)	Moderate risk % (SE)	Low risk % (SE)	Total at-risk % (SE)
One or more harms ***	100.0 (0.0)	67.6 (5.9)	26.6 (4.1)	43.8 (3.7)
Felt ashamed or had regrets ***	86.7 (8.0)	52.0 (6.9)	17.1 (4.0)	32.4 (3.8)
Raided savings ***	44.2 (11.)	22.2 (4.9)	5.7 (1.6)	13.3 (1.8)
Felt stressed or anxious ***	61.3 (15.)	19.2 (5.1)	**2.3 (1.1)**	12.1 (2.0)
Felt depressed ***	44.4 (13.)	**13.2 (4.7)**	**1.0 (0.7)**	8.2 (1.6)
Borrowed money from family/friends ***	**32.5 (12.)**	**10.3 (4.1)**	**2.0 (0.9)**	7.0 (1.7)
Ran out of money for food ***	36.1 (11.)	**11.2 (4.7)**	**0.4 (0.3)**	6.5 (1.6)
Relationship problem with family/friends ***	**32.1 (13.)**	**9.0 (4.5)**	**0.6 (0.3)**	5.7 (1.7)
Increased credit card debt ***	**19.3 (8.9)**	**10.8 (4.6)**	**1.3 (0.6)**	5.4 (1.5)
Ran out of money for bills ***	**34.7 (13.)**	**5.2 (1.8)**	**0.7 (0.4)**	5.1 (1.4)
Ran out of money for rent ***	**27.4 (12.)**	**7.1 (4.3)**	**0.6 (0.4)**	**4.8 (1.6)**
Underperformed at work/study **	**11.6 (8.3)**	**12.6 (7.3)**	**0.6 (0.6)**	**4.6 (2.2)**
Verbal or physical violence towards you **	**11.6 (8.2)**	**7.9 (4.4)**	**0.2 (0.2)**	**3.2 (1.4)**
Missed work/study *	0.0 (0.0)	**6.3 (3.8)**	0.0 (0.0)	**1.6 (1.0)**
Sold or hocked something ***	**9.7 (7.3)**	**1.4 (0.9)**	**0.2 (0.2)**	**1.4 (0.7)**
Did something illegal	**2.2 (2.2)**	**0.8 (0.8)**	**0.3 (0.3)**	**0.6 (0.4)**
Debt collectors repossessed goods	**2.2 (2.2)**	0.0 (0.0)	0.0 (0.0)	**0.2 (0.2)**
Kids missed out on something/school	**2.2 (2.2)**	0.0 (0.0)	0.0 (0.0)	**0.2 (0.2)**
Lost job/dropped/kicked out of study	0.0 (0.0)	**0.4 (0.4)**	0.0 (0.0)	**0.1 (0.1)**
Population (N)	**2,487**	**6,426**	**16,938**	**25,852**

NOTES: Bolded estimates indicate relative standard error > 30% - caution interpreting
Significant association between harm and PGSI: *** p<0.001, ** p<0.01, * p<0.05

5.13 Help-seeking behaviour amongst at-risk gamblers

Table 35 shows the percentage of risky, at-risk (one or more on the PGSI) and harmed gamblers that sought help for their gambling. Of all people who were asked the question (monthly EGM, regular and at-risk gamblers), 1.5% (480 from 33,000 people) sought help for their gambling. Among at-risk gamblers this increased to 1.9%, while

amongst those people who identified a harm from their own gambling, 4% sought help.

Table 35: Help-seeking behaviour, 2018 risky and at-risk gamblers

	Risky Gamblers[1] %	At-risk Gamblers %	Harmed from Own gambling %
Did not seek help	98.5	98.1	96.0
Did get help	1.5	1.9	4.0
Total	**100.0**	**100.0**	**100.0**
Population	33,022	25,852	11,335

[1] Risky gamblers = monthly EGM, regular and at-risk gamblers

Table 36 shows that people experiencing problem gambling were significantly more likely than moderate and low risk gamblers to seek help for their gambling problems. With 13% (320 people) of problem gamblers seeking help, compared with le4ss than 2% (110 people) for moderate risk and less than 0.5% (40 people) for low risk gambling.

Table 36: Help-seeking behaviour by problem gambling risk, 2018 at-risk gamblers

	Problem gambling % (SE)	Moderate risk % (SE)	Low risk % (SE)	Total % (SE)
Did not seek help	86.8 (6.5)	98.2 (0.9)	99.8 (0.2)	98.1 (0.7)
Sought help for own gambling problems	13.2 (6.5)	1.8 (0.9)	0.2 (0.2)	1.9 (0.7)
Total	**100.0**	**100.0**	**100.0**	**100.0**
Population (N)	2,487	6,426	16,938	25,852

Figure 53 shows the distribution of problem gambling risk by the number of people/ways that at-risk gamblers sought help, with this association being significant. Encouragingly, it shows that most of the people seeking help were at-risk gamblers experiencing problem or moderate risk gambling.

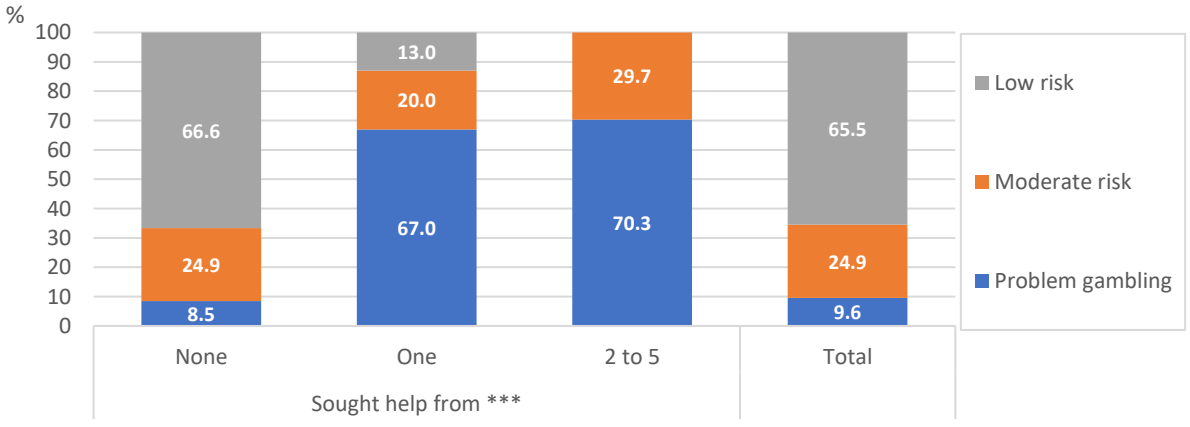


Figure 53: Number of people/ways sought help for gambling by problem gambling risk, 2018 NT at-risk gamblers

Significant association between problem gambling risk and number of harms from own gambling: *** p<0.001, ** p<0.01, * p<0.05

Table 37 lists the types of help at-risk gamblers sought, and the percentage of at-risk gamblers using that form of help. Only 1.9% (470) at-risk gamblers sought help, with the

most common type of help being gambling counsellor (40%), followed by internet online help (25%), local doctor (21%), police (20%), social worker/psychologists (14%), gambling helpline (14%), and family member (12%).

Table 37: Type of help-seeking behaviour, 2018 at-risk gamblers who sought help

Type of help	%
Gambling counsellor	39.6
Internet online help	24.6
Local doctor	20.8
Police	19.5
Social worker/psychologists	14.4
Gambling helpline	13.9
Family member	11.5
Spouse or partner	8.8
Other help: Life-Line	7.9
Church/religious worker	5.1
Friends	2.4
Population who sought help (N)	**470**

5.14 Problem gambling risk by harm from someone else's gambling

The survey also asked respondents whether they had been negatively affected by someone else's gambling in the last year. The questions on types of negative consequences from another person's gambling are analysed more thoroughly in chapter 7. Figure 54 shows a significant association between problem gambling risk among NT gamblers and being harmed by someone else's gambling. Problem gambling prevalence was 3.7% for people harmed from someone else's gambling, compared with 1.7% in those not harmed (and 1.9% for all gamblers), while moderate risk gambling was 14% for those harmed by another person's gambling, compared with 4% in those not harmed. Low risk gambling (21%) was also higher for those harmed from someone else's gambling, compared with those not harmed (12%). Not shown, but this association was not significant in 2015.

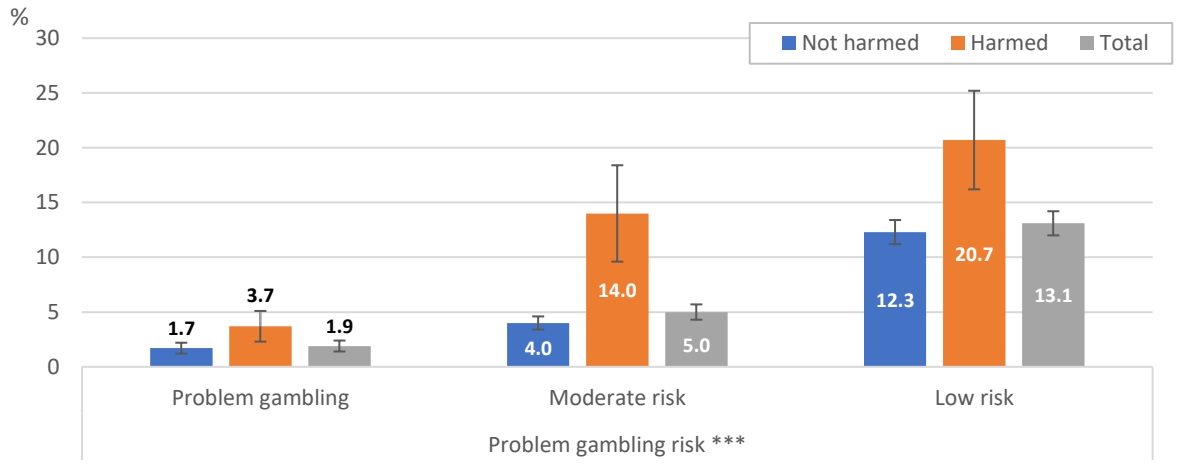


Figure 54: Negative consequences from someone else's gambling by PGSI, 2018 NT gamblers

Significant association between problem gambling risk and number of harms from someone else's gambling: *** p<0.001, ** p<0.01, * p<0.05

6 AT-RISK GAMBLERS: ATM ACCESS, STAFF APPROACHES AND SELF-EXCLUSION

6.1 Background

The data in this section was asked of gamblers who were (i) classified as at-risk (i.e. PGSI score of one or more), (ii) regular gamblers (weekly gamblers excluding lotto and instant scratch ticket gambling), and (iii) monthly or more EGM gamblers. These three groups of gamblers are at higher risk of experiencing problem gambling and data on ATM access and staff approaches to gamblers and experience of self-exclusion are cross tabulated against these three variables to highlight differences.

6.1.1 Chapter contents

Specifically, this chapter presents:

- The percentage of risky gamblers that access an ATM while in a gambling session by problem, regular, monthly EGM gambling and socio-demographic factors.
- Staff interactions checking on gamblers wellbeing by problem gambling risk.
- Experience of self-exclusion by problem gambling risk.

6.2 Chapter highlights

- Nearly all (95%) of gamblers experiencing problem gambling accessed an ATM while in a gambling session, compared with 75% of moderate risk and 46% of low risk and non-risk gamblers.
- Weekly (89%), monthly (70%) and less than monthly (78%) EGM gamblers were significantly more likely to access an ATM throughout a gambling session, compared with non-EGM gamblers (28%).
- Across at-risk, regular and monthly EGM gamblers, 6% were approached by a staff member of a venue or betting company to check on them and their gambling.
- Being approached by a staff member about gambling varied significantly across problem gambling risk groups, with 22% of gamblers experiencing problem gambling being approached by a staff member, compared with 3, 4 and 7% of moderate risk, low risk and non-risk gamblers respectively.
- Regular (weekly excluding lotto and instant scratch tickets) gamblers (10%) were also more likely to be approached by a staff member to check on their gambling, compared with non-regular gamblers (3%).
- Around 1% (or 400) of gamblers asked to be self-excluded from a venue or betting site, compared with over 2,700 gamblers being classified as experiencing problem gambling.
- All gamblers who asked to be self-excluded achieved this goal and noted that it had helped them with their gambling problems.

6.3 In-venue ATM access by problem, regular and monthly EGM gambling

In-venue ATM access for gambling was not significantly associated with region, sex and age and are not presented. Figure 55 shows a significant association between problem gambling risk and accessing an ATM for gambling while in a venue. The chance of someone accessing an ATM while gambling in a venue increased with problem gambling risk, with 98% of problem gamblers accessing an ATM while gambling in a venue, compared with 75%, 46%, and 46% for moderate, low and non-risk gamblers.

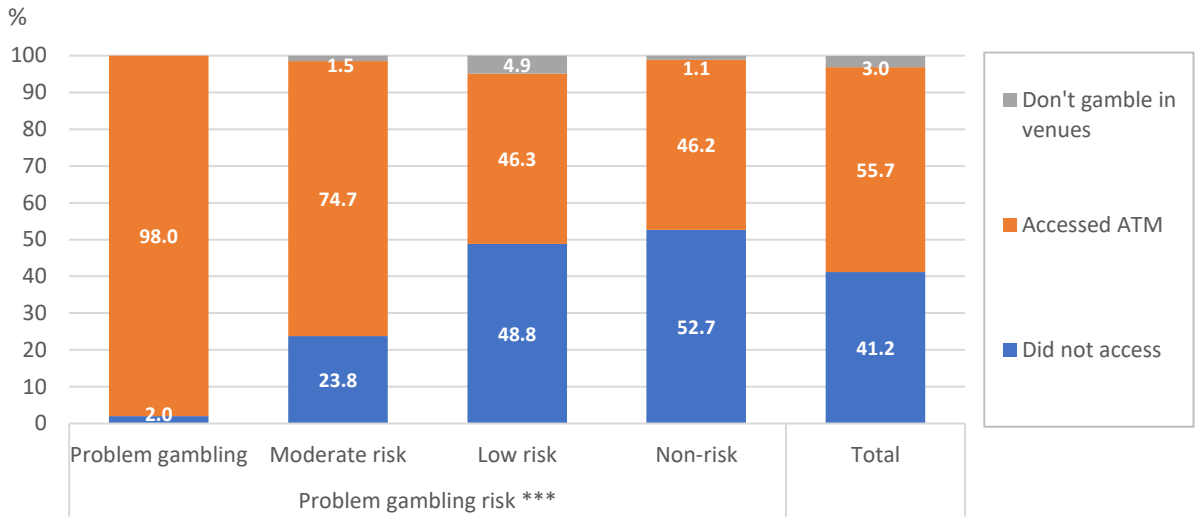


Figure 55: Problem gambling risk by in-venue ATM access for gambling, at-risk, monthly EGM and regular gamblers

*** p<0.001, ** p<0.01, * p<0.05: Significant association between accessing an ATM and PGSI

Figure 56 shows the marginally non-significant association between accessing an ATM and regular gambler status. Regular gamblers (61%) were more likely to access an ATM while gambling compared with non-regular gamblers (53%). Non-regular gamblers (4.2%) were more likely to not gamble in a venue, compared with regular gamblers (0.9%).

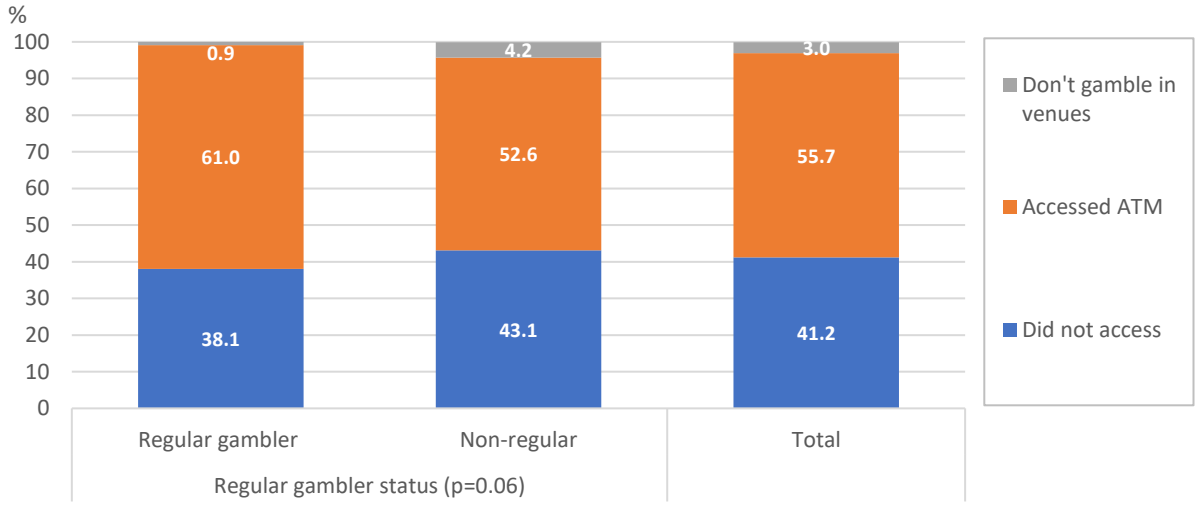


Figure 56: Regular gambler status by in-venue ATM access for gambling, at-risk, monthly EGM and regular gamblers

*** p<0.001, ** p<0.01, * p<0.05: Significant association between accessing an ATM and regular gambler

Figure 57 shows the significant association between EGM gambling frequency and ATM access for gambling. Weekly (89%), monthly (70%) and less than monthly (78%) EGM gamblers were more likely to access an ATM for gambling while in a venue compared with non-EGM gamblers (28%). Weekly EGM gamblers were the most likely to access an EGM for gambling while in a venue.

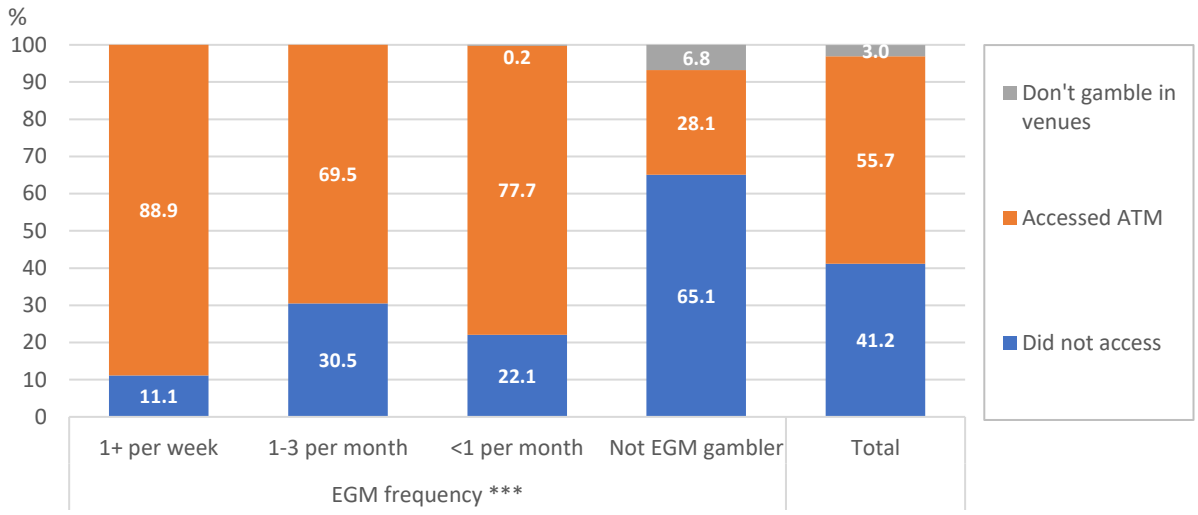


Figure 57: EGM frequency by in-venue ATM access for gambling, at-risk, monthly EGM and regular gamblers

*** p<0.001, ** p<0.01, * p<0.05: Significant association between accessing an ATM and EGM frequency

Problem gambling risk was significantly associated with the number of times a gambler accessed an ATM for gambling (Figure 58). Problem (45%) and moderate risk (62%) gamblers were more likely to access an ATM two or more times for gambling, compared with low (30%) and non-risk (7%) gamblers. ATM access did not vary significantly by region, gender or age.

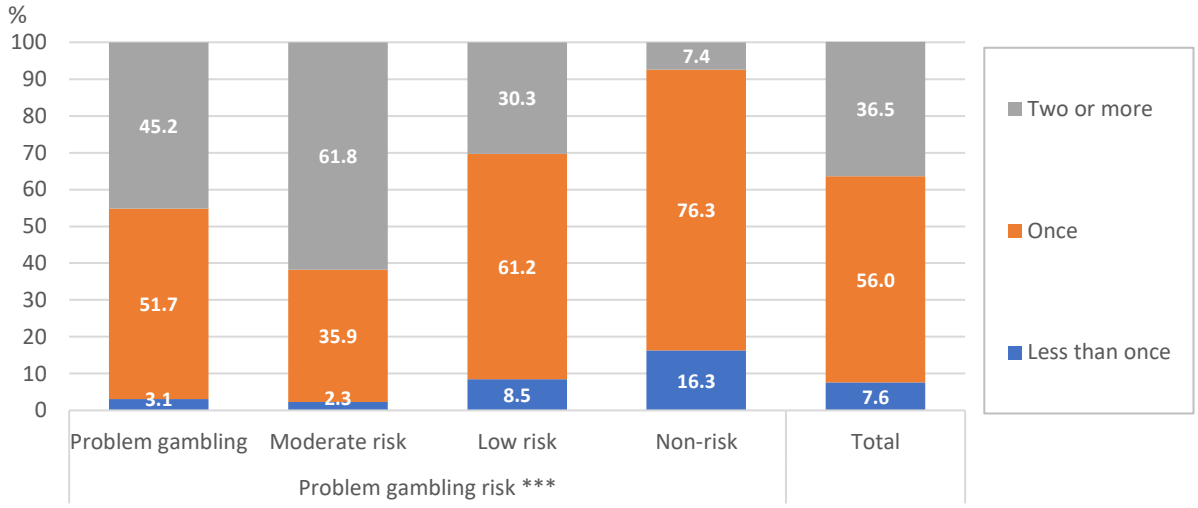


Figure 58: Problem gambling risk by number of times access an ATM for gambling, at-risk, monthly EGM and regular gamblers

*** p<0.001, ** p<0.01, * p<0.05: Significant association between accessing an ATM and problem gambling risk

Figure 59 shows there was no significant difference between regular and non-regular gamblers in the number of times they accessed an ATM for gambling in a session.

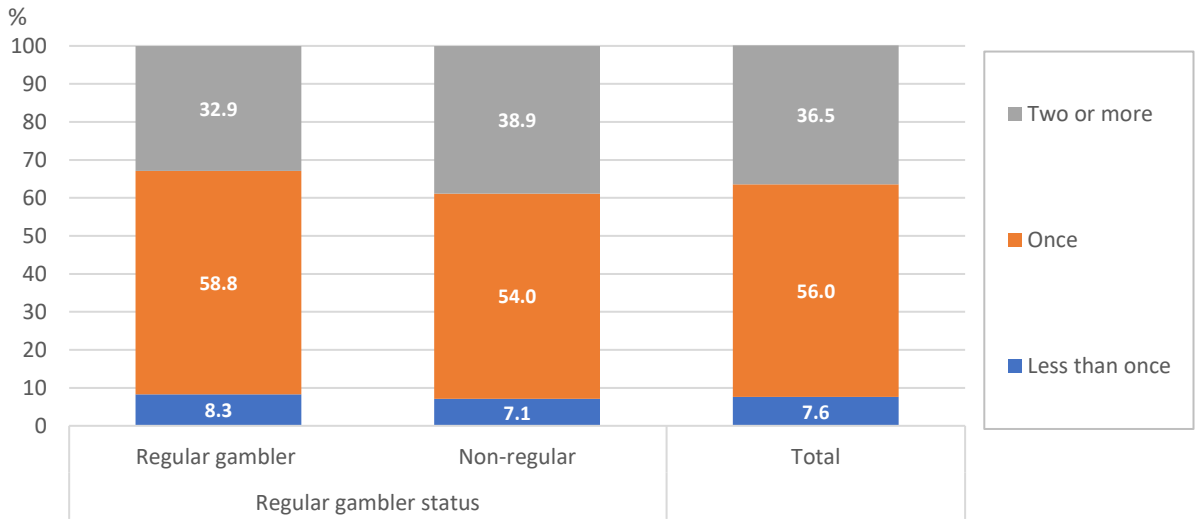


Figure 59: Regular gambling status by number of times access an ATM for gambling, at-risk, monthly EGM and regular gamblers

*** p<0.001, ** p<0.01, * p<0.05: Significant association between accessing an ATM access and regular gambling

Figure 60 shows that EGM gambling frequency was significantly associated with the average number of times an ATM was accessed while gambling. Weekly EGM gamblers (45%) and less than monthly EGM gamblers (45%) were more likely to access an ATM two or more times compared with 1-3 times per month EGM gamblers (20%) and non-EGM gamblers (31%).

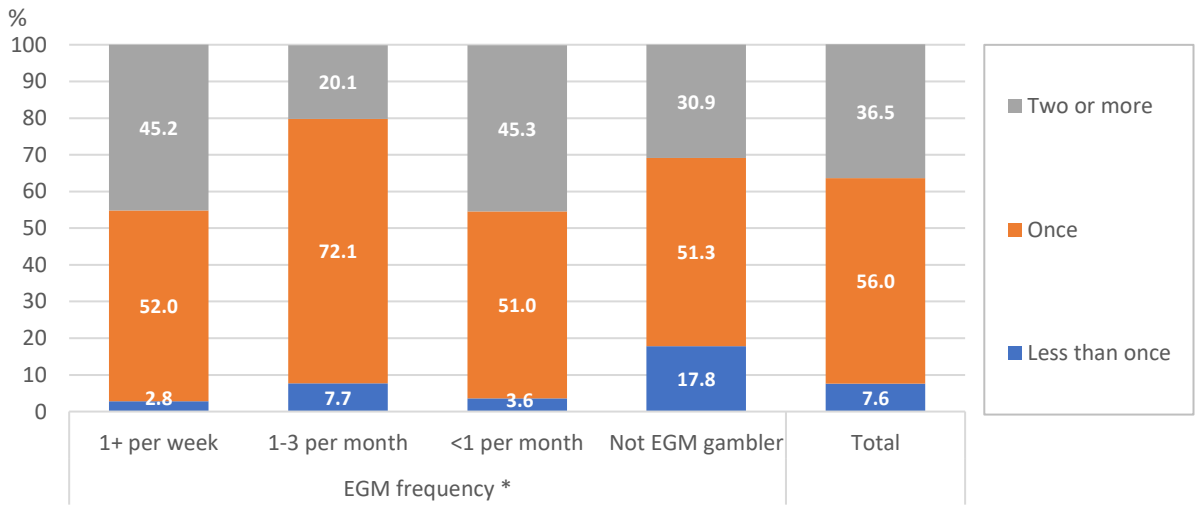


Figure 60: EGM gambling frequency by number of times access an ATM for gambling, at-risk, monthly EGM and regular gamblers

*** p<0.001, ** p<0.01, * p<0.05: Significant association between number of times accessed an ATM and EGM gambling frequency

6.4 In-venue ATM access by socio-demographic factors

Figure 61 shows there was a marginally non-significant association between region and number of times accessing an ATM for gambling. Gamblers living in Alice Springs

(53%) and Regional Towns (51%) were more likely to access an ATM two or more times in a gambling session, compared with Darwin/Palmerston (28%) and Rest of NT (19%).

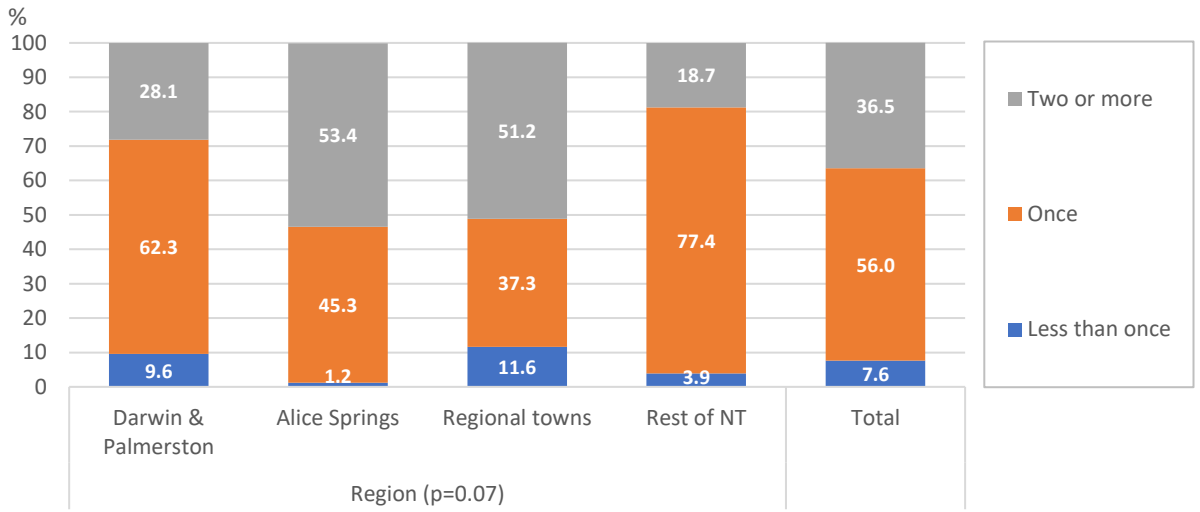


Figure 61: Region by number of times access an ATM for gambling, at-risk, monthly EGM and regular gamblers

*** p<0.001, ** p<0.01, * p<0.05: Significant association between accessing an ATM access and EGM gambling frequency

There was a significant difference between males and females in the number of times they accessed an ATM for gambling, with 49% of females accessing an ATM two or more times, compared with 29% for males (Figure 62). There was no significant variation across age groups.

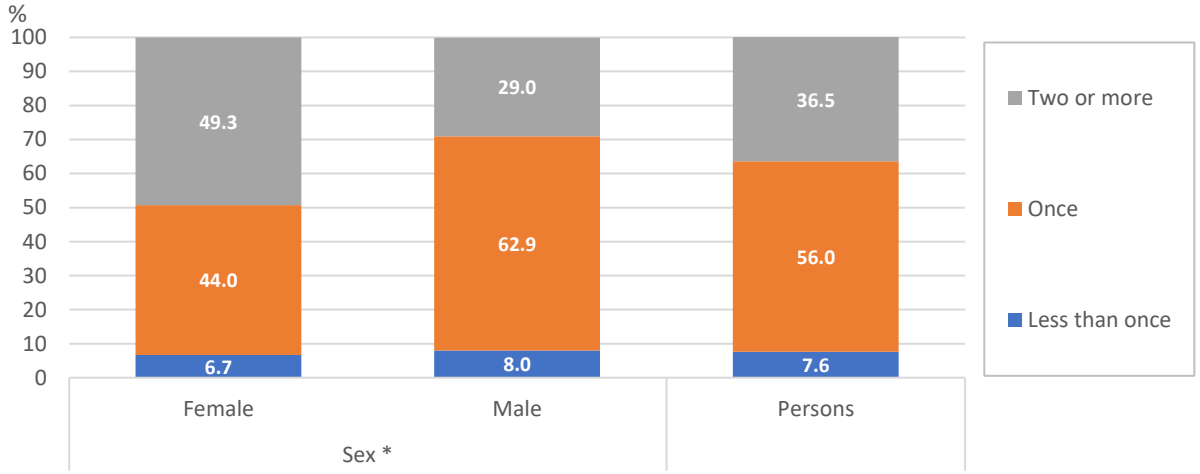


Figure 62: Sex by number of times access an ATM for gambling, at-risk, monthly EGM and regular gamblers

*** p<0.001, ** p<0.01, * p<0.05: Significant association between accessing an ATM access and EGM gambling frequency

6.5 Staff approaches about gambling by problem gambling risk

Figure 63 shows there was a significant difference across problem gambling risk categories in the percentage reporting being spoken to by a staff member of a gambling venue or betting company about their gambling. Problem gamblers (22%)

were more likely to be spoken to by a staff member compared with all other risk categories (all less than or equal to 7%).

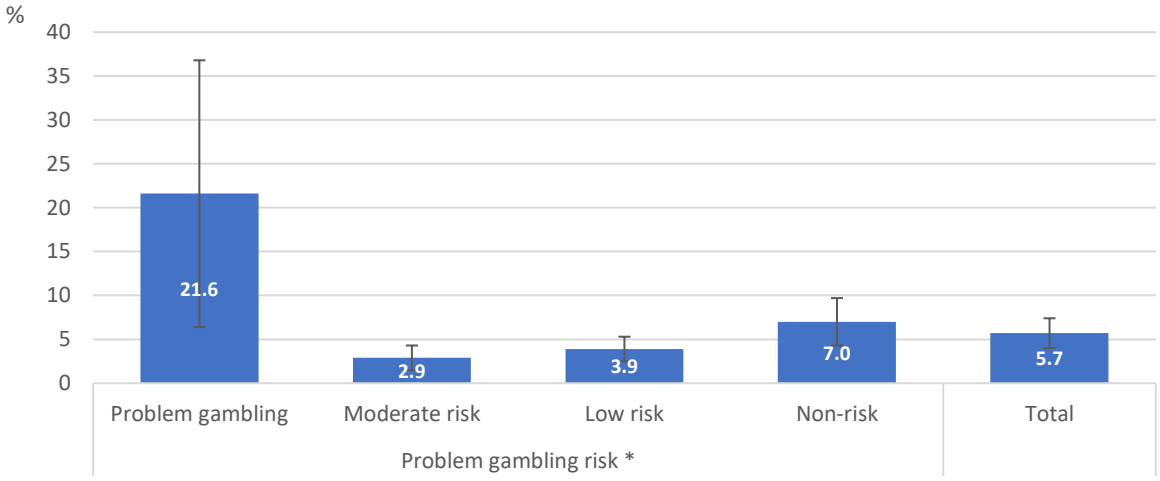


Figure 63: Problem gambling risk by staff spoken to about gambling, at-risk, monthly EGM and regular gamblers

*** p<0.001, ** p<0.01, * p<0.05: Significant association between accessing problem gambling risk and being spoken to by staff about gambling
NOTE: Relative standard errors >30% - Caution interpreting estimates

Figure 64 shows that regular gamblers (10%) were significantly more likely to be spoken to by a staff member about their gambling, compared with non-regular gamblers (3%).

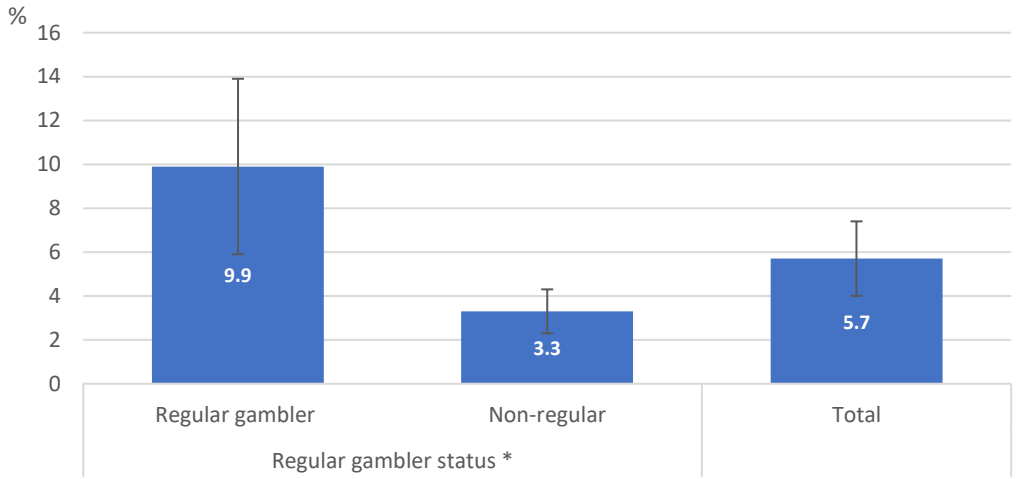


Figure 64: Regular gambling by staff spoken to about gambling, at-risk, monthly EGM and regular gamblers

*** p<0.001, ** p<0.01, * p<0.05: Significant association between accessing regular gambling and being spoken to by staff about gambling
NOTE: Relative standard errors >30% - Caution interpreting estimates

EGM gambling frequency was significantly associated with being spoken to by a staff member about their gambling, with 24% of weekly gamblers spoken to, compared with 10.5% for monthly, 2.7% for less than monthly and 1.3% for non-EGM gamblers (Figure 65).

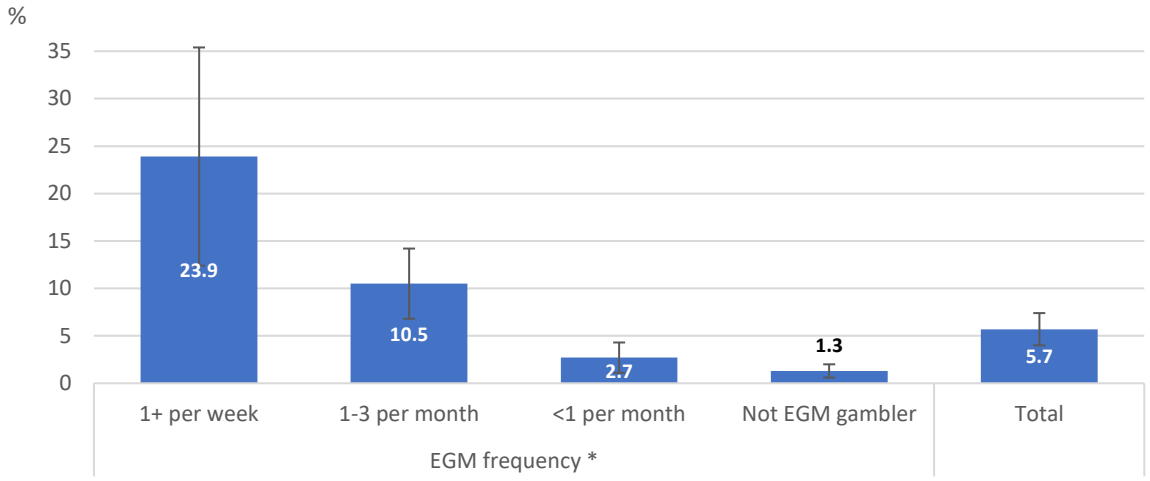


Figure 65: EGM gambling frequency by staff spoken to about gambling, at-risk, monthly EGM and regular gamblers

*** p<0.001, ** p<0.01, * p<0.05: Significant association between accessing EGM gambling frequency and being spoken to by staff about gambling
NOTE: Relative standard errors >30% - Caution interpreting estimates

Figure 66 shows there was significant variation across regions for being spoken to by a staff member about gambling, with it being lowest in regional Towns (1%) and highest in Rest of NT (26%), though these regional estimates do have large relative standard errors, so some care should be made in using point estimates. There were no significant association for age and sex and being spoken to by a staff member about gambling.

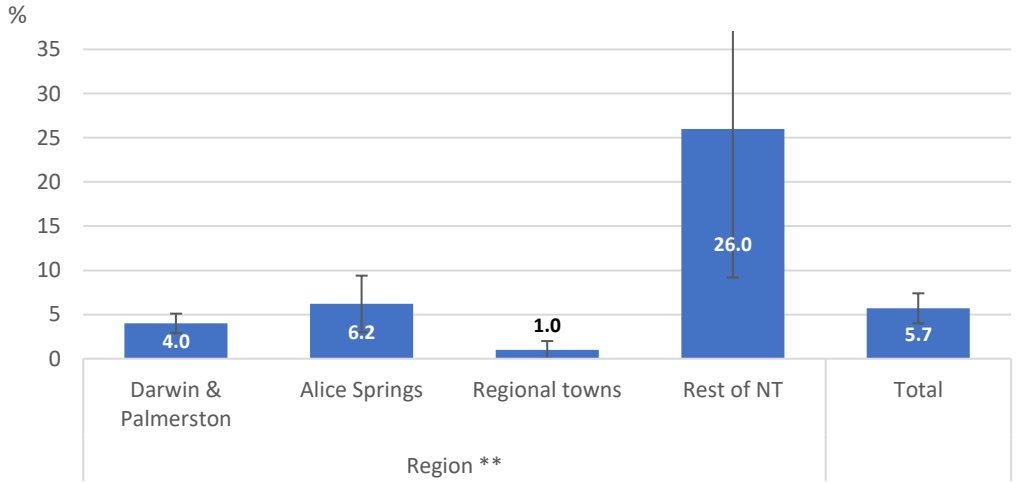


Figure 66: Region by staff spoken to about gambling, at-risk, monthly EGM and regular gamblers

*** p<0.001, ** p<0.01, * p<0.05: Significant association between region and being spoken to by staff about gambling
NOTE: Relative standard errors >30% - Caution interpreting estimates

6.6 Self-exclusion by problem gambling risk

Across the NT 1.2% (about 380 people) of at-risk, monthly or more EGM and regular gamblers asked to be self-excluded from gambling (Figure 67). This varied significantly across problem gambling risk categories, with 12% of problem gamblers asking to be self-excluded, compared with 1.3% for moderate risk gamblers and none in low and

non-risk gamblers. There was no variation in self-exclusion by EGM gambling frequency, regular gambler status, region, sex or age. Of those people who asked to be self-excluded, all indicated that they were successful in self-excluding and that it had helped reduce their gambling problems.

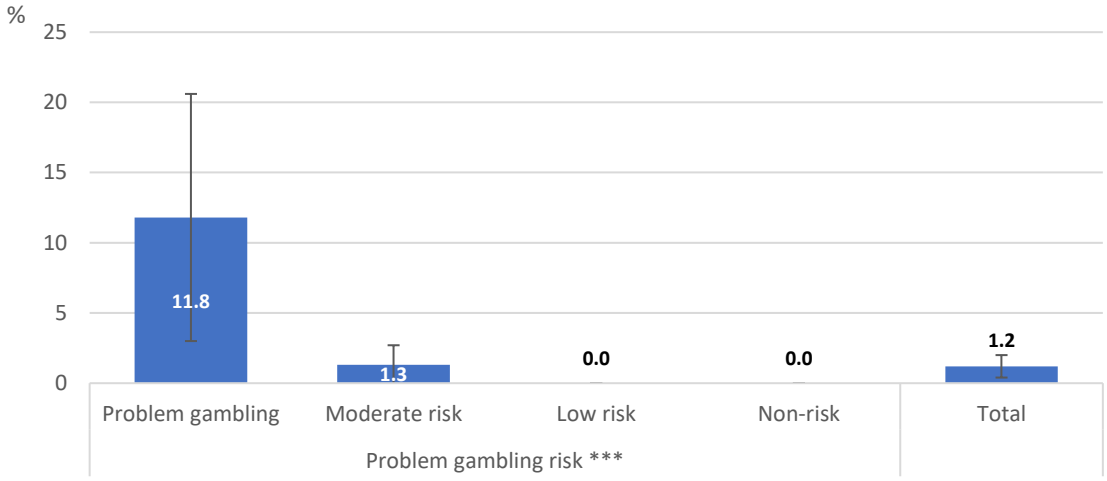


Figure 67: Problem gambling risk by asked to be self-excluded from gambling, at-risk, monthly EGM and regular gamblers

*** p<0.001, ** p<0.01, * p<0.05: Significant association between problem gambling risk and being spoken to by staff about gambling
NOTE: Relative standard errors >30% - Caution interpreting estimates

7 HARMS FROM SOMEONE ELSE'S GAMBLING

7.1 Background

This chapter presents information on negative consequences (harms) experienced because of someone else's gambling. The 2015 NT Gambling Prevalence and Wellbeing Survey was the first population prevalence survey in Australia to collect information on harms from someone else's gambling, and the 2018 survey has used a slightly amended list of harms, and also asked people how frequently they experienced these harms (using the same scale as gambling participation). This survey asked NT adults whether, in the last 12 months, they had been negatively affected by someone else's gambling and then asked how frequently the following harms occurred (see Appendix for exact survey question). Information was also collected on the relationship to the person whose gambling was affecting them, the main type of gambling (up to two) causing the problems, and whether they sought help and from who or where.

7.1.1 Chapter contents

Specifically, this chapter presents:

- The percentage of the adult population who said they were negatively affected by someone else's gambling for the NT (by 2015 and 2018), regions, demographic and socioeconomic variables and health risk factors.
- The percentage of the adult population who said they were negatively affected by someone else's gambling by participation in gambling activities.
- The percentage of the adult population who said they were negatively affected by someone else's gambling by problem gambling risk.
- The types of negative consequences experienced because of someone else's gambling by sex, frequency of occurrence and by 2015 and 2018.
- The relationship to the person whose gambling was negative affecting them, the type of gambling they were doing, and the type of help-seeking behaviour sought by those affected.
- Negative consequences from another person's gambling by participation in different gambling activities.

7.2 Chapter highlights

- Eight percent of adults in the NT experienced at least one negative consequence because of another person's gambling in the year before the survey, which equates to just over 14,500 people. This was significantly less than the 13% of adults who said they were negatively affected by someone else's gambling in 2015.
- Socio-demographic characteristics significantly associated with increased risk of experiencing negative consequences because of another person's gambling were region (highest in Regional Towns at 18% and Alice Springs at 12%), and Indigenous status (17%). No socioeconomic variables had a significant association.
- Health risk factors significantly associated with increased risk of being negatively affected by someone else's gambling were poor self-assessed health (14%), daily smoking (14%), running out of money for essentials in the last year (13%), illicit drug use (11%), and domestic or family violence (18%).

- EGM gambling was the only gambling activity significantly associated with being negatively affected by someone else's gambling, with 14% of EGM gamblers negatively affected, compared with 7% of non-EGM gamblers.
- Problem gambling risk was significantly associated with being negatively affected from someone else's gambling, with 18%, 27% and 15% of problem, moderate and low risk gambling groups being affected respectively, compared with 7% and 5% among non-problem and non-gamblers respectively.
- Negative consequences experienced by respondents because of someone else's gambling from most to least common were feeling stressed or anxious (4% or 7,250 people, of which it was weekly for 2,300 people), relationship problems with family or friends (4% people, of which it was weekly for 2,050 people), running out of money for rent/mortgage (3% or 5,000 people, of which it was weekly for 1,300 people), running out of money for bills (3%), borrowing money from family or friends (3%), feeling ashamed or regretful (2.5% or 4,500 people, of which it was weekly for 1,400 people), and running out of money for food (2% of which it was weekly for 1,100 people).
- The person whose gambling negatively affected the respondent was most commonly the friend (23%), followed by parent (15%), spouse (12%), ex-partner (10%), brother/sister (8%), son/daughter (6%), colleague (5%), then other family member (4%).
- Twenty-one percent of people negatively affected by someone else's gambling sought help, with most people talking to a friend (11%). Women were more likely to seek out help and were significantly more likely than men to speak with a social worker/psychologist (14% *cf*. 1%), a general practice doctor (11% *cf*. 0%), police (7% *cf*. 0%), internet help (5% *cf*. 0.4%), and a gambling counsellor (2.4% *cf*. 0.2%).

7.3 Harms from another person's gambling, 2015 and 2018

There was a significant decrease in the percentage of people indicating that someone else's gambling had negatively affected them from 13% in 2015 to 8% in 2018 (Table 38). This represented 14,500 NT adults being negative affected by someone else's gambling in 2018.

Table 38: Number of harms experienced because of someone else's gambling by time, 2015 and 2018 NT adult population

	Survey ***			
	2018	**2015**	**2018**	**2015**
None	91.9 (0.9)	87.0 (2.2)	165,647	153,832
One or two	3.3 (0.6)	8.7 (2.2)	5,914	15,401
Three or more	4.8 (0.7)	4.3 (0.8)	8,608	7,633
Total	**100.0**	**100.0**	**180,169**	**176,866**
One or more *	8.1 (0.9)	13.0 (2.2)	14,521	23,034

*** p < 0.001, ** p < 0.01, * p < 0.05: Significant difference between harms distribution, 2015 to 2018

Figure 68 shows the percentage of adults negatively affected by another person's gambling in the NT by region for 2015 and 2018. The variation across regions was significant in the 2018 survey, but not in 2015, though the trend for 2015 mirrors the 2018 trend, albeit with a higher percentage harmed in each region. In 2018, people living in Regional Towns (18%) and Alice Springs (12%) were more likely to be harmed from someone else's gambling than people living in Darwin/Palmerston (6%) and Rest of NT (6%).

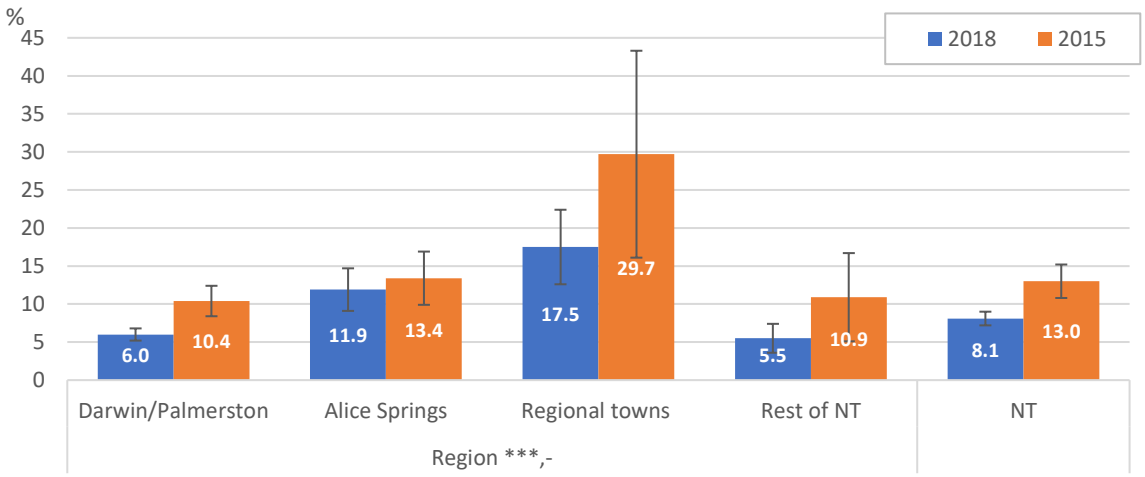


Figure 68: Harmed by someone else's gambling by region and time, 2015 and 2018 NT adult population

*** p < 0.001, ** p < 0.01, * p < 0.05: Significant association between harm and region, 2015 and 2018

7.4 Harms from someone else's gambling by socio-demographic characteristics

Table 39 shows the association between socio-demographic variables and number of harms from someone else's gambling. Region and Indigenous status were the only variables with a significant association with number of harms from someone else's gambling. The percentage harmed from someone else's gambling was significantly higher in Regional Towns and Alice Springs, compared with Darwin/Palmerston and Rest of NT, and a higher percentage of people endorsed three or more harms from

the list. Indigenous respondents (16.5%) were more likely to be harmed from someone else's gambling than non-Indigenous respondents (5.3%).

Table 39: Number of harms from someone else's gambling by socio-demographic variables, 2018 NT adult population

	Number of harms			
	None % (SE)	1 or 2 % (SE)	3 or more % (SE)	Population N
NT	91.9 (0.9)	3.3 (0.6)	4.8 (0.7)	180,168
Region **				
Darwin/Palmerston	94.0 (0.8)	2.2 (0.4)	3.9 (0.8)	113,255
Alice Springs	88.1 (2.8)	5.5 (2.0)	6.3 (2.0)	28,924
Regional towns	82.5 (4.9)	7.6 (3.6)	9.8 (3.9)	18,254
Rest of NT	94.5 (1.9)	2.4 (1.2)	3.1 (1.4)	19,734
Age				
18-29	90.1 (2.7)	3.8 (1.7)	6.1 (2.1)	39,493
30-39	92.3 (2.0)	1.9 (1.1)	5.8 (1.7)	45,783
40-49	91.8 (1.6)	3.7 (1.1)	4.6 (1.2)	37,817
50-64	93.1 (1.1)	3.7 (0.8)	3.2 (0.8)	39,964
65 or more	93.0 (1.8)	3.8 (1.5)	3.2 (1.1)	17,110
Sex				
Female	91.7 (1.1)	2.6 (0.5)	5.6 (1.0)	87,676
Male	92.1 (1.4)	3.9 (1.0)	4.0 (1.0)	92,491
Indigenous status ***				
Non-Indigenous	94.7 (0.7)	2.3 (0.4)	3.1 (0.6)	136,176
Indigenous	83.5 (2.8)	6.5 (2.0)	10.0 (2.2)	43,991
Language spoken at home				
English	91.8 (1.0)	3.3 (0.6)	4.9 (0.8)	163,233
Not English	93.0 (2.4)	3.0 (1.5)	4.0 (1.9)	16,781
Household type				
Couple with children	93.2 (1.5)	3.4 (1.1)	3.4 (1.0)	62,985
Couple with no children	93.7 (1.8)	1.5 (0.6)	4.8 (1.7)	44,953
Single parent with children	88.8 (3.8)	6.3 (3.6)	4.9 (1.6)	13,396
Single person	90.9 (2.0)	4.4 (1.2)	4.7 (1.7)	28,635
Group	89.7 (2.7)	4.2 (1.4)	6.2 (2.3)	22,669
Other	87.0 (4.9)	0.9 (0.7)	12.1 (4.8)	7,529

*** p < 0.001, ** p < 0.01, * p < 0.05: Significant association between socio-demographic variable and number of harms

No socioeconomic variables were significantly associated with number of harms from someone else's gambling, so no data for these associations are presented.

7.5 Harms from another person's gambling by health risk factors

Table 36 shows associations between health and health risk factors, and the number of harms experienced because of another person's gambling. People who self-assessed the own health as poor (26%) or fair (11%) were significantly more likely to be harmed by someone else's gambling, and experience more harms than people reporting their health as good (5%) or excellent (6%). People who smoked daily (14%) were more likely to be harmed by someone else's gambling than never (6%) and ex-smokers (7%). People that had run out of money for essentials in the last 12 months

(13%) were significantly more likely to be harmed by someone else's gambling, compared with those who did not run out of money (7%).

Table 40: Number of harms because of someone else's gambling by health and health risk factors, 2018 NT adult population

	Number of harms				
	None % (SE)	1 or 2 % (SE)	3 or more % (SE)	One or more % (SE)	Population N
NT	91.9 (0.9)	3.3 (0.6)	4.8 (0.7)	8.1 (0.9)	180,168
Self-assessed health ***					
Excellent	94.1 (2.0)	3.7 (1.7)	2.2 (1.0)	5.9 (2.0)	29,108
Very good	91.2 (2.0)	2.1 (1.0)	6.7 (1.8)	8.8 (2.0)	52,608
Good	94.6 (0.9)	2.4 (0.6)	2.9 (0.7)	5.4 (0.9)	66,179
Fair/Poor	85.6 (2.8)	6.6 (2.0)	7.8 (2.1)	14.4 (2.8)	24,775
CAGE alcohol screen					
Drinks with no Problem	92.9 (1.0)	3.2 (0.7)	3.9 (0.7)	7.1 (1.0)	123,256
Alcohol problem	88.0 (2.9)	5.3 (2.0)	6.7 (2.3)	12.0 (2.9)	27,520
Does not drink alcohol	91.5 (2.3)	1.9 (0.8)	6.5 (2.2)	8.5 (2.3)	29,392
Smoking status **					
Never smoker	94.0 (1.2)	1.7 (0.6)	4.2 (1.0)	6.0 (1.2)	87,870
Ex-smoker	92.6 (1.5)	3.1 (1.0)	4.3 (1.1)	7.4 (1.5)	52,502
Daily Smoker	86.4 (2.4)	7.0 (1.7)	6.6 (1.8)	13.6 (2.4)	39,758
People smoke inside house					
Never	92.4 (0.9)	3.3 (0.6)	4.3 (0.7)	7.6 (0.9)	157,409
Sometimes	91.0 (3.1)	2.5 (1.2)	6.5 (2.9)	9.0 (3.1)	9,131
Most/All of the time	87.7 (4.4)	3.5 (1.8)	8.8 (4.1)	12.3 (4.4)	13,221
Kessler-5					
Low/No distress	92.6 (0.9)	3.1 (0.6)	4.3 (0.8)	7.6 (1.0)	153,478
High/very high distress	88.2 (2.9)	4.1 (2.0)	7.7 (2.2)	10.0 (2.2)	26,690
Last year financial stress **					
Had Money	92.6 (0.9)	3.4 (0.6)	4.0 (0.7)	7.4 (0.9)	157,629
Ran out of money	87.3 (2.9)	2.6 (1.2)	10.1 (2.7)	12.7 (2.9)	22,526
Illicit drug use *					
Did not use drugs illicitly	92.5 (1.0)	3.4 (0.7)	4.0 (0.7)	7.5 (1.0)	152,304
Used drugs illicitly	88.7 (2.6)	2.5 (0.7)	8.9 (2.6)	11.3 (2.6)	27,592
Type of illicit drug used					
Cannabis **	87.1 (3.0)	2.9 (0.8)	10.0 (2.9)	12.9 (3.0)	24,028
Legal drug illicitly	95.6 (3.5)	1.0 (0.7)	3.4 (3.4)	4.4 (3.5)	2,943
Methamphetamines ***	71.8 (14.)	1.9 (1.6)	26.2 (14.)	28.2 (14.)	3,581
Ecstasy	94.3 (2.6)	0.7 (0.5)	5.0 (2.5)	5.7 (2.6)	7,264
Cocaine	80.3 (8.1)	1.5 (1.0)	18.2 (8.1)	19.7 (8.1)	6,607
LSD/Mushrooms	93.9 (3.2)	2.4 (1.8)	3.7 (2.6)	6.1 (3.2)	3,405
Domestic/family violence ***					
None	94.1 (0.8)	3.2 (0.6)	2.8 (0.5)	5.9 (0.8)	149,355
Domestic/family violence	81.8 (3.6)	4.0 (1.7)	14.3 (3.2)	18.2 (3.6)	30,427

*** p<0.001, ** p<0.01, * p<0.05: Significant association between health risk factor and number of harms

Still referring to Table 36, using drugs illicitly was significantly associated with being harmed by someone else's gambling. Specifically, Illicit cannabis (13%) and methamphetamine (28%) use were significantly associated with being harmed by someone else's gambling. Lastly, respondents who had experienced domestic or

family violence in the last 12 months (18%) were significantly more likely to be harmed by someone else's gambling, compared with those who did not experience domestic or family violence (6%) (Table 36).

7.6 Harms from another person's gambling by gambling participation

Table 41 shows the association between number of harms from someone else's gambling by participation in different gambling activities, non-gambling, online gambling and regular gambling. Gambling on EGMs was the only activity significantly associated with being harmed by someone else's gambling, with 14% of EGM gamblers experiencing harm from someone else's gambling, compared with 5% for non-gamblers, and 10% for any gambling.

Table 41: Number of negative consequences because of someone else's gambling by gambling activity, 2018 NT adult population

	2018 Number of harms				
	None % (SE)	1 or 2 % (SE)	3 or more % (SE)	One or more % (SE)	Population N
NT	91.9 (0.9)	3.3 (0.6)	4.8 (0.7)	8.1 (0.9)	180,168
Non-gamblers	95.4 (1.4)	0.9 (0.5)	3.7 (1.3)	4.6 (1.4)	51,049
Online gambler	90.4 (3.1)	5.2 (2.5)	4.4 (2.0)	9.6 (3.1)	20,254
Regular gambler	90.6 (2.1)	5.4 (1.5)	4.0 (1.4)	9.4 (2.1)	22,964
Any gambling activity	90.6 (1.1)	4.2 (0.8)	5.2 (0.9)	9.4 (1.1)	129,119
EGMs **	86.3 (2.5)	6.4 (1.8)	7.4 (2.0)	13.7 (2.5)	41,245
Instant scratchies	88.1 (2.8)	4.8 (1.8)	7.1 (2.3)	11.9 (2.8)	29,314
Informal betting	88.5 (4.6)	3.5 (1.7)	8.0 (4.3)	11.5 (4.6)	5,957
Keno	89.6 (1.9)	4.8 (1.3)	5.5 (1.5)	10.4 (1.9)	46,141
Racetrack betting	89.7 (2.3)	3.8 (1.6)	6.6 (1.8)	10.3 (2.3)	33,261
Casino games	90.5 (3.2)	4.8 (2.6)	4.8 (2.1)	9.5 (3.2)	19,365
Raffles	90.5 (1.5)	3.9 (0.9)	5.6 (1.2)	9.5 (1.5)	66,412
Lotteries	90.8 (1.4)	4.7 (1.0)	4.6 (0.9)	9.2 (1.1)	87,812
Sports betting	92.9 (2.0)	4.0 (1.6)	3.1 (1.2)	7.1 (2.0)	15,246
Bingo	94.5 (3.1)	3.0 (2.3)	2.5 (2.1)	5.5 (3.1)	5,006
Other betting	95.2 (5.2)	0.0 (0.0)	4.8 (5.2)	4.8 (4.8)	636
Non-sports betting	100.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	1,259
Number of activities					
One	92.6 (1.8)	3.5 (1.4)	3.9 (1.1)	7.4 (1.8)	36,477
Two	92.1 (2.0)	3.9 (1.1)	4.0 (1.7)	7.9 (2.0)	30,331
Three	88.6 (2.6)	4.2 (1.4)	7.1 (2.3)	11.4 (2.6)	24,141
Four	85.9 (4.1)	5.6 (2.7)	8.5 (3.3)	14.1 (4.1)	18,376
Five or more	91.1 (2.7)	4.8 (2.5)	4.1 (1.2)	8.9 (2.7)	19,793

*** p<0.001, ** p<0.01, * p<0.05: Significant association between gambling activity and number of harms

7.7 Harms from another person's gambling by problem gambling risk

Problem gambling risk was significantly associated with being harmed by someone else's gambling, with 18%, 27% and 15% of people experiencing problem, moderate risk and low risk gambling experiencing harm from someone else's gambling, compared with 7% of non-risk gamblers and 5% of non-gamblers (Table 42).

Table 42: Number of negative consequences by the PGSI, 2018 NT adult population

	Number of negative consequences ***				Population
	None	1 or 2	3 or more	1 or more	N
Problem gambler	81.8 (7.3)	**6.1 (4.3)**	**12.2 (5.7)**	18.2 (7.3)	2,487
Moderate risk gambler	73.5 (7.3)	**13.9 (6.7)**	**12.6 (4.7)**	26.5 (7.3)	6,426
Low risk gambler	85.1 (3.2)	**4.3 (1.3)**	**10.7 (3.1)**	14.9 (3.2)	16,919
Non-risk gambler	92.7 (1.1)	3.6 (0.8)	3.7 (0.9)	7.3 (1.1)	103,286
Non-gambler	95.4 (1.4)	**0.9 (0.5)**	**3.7 (1.3)**	4.6 (1.4)	51,049
Northern Territory	91.9 (0.9)	3.3 (0.6)	4.8 (0.7)	8.1 (0.9)	180,168

NOTES: Bolded estimates in this table have a relative standard error > 25% - interpret cautiously

7.8 Types of harms experienced because of someone else's gambling

Respondents who said that someone else's gambling negatively affected them in the last year were then read a list of 17 harms and asked how often each of them occurred. Table 43 shows endorsement rates in the NT adult population by sex. Females endorsed most harms at a higher rate than males, though differences were not statistically significant, except for the 'other' category. Feeling stressed or anxious was the most endorsed harm at 4% of the adult population, and was higher for females, but the difference was not statistically significant. Relationship problems with family or friends was the next most common harm reported (4%), followed by harms relating to financial problems (e.g. running out of money for rent/mortgage or bills, borrowing money). Over 7,000 adults experienced stress or anxiety, and relationship problems with family or friends because of someone else's gambling.

Table 43: Types of harms because of someone else's gambling by sex, NT Adult population

	Female % (SE)	Male % (SE)	Persons % (SE)	Female N	Male N	Persons N
At least one harm	8.3 (1.1)	7.9 (1.3)	8.1 (0.9)	7,259	7,262	14,521
Felt stressed or anxious	4.7 (0.8)	3.3 (0.9)	4.0 (0.6)	4,177	3,074	7,251
Relationship problems with family/friends	4.4 (0.9)	3.4 (1.0)	3.9 (0.7)	3,887	3,129	7,017
Ran out of money for rent/mortgage	3.4 (0.9)	**2.6 (0.9)**	2.9 (0.6)	2,966	2,369	5,335
Ran out of money for bills	3.8 (0.9)	**1.8 (0.7)**	2.8 (0.6)	3,391	1,666	5,057
Borrowed money from family/friends	3.5 (0.9)	**1.8 (0.7)**	2.6 (0.6)	3,068	1,625	4,694
Felt ashamed or had regrets	2.9 (0.7)	2.2 (0.6)	2.5 (0.5)	2,521	2,035	4,556
Ran out of money for food	2.6 (0.7)	**1.6 (0.7)**	2.1 (0.5)	2,296	1,504	3,800
Raided savings	**2.1 (0.7)**	**1.9 (0.7)**	2.0 (0.5)	1,846	1,808	3,654
Felt depressed	1.7 (0.4)	**1.9 (0.7)**	1.8 (0.4)	1,486	1,768	3,254
Physical or verbal violence towards you	1.9 (0.5)	**1.4 (0.5)**	1.6 (0.4)	1,696	1,258	2,954
Other harm ***	**2.2 (0.7)**	**0.4 (0.2)**	1.3 (0.3)	1,931	338	2,269
Kids missed school/missed out on something	**1.2 (0.5)**	**0.9 (0.5)**	1.0 (0.3)	1,066	830	1,896
Increased credit card debt	**0.4 (0.2)**	**1.3 (0.7)**	**0.9 (0.4)**	335	1,204	1,539
Sold or hocked possessions	**0.8 (0.3)**	**0.5 (0.4)**	**0.7 (0.3)**	730	466	1,196
Under-performed at work/study	**1.2 (0.4)**	**0.3 (0.3)**	0.7 (0.2)	1,067	290	1,357
Missed work/study	**0.5 (0.3)**	**0.4 (0.3)**	**0.4 (0.2)**	404	383	788
Debt collectors repossessed goods	0.1 (0.0)	**0.5 (0.4)**	**0.3 (0.2)**	60	446	506
Did something illegal	**0.6 (0.3)**	0.0 (0.0)	**0.3 (0.1)**	504	0	504

NOTES: Bold font indicates relative standard error greater than 30% of estimate - interpret cautiously
*** p<0.001, ** p<0.01, * p<0.05: Significant association between type of negative consequence & sex

Figure 69 shows the frequency of harms occurring because of someone else's gambling. For most harms, people said they were occurring at least monthly. For example, 3.6% of adults reported feeling stressed or anxious (2,300 weekly), while 3.8% reported relationship problems with family or friends (6,300 people monthly or more often). Over 2,000 people were feeling depressed or felt ashamed because of someone else's gambling at least once per month.

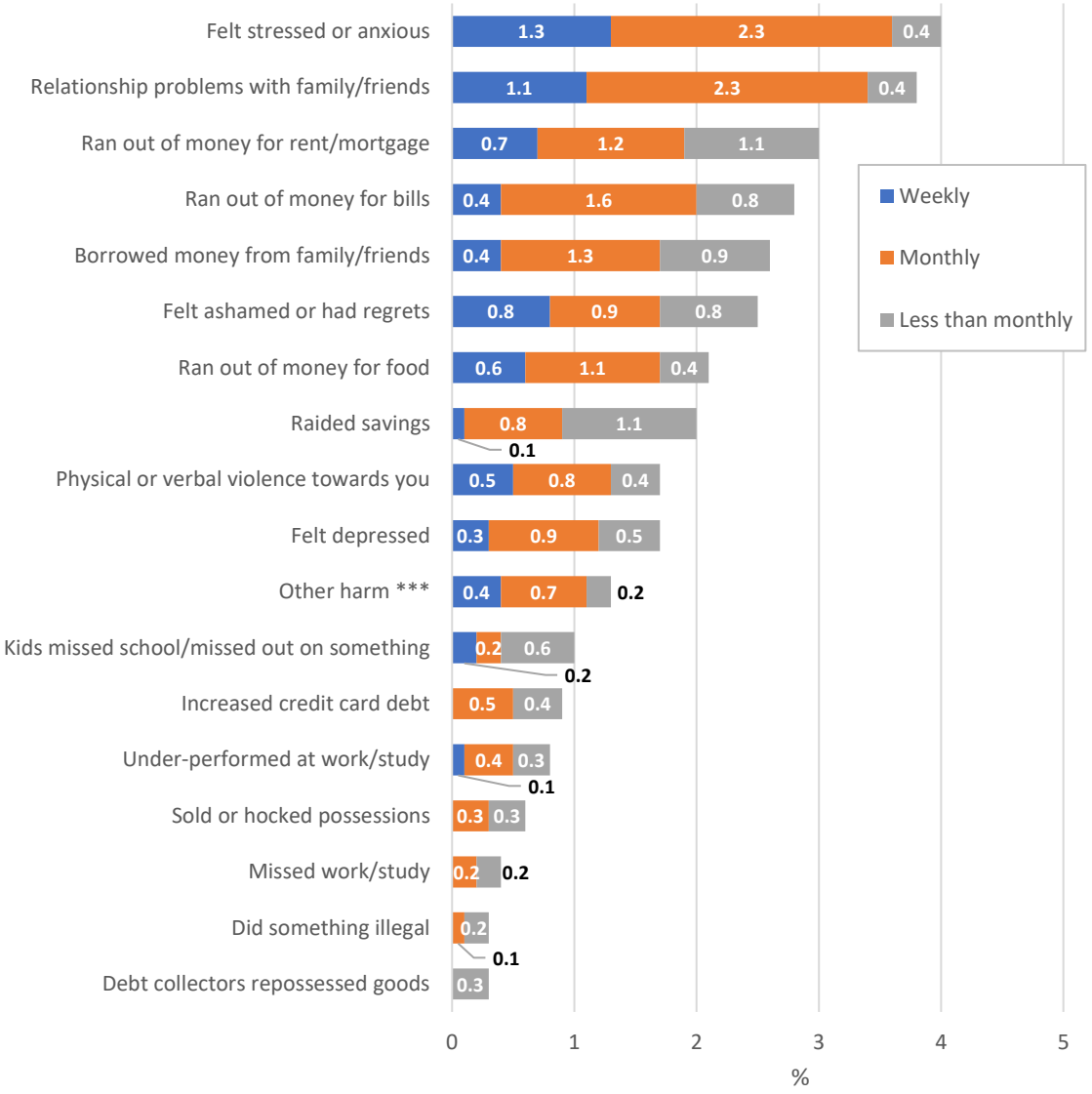


Figure 69: Frequency of types of harms from someone else's gambling, NT Adult population

Table 44 shows counts of people for each harm by frequency of occurrence in the last year. Over 2,000 people felt stressed or anxious or had relationship problems with family or close friends on a weekly basis because of someone else's gambling, and a further 4,000 experienced these harms monthly.

Table 44: Frequency of types of harms from someone else's gambling population counts, NT Adult population

	Weekly N	Monthly N	Less than Monthly N	Total N
Felt stressed or anxious	2,344	4,155	752	7,251
Relationship problems with family/friends	2,044	4,214	758	7,016
Ran out of money for rent/mortgage	1,310	2,088	1,938	5,336
Ran out of money for bills	705	2,839	1,513	5,057
Borrowed money from family/friends	693	2,366	1,635	4,694
Felt ashamed or had regrets	1,433	1,642	1,481	4,556
Ran out of money for food	1,119	1,945	737	3,801
Raided savings	209	1,424	2,021	3,654
Felt depressed	552	1,712	990	3,254
Physical or verbal violence towards you	840	1,407	707	2,954
Kids missed school/missed out on something	397	440	1,059	1,896
Increased credit card debt	0	826	713	1,539
Under-performed at work/study	100	733	525	1,358
Sold or hocked possessions	0	567	630	1,197
Missed work/study	0	447	340	787
Debt collectors repossessed goods	0	0	506	506
Did something illegal	0	169	336	505

Figure 70 shows the change in prevalence of harms from someone else's gambling between 2015 and 2018. There was a significant decrease from 2015 to 2018 in the prevalence of people identifying at least one harm from 13% to 8.1%. Raiding savings and relationship problems with family or friends both declined significant between 2015 and 2018, from 7.7% to 3.9% and 5.7% to 2% respectively. No other differences in prevalence of harms were significant.

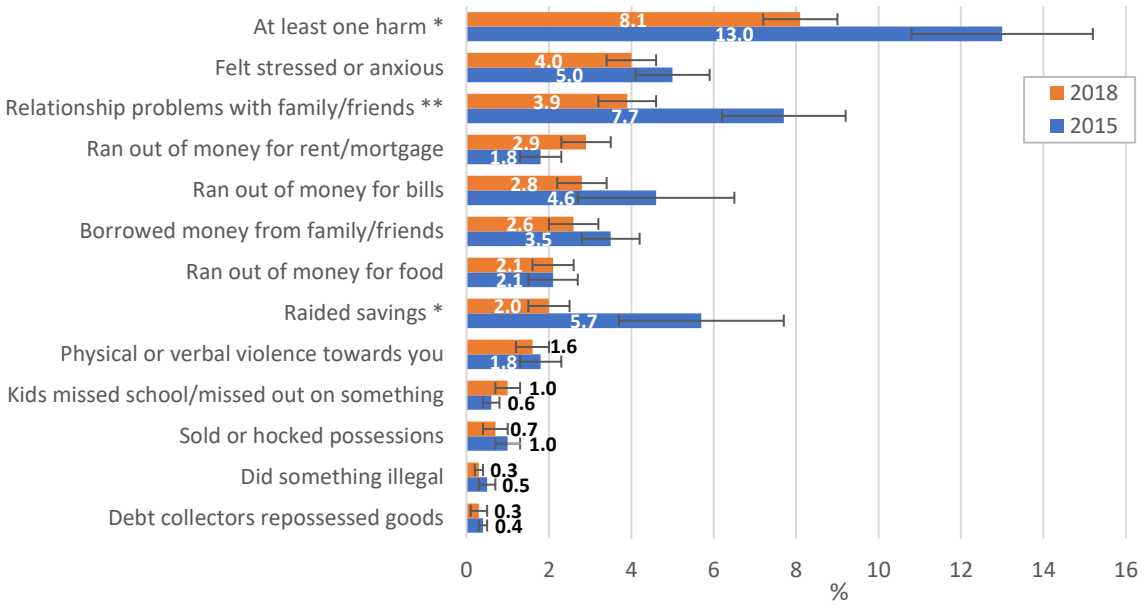


Figure 70: Frequency of types of negative consequences because of someone else's gambling, percentage NT Adult population

*** p<0.001, ** p<0.01, * p<0.05: Significant difference between surveys

7.9 Number of harms and number of harm events from own and others gambling

7.9.1 Number of harms from own gambling by PGSI for at-risk gamblers

Figure 71 shows the population distribution of at-risk gamblers by problem gambling risk. Ten percent of at-risk gamblers were experiencing problem gambling, 25% moderate risk gambling, and 65% low risk gambling. This distribution was used to compare with how harms are distributed among at-risk gamblers (Figure 72).

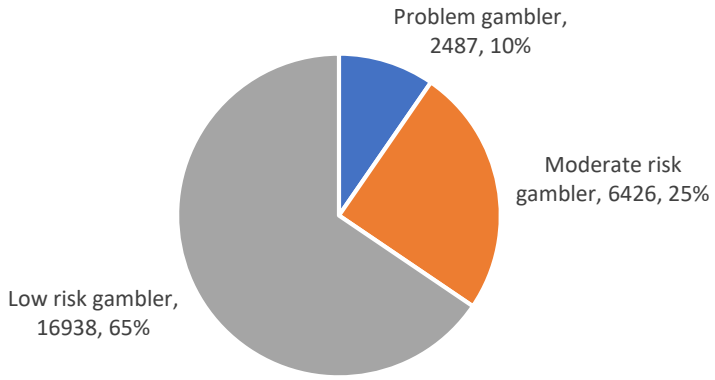
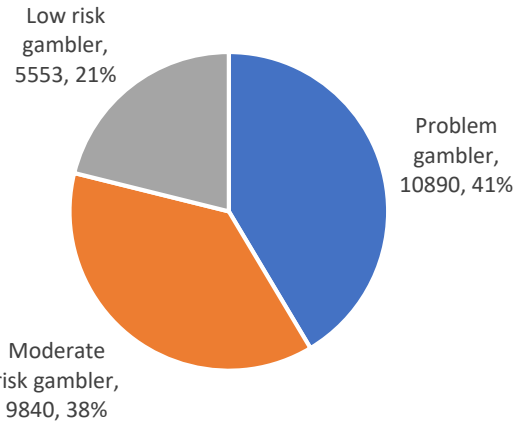
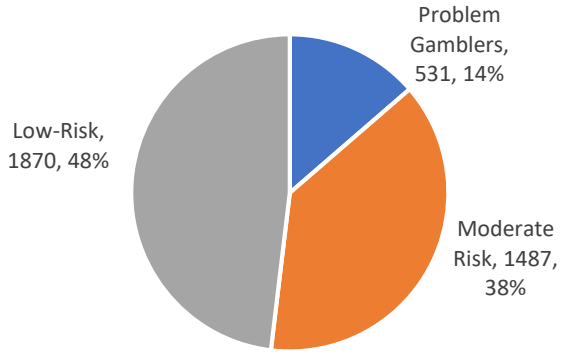


Figure 71: Population distribution by problem gambling risk, 2018 NT at-risk gamblers

Figure 72a displays the distribution of number of harms endorsed by at-risk gamblers from their own gambling by problem gambling risk. Problem gamblers identified the most harms, accounting for 41% of all harms, followed by moderate risk gamblers (38%) and low risk gamblers (21%). Figure 72b shows years lost to disability using disability weights from the Victorian study [22], which shows a different distribution to the numbers of harms among at-risk gamblers. Using disability weights, gamblers experiencing problem gambling experienced 14% of the harm (*cf*. 41% in previous), moderate risk problem gambling experienced 38% of the harm (*cf*. 38% in previous), and low risk problem gambling experienced 48% of the harm (*cf*. 21% in previous). This highlights that how harm is derived can affect our understanding of the burden of this harm among gamblers.



(a)



(b)

Figure 72: Distribution of (a) number of harms from own gambling and (b) years lost to disability by problem gambling risk, 2018 NT At-risk gamblers

7.9.2 Number of harms from someone else's gambling by PGSI for NT adult population

Figure 73 shows the NT adult population distribution across problem gambling risk categories, non-risk and non-gamblers. About 1.4% of the NT adult population were classified as experiencing problem gambling, 3.6% moderate risk gambling, 9% low risk gambling, and 57% and 29% were non-risk gamblers and non-gamblers respectively. Use the population distribution to assess over or under-representation of harms for that group in Figure 73.

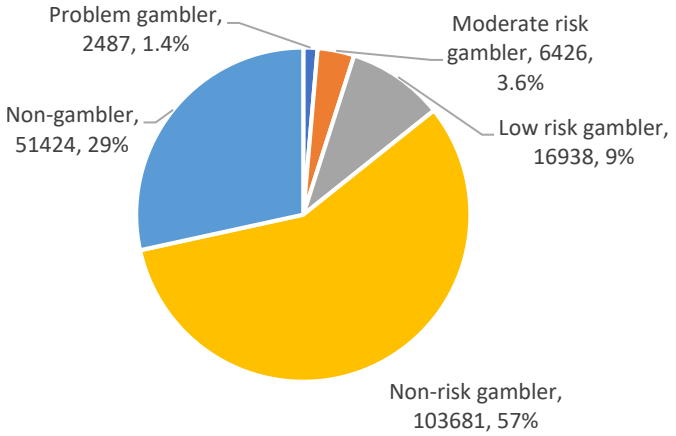


Figure 73: NT adult population distribution by problem gambling risk, 2018 NT adults

Figure 74 shows the distribution of harms from someone else's gambling by problem gambling risk for the total population. Most harms occurred among non-risk gamblers (45%), followed by low risk gamblers (21%), non-gamblers (16%), moderate risk gamblers (14%) and problem gamblers (4%).

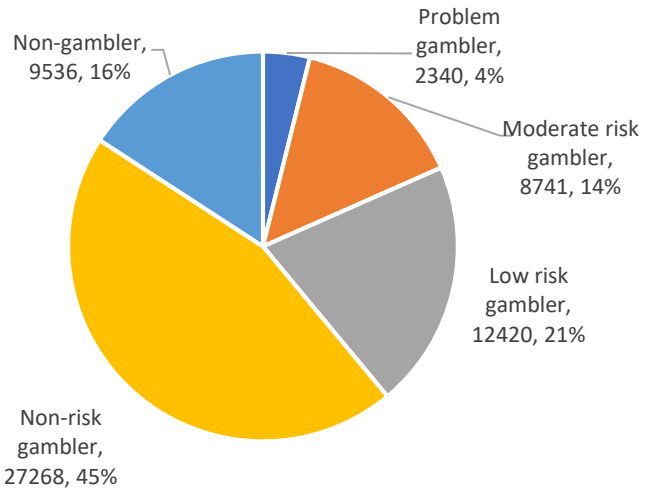


Figure 74: Distribution of number of harms from someone else's gambling by problem gambling risk in last year, 2018 NT Adult population

7.9.3 Total harms (own and other's) from gambling by PGSI for NT adult population

The previous two sections reported the number of harms from own gambling and from someone else's gambling separately. This section puts harm from own and someone else's gambling together, to get an overall distribution of all gambling-related harm in the NT. The distribution changed markedly when adding own and others harms together (Figure 75). Non-risk gamblers (32%) still experienced the highest burden if harms, followed by moderate and low risk gamblers (21% each), problem gamblers (15%) and non-gamblers (11%). Gamblers experiencing problem and moderate risk gambling endorsed many more different harms (own and others) per person compared to low risk, non-risk and non-gamblers.

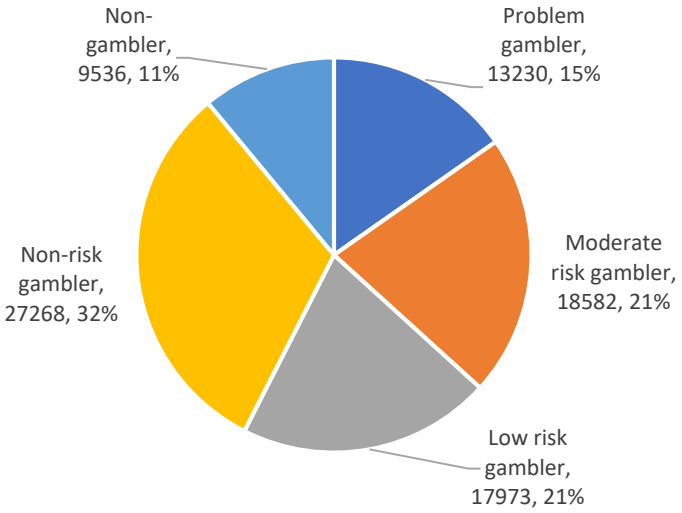


Figure 75: Distribution of total number of harms from gambling by problem gambling risk in last year, NT Adult population

7.10 Relationship to person causing gambling harms

The most nominated person as being the cause of the gambling harm was a friend (23%), followed by parent (15%), spouse (12%), ex-partner/spouse (10%), sibling (8%),

son or daughter (6%), and work colleague (5%). Family or extended family were the most nominated people causing the gambling harm to the person, making up 52% of nominated people causing gambling harm to them. There were no sex or regional differences in the nominated person, though age was significantly associated with relationship to person, with younger people more likely to nominate parents, while older people were more likely to nominate sons or daughters.

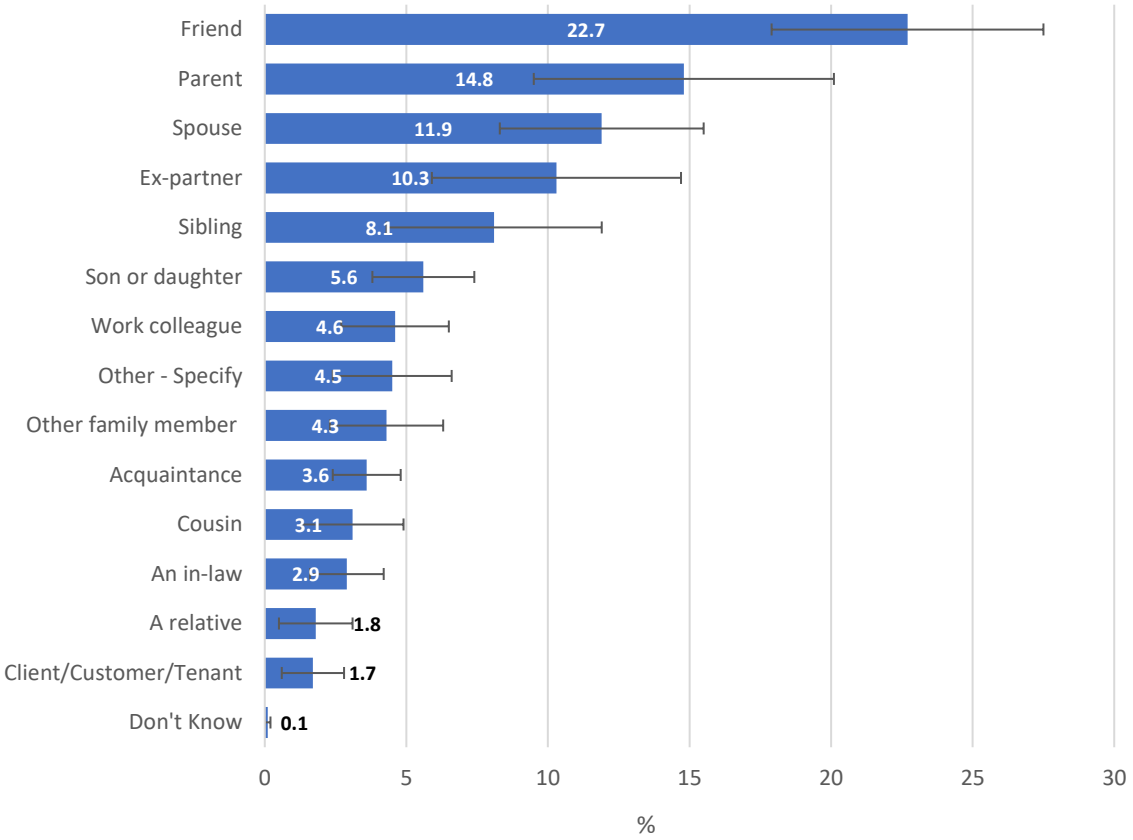


Figure 76: Relationship to person whose gambling was harming them, NT Adults harmed by someone else's gambling

7.11 Type of gambling causing harms

Of those 8.1% (14,521 adults) being harmed from someone else's gambling, 67% nominated one type of gambling activity, while 33% nominated two activities that the person whose gambling harmed them gambled on. EGMs were the most commonly nominated type of gambling that the person whose gambling was causing harm gambled on, with 46% identifying EGMs solely, and a further 25% of those harmed identifying EGMs, along with another type of gambling that the person was doing. Racetrack betting was nominated by 18% of people either solely or with another type of gambling, while casino games were nominated either solely or with another activity by 17% of those harmed by another person's gambling. The "other" type of gambling mostly included online gambling and some share investing. There were no statistically significant differences between type of gambling causing harm with region, sex or age.

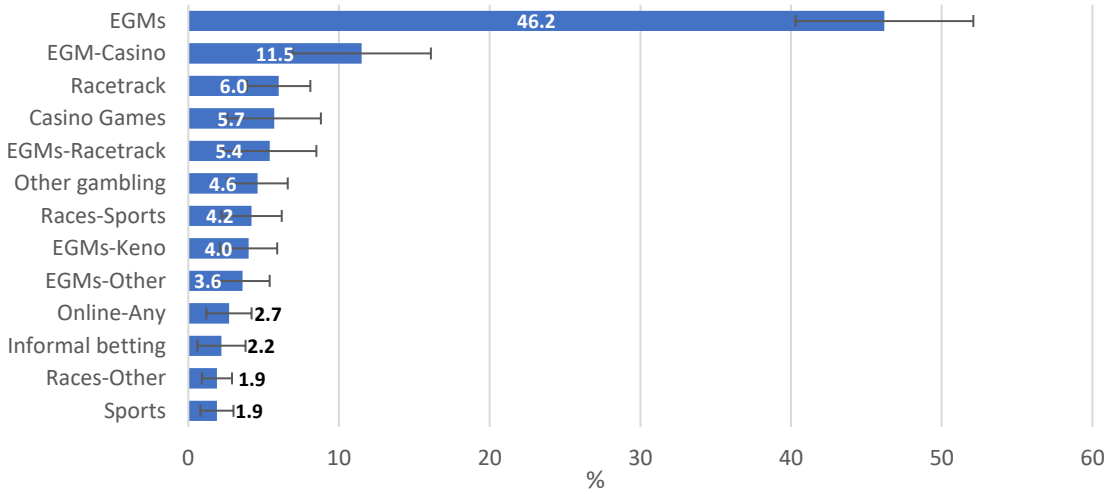


Figure 77: Type of gambling nominated by person being harmed from someone else's gambling, NT Adults harmed by someone else's gambling

7.12 Help-seeking behaviour of those harmed from someone else's gambling

Figure 78 shows that of the 14,500 adults' who had experienced harms by someone else's gambling, 21% sought help. Help-seeking differed significantly between men and women, with more women (28%) seeking help, compared with men (14%), and women (14%) were also more likely to seek help from three or more different sources (see next Figure for types of help), compared with men (2%).

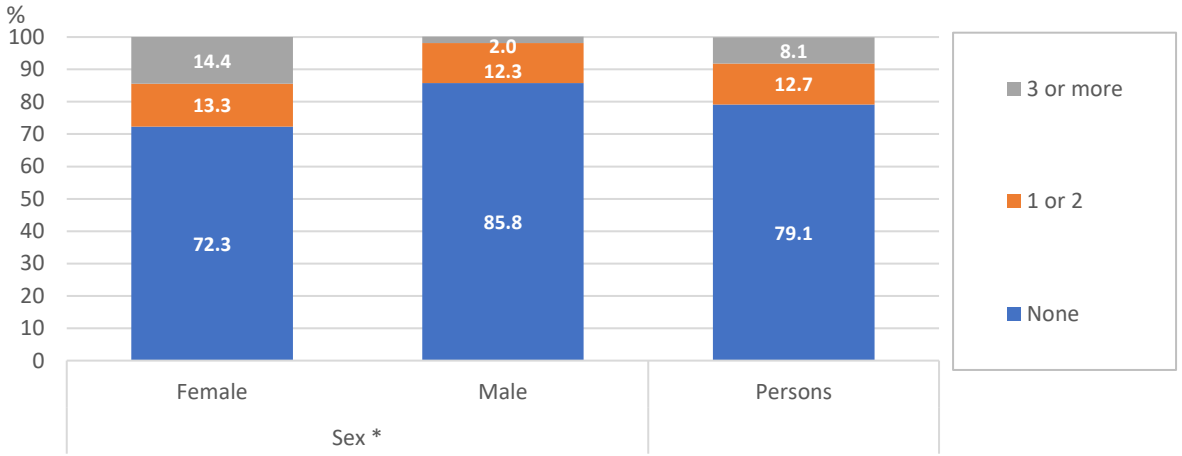


Figure 78: Number of ways sought help from being harmed by someone else's gambling by sex, NT Adults harmed by someone else's gambling

*** p<0.001, ** p<0.01, * p<0.05: Significant difference between men and women in help-seeking

Figure 79 shows the types of help sought out by people harmed from someone else's gambling. The most common type of help sought was speaking with friends (11%), followed by seeing a social worker/psychologist (7%), speaking to a family member (7%), and seeing a local medical doctor (6%). Females were more likely to seek help for gambling problems than men, and this was statistically significant for social worker/ psychologists (14% *cf*. 0.7%), local medical doctor (11% *cf*. 0%), police (3.3% *cf*. 0%), internet/online help (4.6% *cf*. 0.4%), and a gambling counsellor (2.4% *cf*. 0.2%).

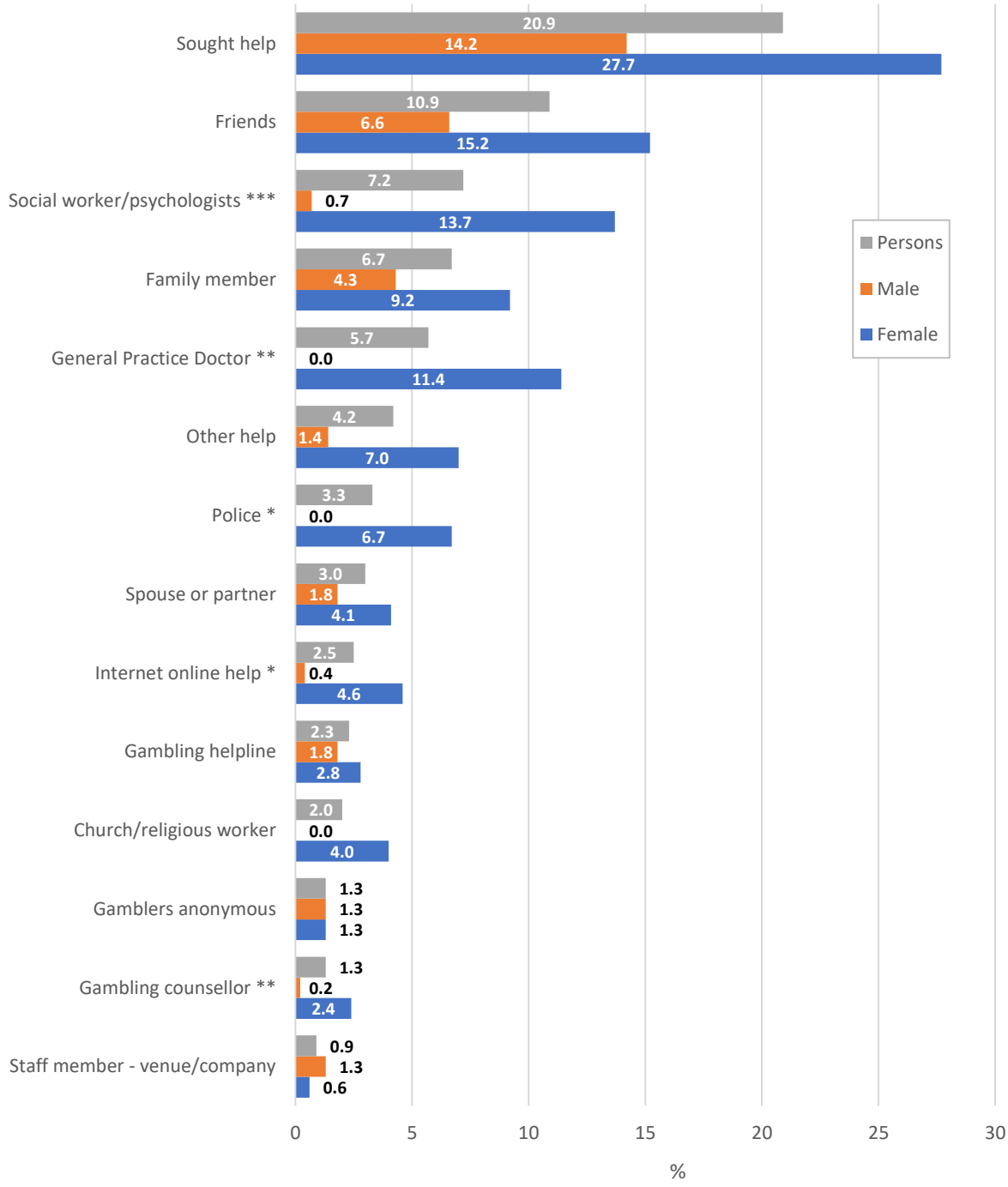


Figure 79: Type of help sought after being harmed by someone else's gambling by sex, NT adults harmed by someone else's gambling

*** p<0.001, ** p<0.01, * p<0.05: Significant difference between men and women in help-seeking

Table 45 shows the population counts for type of help-seeking people affected by someone else's gambling sought by sex. Just over 3,000 people from 14,400 people who were harmed from someone else's gambling sought help.

Table 45: Type of help sought after being harmed by someone else's gambling by sex, NT Adults harmed by someone else's gambling

Type of help	Female N	Male N	Persons N
Sought help	1,973	1,034	3,007
Friends	1,106	478	1,584
Social worker/psychologists ***	993	53	1,046
Family member	668	309	977
General Practice Doctor **	829	0	829
Other help	506	98	604
Police *	485	0	485
Spouse or partner	300	129	429
Internet online help *	334	31	365
Gambling helpline	200	127	327
Church/religious worker	292	0	292
Gambling counsellor **	175	15	190
Gamblers anonymous	92	96	188
Staff member - venue/company	41	96	138
Total harmed	**7,136**	**7,262**	**14,398**

*** p<0.001, ** p<0.01, * p<0.05: Significant difference between men and women in help-seeking

7.13 Multivariable logistic regression model for harms from someone else's gambling

Table 46 presents the multivariable logistic regression model for harm from someone else's gambling, along with the distribution of explanatory variables and the percentage harmed from someone else's gambling. The largest effect sizes (as measured by the odds ratio) were for problem gambling risk and the Attitudes Towards Gambling Scale (ATGS-8). People classified as moderate risk problem gambling had odds of 15.65 (6.87 to 35.7) of being harmed from someone else's gambling, while the odds for low risk problem gambling was 2.78 (1.35 to 5.73) and problem gambling was 6.48 (2.03 to 20.7), compared with non-gamblers. People with the most negative attitude towards gambling, had odds of 12.03 (5.96 to 24.6) of being harmed by someone else's gambling, compared with people who had a positive attitude towards gambling. People with poor self-assessed health (27.8%) were more likely to be harmed from someone else's gambling, compared with those with excellent self-assessed health (6.6%), as were people experiencing domestic or family violence (15% to 17%), compared with those not experiencing domestic violence (6.4%). Seventeen percent of Indigenous respondents were harmed from someone else's gambling, compared with 5.2% of non-Indigenous respondents. Lastly, people with a gross personal income of $50,000 to $69,999 were mostly likely to be harmed from someone else's gambling (13%), compared with lower and higher income brackets.

Table 46: Multivariable logistic regression for experiencing harm from someone else's gambling, NT adults

	Distribution % (SE)	Harm % (SE)	OR (95% CI)
NT	**100.0**	**8.1 (0.9)**	**-**
Domestic/family violence			
None	82.0 (1.4)	6.4 (0.9)	1
One	8.2 (1.0)	16.7 (5.6)	**2.40 (1.18-4.89)**
2 or more	9.9 (1.1)	15.3 (4.0)	**3.52 (1.75-7.11)**
Self-assessed health			
Excellent	16.6 (1.3)	6.6 (2.2)	1
Very good	29.9 (1.5)	7.6 (1.9)	1.53 (0.64-3.69)
Good	35.5 (1.6)	5.8 (1.0)	0.83 (0.37-1.87)
Fair	14.0 (1.2)	11.4 (3.0)	1.42 (0.54-3.70)
Poor	3.9 (0.7)	27.8 (8.8)	**7.54 (2.18-26.1)**
Attitude to gambling (ATGS-8)			
Positive (25+)	20.5 (1.3)	3.7 (1.6)	1
Mildly negative	27.2 (1.5)	6.6 (1.9)	**2.78 (1.35-5.73)**
Negative	22.8 (1.4)	8.6 (1.9)	**4.88 (2.33-10.2)**
Most negative	29.5 (1.5)	12.2 (2.0)	**12.09 (5.96-24.6)**
PGSI			
Non-gambler	26.9 (1.6)	5.5 (1.7)	1
Non-risk	58.3 (1.7)	7.2 (1.2)	**3.02 (1.67-5.46)**
Low risk	9.9 (0.9)	13.9 (3.4)	**5.80 (2.88-11.7)**
Moderate risk	3.4 (0.5)	22.5 (5.8)	**15.65 (6.87-35.7)**
Problem gambling	1.5 (0.4)	17.9 (7.6)	**6.48 (2.03-20.7)**
Indigenous status			
Non-Indigenous	76.0 (1.5)	5.2 (0.8)	1
Indigenous	24.0 (1.5)	17.2 (3.0)	**3.37 (2.03-5.58)**
Personal gross income			
<$20,000	8.8 (1.0)	8.7 (3.9)	3.00 (0.82-11.0)
$20,000-$29,999	9.3 (1.0)	5.0 (1.6)	1
$30,000-$49,999	12.4 (1.0)	5.9 (1.6)	1.28 (0.50-3.26)
$50,000-$69,999	18.4 (1.5)	12.9 (3.0)	**3.35 (1.31-8.59)**
$70,000-$99,999	22.5 (1.4)	9.6 (2.3)	**3.40 (1.36-8.52)**
$100,000-$119,999	12.4 (1.0)	5.6 (1.6)	1.21 (0.47-3.09)
$120,000 or more	16.1 (1.2)	5.6 (2.1)	1.52 (0.55-4.24)

NOTES: Bold font indicates category of variable is significant and odds ratio confidence intervals do not include one.

8 COMMUNITY ATTITUDES TO GAMBLING

8.1 Background

Understanding community attitudes towards gambling is important, as it provides information to governments on the palatability of gambling regulation and policy. The 2018 survey included more questions on Territorians attitudes towards gambling, compared with the 2015 survey.

8.1.1 Chapter contents

This chapter contains:

- Comparisons between the 2015 and 2018 surveys on community views on whether EGM numbers should decrease, stay the same or increase in NT clubs and hotels. Associations between age, sex, region and harm from someone else's gambling are also presented.
- Comparisons between the 2015 and 2018 surveys on community views on whether there is too much gambling in NT clubs and hotels, along with associations with age, sex, region and harm from someone else's gambling.
- The Attitudes to Gambling Scale quartiles and individual items by age, sex, region and harm from someone else's gambling.

8.2 Chapter highlights

- There was a significant increase from 50% in 2015 to 56% in 2018 in the percentage of adults indicating they would like to see a decrease in the number of EGMs in hotels, while for clubs there was a small non-significant increase from 53% to 55%.
- The increase from 2015 to 2018 in the percentage of adults indicating they would like to see a decrease in EGMs in hotels was significant for men (45% to 51%), but not for women.
- Women were significantly more likely than men to want a decrease in EGM numbers in clubs (51% men and 58% women) and hotels (51% men and 60% women).
- People that were negatively affected by someone else's gambling were significantly more likely to indicate they would like to see a decrease in EGM numbers in hotels (73% among those harmed from someone else's gambling *cf*. 52% not harmed) and clubs (76% among those harmed from someone else's gambling *cf*. 54% not harmed).
- Women (68%) were significantly more likely than men (55%) to agree or strongly agree with the statement *there is too much gambling in NT hotels*, and this was similar for the statement *there is too much gambling in NT clubs* (67% for women and 56% for men).
- People living in Alice Springs (71%) and the Rest of the NT (68%) were significantly more likely to agree or strongly agree with the statement *there is too much gambling in NT hotels*, compared with other regions in the NT.
- Again, people who were harmed by someone else's gambling (74%) were significantly more likely to agree or strongly agree that *there is too much gambling in NT clubs*, compared with people who were not harmed (59%), with a similar significant association also present for the statement *there is too much gambling in NT clubs*.
- The Attitudes to Gambling Scale (ATGS-8) indicated that 75% of adults in the NT had a negative view towards gambling, and women were significantly more likely than men to hold a negative view across all eight items in the ATGS-8.
- Socio-demographic factors associated with having a less favourable view of gambling were being Indigenous, female, not speaking English at home, and being a single parent or living in a group household.

- Socioeconomic factors associated with having a less favourable view of gambling were being unemployed or working part-time/casually, having a bachelor's degree or higher, and not being a fly-in fly-out worker.
- Having a more favourable view of gambling was positively and significantly correlated with frequency of gambling for all gambling activities.
- People experiencing problem gambling (7% in positive quartile) and non-gamblers (11% in positive quartile) had a significantly less favourable view of gambling, compared with moderate risk (25%), low risk (26%), and non-risk gamblers (25%).
- People who experienced harm form someone else's gambling were significantly more likely to view gambling less favourably, compared with those not harmed.
- 21% of adults strongly agreed that people should have to set limits for time and money on EGM gambling, and a further 47% agreed, while just 4% of adults strongly disagreed.

8.3 Community opinions on EGM numbers in hotels and clubs

Figure 80 shows the percentage of adults indicating their preference for an increase, decrease or no change in the number of EGMs located in hotels and clubs in the NT. There was a significant increase between surveys in the percentage of adults indicating they would like a dercrease in EGM numbers in hotels from 49.7% in 2015 to 55.5% in 2018. The percentage of people indicating they would like an increase in EGM numbers in hotels increased from 1.8% to 3.6% between the 2015 and 2018 survey, while the percentage indicating EGM numbers should stay the same decreased from 48.5% to 40.9%. There was no significant change in preferences for a change in EGM numbers in clubs between 2015 and 2018, though more than half of NT adults indicating they would like to see a reduction in EGM numbers in NT clubs, while there was a small reduction in the percentage of adults indicating that they would like to see more EGMs in NT clubs. The change in community opinion on EGM numbers in hotels was driven by male respondents, with a significant increase in the percentage of males indicating they would like to see a decrease in EGM numbers in hotels between 2015 (44.7%) and 2018 (50.9%).

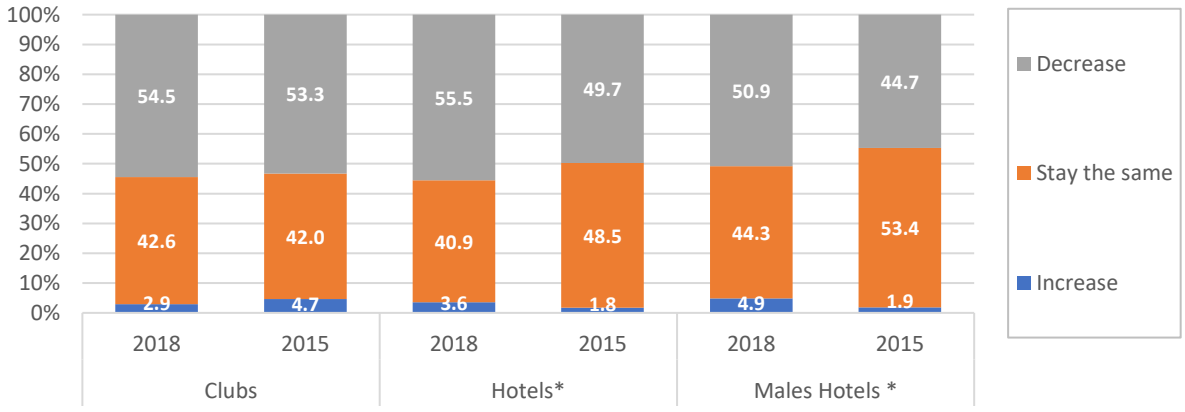


Figure 80: Community opinions on whether to change the number of EGMs in clubs and hotels by survey, 2015 and 2018 NT Adult population

*** p<0.001, ** p<0.01, * p<0.05: Significant difference between surveys

Figure 81 shows community opinions on EGM numbers in clubs and hotels by region, age and sex. More than 50% of adults in the NT would like to see a decrease in EGM numbers in clubs (54.5%) and hotels (55.5%). Older and younger people were less likely

to want a decrease in EGM numbers for both club and hotels, though differences across age groups were not statistically significant. Women were significantly more likely than men to want a decrease in EGMs in clubs (57.9% *cf*. 51.1%) and hotels (60.3% *cf*. 50.9%). Variation across regions in the NT showed no statistically significant differences, though a higher percentage of people in Darwin/Palmerston and Alice Springs would like a decrease in EGM numbers in hotels and clubs. Comparisons between the 2015 and 2018 surveys for age and region could not be produced reliably due to sample size, though region, age and sex estimates are produced below for the 2018 survey.

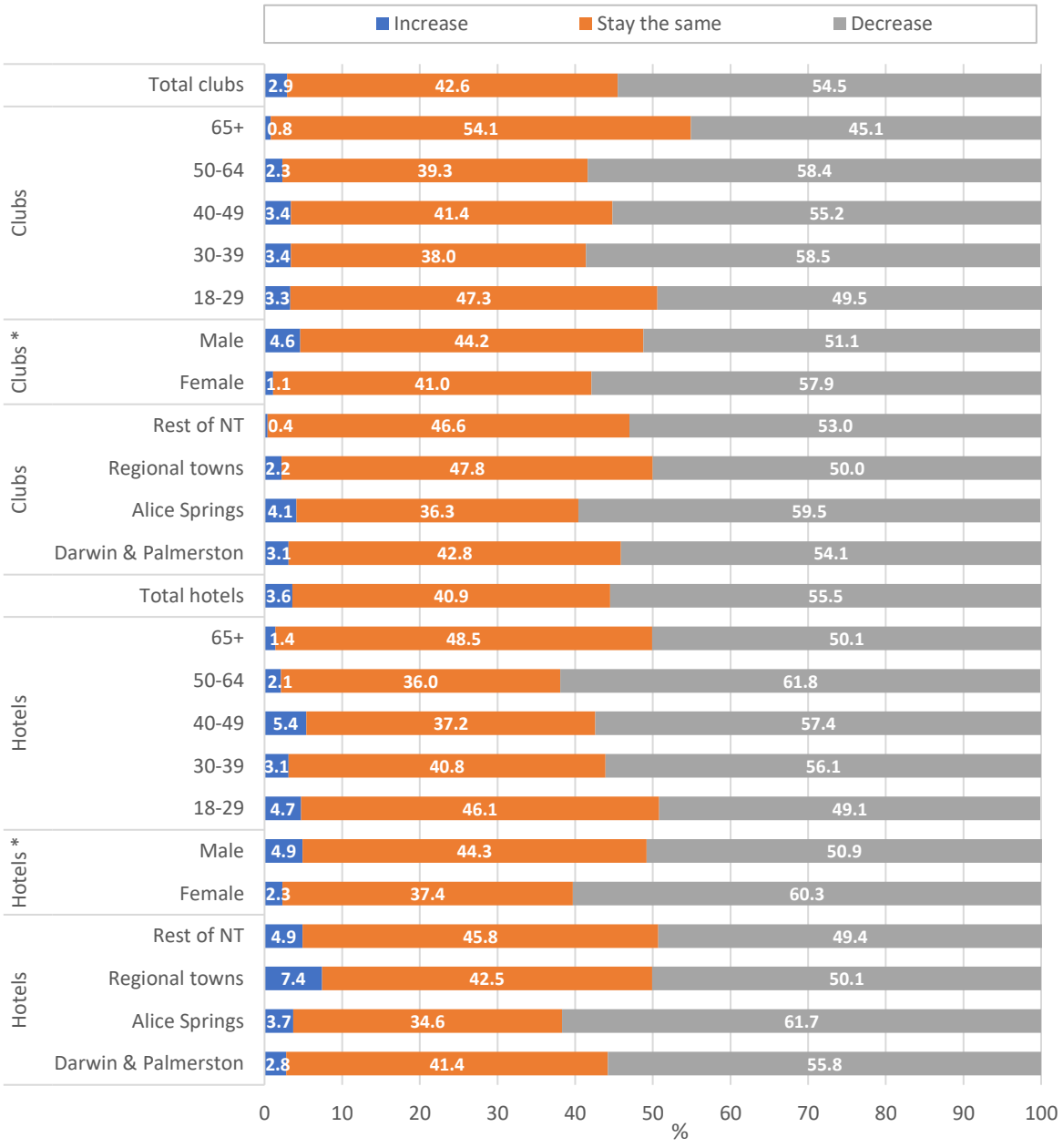


Figure 81: Community opinions on whether to change the number of EGMs in hotels and clubs by region, age and sex, 2018 NT Adult population

*** p<0.001, ** p<0.01, * p<0.05: Significant association between demographic and opinion

Figure 82 shows the significant association between opinion on EGM numbers in clubs and hotels, and whether the person had been harmed by someone else's gambling. Seventy-six percent of people that were harmed from someone else's gambling indicated their preference for a decrease in EGM numbers in clubs, compared with 52% of people who were not harmed from someone else's gambling. This same pattern was observed for decreases in EGM numbers in hotels, with 73% of people harmed by someone else's gambling indicating a preference for a decrease in EGM numbers, compared with 54% for people not harmed from someone else's gambling.

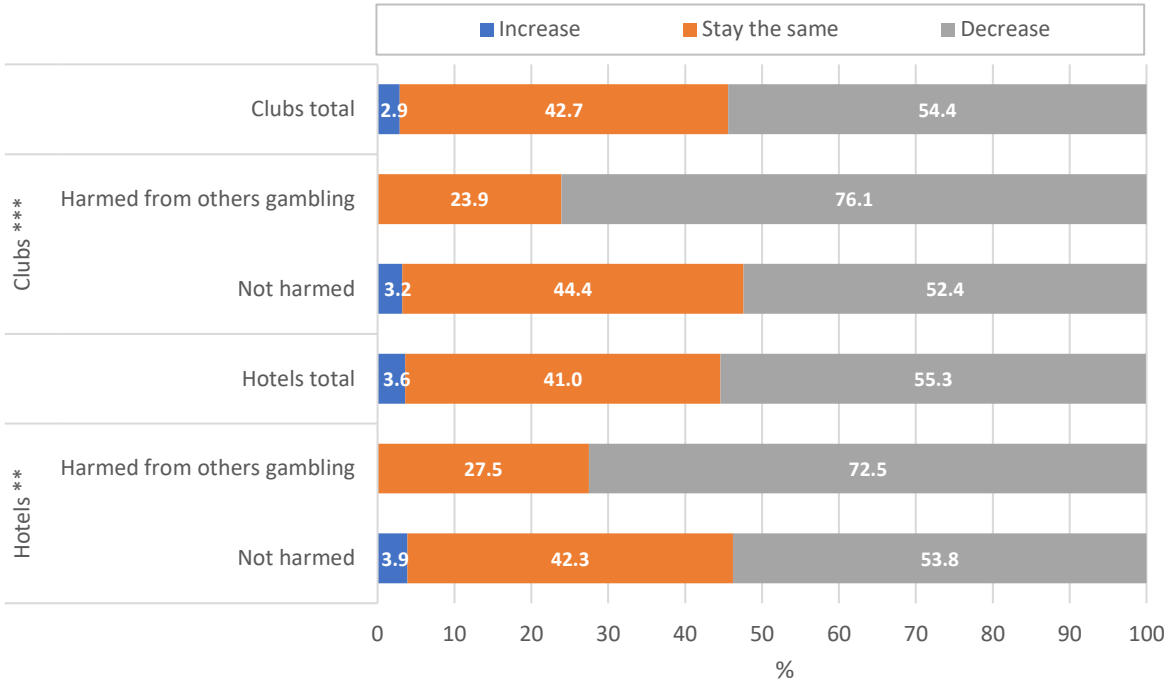


Figure 82: Community opinions on whether to change the number of EGMs in hotels and clubs by whether harmed from someone else's gambling, 2018 NT Adult population

*** p<0.001, ** p<0.01, * p<0.05: Significant association between harm and opinion

8.4 Community attitudes on the availability of gambling in NT clubs and hotels

Figures 83 and 84 show responses to the statement "there is too much gambling in pubs/clubs" by age, sex and region. Over 60% of adults agreed or strongly agreed that there was too much gambling in NT pubs, while 16% were neutral, 21% disagreed, and 2% strongly disagreed (Figure 100). Women (68%) were significantly more likely than men (54%) to agree or strongly agree that there is too much gambling in NT pubs. There was significant variation across regions, with a higher percentage of adults in Alice Springs (71%) and the Rest of the NT (68%) agreeing or strongly agreeing that there is too much gambling in NT pubs, compared with Darwin (58%) and Regional Towns (55%) responses.

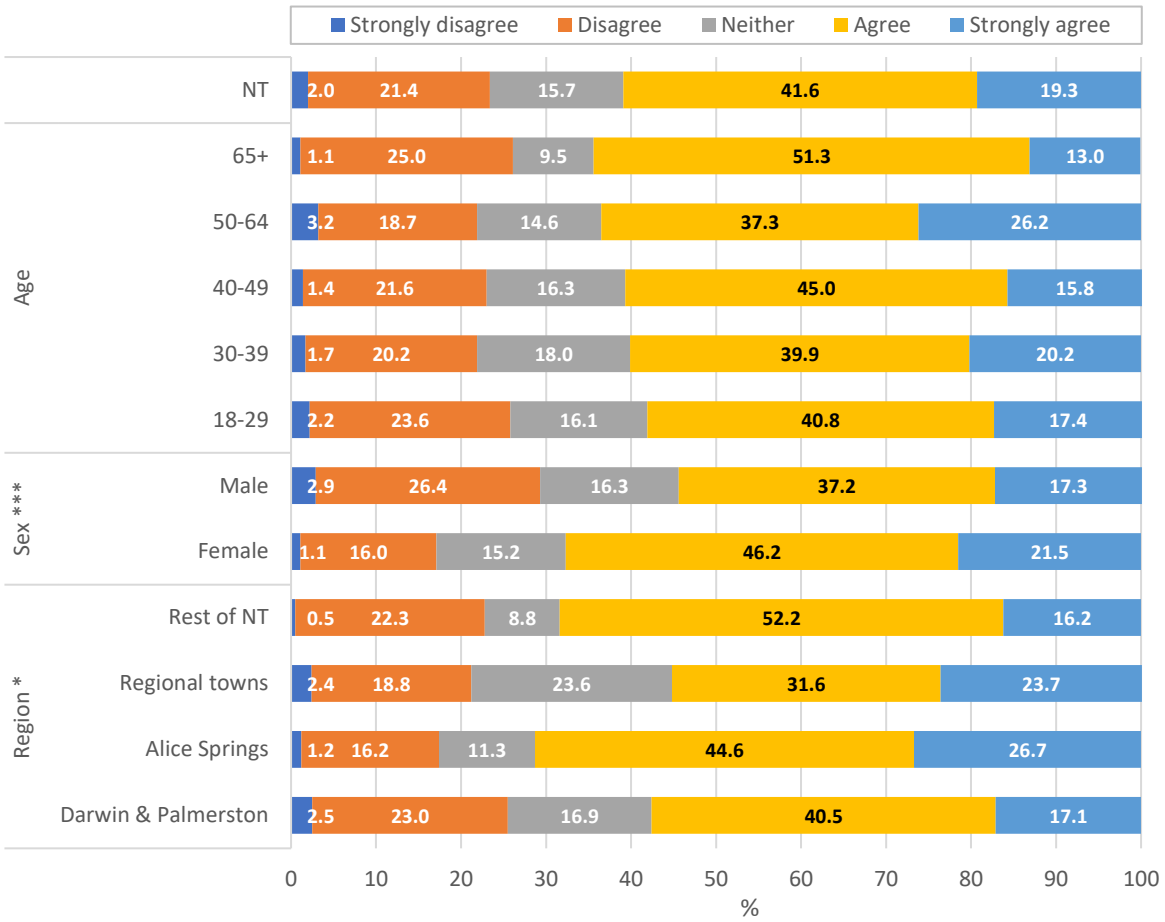


Figure 83: There is too much gambling in NT hotels by region, age and sex, 2018 NT Adult population

*** p<0.001, ** p<0.01, * p<0.05: Significant association between demographic and opinion

Similar trends observed for pubs were identified for clubs, though sex was the only demographic variables showing a significant association. Across the NT, 61% of adults agreed or strongly agreed that there is too much gambling in NT clubs, while 2% strongly disagreed, 21% disagreed, and 16% were neutral. There was a trend with age for an increasing percentage of people agreeing or strongly agreeing that there is too much gambling in NT clubs the older respondents were, though this trend was not statistically significant. Women (67%) were significantly more likely to agree or strongly agree that there is too much gambling in NT clubs, compared with men (56%). People in Alice Springs were the mostly likely to agree or strongly agree that there is too much gambling in NT clubs, like that observed for hotels (Figure 84).

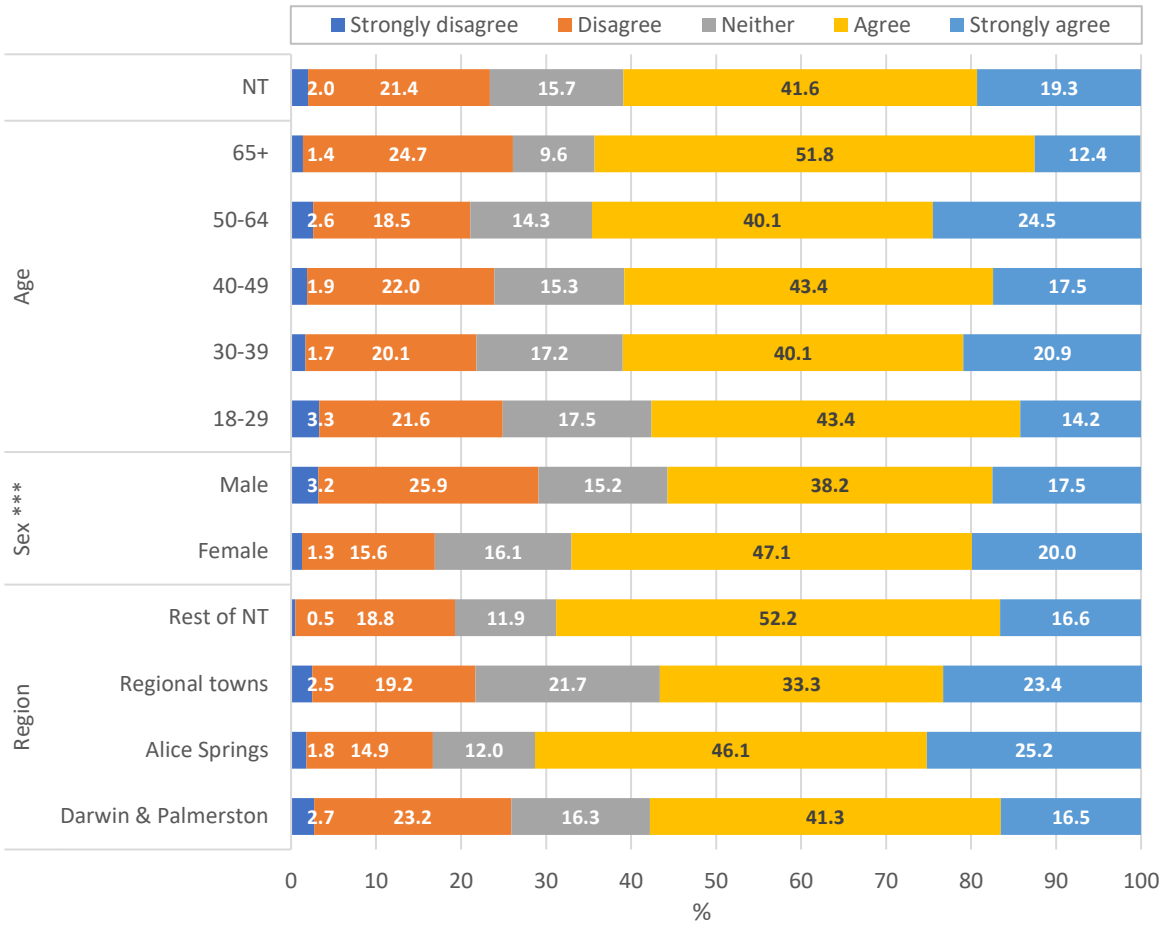


Figure 84: There is too much gambling in NT clubs by region, age and sex, 2018 NT Adult population

*** p<0.001, ** p<0.01, * p<0.05: Significant association between demographic and opinion

Being harmed by someone else's gambling was significantly associated with opinions on too much gambling in NT hotels and clubs. Sixty-nine percent of people harmed from someone else's gambling agreed or strongly agreed that there is too much gambling in NT pubs, compared with 61% of people who were not harmed by someone else's gambling. For clubs, 74% of those harmed by someone else's gambling, compared with 60% of those not harmed agreed or strongly agreed that there is too much gambling in NT clubs (Figure 85).

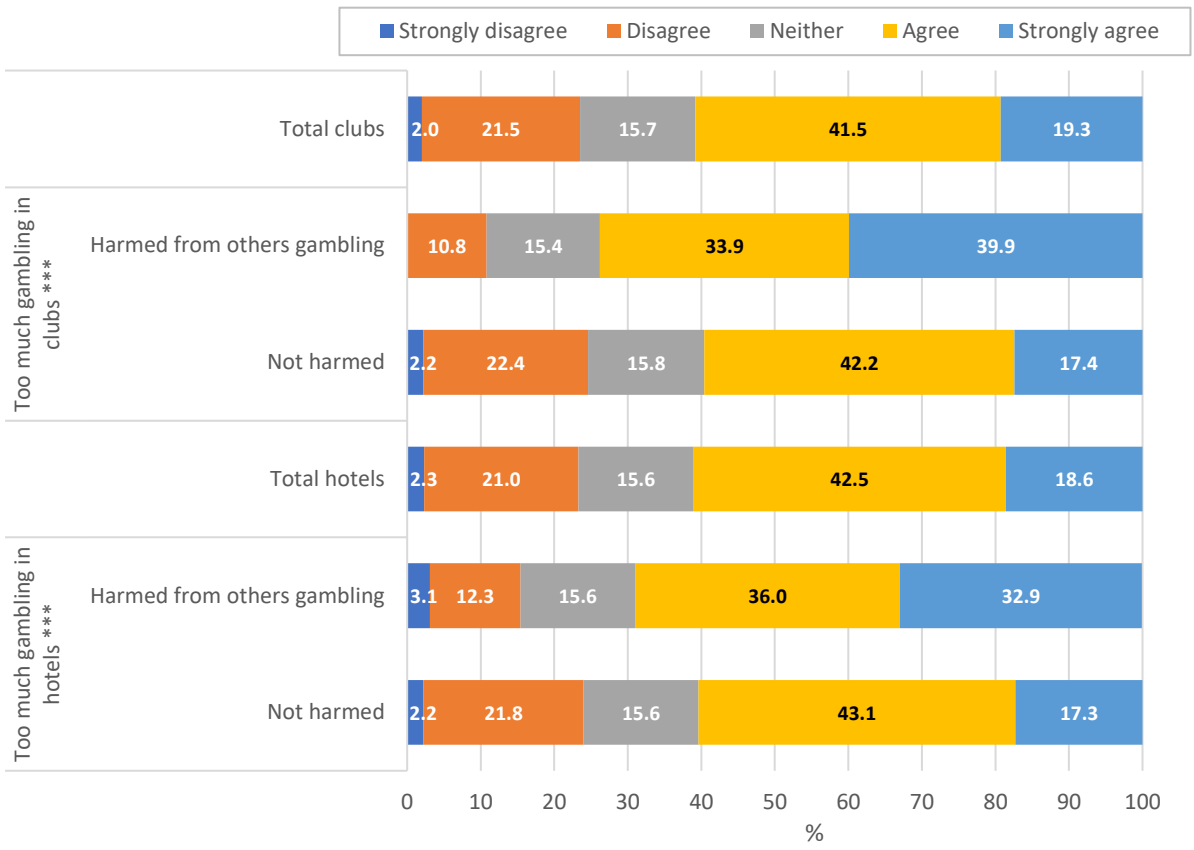


Figure 85: There is too much gambling in NT clubs by harm from someone else's gambling, 2018 NT Adult population

*** p<0.001, ** p<0.01, * p<0.05: Significant association between demographic and opinion

8.5 Community attitudes on setting limits when gambling on EGMs

Respondents were asked whether *people in the NT should have to set limits on time and money spent playing the pokies?* Approximately 4% of the weighted sample responded, "don't know", equating to 7,600 adults or 90 respondents in the unweighted sample. Including "don't know" responses did not change the the results, so these are included in this section.

8.5.1 Setting limits on EGMs by socio-demographic and socioeconomic factors

Only labour force status and sex were significantly associated with setting limits on EGM gambling, so only these are presented.

Figure 86 shows that across the NT 47% of adults agreed that EGM gamblers should set time and money limits on EGM gambling, and a further 21% strongly agreed, giving 68% of adults in the NT supporting policy on setting limits on EGM gambling. Women (74%) were more likely than men (62%) to agree or strongly agree that EGM gamblers should be setting limits on time and money when gambling on EGMs. Men (26%) were also more likely to disagree or strongly disagree than women (16%) that gamblers should set limits on their EGM gambling.

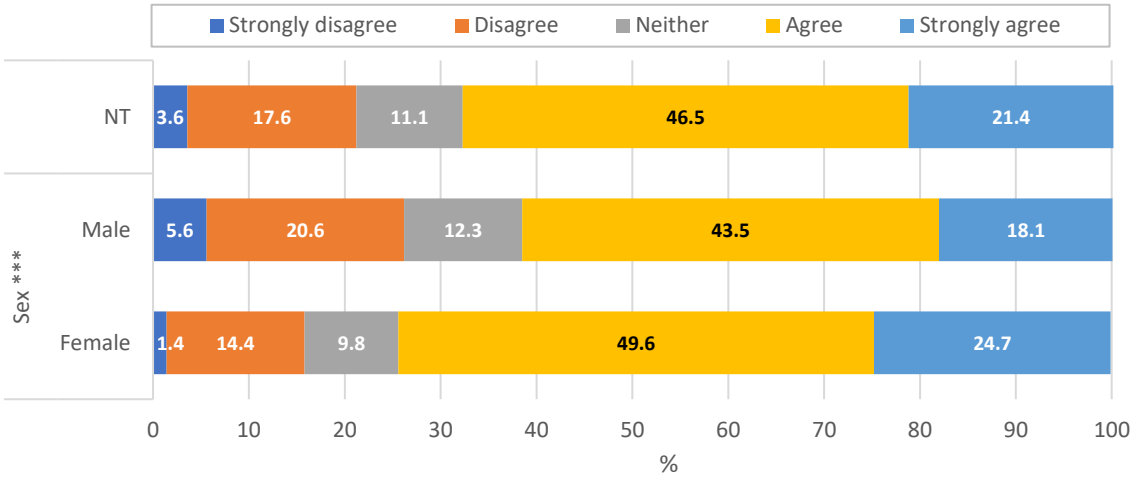


Figure 86: Setting limits on EGM gambling time and money by sex, 2018 NT adult population

*** p<0.001, ** p<0.01, * p<0.05: Significant association between sex and setting limits

Figure 87 shows the significant association between labour force status and setting limits on EGM gambling. Full-time (69%) and part-time or casually (72%) employed respondents were more likely to agree or strongly agree that gamblers should set limits on EGM gambling, compared with those not in the labour force (61%). Respondents not in the labour force (26%) were also more likely to disagree or strongly disagree that gamblers should limits on EGM gamblers than part-time/casually employed (17%) and unemployed (17%) respondents.

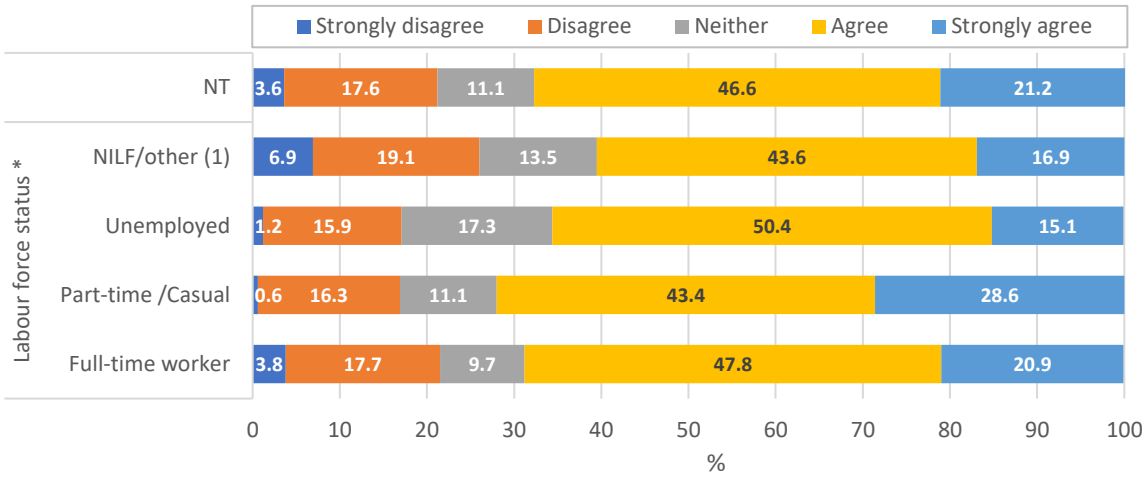


Figure 87: Setting limits on EGM gambling time and money by labour force status, 2018 NT adult population

*** p<0.001, ** p<0.01, * p<0.05: Significant association between labour force status and setting limits
(1) Not in the labour force and other (e.g. retired)

8.5.2 Setting limits on EGMs by gambling frequency

Figure 88 shows a significant association between all gambling frequency and views on setting limits on EGM gambling. The less frequent a person gambled, the more likely they were to support setting limits on EGM gambling. Seventy-six percent of non-gamblers agreed or strongly agreed about setting limits, followed by 71% of less than monthly gamblers, 65% of monthly gamblers and 58% of weekly gamblers. The opposite trend was also present for disagreeing or strongly disagreeing about setting

limits, with 31% of weekly gamblers disagreeing or strongly disagreeing, 24% of monthly gamblers, 17% of less than monthly gamblers and 15% of non-gamblers.

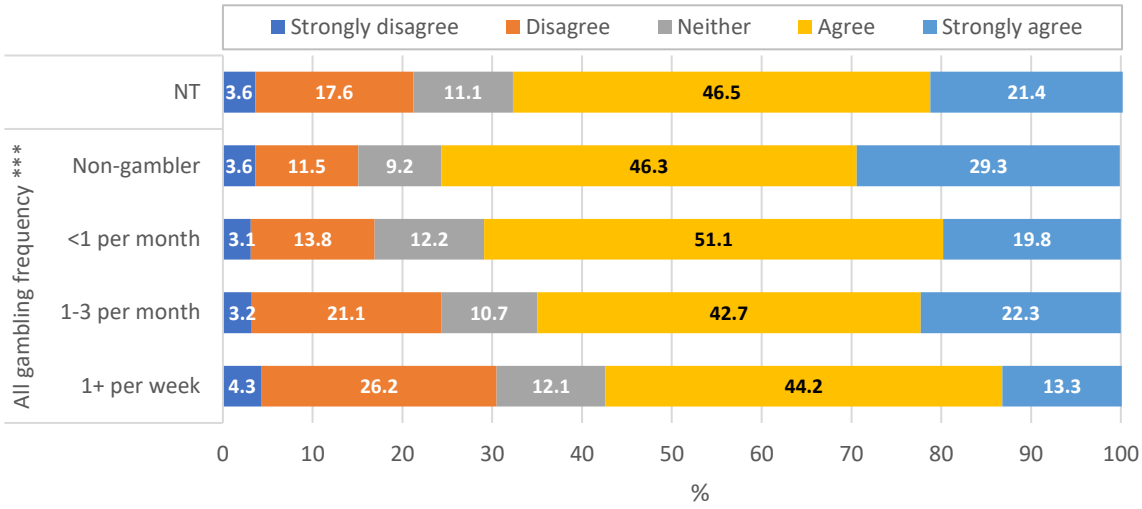


Figure 88: Setting limits on EGM gambling time and money by all gambling frequency, 2018 NT adult population

*** p<0.001, ** p<0.01, * p<0.05: Significant association between gambling frequency and setting limits

Figure 89 shows that a similar (and significant) trend to that observed for all gambling frequency was present for EGM gambling frequency with regards setting limits on EGM gambling. That is, 43% of weekly EGM gamblers agreed or strongly agreed that limits should be set on EGM gambling, followed 47% of monthly EGM gamblers, 60% of less than monthly EGM gamblers, 70% of non-EGM gamblers and 75% of non-gamblers. The trend for disagreeing or strongly disagreeing with setting EGM limits was more pronounced for EGM gamblers, compared with all gambling frequency, with 38% of weekly, 46% of monthly, 29% of less than monthly, 18% of non-EGM gamblers and 15% of non-gamblers disagreeing or strongly disagreeing that time and money limits should be set on EGM gambling.

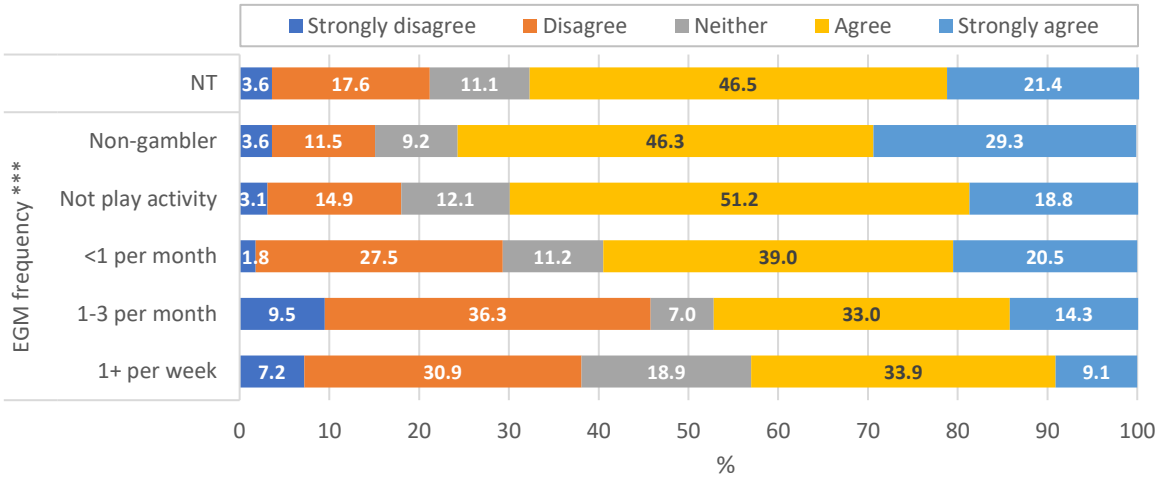


Figure 89: Setting limits on EGM gambling time and money by all gambling frequency, 2018 NT adult population

*** p<0.001, ** p<0.01, * p<0.05: Significant association between gambling frequency and setting limits

8.5.3 Setting limits on EGMs by harm from someone else's gambling

Figure 90 shows the significant association between harm form someone else's gambling and views on setting limits on EGM gambling time and money. The more harms from someone else's gambling, the more likely they were to strongly agree that EGM limits should be set. Specifically, 44% of people who identified three or more harms from someone else's gambling strongly agreed that limits should be set, dropping to 29% for people experiencing one or two harms, and 20% for people experiencing no harms.

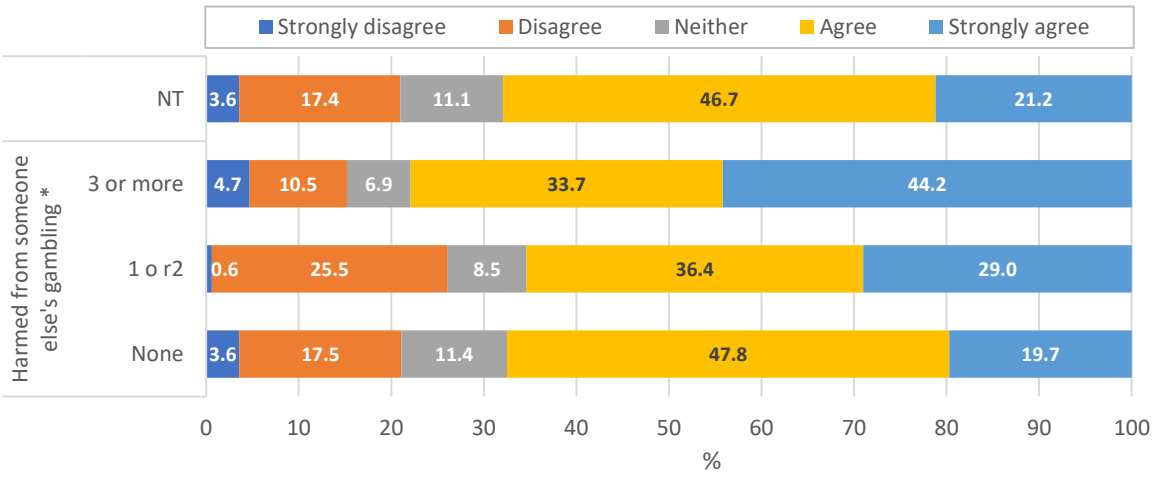


Figure 90: Setting limits on EGM gambling time and money by all gambling frequency, 2018 NT adult population

*** p<0.001, ** p<0.01, * p<0.05: Significant association between gambling frequency and setting limits

8.6 The Attitudes to Gambling Scale (ATGS-8)

The Attitudes to Gambling Scale-8 was included in the 2018 survey for the first time. It uses the Likert scale strongly agree (5), agree (4), neither agree or disagree (3), disagree (2), and strongly disagree (1), and is a mixture of statements that indicate a positive or negative view of gambling. Responses to negative statements were reverse coded and scores added to get a score ranging from 8 to 40 and this was divided into quartiles. The 4th quartile (scores 25 to 40) indicates the person has a positive attitude towards gambling, while all other quartiles indicate a more negative view, with the first quartile being the most negative attitude towards gambling. Differences in attitudes by socio-demographic, socioeconomic and other variables of interest are presented for individual items and the full scale.

Responses to individual questions by sex are shown in Figure 91. Six of the eight items showed significant differences in responses between men and women, with women always having a more negative view of gambling, compared with men. The item eliciting the most people indicating they strongly agree was *there is too many opportunities for gambling now days*, with 38% of women strongly agreeing and a further 50% agreeing, while for men 29% strongly agreed and 51% agreed . The next highest response was for *gambling is dangerous for families*, with 30% women strongly agreeing and a further 48% agreeing, while for men, 24% strongly agreed and a further 52% agreed.

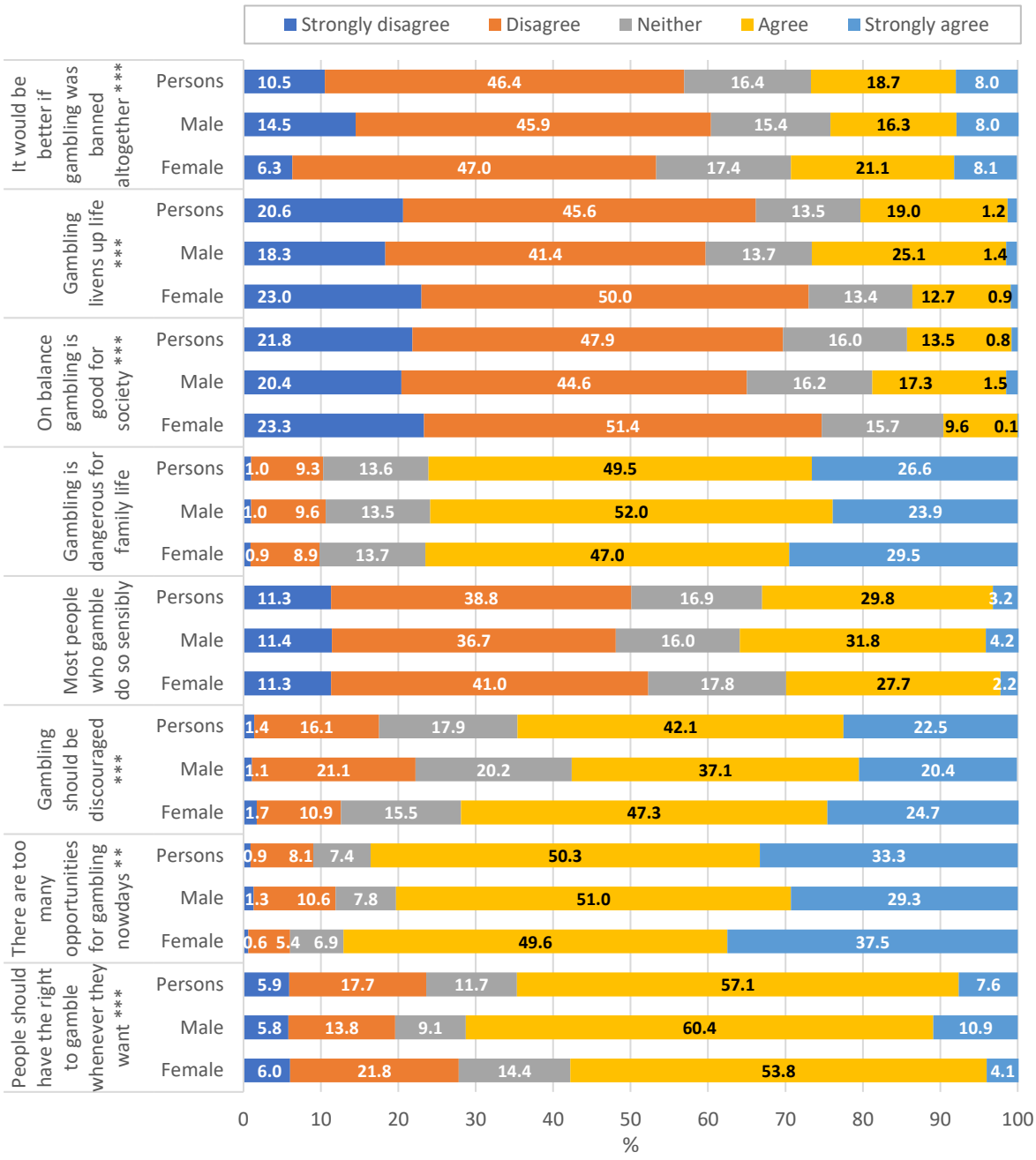


Figure 91: Sex by ATGS-8 items, 2018 NT Adult population

*** p<0.001, ** p<0.01, * p<0.05: Significant difference between male and female

Three items on the ATGS-8 varied significantly across regions, as shown in Figure 92. People in Regional Towns (37%) and Rest of NT (44%) were more likely to agree or strongly agree with the statement "it would be better if gambling was banned altogether", compared with those living in Darwin/Palmerston (23%) and Alice Springs (22%). People in Alice Springs (23%) were less likely to agree or strongly agree with the statement "most people who gamble do so sensibly", compared with Darwin/Palmerston (36%), Rest of NT (35%) and Regional Towns (31%). People in the Rest of the NT (70%) were more likely to agree or strongly agree that "gambling should be discouraged", compared with Darwin/Palmerston (64%), Alice Springs (65%), and Regional Towns (62%).

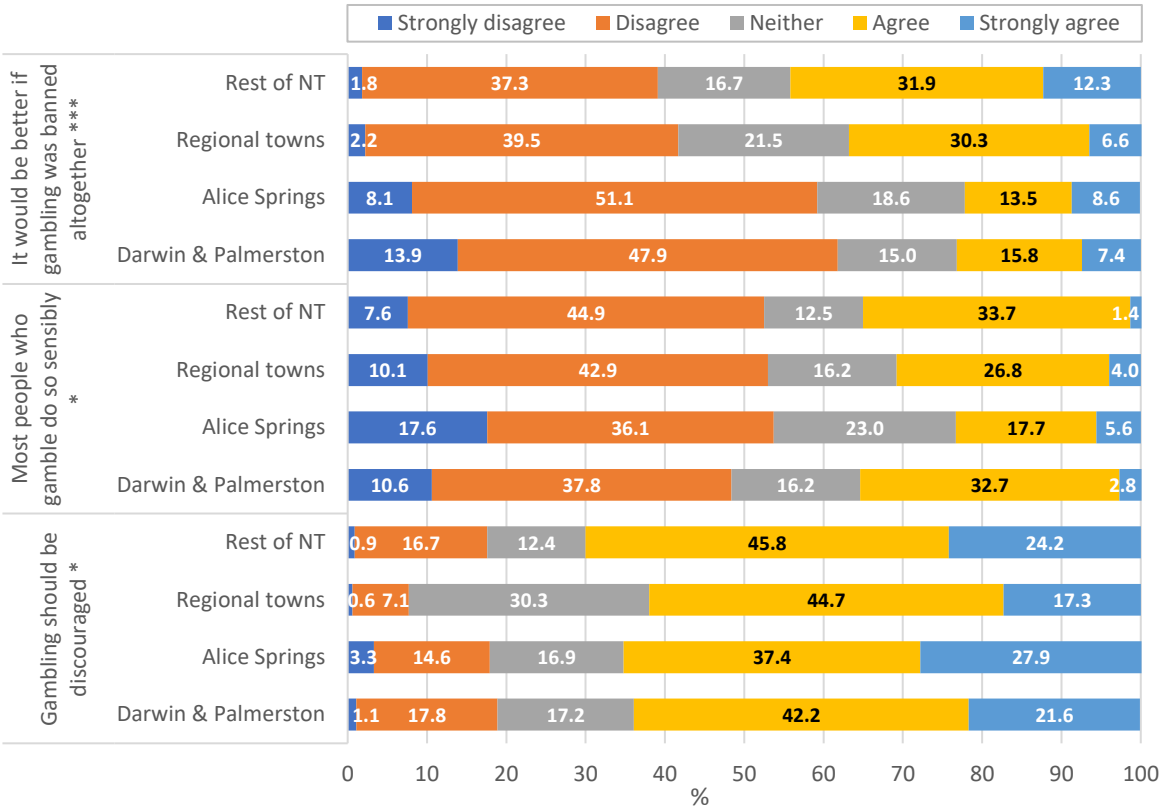


Figure 92: Region by ATGS-8 items with significant variation across regions, 2018 NT Adult population

*** p<0.001, ** p<0.01, * p<0.05: Significant difference across regions

Only one items from the ATGS-8 showed significant variation by age, as shown in Figure 93. Older people were more likely to disagree with the statement "it would be better if gambling was banned altogether", compared with younger people. Specifically, 50% of people under 40 years disagreed or strongly disagreed with the statement, compared with more than 60% in older age groups. The reverse of this trend was present in agree and strongly agree responses.

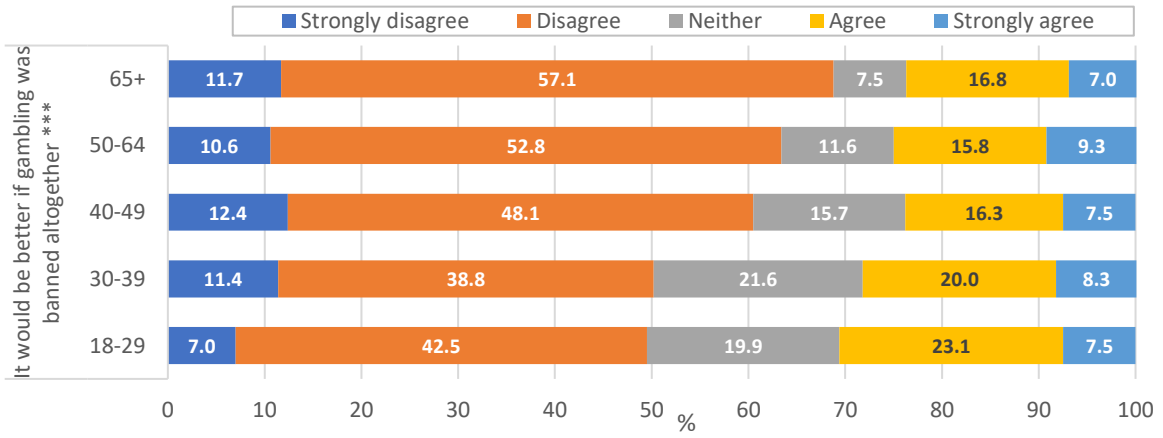


Figure 93: Age by ATGS-8 questions for items with significant variation across age groups, 2018 NT Adult population

*** p<0.001, ** p<0.01, * p<0.05: Significant difference across age groups

8.6.1 Attitudes to Gambling Scale quartiles by socio-demographic variables

The ATGS-8 (quartiles) varied significantly by sex, Indigenous status, language spoken at home and household type, and was marginally non-significant for region (Figure 94). People living in Rest of NT (10%) and Regional Towns (13%) were less likely to view gambling positively (highest quartile), compared with Darwin/Palmerston (24%) and Alice Springs (18%). Women (14%) were significantly under-represented in the highest quartile, compared with men (27%). Indigenous people (13%) were under-represented in the highest quartile (positive view of gambling), compared with non-Indigenous people (23%). People who did not speak English at home (6%) were significantly less likely to have a positive view of gambling, compared with English home speakers (22%). Single parents with children (13%), group (15%) and other households (13%) were less likely to have a positive view of gambling (least negative view quartile), compared with couple with no children households (26%) and single person households (23%).

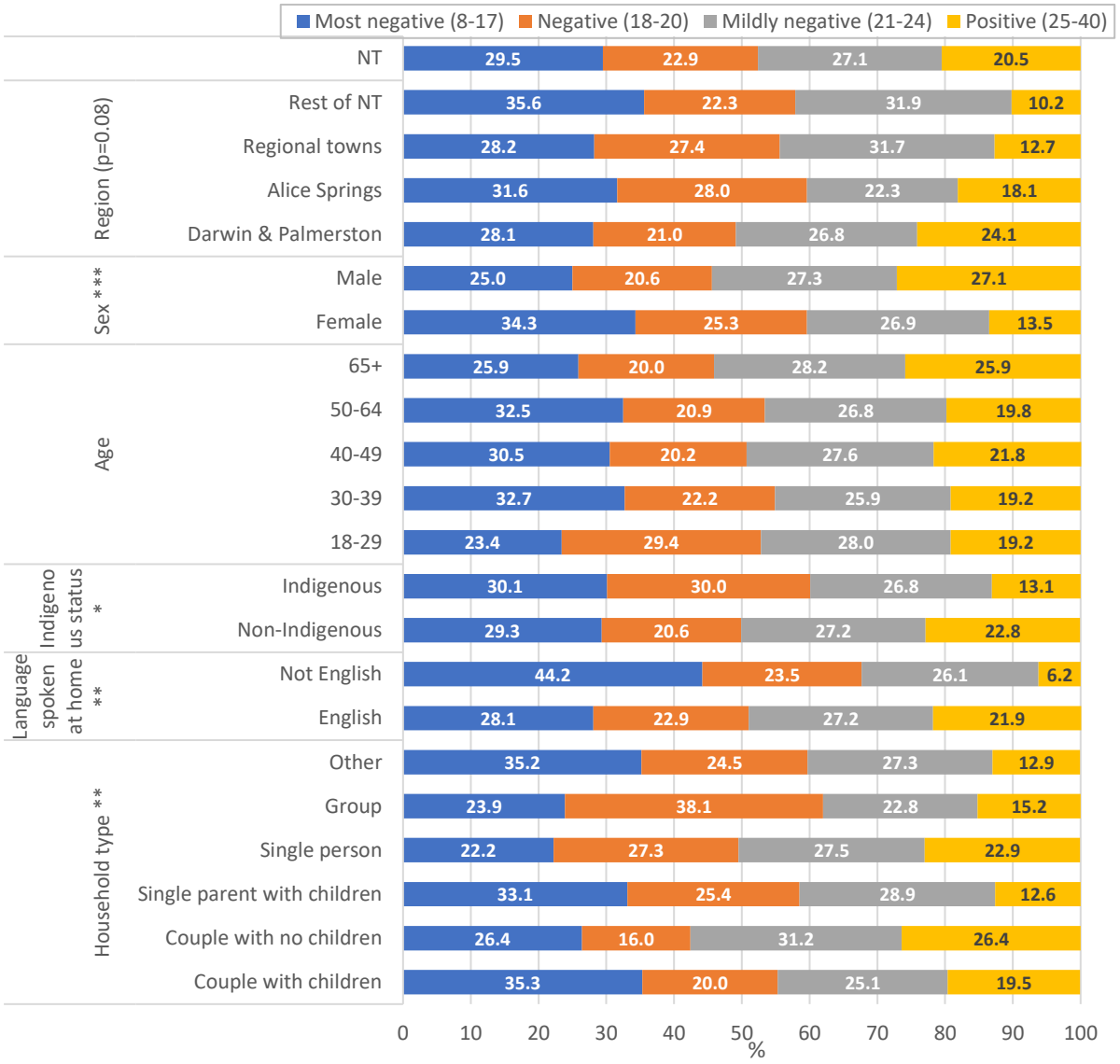


Figure 94: Socio-demographic variables by ATGS-8 quartiles, 2018 NT Adult population

*** p<0.001, ** p<0.01, * p<0.05: Significant association between socio-demographic variable and attitudes

8.6.2 Attitudes to Gambling Scale quartiles by socioeconomic variables

Figure 95 shows associations between the ATGS-8 and socioeconomic variables. The association between the ATGS-8 and personal gross income was marginally non-significant, but showed a trend that as people earned more income, they had a more favourable view of gambling, with 12% of people 4earning less than $20,000 per annum in the most positive quartiles, compared with 30% for those earning $120,000 or more per annum. FIFO/DIDO workers were more likely to view gambling favourably, as were unemployed and part-time/casual workers, and those with a bachelor's degree or higher.

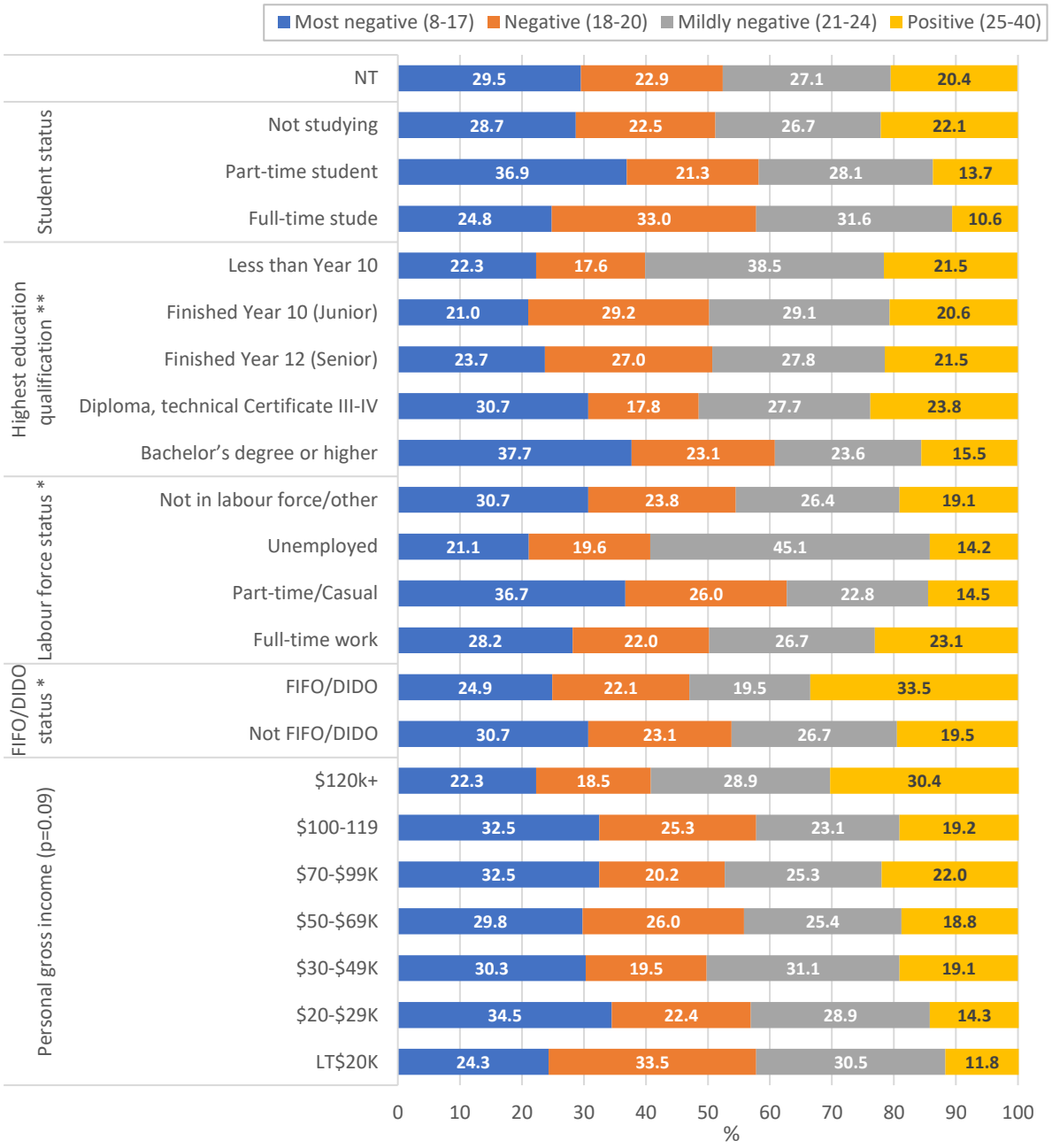


Figure 95: Attitudes to Gambling Scale by socioeconomic variables, 2018 NT Adult population

*** p<0.001, ** p<0.01, * p<0.05: Significant association between socioeconomic variable and attitudes

8.6.3 Attitudes to Gambling Scale quartiles by gambling activity frequency

Figure 96 shows associations between the ATGS-8 and gambling activity frequency, all gambling frequency, online gambling and regular gambling. All gambling activity variables were significantly associated with the ATGS-8. People who gambled one or more times per week, were significantly more likely to view gambling positively, compared with non-gamblers, or less frequent gamblers for the activity. Forty-three percent of online gamblers viewed gambling more positively, compared with 21% non-online gamblers, which was similar for regular gamblers (42%), compared with non-regular gamblers (20%). Weekly racetrack (68%)casino game (69%), and sports (63%) gamblers were the most over-represented in the positive view of gambling quartile.

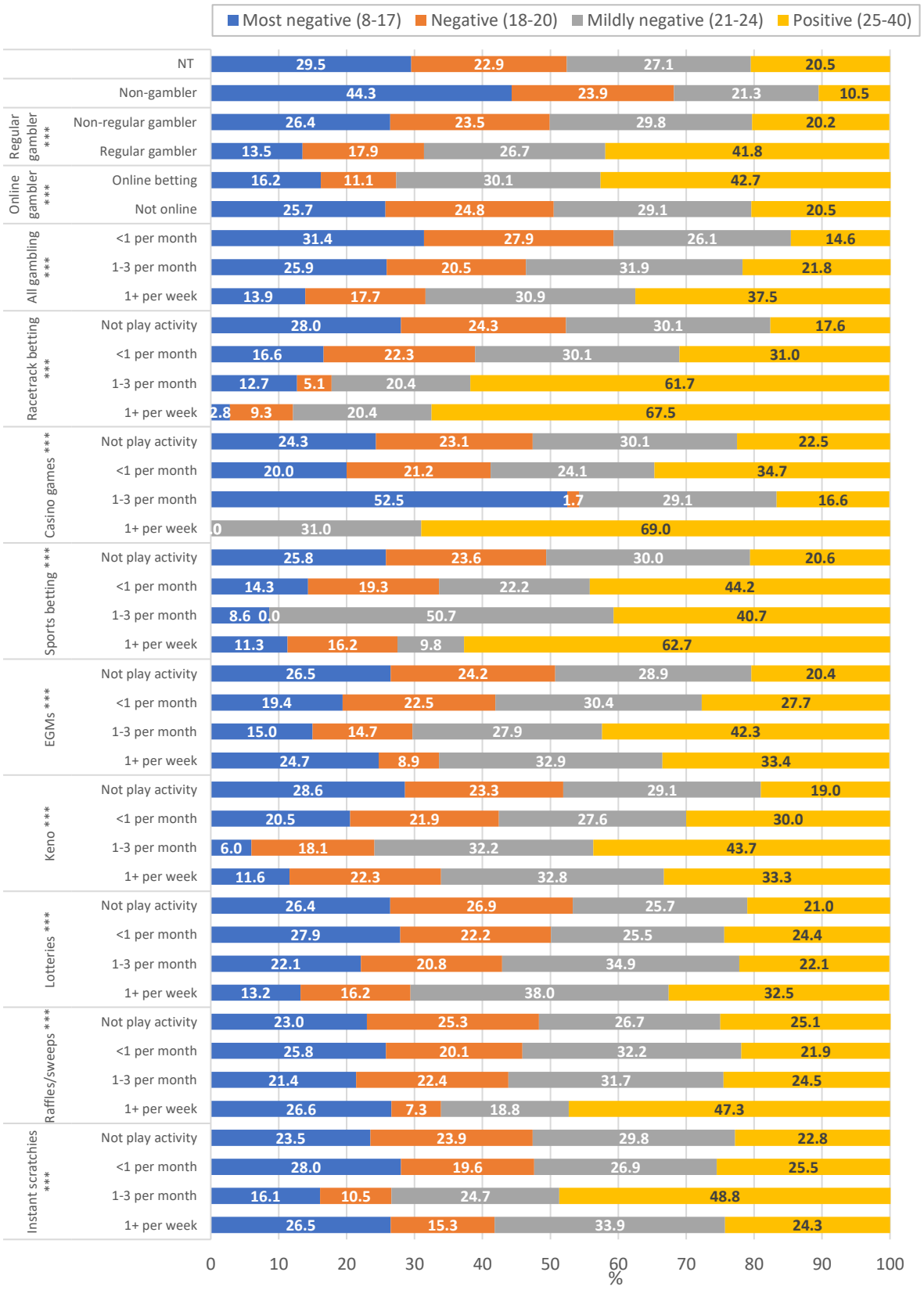


Figure 96: Attitudes to Gambling Scale by frequency of gambling activities, 2018 NT Adult population

*** p<0.001, ** p<0.01, * p<0.05: Significant association between gambling frequency and attitudes

8.6.4 Attitudes to Gambling Scale quartiles by problem gambling risk

Figure 97 shows the significant association between the ATGS-8 and problem gambling risk. Non-gamblers (11%) and people experiencing problem gambling (7%) were less likely to have a positive view of gambling, compared with moderate risk (25%), low risk (26%), and non-risk (24%) gamblers.

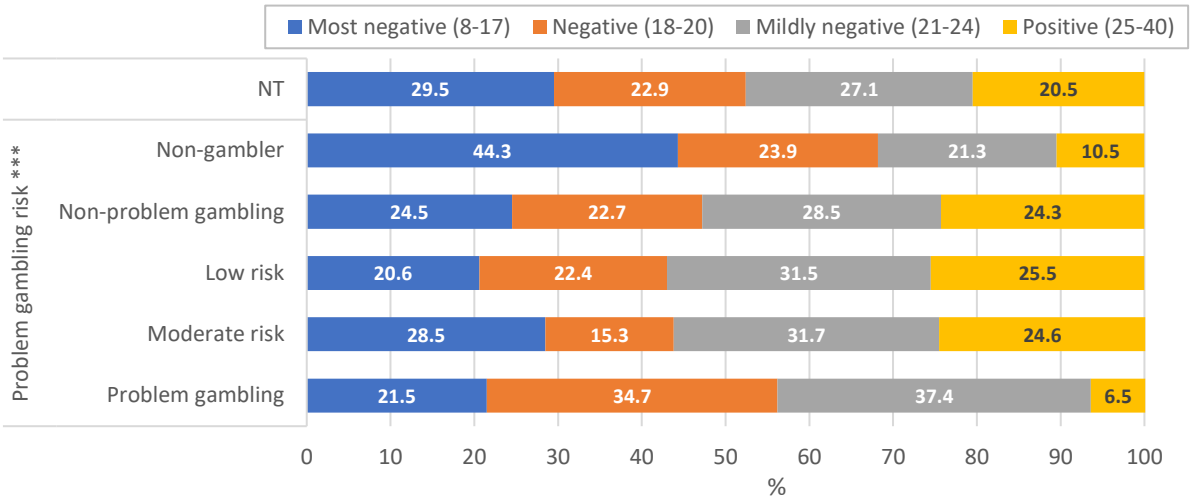


Figure 97: Problem gambling risk by ATGS-8 quartiles, 2018 NT Adult population

*** p<0.001, ** p<0.01, * p<0.05: Significant association between problem gambling risk and attitudes

8.6.5 Attitudes to Gambling Scale quartiles by harm from someone else's gambling

Figure 98 shows the significant association between number of harms from someone else's gambling and the ATGS-8. People who identified three or more harms from someone else gambling were over-represented (52%) in the most negative view of gambling quartile, and under-represented in the most positive view of gambling quartile (6%).

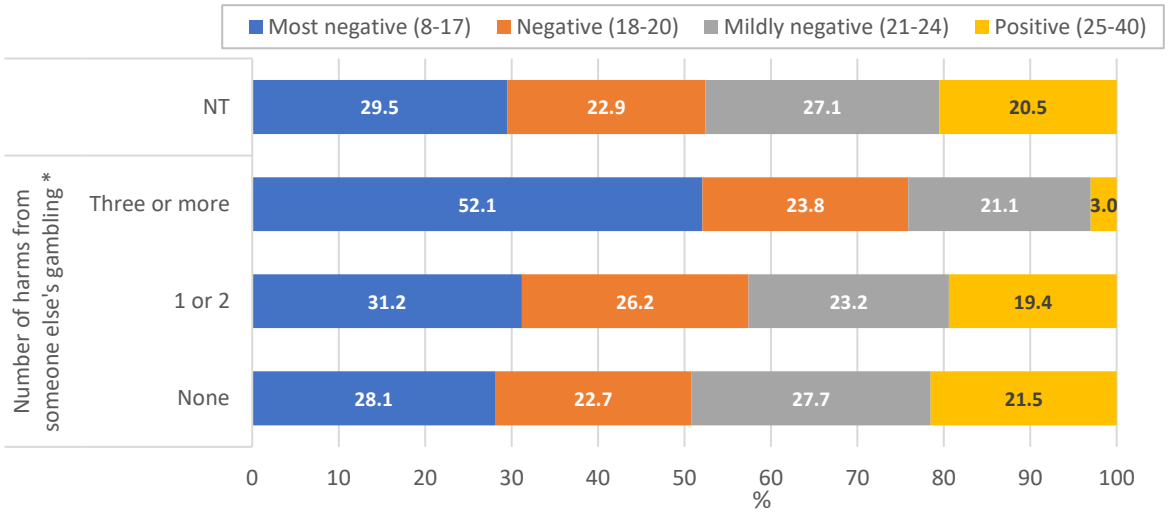


Figure 98: Harm from someone else's gambling by ATGS-8, 2018 NT Adult population

*** p<0.001, ** p<0.01, * p<0.05: Significant association between number of harms and attitudes

9 CHANGES TO EGM POLICY AND EGM GAMBLING HARM

9.1 Background

Electronic Gambling Machines (EGMs) are widespread throughout Australia, except in Western Australia, where they are only located in the single casino. EGMs are the gambling activity most associated with problem gambling [23, 24], and in the 2015 NT survey, 92% of problem gamblers played EGMs [2].

9.1.1 Chapter contents

This chapter presents EGM policy and related survey data and was asked of all monthly or more EGM gamblers. Specifically, this chapter contains:

- Change in spending as a result of note acceptor installation for monthly or more EGM gamblers (by problem gambling risk, harm from own gambling and socio-demographic variables)
- Largest load-up into an EGM by monthly or more EGM gamblers and whether they experienced a negative consequence from this
- Problem gambling risk for EGM gamblers, and harm from own gambling for at-risk EGM gamblers, including differences in harms between EGM and non-EGM at-risk gamblers.
- Differences between EGM and non-EGM gamblers highest spend activity and a logistic regression model including multivariable adjusted significant socio-demographic and socioeconomic factors predicting EGMs as a highest spend activity.

9.2 Chapter highlights

- 30% of monthly or more EGM gamblers indicated that the change to note acceptors on EGMs in hotels and clubs increased the amount they spent, with this being significantly higher among EGM gamblers aged 18-29 years (49%) and 30-39 years (41%), and lower among those aged 65 or more years (17%).
- 68% of monthly or more EGM gamblers experiencing problem gambling indicated that the installation of note acceptors led to an increase in their EGM spend, compared with 28% of moderate risk, 37% of low risk and 9% of non-risk gamblers (see Chapter 10).
- Monthly or more EGM gamblers who experienced harm from their *own* gambling (49%) were significantly more likely than those not experiencing harm from their own gambling (18%) to indicate that note acceptor installation on EGMs increased their EGM spending.
- 77% of monthly or more EGM gamblers said that the largest load-up into an EGM in the last year was $100 or less, while just 10% had a largest load-up of $300 or more. This indicates that a reduction in load-up to a maximum of $100 could be implemented without affecting many EGM gamblers.
- Of those gamblers that inserted $300 or more as their largest load-up into an EGM, 42% were classified as experiencing problem gambling, compared with 4% of those who only inserted $100 or less as their largest load-up.
- Of those gamblers that inserted $300 or more as their largest load-up into an EGM, 53% experienced a negative consequence as a result of this load-up, compared with 13% of those with a maximum load-up of $100 or less, and 22% of those with a maximum load-up of $101-$299.

- 11% of gamblers had a highest spend activity of EGMs. Being unemployed (31%), Indigenous (20%) and having a Year 10 education (18%) were significantly associated with EGM as highest spend in a multivariable logistic regression model.

9.3 Change in EGM spending after note acceptor policy change

Monthly or more EGM gamblers were asked *has the introduction of note acceptors on pokies increased, decreased or not changed the amount of money you spend on pokies?* There were no significant differences across regions and sex for this question, so these are not presented. Figure 99 shows that across all monthly EGM gamblers, 31% indicated that the note acceptor installation had led to an increase in their EGM spending. There was a statistically significant association between change in EGM spending after note acceptor installation and age. EGM monthly or more gamblers less than 40 years of age were more likely to increase how much they spent on EGMs after the installation of note acceptors. This younger age group were also more likely to have not or rarely played EGMs prior to 2013 when note acceptors were able to be installed. There was no difference between male and female responses to this question.

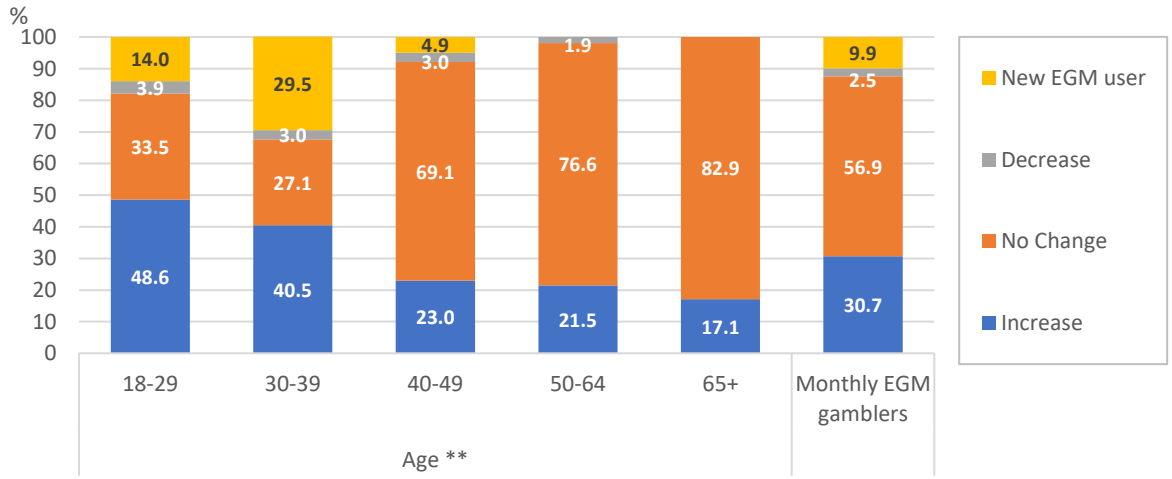


Figure 99: Age by change in EGM spending after introduction of note acceptors, 2018 monthly EGM gamblers

*** p<0.001, ** p<0.01, * p<0.05: Significant association between age and change in EGM spending

There was a significant association between problem gambling risk and change in EGM spending after note acceptor installation for monthly or more EGM gamblers (Figure 100). Around 68% of monthly or more EGM gamblers experiencing problem gambling reported that note acceptor installation caused an increase in their EGM spending, compared with 27.5% and 37.3% of EGM gamblers experiencing moderate and low and non-risk gambling and 8.9% non-risk EGM gamblers. There was no association between EGM gambling frequency and change in spending on EGMs after note acceptor installation, so this is not presented.

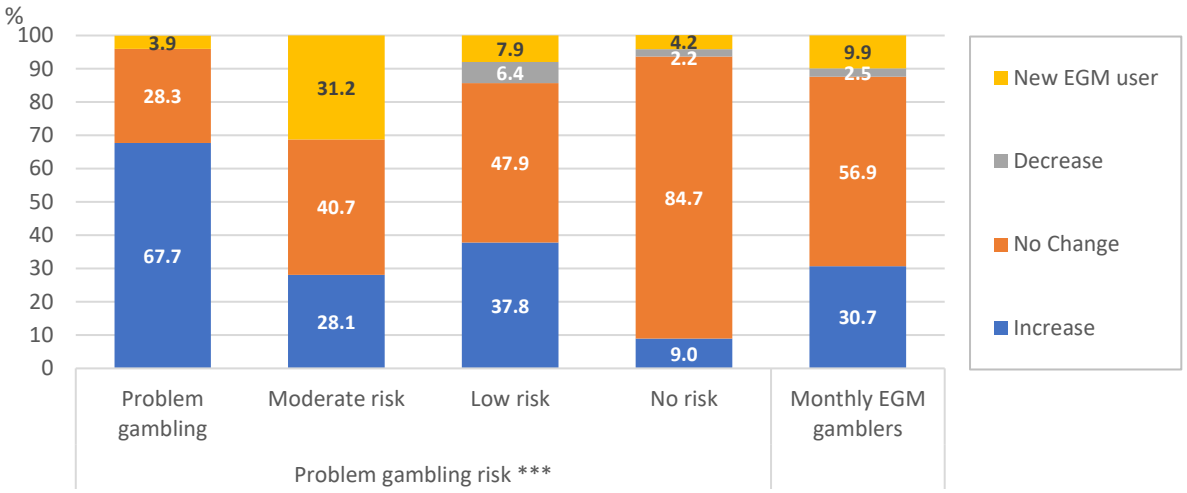


Figure 100: Problem gambling risk by change in EGM spending after introduction of note acceptors, 2018 monthly or more EGM gamblers

*** p<0.001, ** p<0.01, * p<0.05: Significant association between problem gambling risk and change in EGM spending

Figure 101 shows a significant association between harm from own gambling and change in spending after note acceptor installation for monthly or more EGM gamblers. Among those monthly or more EGM gamblers who reported at least pone harm form their own gambling, 48.5% also said that note acceptor installation increased their EGM spending, compared with 18% among monthly EGM gamblers that did not identify a harm from their own gambling. Those harmed from their own gambling were also more likely to be a new user to EGMs (17.5%), compared with those not reporting a harm, with 4.5% of this group new users to EGMs.

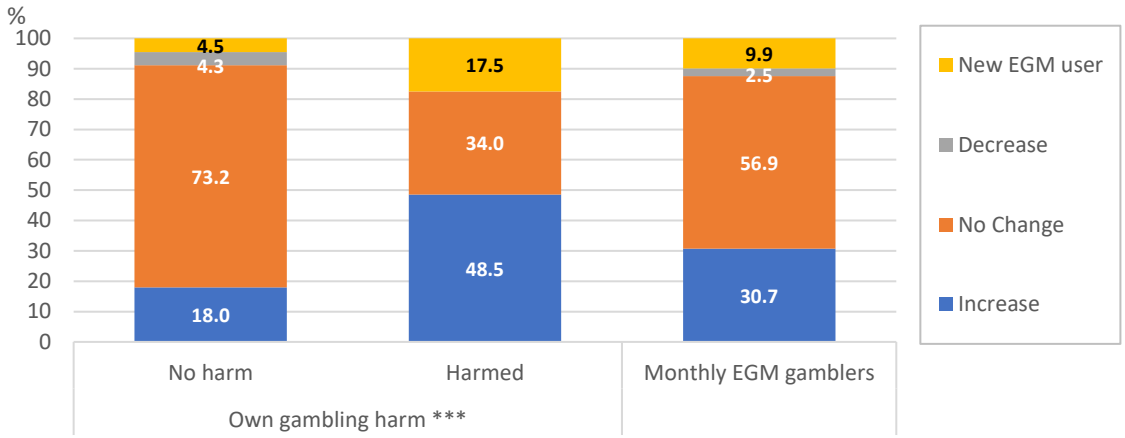


Figure 101: Harm from own gambling by change in EGM spending after introduction of note acceptors, 2018 monthly or more EGM gamblers

*** p<0.001, ** p<0.01, * p<0.05: Significant association between problem gambling risk and change in EGM spending

9.4 Largest load-up into an EGM and negative consequences from load-up

Figure 102 shows the largest amount loaded into an EGM in the last year by EGM gambling frequency for monthly EGM gamblers. More than three quarters of monthly EGM gamblers loaded less than $100 as their largest load up, and this did not vary

significantly by EGM gambling frequency; however, 13% of weekly gamblers, compared with 7% of monthly gamblers loaded $300 or more as their largest load up.

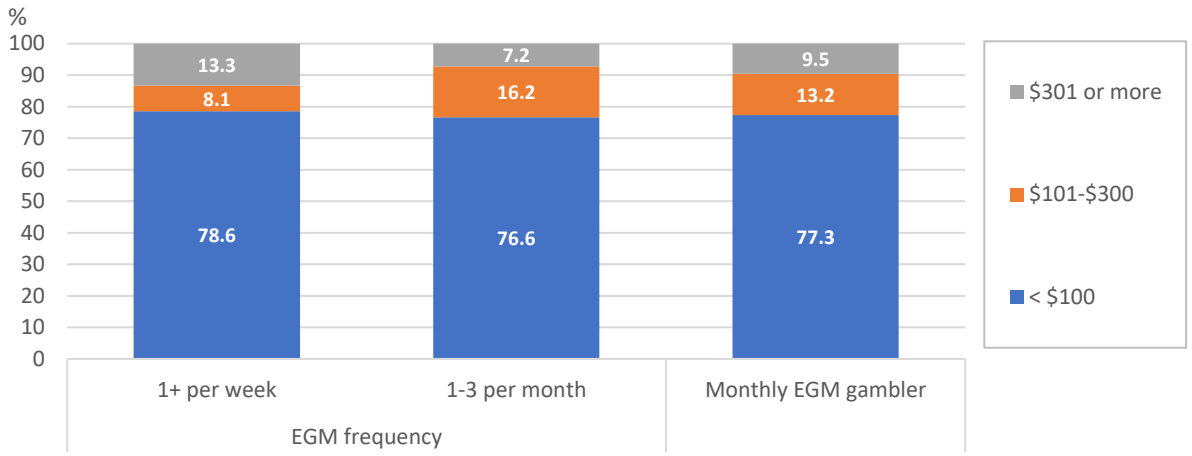


Figure 102: EGM frequency by largest amount loaded into an EGM, 2018 monthly EGM gamblers

Figure 103 shows the significant association between largest load up amount in a session on an EGM and problem gambling risk for monthly or more EGM gamblers. Fifty-five percent of EGM gamblers experiencing problem gambling had a largest load up of $100 or less in the last 12 months, increasing to 73%, 77% and 90% for moderate, low and non-risk gamblers. A quarter of problem and moderate risk gamblers had a largest load up of $301 or more, compared with 2% of low risk and no non-risk gamblers.

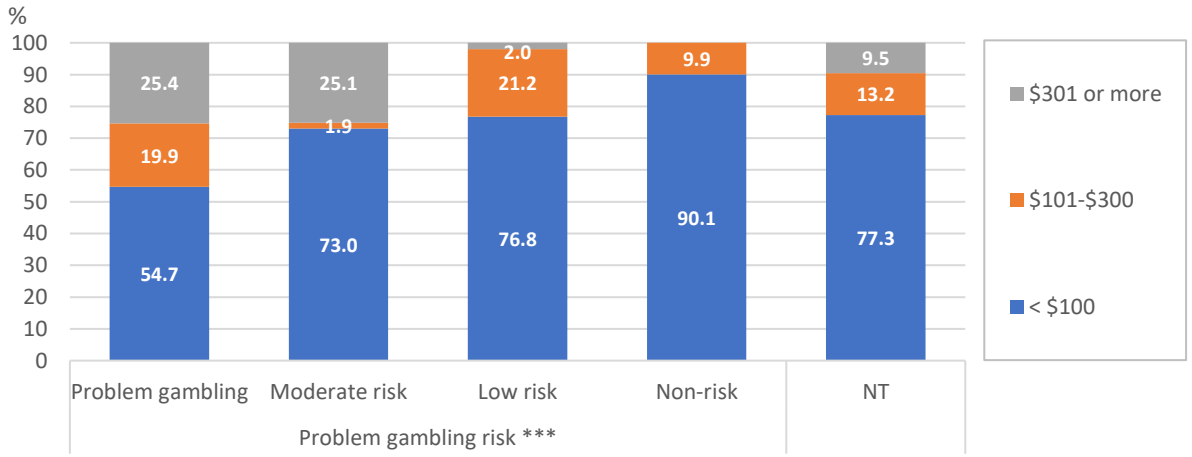


Figure 103: Problem gambling risk by largest amount loaded into an EGM, 2018 monthly EGM gamblers

*** p<0.001, ** p<0.01, * p<0.05: Significant association between problem gambling risk and largest EGM load-up amount

Figure 104 flips problem gambling risk and largest load up amount around and shows that 41.5% of monthly or more EGM gamblers who had a largest load-up of $301 or more were classified as experiencing problem gambling, compared with 4.1% of those who had a largest load-up of less than $100, and 22.7% of those whose largest load-up was $101 to $300. This significant association provides some evidence that the

change from to note acceptors and the increased load-up amount now available is disproportionally affecting people experiencing problem and moderate risk gambling.

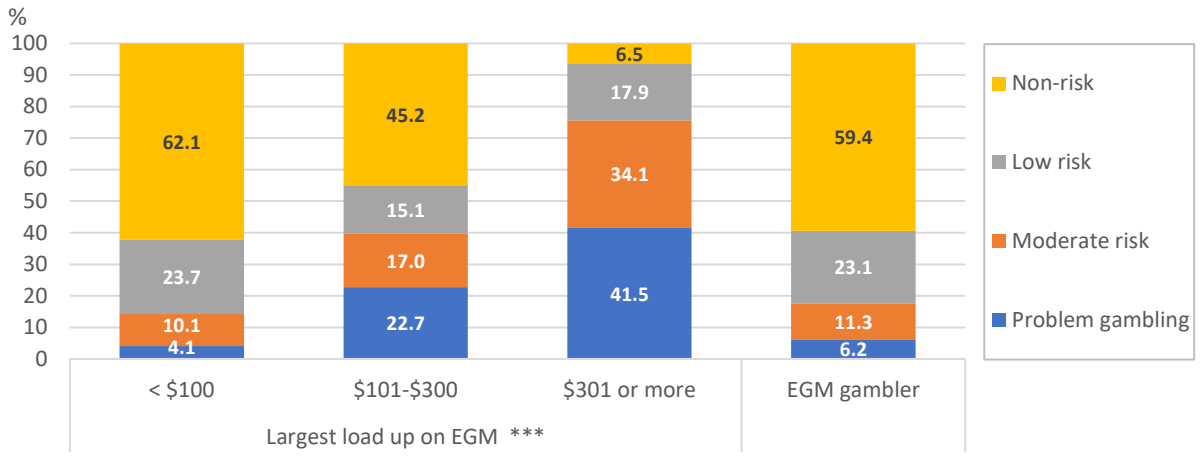


Figure 104: Largest amount loaded into an EGM by problem gambling risk, 2018 monthly EGM gamblers

*** p<0.001, ** p<0.01, * p<0.05: Significant association between problem gambling risk and largest EGM load-up amount

Over half of the monthly or more EGM gamblers who had a largest load up of $301 or more experienced negative consequences from spending too much on gambling when they loaded up $301 or more (Figure 105). This drops to 22% of those whose largest load up was $101 to $300 and 13% among those whose largest load up was less than $101. This association was statistically significant. So, a reduction in load-up would be expected to reduce harm from EGMs.

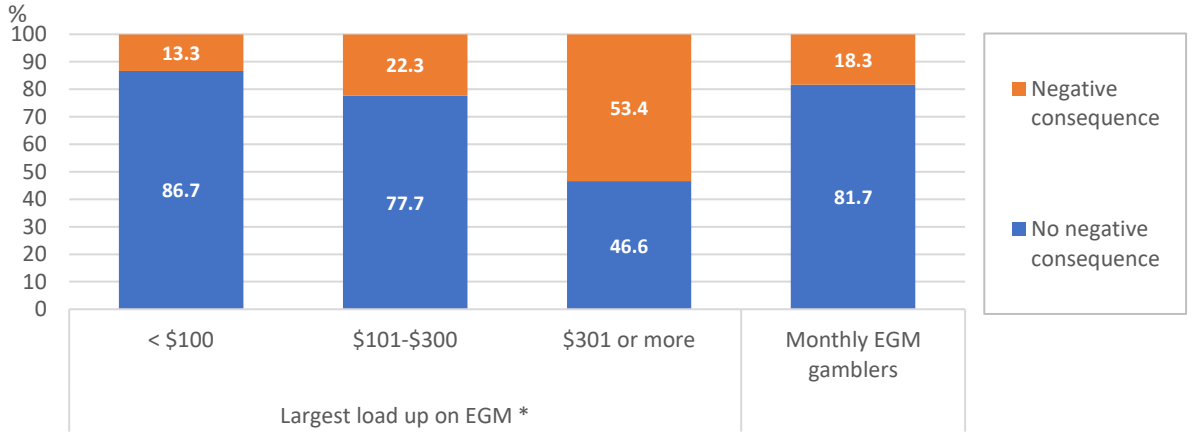


Figure 105: Largest amount loaded into an EGM by negative consequences from largest load into EGM by, 2018 monthly EGM gamblers

*** p<0.001, ** p<0.01, * p<0.05: Significant association between experience harm from EGM highest load-up and largest EGM load-up amount

9.5 EGMs and problem gambling risk

Figure 106 shows the change in problem gambling risk between 2015 and 2018 for EGM, non-EGM and all gamblers. There was a statistically significant increase in problem gambling risk for all categories for EGM gamblers, with problem gambling

increasing from 2.7% to 6.2%, moderate risk gambling from 7.8% to 11.3% and low risk gambling from 18.6% to 23.1%. There were non-significant increases in all problem gambling risk categories for non-EGM gamblers, while increases were significant in problem gambling risk for all gamblers. In 2018, 41% percent of EGM gamblers were classified as at risk of problem gambling, compared with 29% in 2015, and 12% and 9% of non-EGM gamblers in 2018 and 2015 respectively. This compares with 20% of all gamblers at risk of problem gambling in 2018 and 15% in 2015.

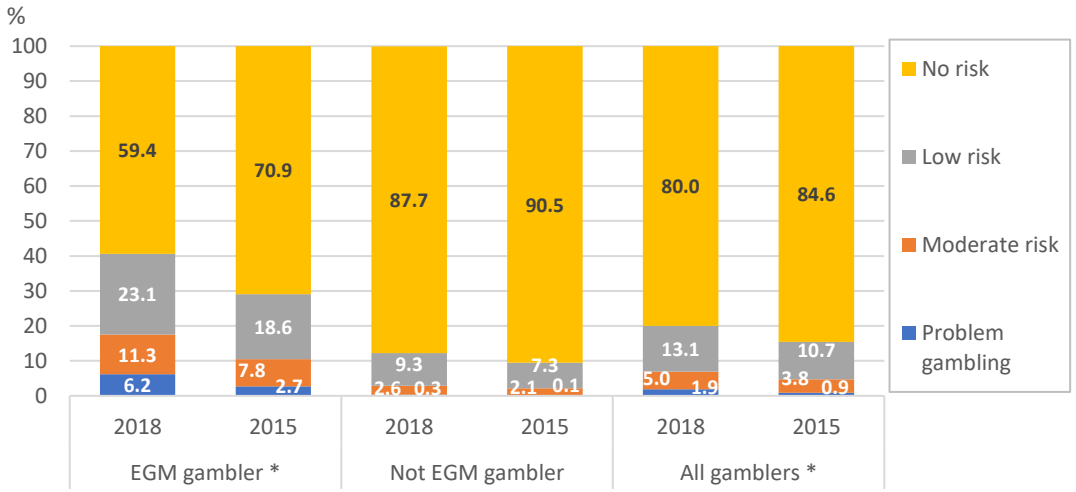


Figure 106: EGM gambling by problem gambling risk and time, 2018 and 2015 gamblers

*** p<0.001, ** p<0.01, * p<0.05: Significant difference in problem gambling risk between 2015 and 2018

Figure 107 shows problem gambling risk by EGM gambling frequency for 2018. The association between problem gambling risk and EGM gambling frequency is statistically significant, with 33% of weekly, 10% of monthly, and 2% of less than monthly EGM gamblers classified as experiencing problem gambling. Over 75% of weekly EGM gamblers were classified as at risk of problem gambling, compared with 20% of all gamblers, and 12% of non-EGM gamblers.

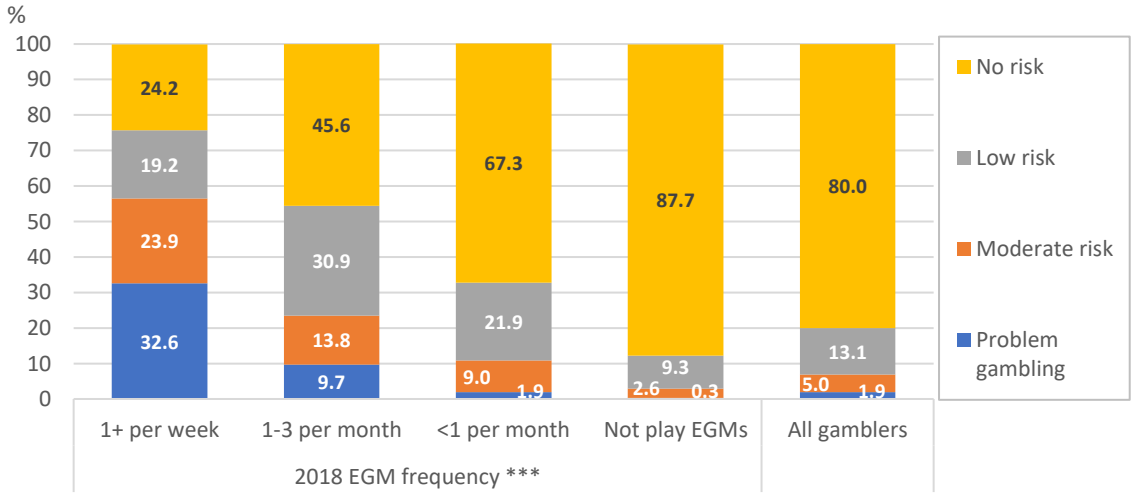


Figure 107: EGM frequency of gambling by Problem gambling risk, 2018 gamblers

*** p<0.001, ** p<0.01, * p<0.05: Significant association between problem gambling risk and EGM frequency of gambling

Figure 108 flips problem gambling risk and EGM gambling frequency around, and shows that 46% of gamblers experiencing problem gambling, gambled on EGMs weekly, compared with 13% for moderate risk gambling and 4% for low risk gambling. Eighty-eight percent of gamblers experiencing problem gambling gambled on EGMs, compared with 62% for moderate risk gamblers, 48% of low risk gamblers, 20% of non-EGM gamblers, and 27% of all gamblers.

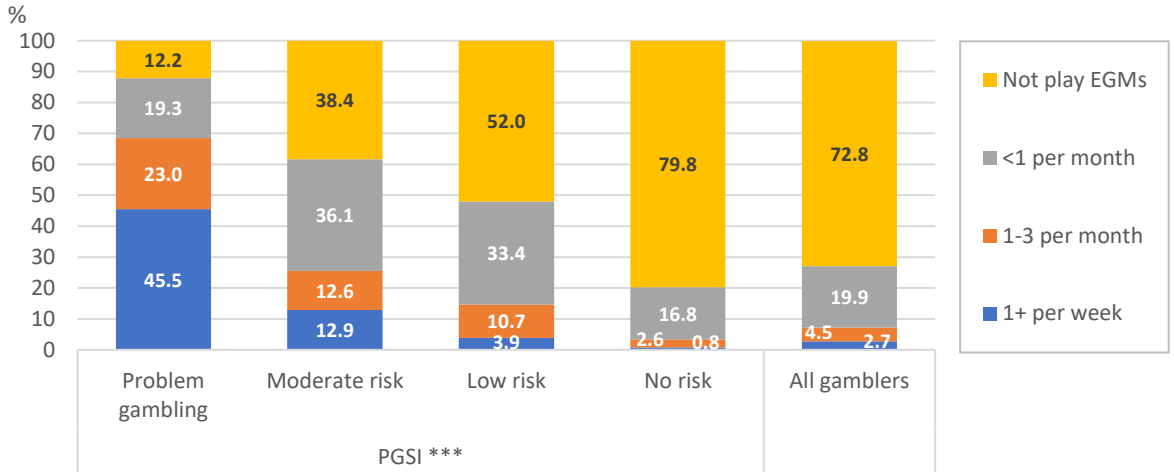


Figure 108: Problem gambling risk by EGM frequency of play, 2018 gamblers

*** p<0.001, ** p<0.01, * p<0.05: Significant association between age and change in EGM spending

9.6 At-risk EGM gamblers and harm from their own gambling

Table 47 shows that there were 25,852 at-risk (PGSI 1 or more) gamblers in the NT in 2018, of which 14,273 were EGM gamblers, and 11,579 non-EGM gamblers. There was a significant difference the number of harms experience because of own gambling, between at-risk EGM and non-EGM gamblers, with 55% (7,700 EGM gamblers), experiencing at least one harm from their own gambling, compared with 31% (3,500) at-risk non-EGM gamblers. Population counts in this table can be used to calculate population counts for figures in this section.

Table 47: Number of harms from own gambling by at-risk EGM gambling status, 2018 at-risk gamblers

	At-risk EGM status **			At-risk EGM status **		
	Not-EGMs % (SE)	EGMs % (SE)	At-risk % (SE)	Not-EGMs N	EGMs N	At-risk N
None	69.2 (1.8)	45.6 (2.8)	56.2 (1.5)	8,013	6,504	14,517
One or two	25.9 (4.7)	40.6 (5.2)	34.0 (3.7)	2,999	5,789	8,788
Three or more	4.9 (4.6)	13.9 (5.2)	9.9 (3.7)	567	1,980	2,547
Total	**100.0**	**100.0**	**100.0**	**11,579**	**14,273**	**25,852**

*** p<0.001, ** p<0.01, * p<0.05: Significant difference in number of harms between at-risk EGM and non-EGM gamblers

Figure 109 shows the number of harms experienced because of own gambling for at risk gamblers by EGM gambling status and survey. There was a significant increase in the percentage of at-risk gamblers reporting harm from their own gambling for at risk EGM and non-EGM gamblers between 2015 and 2018. Around 30% of at-risk EGM gamblers reported at least one harm from their own gambling in 2015, increasing to 55% in 2018, compared with 19% and 31% of at-risk non-EGM gamblers respectively.

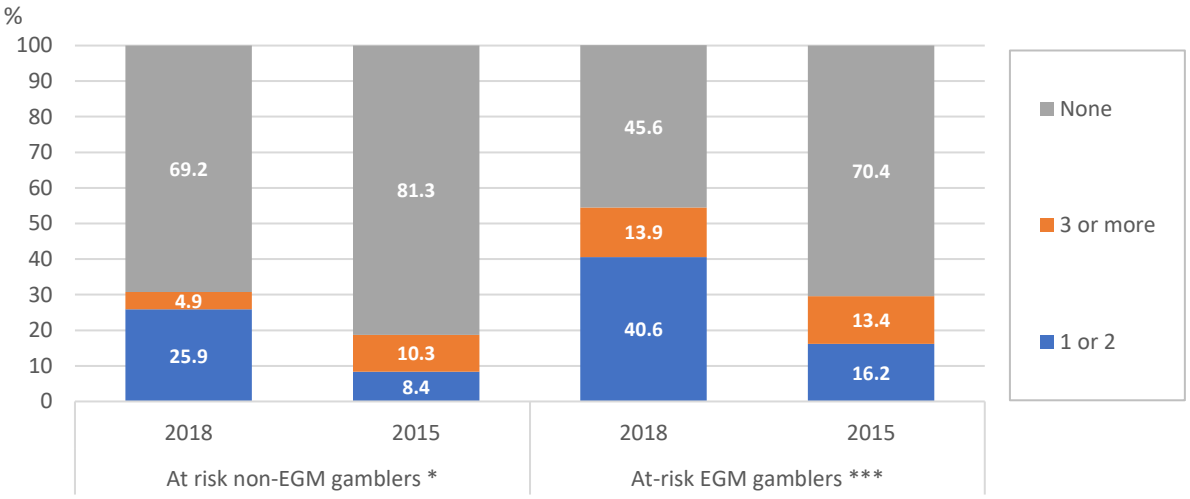


Figure 109: EGM gamblers harmed from own gambling by number of harms and survey, 2015 and 2018 at-risk gamblers

*** p<0.001, ** p<0.01, * p<0.05: Significant change in distribution between 2015 and 2018

Figure 110 shows a significant difference between at-risk EGM and non-EGM gamblers in the number of harms experienced from their own gambling. Among all at-risk gamblers, 34% experienced one or more harms from their own gambling, compared with 41% (7,700 people) among at-risk EGM gamblers and 26% (3,500 people) among at risk non-EGM gamblers, while three or more harms were experienced by 10%, 14% and 5% of at risk gamblers, at risk EGM gamblers and at risk non-EGM gamblers respectively.

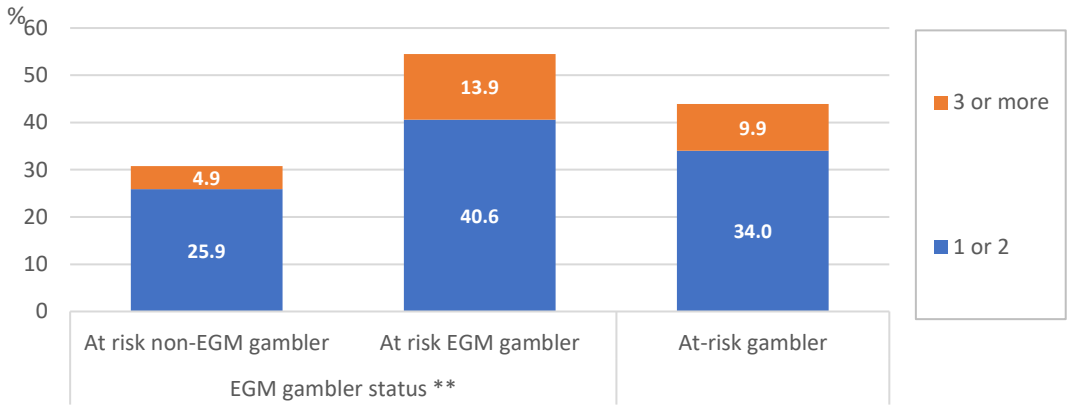


Figure 110: At-risk EGM and non-EGM gamblers by number of harms from own gambling, 2018 at-risk gamblers

*** p<0.001, ** p<0.01, * p<0.05: Significant difference in distribution of number of own harms between EGM and non-EGM gamblers

Figures 111 to 114 show the harms from own gambling that had a statistically significant difference between at-risk EGM and non-EGM gamblers. All three psychological/emotional harms were reported at significantly higher rates for at-risk EGM gamblers, compared with at-risk non-EGM gamblers. Figure 111 shows that nearly 45% (6,250 people) of at-risk EGM gamblers reported feeling ashamed or had regrets because of their own gambling, compared with 19% of at-risk non-EGM gamblers and 32% of all at-risk gamblers. Around 9% (1,200 people) and 21% (3,000 people) of at-risk

EGM gamblers reported they felt ashamed or had regrets weekly and monthly respectively, compared 0.5% and 11% for at-risk non-EGM gamblers, and 5% and 17% for all at-risk gamblers respectively.

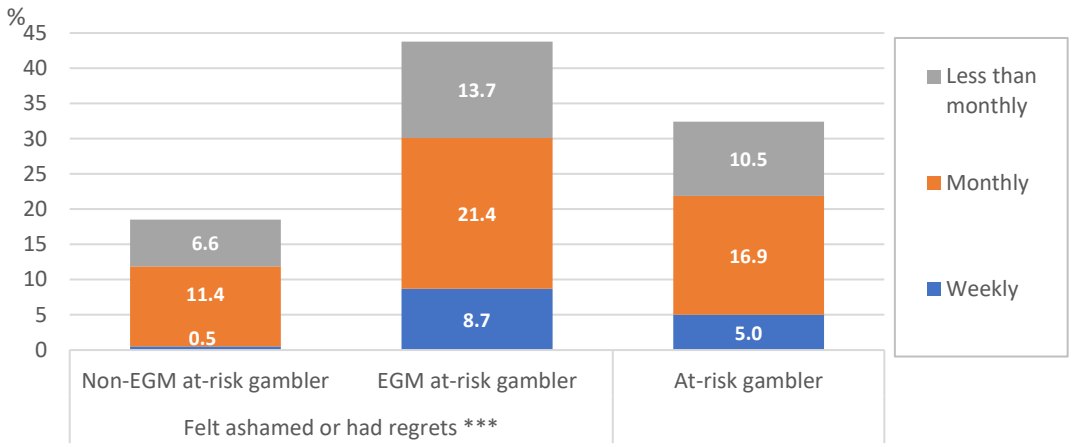


Figure 111: At-risk EGM and non-EGM gamblers by frequency of felt ashamed or had regrets, 2018 at-risk gamblers

*** p<0.001, ** p<0.01, * p<0.05: Significant difference in distribution in frequency of felt ashamed or had regrets between EGM and non-EGM at risk gamblers

Figure 112 sows a statistically significant difference between at-risk EGM and non-EGM gamblers in feeling stressed or anxious because of their gambling. Around 17% at-risk EGM gamblers reported feeling stressed or anxious, compared with 7% of at-risk non-EGM gamblers. Around 7% (980 people) of at-risk EGM gamblers felt stressed or anxious weekly, and a further 7.1% (1,010 people) felt stressed or anxious monthly, compared with less than 1% and 5% of at-risk non-EGM gamblers respectively.

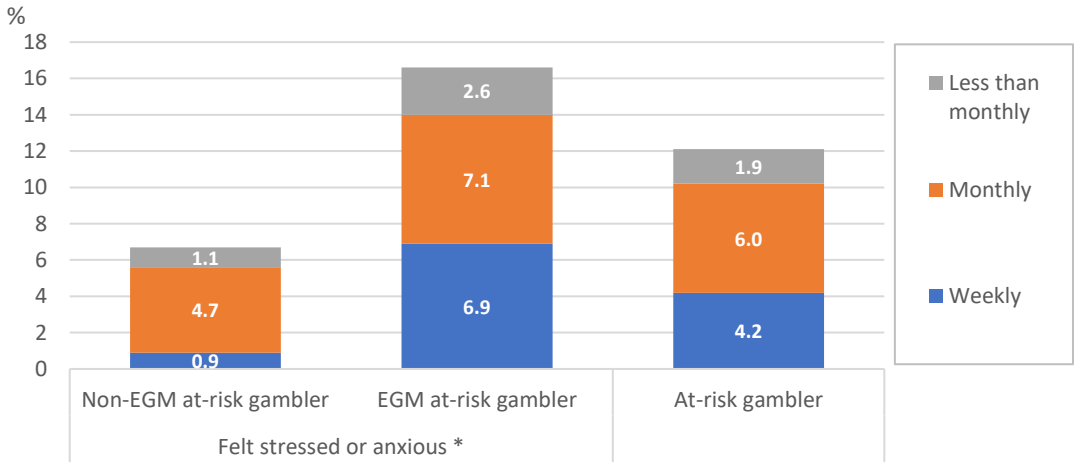


Figure 112: At-risk EGM and non-EGM gamblers by frequency of felt stressed or anxious, 2108 at-risk gamblers

*** p<0.001, ** p<0.01, * p<0.05: Significant difference in distribution in frequency of felt stressed or anxious between EGM and non-EGM at risk gamblers

Figure 113 shows a marginally non-significant difference between at-risk EGM and non-EGM gamblers in reporting feeling depressed because of their own gambling. Eleven percent (1,600 people) of at-risk EGM gamblers reported feeling depressed because of their own gambling, compared with 4% of at-risk non-EGM gamblers.

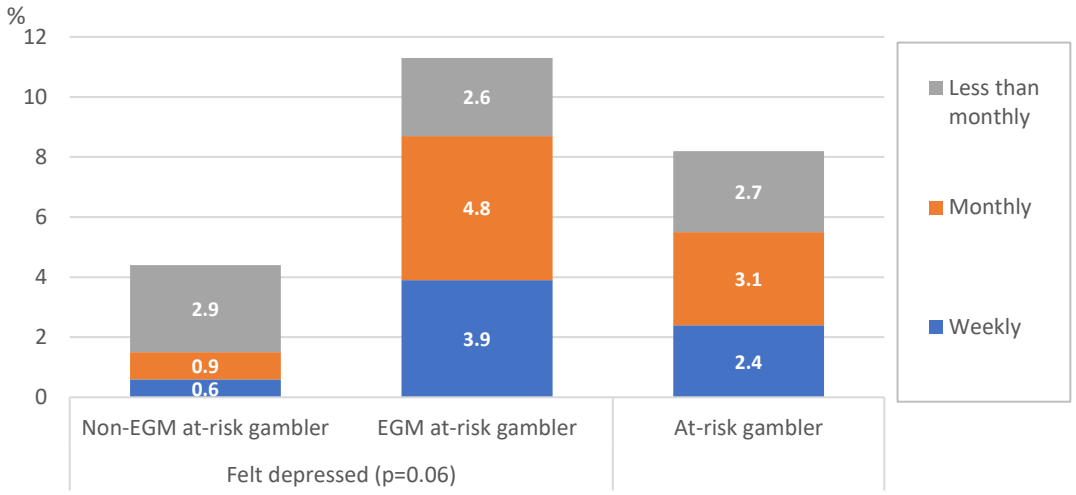


Figure 113: At-risk EGM and non-EGM gamblers by frequency of felt depressed, at-risk gamblers

*** p<0.001, ** p<0.01, * p<0.05: Significant difference in distribution in frequency of felt depressed between EGM and non-EGM at risk gamblers

Figure 114 shows that 20% (2,800 people) of at-risk EGM gamblers raided their savings, compared with less than 6% of at-risk non-EGM gamblers, and 13% of all at-risk gamblers. At-risk EGM gamblers were also more likely to raid savings weekly (2.3%), and monthly (12%), compared with at-risk non-EGM gamblers (0.3% and 2.4% respectively), and all at-risk gamblers (1.4% and 7.5% respectively).

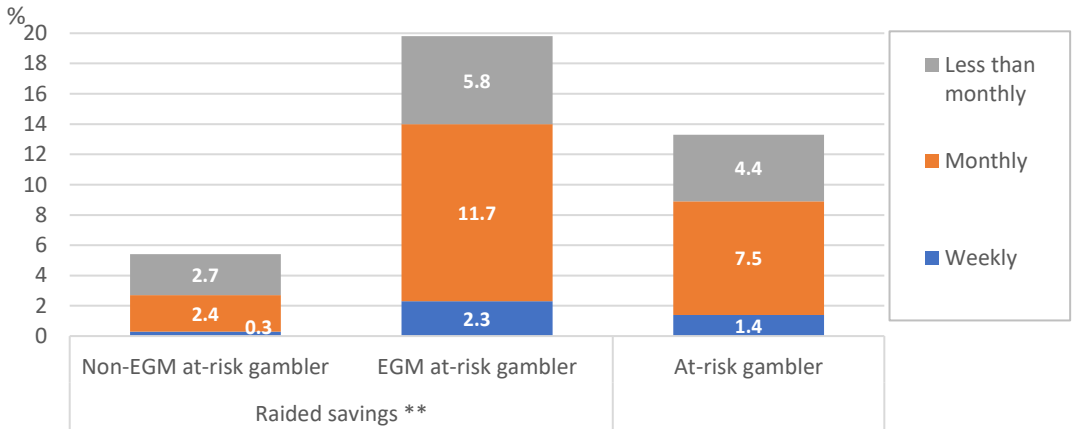


Figure 114: At-risk EGM and non-EGM gamblers by frequency of raiding savings, at-risk gamblers

*** p<0.001, ** p<0.01, * p<0.05: Significant difference in distribution in frequency of raiding savings between EGM and non-EGM at risk gamblers

9.7 EGMs as highest spend

Figure 115 shows there was a small non-significant decline in EGMs as a highest spend activity from 2015 to 2018 (12.8% to 10.9%); however, EGMs remained ranked third as a highest spend gambling activity across all activities.

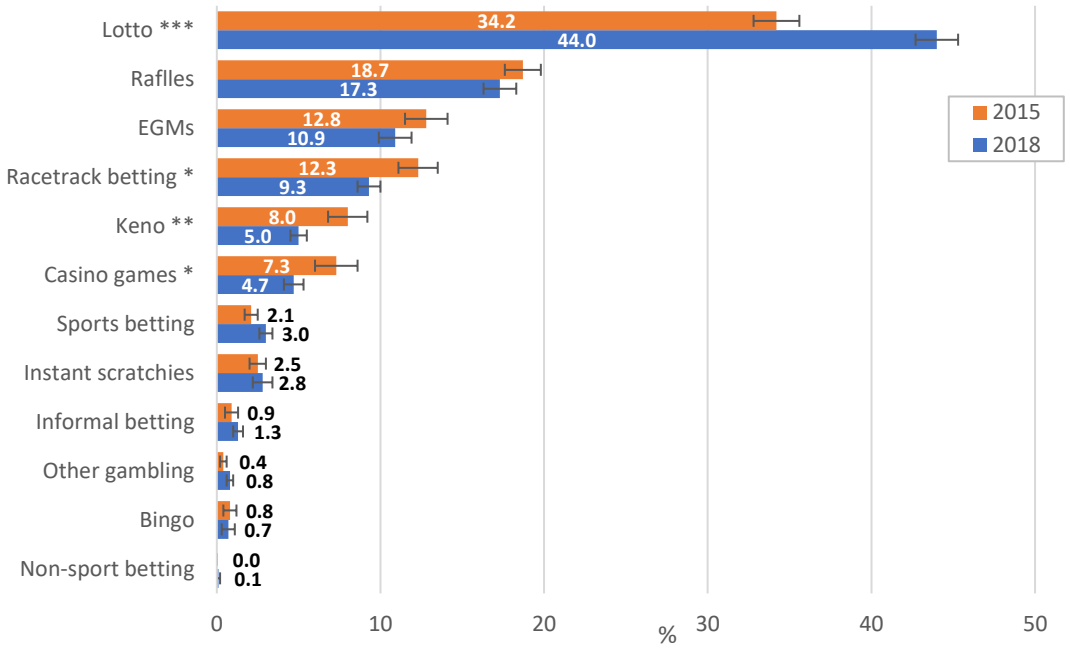


Figure 115: Highest spend gambling activity by survey, 2015 and 2018 All gamblers

*** p<0.001, ** p<0.01, * p<0.05: Significant difference by survey

Figure 116 shows highest spend activity by survey for EGM gamblers only. There was a small non-significant decline in EGM gamblers selecting EGMs as their highest spend gambling activity from 42.4% in 2015 to 40.3% in 2018. There was a significant increase from 2015 to 2018 in the percentage of EGM gamblers selecting lotto (19.8% to 27.7%) and informal betting (0.1% to 0.5%) as their highest spend activity.

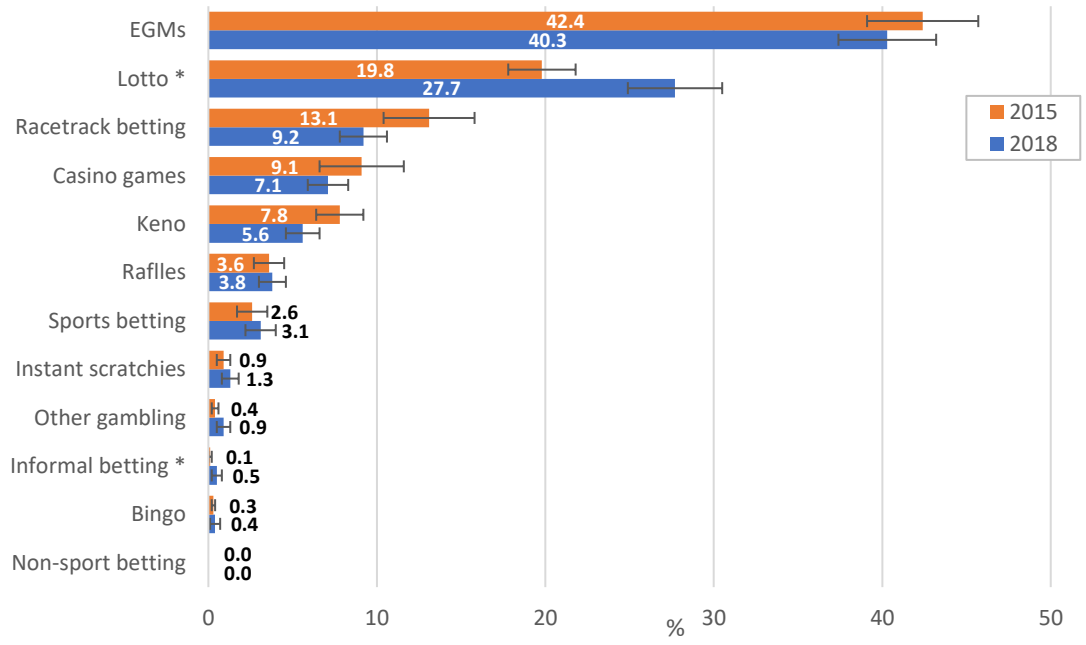


Figure 116: EGM gamblers highest spend gambling activity by survey, 2015 and 2018 EGM gamblers

*** p<0.001, ** p<0.01, * p<0.05: Significant difference by EGM gambler status

Figure 117 shows highest spend gambling activity by EGM gambler status where a significant difference was present. EGM gamblers were significantly less likely than non-EGM gamblers to have a highest spend activity of lotto (27.7% *cf*. 50.2%), raffles (3.8% *cf*. 22.3%), and instant scratch tickets (1.3% cf. 3.4%). EGM gamblers were significantly more likely than non-EGM gamblers to gamble on casino table games (7.1% *cf*. 3.8%).

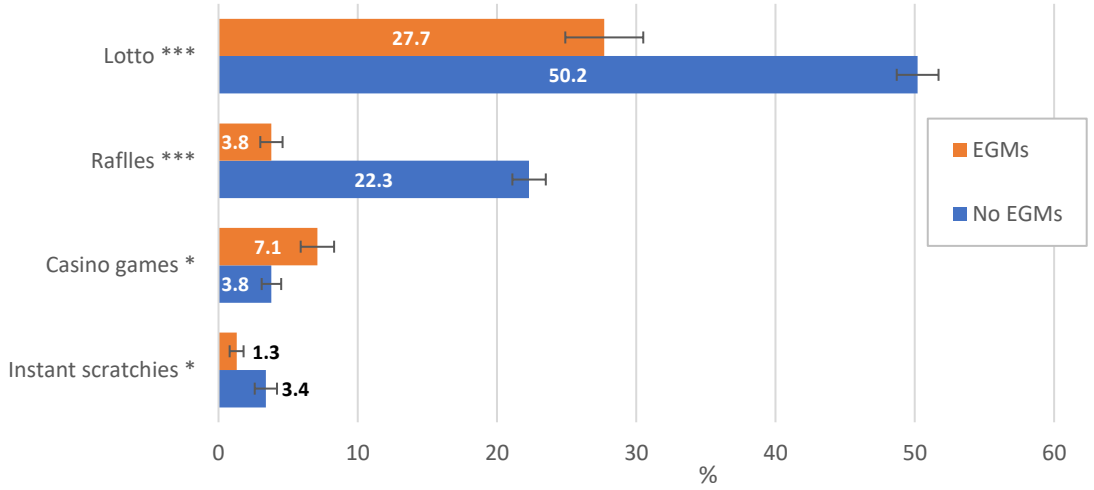


Figure 117: Significant highest spend gambling activities by EGM gambler status, 2018 All gamblers

*** p<0.001, ** p<0.01, * p<0.05: Significant difference by EGM gambler status

9.8 Multivariable model of EGMs as highest spend with socio-demographic and socioeconomic factors

Figure 118 shows socio-demographic and socioeconomic variables that remained significantly associated with EGMs as a highest spend activity in a multivariable logistic regression model. The proportion of variance explained by the model was low at 3.3%. Across the NT 11% of gamblers reported EGMs as the highest spend activity, and this was significantly higher among unemployed (31.4%) and FIFO/DIDO (18.4%) gamblers, those with a Year 10 education (18%), and Aboriginal and Torres Strait Islander gamblers (19.6%). Gamblers with a bachelor's degree or higher (6.4%) were significantly less likely to report EGMs as their highest spend activity.

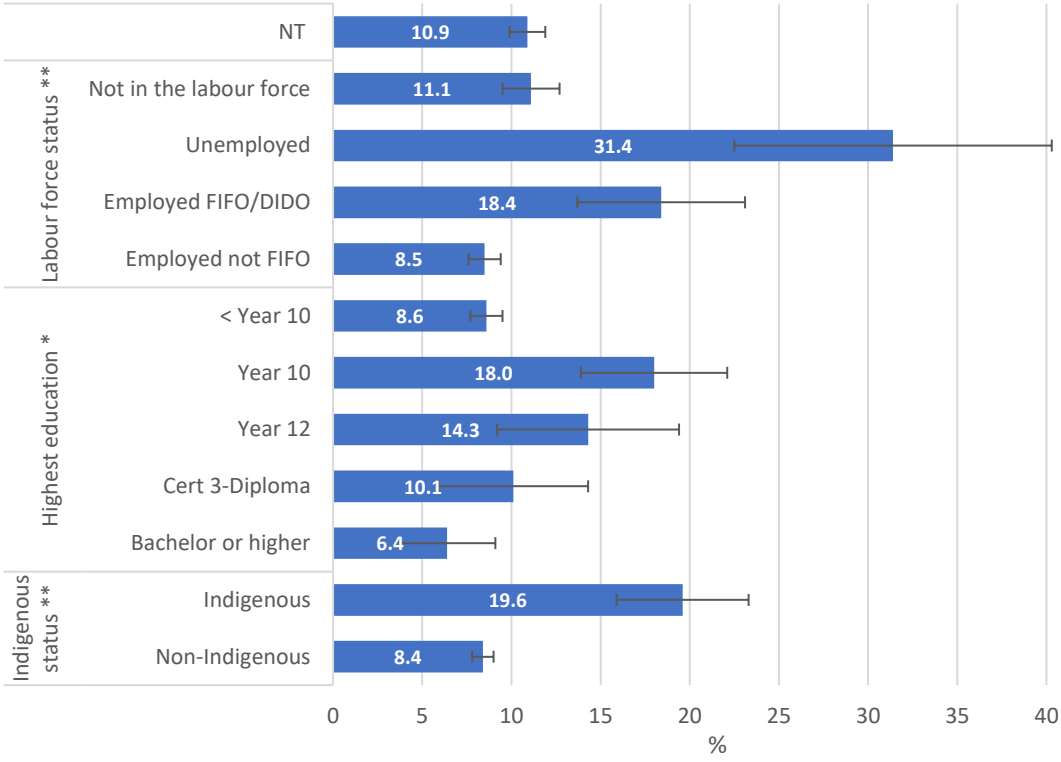


Figure 118: Multivariable adjusted model for EGMs as highest spend with socio-demographic and socioeconomic variables, 2018 All gamblers

*** p<0.001, ** p<0.01, * p<0.05: Significant association between variables and EGM as highest spend

10 REAL USER LOSSES, NUMBER OF EGMS AND SELF-REPORTED SPENDING ON EGMS

10.1 Background

This chapter presents EGM numbers and user losses (also known as player losses, or player expenditure) data obtained from the Department of Attorney General and Justice, NT Government, and self-reported EGM expenditure collected in the 2018 survey. Changes in user losses can reflect policy changes, consumer preferences or changes in the number of EGMs (or venues). Four changes related to policy, regulation and economic conditions have likely affected EGM user losses over time in the NT and include:

- Smoking ban in all venues from 1 January 2010.
- Note acceptors allowed to be installed on EGMs located in hotels and clubs from 28 May 2013 (implementation in venues started in 2014).
- Previous caps of 10 EGMs per hotel and 45 per club were increased to 20 and 55 respectively from July 2015.
- Slow economic conditions in the NT starting around 2013/14.

10.1.1 Chapter contents

Data from the NT Government presented in this chapter includes annual trends in the number of EGM venues, number of EGMs, and real user losses by venue type (hotel, club, casino) of venue size (based on how many EGMs the venue has). User losses for the top 10 hotels and top 10 clubs are also compared with total user losses for all hotels and clubs. All EGM user losses data is converted to 2017-dollar values using the Australian Bureau of Statistics Consumer Price Index (CPI). The data on EGMs obtained from the NT Government has been published in an online journal article in *BMC Public Health* [3] and can be accessed here: https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-019-6814-1. The published article includes more detailed analysis and policy discussion than what is in this report, and is recommended for readers interested in the implications of the changes in EGM policy (e.g. change to allow note acceptors in community venues and lifting of the cap), and the effect on EGM user losses. Self-reported spending on EGMs collected as part of the 2018 survey is also included, broken down by EGM gambling frequency, problem gambling risk and harm form own gambling.

10.2 Chapter highlights

- From 2012 to 2017 there was been a reduction in the number of clubs and hotels operating EGMs in the NT, with 41 from 44 hotels having between 10 and 20 EGMs as of the end of 2017, while 12 of 30 clubs in the NT had 45 to 55 EGMs in 2017.
- The number of EGMs located in hotels and clubs (community venues) declined between 2009 and 2015 from 1,314 to 1,173, and then increased over the next two years to 1,550 as of the end of 2017, with this increase because of the lifting on the EGM cap from 10 to 20 in hotels and 45 to 55 in clubs.
- The increase in EGM numbers in line with the new cap occurred faster in larger venues (i.e. those that already had the maximum allowable number of EGMs).
- Larger clubs and hotels were the first venues to install note acceptors onto their EGMs, with 91% of EGMs in clubs with 45 to 55 EGMs having note acceptors at the end 2017, compared with 61% of clubs with less than 20 EGMs, indicating they had greater capacity to implement the change in EGM policy. A similar trend was observed for hotels.

- The installation of note acceptors on community venue EGMs led to a 48% increase in EGM real user losses from 2014 to 2017, with this occurring after declines in real user losses in every year after the smoking ban from 2010 to 2013.
- The top 10 hotels in terms of user losses experienced a 112% increase in real user losses after the installation of note acceptors, compared with a 60% increase across all hotels, while the top 10 clubs experienced a 30% increase in real user losses after the installation of note acceptors, compared with a 26% increase across all clubs.
- The top 10 hotels (from 44) accounted for 58% of all EGM user losses, while the top 10 clubs (from 30) accounted for 81% of user losses.
- Weekly EGM gamblers made up 10% of all EGM gamblers, but accounted for 69% of self-reported EGM expenditure, with an annual self-reported expenditure of $12,361, compared with $2,180 for monthly and $248 for less than monthly EGM gamblers.
- EGM gamblers experiencing problem gambling made up 6% of EGM gamblers, but accounted for 38% of self-reported EGM expenditure, with annual self-reported expenditure of $10,755, compared with $4,422, $1,292, and $507 for moderate risk, low risk and non-risk gamblers respectively.
- The 31% of monthly or more EGM gamblers who indicated that they had increased their spending after the installation of note acceptors accounted for 49% of self-reported EGM expenditure, and had a self-reported annual spend of $9,469, compared with $4,447 for EGM gamblers indicating that the change did not affect how much they spend on EGMs.

10.3 Number of venues and EGMs by venue type and size

Figure 119 shows changes in the number of EGM venues in the NT from 2003 to 2017. The number of venues in the NT peaked in 2011, with two casinos, 35 clubs, and 52 hotels. In 2013, the year the note acceptor policy change occurred, there were 10 hotels with less than 10 EGMs and 37 with 10 EGMs, while there were 14 clubs with less than 20 EGMs, 10 with 20-44 EGMs, and 7 with 45 EGMs. By 2017 the mix in sizes of venues had changed with only 3 hotels now having less than 10 EGMs, and 41 hotels with 10-20 EGMs, while for clubs the number with less than 20 EGMs reduced to 9 (from 14), and the number with 45-55 EGMs increased to 12 (from 7).

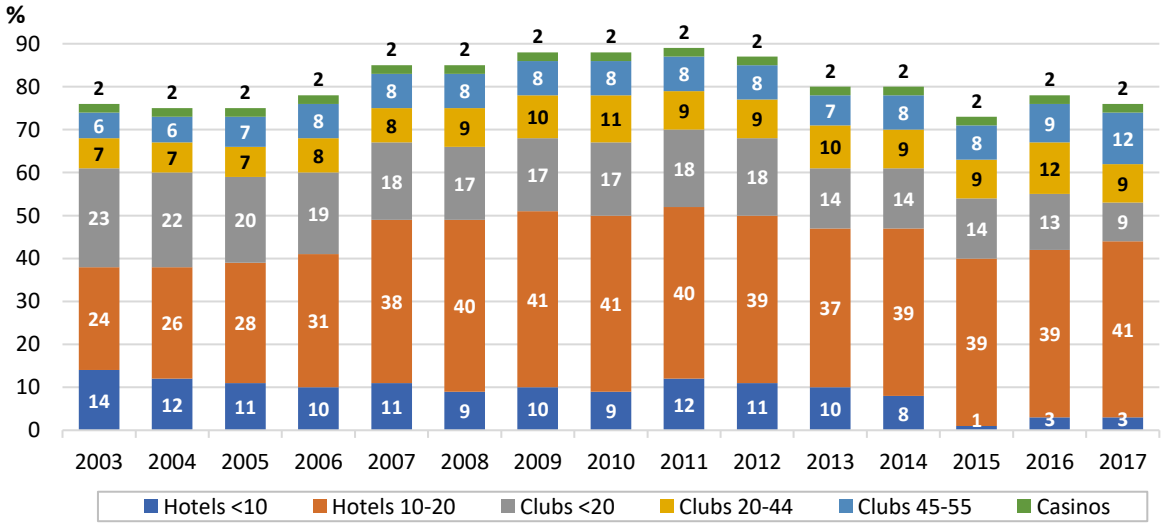


Figure 119: Number of venues by venue type and size in the NT, 2003 to 2017

Figure 120 shows the number of EGMs by venue type and size. The number of EGMs in community venues (hotels and clubs) declined from a peak in 2009 (just pre-smoking ban) of 1,314 to 1,173 in 2015, and then increased to 1,550 over the next two years as a result of the lifting of the cap in hotels (10 to 20) and clubs (45 to 55), representing a 32% increase in EGM numbers. The trend in number of EGMs housed in the two casinos was different than in community venues, with casino EGM numbers peaking in 2014 at 1,103 and then declining every year through to 2017 to 904 EGMs, representing a 18% decline in EGM numbers. Looking at the red (hotels 10-20 EGMs) and light blue (clubs 45-55) lines, it is visible that most of the increase in EGMs numbers occurred in hotels and clubs that already were at the maximum number of EGMs allowed, prior to the lifting of the cap. In 2015, there were 393 EGMs in hotels with the maximum number of EGMs and this increased to 583, representing a 48% increase, while for clubs, there were 361 EGMs in clubs with maximum number of EGMs and this increased to 600, representing a 61% increase in EGM numbers. Declines from 2014 or 2015 occurred for clubs with 20-44 EGMs and less than 20 EGMs, and similarly for hotels with less than 10 EGMs, indicating the clubs and hotels took advantage of the policy change and increased number of EGMs quite quickly after the policy change.

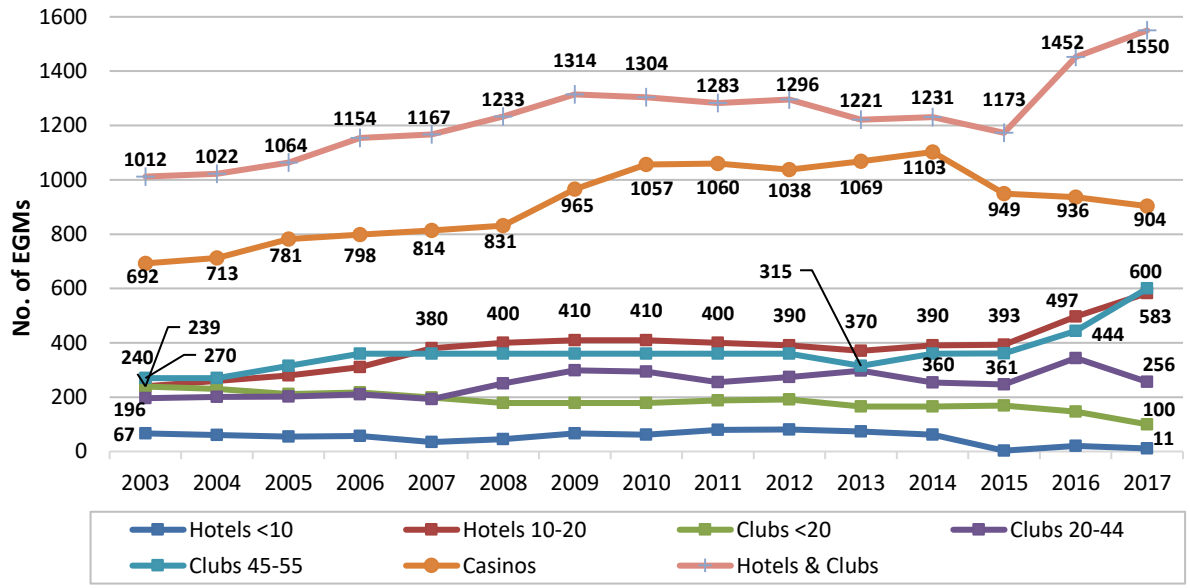


Figure 120: Number of EGMs by venue type and size in the NT, 2003 to 2017

10.4 Percentage of EGMs with note acceptors

The change in policy to allow note acceptors to be installed on EGMs located in hotels and clubs occurred in May 2013, so it is instructive to see how fast venues changed their EGMs from coin to note acceptors. The two casinos in the NT have always had note acceptors on their EGMs, so EGMs are not included in Figure 121, which shows the increase in the percentage of EGMs with note acceptors in clubs by size of venue. By the end of 2013 12% of EGMs in clubs with less than 20 EGMs were note acceptor EGMs, and this increased to 61% in 2017. For clubs that already had the maximum allowable number of EGMs in 2013 (45), 35% of their EGMs had note acceptors by the end of 2013, increasing to 91% in 2017. Clubs with 20-44 EGMs had 25% of their EGMs with note acceptors by the end of 2013, and this increased to 80% in 2017. This shows that the larger clubs had greater economic capacity to take advantage of the policy

change than smaller clubs. So, it is likely that all new EGMs added after the lift in caps were able to accept notes (Figure 121).

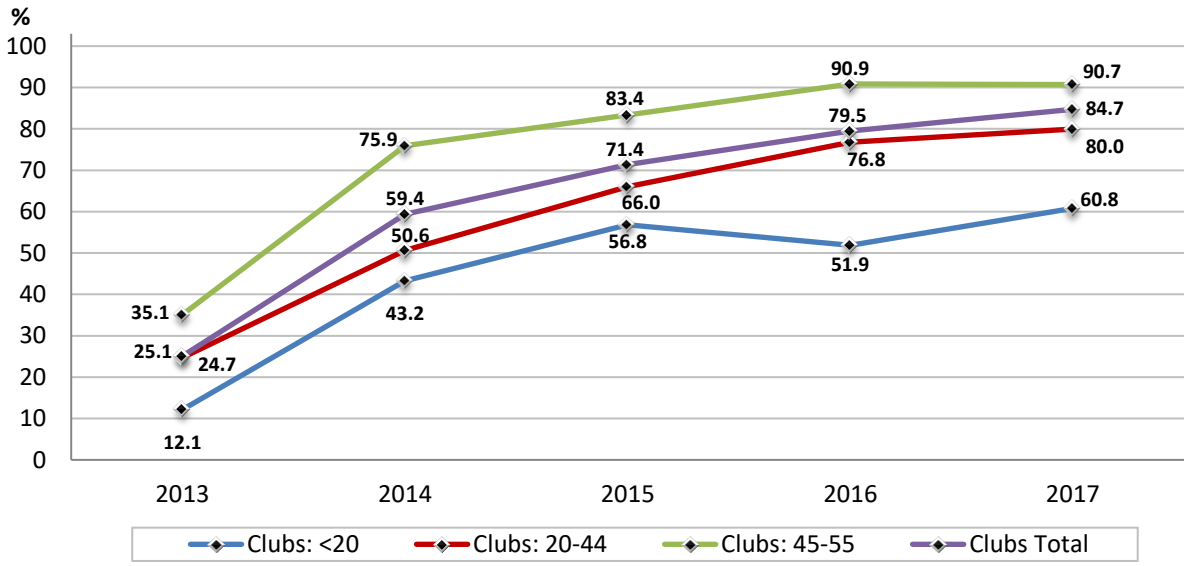


Figure 121: Percentage of EGMs with note acceptors in NT clubs by club size, 2013 to 2017

Figure 122 shows the increase in percentage of EGMs with note acceptors by hotel size. No EGMs in hotels with less than 10 EGMs had been converted to note accepting machines by the end of 2013, but this increased to 78% by the end of 2017. In contrast, 35% of EGMs in hotels with 10 EGMs in 2013 had been converted to note accepting machines, and this increased to 78% by the end of 2017. This must be seen in the context that EGM numbers in hotels at the maximum allowable number in 2015 increased by 48% by the end of 2017, and similarly shows that hotels already at the cap had greater capacity in convert their EGMs to note acceptors.

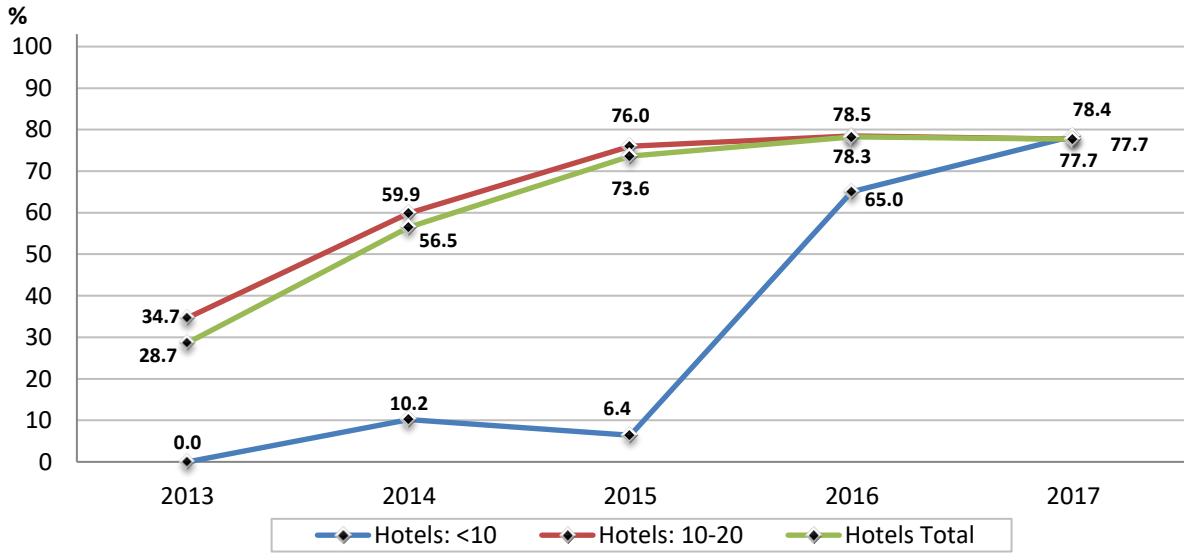


Figure 122: Percentage of EGMs with note acceptors in NT hotels by hotel size, 2013 to 2017

10.5 EGM user losses by venue type and size

Figure 123 shows real (CPI adjusted) EGM user losses by venue type and size from 2003 to 2017, with all years converted to 2017 dollars. EGM user losses in hotels and clubs (combined) grew 49% from 2003 ($61 million) to 2009 ($91 million), before declining 21% in the first year after the smoking ban in 2010 ($72 million). Hotel and club combined EGM user losses continued to decline until the end of 2013 to $65 million, and then increased 48% over the four years, at an average annual rate of 12%. Real EGM user losses in casinos, like community venues climber from 2003 ($79 million) to 2009 ($109 million), before declining 16% in one year to $92 million, and continued to decline through to 2017, where they were $74 million. The year 2015 was the first time that EGM user losses were greater in community venues, compared with EGM user loss4es in the two casinos, and this can be attributed directly to the installation of note acceptors in hotels and clubs. It is also clear form the trends that the majority of the increase in EGM user losses occurred in hotels and clubs with the maximum allowable number of EGMs under the old cap (10 and 45 respectively), and it is these same venues that also increased their number of EGMs after the cap was increased to 20 for hotels and 55 for clubs. Clubs and hotels with less than the maximum number of EGMs available had decreases in EGM user losses between 2013 and 2017.

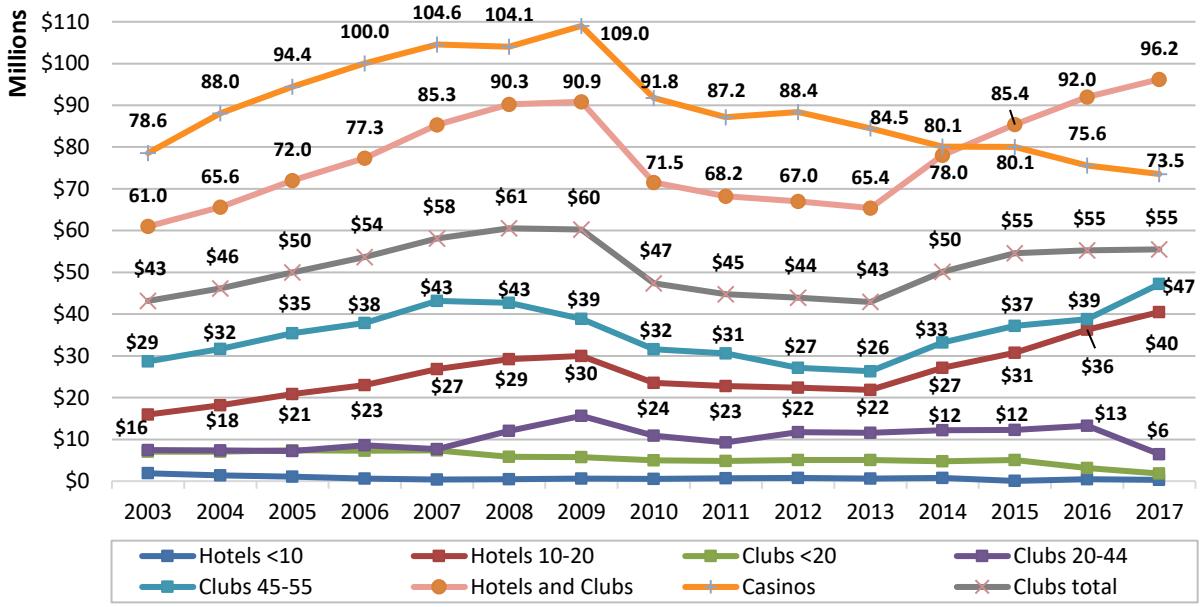


Figure 123: Real EGM user losses by venue type and size in the NT, 2003 to 2017

Table 48 shows user losses, share of user losses and change in user losses from 2013 to 2017 for the top 10 clubs and top 10 hotels, compared with all clubs and hotels. The top 10 user loss clubs in the NT housed 62% of EGMs and received 81% of user losses. There was little difference in the percentage increase in user losses from 2013 to 2017 in the top 10 clubs, compared with all clubs. However, a different picture emerges for hotels, with just 35% of EGMs located in the top 10 user loss hotels yet they receive 58% of all user losses in hotels. The percentage increase in real user losses from 2013 (note acceptors) to 2015 (increase in cap) was 43% in the top 10 hotels, and 21% across all hotels, and from 2015 to 2017 was 48% in the top 10 hotels compared with 32% in all hotels. So, from 2013 real user losses in all hotels increased 59%, compared with 112% in the top 10 hotels.

Table 48: User losses, number of EGMs, user losses per EGM, change in real user losses and percentage share of top 10 venues for hotels and clubs, 2017

	2017			Real User losses		
	User losses $	Number of EGMs	User loss per EGM $	2013-2015 % change	2015-2017 % change	2013-2017 % change
Top 10 clubs	$44,850,676	509	$88,086	17.9	10.1	29.8
Total clubs	$55,466,206	818	$67,849	14.2	10.2	25.9
% share top 10 clubs	81%	62%	-	-	-	-
Top 10 hotels	$23,488,255	199	$117,834	43.4	47.9	112.1
Total hotel	$40,768,368	577	$70,676	20.6	31.6	58.7
% share top 10 of hotels	58%	35%	-	-	-	-

10.6 Self-reported EGM gambling expenditure

All EGM gamblers were asked how much they usually spend when they gamble on EGM in a usual session, and this was multiplied by their frequency of EGM gambling, which allowed for the calculation of median annual EGM losses, total annual EGM losses, and the percentage of losses attributable to EGM gamblers by frequency of gambling and problem gambling risk. Self-reported gambling expenditure is almost always under-estimated by people (like smoking and alcohol consumption), and a comparison with official EGM user losses indicates self-reported expenditure is under-estimated by around 50 to 60% [3]. EGM expenditure had a skewed distribution (many with low expenditure and few with high expenditure), so non-parametric statistical tests comparing EGM expenditure by explanatory variables were used. Self-reported expenditure is best used to ascertain relative expenditure by characteristics of EGM gamblers.

Table 49 shows the median annual EGM losses, EGM population, total annual losses, share of losses, losses per person and EGM gamblers distribution by EGM gambling frequency. Unsurprisingly, there was a significant association between EGM frequency of gambling and expenditure. Weekly EGM gamblers median annual loss was $5,200, compared with $1,300 for monthly and $100 for less than monthly. The share of expenditure by weekly EGM gamblers was 69%, yet this group made up only 10% of EGM gamblers, while less than monthly EGM gamblers contributed 10% of expenditure by made up 73% of EGM gamblers.

Table 49: Self-reported median annual expenditure, total annual losses, losses per EGM gambler and share of losses by EGM frequency, 2018 EGM gamblers

	Median (IQR) annual losses $	Total annual losses $	Share of losses %	EGM gamblers N	Losses Per EGM gambler $	Distribution EGM gamblers % (SE)
EGM frequency ***						
1+ per week	$5,200 (2600-10400)	$42,900,000	69%	3,470	$12,361	9.9 (2.0)
1-3 per month	$1,300 (600-2600)	$12,800,000	21%	5,871	$2,180	16.7 (1.7)
<1 per month	$100 (40-250)	$6,400,000	10%	25,819	$248	73.4 (2.5)
NT EGM gamblers	**$160 (50-780)**	**$62,100,000**	**100%**	**35,160**	**$1,766**	**100.0**

*** p<0.001, ** p<0.01, * p<0.05: Significant difference in median EGM spend by EGM frequency

Table 50 shows a significant association between EGM expenditure and problem gambling risk. EGM gamblers experiencing problem gambling contributed to 38% of

total self-reported losses, yet made up only 6% of EGM gamblers, while those experiencing moderate risk problem gambling contributed to 28% of total self-reported losses, while making up 11% of EGM gamblers. EGM gamblers with no risk of problem gambling made up 17% of total self-reported losses and were 59% of all EGM gamblers. The median annual self-reported loss for EGM gamblers experiencing problem gambling was $2600, compared with $1300 for moderate risk gambling, $260 fort low-risk and $100 for no-risk gambling. The relative contribution of EGM gamblers experiencing problem or moderate risk gambling is consistent with the estimates of the Productivity Commission [23] and higher than what was observed in the 2005 NT Gambling Prevalence Survey.

Table 50: Self-reported median annual expenditure, total annual losses, losses per EGM gambler and share of losses by PGSI, 2018 EGM gamblers

	Median (IQR) annual losses $	Total losses $	Share of losses %	EGM gamblers N	Annual losses per person $	Distribution EGM gamblers % (SE)
PGSI ***						
Problem gambling	$2,600 (1000-7800)	$23,500,000	38%	2,185	$10,755	6.2 (1.7)
Mod. risk gambling	$1,300 (300-5000)	$17,500,000	28%	3,958	$4,422	11.3 (2.1)
Low risk gambling	$260 (100-1000)	$10,500,000	17%	8,130	$1,292	23.1 (2.7)
Non-risk gambling	$100 (40-260)	$10,600,000	17%	20,888	$507	59.4 (3.0)
NT EGM gamblers	**$160 (50-780)**	**$62,100,000**	**100%**	**35,160**	**$1,766**	**100.0**

*** p<0.001, ** p<0.01, * p<0.05: Significant difference in median EGM spend by PGSI

Table 51 shows that those monthly EGM gamblers who reported an increase in spending of note acceptors also reported a significantly higher median annual EGM spend ($2,600) than those that reported no change ($1,560) or a decrease in spending after note acceptor installation ($650). The increased spending group also had almost double the losses per person compared with the no change, decrease or new EGM users.

Table 51: Self-reported median annual EGM losses, total annual losses, and annual losses per person by change in EGM spending after introduction of note acceptors, 2018 monthly or more EGM gamblers

Change in spending **	Median (IQR) annual losses $	Total annual losses $	Share of losses %	Monthly EGM gamblers N	Annual losses per person $	Monthly EGM gamblers %
Increased	$2,600 (1300-13000)	$26,656,264	48.5	2,815	$9,469	30.7 (5.3)
No Change	$1,560 (650-5200)	$23,199,897	42.2	5,217	$4,447	56.9 (5.4)
Decrease	$650 (260-650)	$145,874	0.3	230	$634	2.5 (1.2)
New EGM user	$5,000 (650-5200)	$4,974,380	9.0	908	$5,478	9.9 (4.8)
Total	**$2,600 (780-5200)**	**$54,976,415**	**100.0**	**9,170**	**$5,995**	**100.0**

*** p<0.001, ** p<0.01, * p<0.05: Significant association between EGM self-reported annual expenditure and change in EGM spending

Table 52 shows that there was a significant association between median annual EGM self-reported spend and largest load up into an EGM (note totals differ slightly from previous expenditure table due to different missing data for different variables). Monthly EGM gamblers who had a largest load up of $301 or more had median annual

self-reported spending of $9,100, compared with $2,600 for those with a largest load up of $101-$300 and $1,560 for those with a largest load up of less than $100.

Table 52: Self-reported median annual EGM losses, total annual losses, and annual losses per person by largest load-up into an EGM, 2018 monthly or more EGM gamblers

Largest load up **	Median (IQR) annual losses $	Total annual losses $	Share of losses %	Monthly EGM gamblers N	Annual losses per person $	Monthly EGM gamblers %
<$100	$1,560 (650-5000)	$28,022,186	51.0	7,122	$3,935	77.3 (3.9)
$101-$300	$2,600 (1300-5200)	$8,219,942	15.0	1,217	$6,754	13.2 (3.3)
$301+	$9,100 (5200-26000)	$13,622,517	24.8	872	$15,622	9.5 (2.4)
Total	**$2,600 (780-5200)**	**$49,864,644**	**90.7**	**9,211**	**$5,414**	**100.0**

*** p<0.001, ** p<0.01, * p<0.05: Significant association between EGM self-reported annual expenditure and change in EGM spending

11 LIMITATIONS AND CONCLUSIONS

11.1 Limitations

The 2018 NT Gambling Prevalence and Wellbeing Survey should be viewed as an improvement on the 2015 survey, and the most reliable estimates of gambling participation and problem gambling risk for the NT. While a dual-frame sample and survey design was the same as the 2015 survey, the ratio of mobile to landline numbers included in the frame was vastly different. The 2015 survey sample was made up of 76% landlines, while the 2018 survey sample was made up of 29%. The ratio of mobile to landline respondents obtained in the 2018 survey is more consistent with the distribution of mobile phone use in the NT, and for this reason, the 2018 sample is more representative of the NT adult population and estimates of gambling participation and problem gambling prevalence for the NT should be considered the most accurate population to date in the NT.

However, the difference in the ratio of mobile to landline respondents between the 2015 and 2018 surveys could affect statistical tests comparing estimates between the two surveys. For example, the 2018 survey sampled significantly more Indigenous and non-English speaking background respondents compared with the 2015 survey, and both population groups experience a higher burden of gambling-related problems. Therefore, a significant increase in gambling problems amongst these two groups may be a result of improved coverage in the 2018 sample.

Another limitation of the 2018 sample, which was also present in the 2015 survey, is the under-sampling of Aboriginal people living in remote locations and regional towns in the NT (see Appendix B1). The population weighting procedure used (in both 2015 and 2018) assumes that the Aboriginal sample is broadly representative of their population distribution across the NT. We know this is not the case (see Chapter 3 and Appendix B). Keeping this in mind, research in the NT has found that Aboriginal people living in remote locations are likely to experience problem gambling and gambling-related problems at higher rates than that observed for Aboriginal people living in urban locations in the NT [7, 25-27]. Therefore, while Aboriginal problem gambling prevalence and harm from someone else's gambling are significantly higher than in the non-Indigenous population in the 2018 and 2015 surveys, it is likely that these surveys under-estimate problem gambling risk and harm from someone else's gambling for the Aboriginal population.

The younger population in the NT will affect comparability of problem gambling risk estimates across jurisdictions, as younger adults are more likely to experience gambling problems, and it would be expected that NT PGSI estimates be somewhat higher than other jurisdictions. Age standardisation of PGSI estimates to the Australian standard population distribution would ensure direct comparability across jurisdictions [28]. However, within the NT the Aboriginal population also has a younger age profile to the non-Indigenous population, further complicating comparisons across Australian jurisdictions. The reporting of problem gambling risk estimates in this report has not age-standardised; however, it is recommended that future estimates produced assess the effect of the NT's younger age distribution, by checking age-standardised estimates across jurisdictions.

11.2 Summary and conclusions

The 2018 NT Gambling Prevalence and Wellbeing Survey found that gambling participation had declined for most activities, though it increased non-significantly for sports betting. However, the decline in gambling participation was not observed for problem gambling risk as measured by the PGSI, which showed a significant increase across all problem gambling risk categories between 2015 and 2018. In 2018 there were 2,500 (1.9%) gamblers categorised as experiencing problem gambling, 6,400 (5%) as moderate risk for problem gambling, and 16,900 (13%) as low risk for problem gambling. Problem gambling risk was significantly higher among the Indigenous population, compared with the non-Indigenous population in the NT. Problem gambling risk in the NT is now the highest of all jurisdictions in Australia.

Around 8% or 14,500 NT adults indicated that they had been negatively affected by someone else's gambling, with EGMs the gambling activity most people identified as the gambling the other person was doing when they were negative affected. Indigenous respondents were significantly more likely to be harmed and significantly more likely to gamble on EGM.

Community attitudes to gambling show that around 25% of adults have a positive view of gambling, and that negative views of gambling are significantly associated with being negatively affected form someone else's gambling. People classified as experiencing problem gambling also had less favourable views on gambling, as did non-gamblers.

EGMs continue to be the most dangerous form of gambling to undertake, with over 50% of weekly EGM gamblers classified as experiencing problem gambling or moderate risk of problem gambling. Furthermore, EGMs were identified as the gambling activity for those that were harmed by someone else's gambling in over 70% of those harmed. Around 30% of monthly EGM gamblers indicated that the installation of note acceptors on EGMs in community venues had led them to spend more on EGMs than before note acceptors were installed, and among age groups 18-29 years and 30-39 years, 49% of 41% respectively said they increased their spending on EGMs. The note acceptor policy change has also disproportionally affected gamblers experiencing problem gambling, with 68% of this group spending more as a result of note acceptor installation. Monthly EGM gamblers were also asked about the largest load-up into an EGM in the last year, with 77% having a largest load-up of $100 or less, and just 10% with $301 or more. Problem and moderate risk gamblers (25%) were significantly more likely to load up $301 or more, compared with low risk (10%) and non-risk (0%). Self-reported spending shows that weekly EGMs gamblers account for 69% of EGM spending (average loss per person per year $12,360), while EGM gamblers experiencing problem gambling accounted for 38% of spending (average loss per person per year $10,755). Together, all gamblers at risk of problem gambling accounted for 83% of EGM self-reported spending.

Patterns of gambling in the NT are changing, with fewer people gambling, but with increases in the number of people experiencing problem gambling and harm from another person's gambling. This has implications for the NT due to the younger population in the NT, and the large Aboriginal population, many of which experience significant socioeconomic disadvantage. The findings in this report can be used to inform future gambling policy and will also be useful to a range of other stakeholders including counselling services, councils and industry.

APPENDIX A: DETAILED SURVEY METHODOLOGY

Report by Roy Morgan

1 Introduction

1.1 Background

Roy Morgan was commissioned by the Menzies School of Health at Charles Darwin University (Menzies) to conduct a telephone survey to help determine the prevalence of gambling in the Northern Territory in 2018. Roy Morgan had conducted previous gambling research for Charles Darwin University in the Northern Territory in 2015 and 2005.

1.2 Research objectives

The overall purpose of the 2018 study (as was the case with the 2005 and 2015 studies) was to provide an up-to-date measure of gambling prevalence in the key locations in NT in order to inform Government and welfare agencies' policies and strategies for the future.

1.3 Methodology

The survey was conducted as a Computer Assisted Telephone Interviewing (CATI) survey, with a final sample of 5,000 Northern Territory adults aged 18 or over.

The survey used a random digit dialing sample frame (RDD) for landline interviewing, and a combination of three sample lists for mobile sampling.

A pilot was conducted from 20-23 September 2018. Fieldwork for the main study took place over 9½ weeks, between October 1 and December 7, 2018.

2 Sampling

2.1 Sampling frames

For the survey, a dual sampling frame approach was used. The landline sample frame used was the Random Digit Dialling (RDD) sample frame developed and maintained by Roy Morgan, known as Roy Morgan Telephone Sample. A total of 113,757 pieces of landline telephone sample were used for this survey. Refer to Appendix A for an explanation of the RDD process. Mobile sample was obtained from three sources detailed below.

Landline RDD sampling frames offer the benefit of including unlisted landline numbers – both those that are deliberately 'silent' and those that have been recently connected.

Renters, recent movers, and people living in newly developed areas are included in an RDD sample.

While landline RDD sample includes unlisted landline numbers, it does not account for the growing proportion of households without a landline/fixed telephone line, i.e. 'mobile only' households. This issue is particularly (but not only) relevant to the representativeness of young adults.

The challenge with including mobile sample for an NT survey (as with any survey of a small regional sub-population) is that mobile numbers are not geographically linked, and therefore an RDD approach would be cost prohibitive (as over 98% of all numbers would turn out to be in parts of Australia other than the NT). Therefore, for this component of the sample frame, various sample lists were used, comprising mobile numbers previously flagged as being in the NT.

Mobile sample was obtained from three sources:

1) Roy Morgan Telephone Sample - Roy Morgan also maintains a database of Australian mobile numbers, both *listed* and *generated*, that is enriched with information captured during call attempts and includes such information as age, gender and location as well as call outcomes (e.g. interviewed, refusal, business number, not connected or disconnected, etc.). As far as possible this information is captured for every call made to every number, not just from numbers that complete each survey. This sample also includes past respondents to Roy Morgan Single Source (a nationally representative syndicated survey based on stratified random address-based sampling) who lived in the NT and had given a mobile number and had agreed they could be recontacted. A total of 5,365 mobile numbers were loaded and attempted from this source.
2) Accountable List Brokers (an independent sample broker). A total of 39,132 mobile numbers were loaded and attempted from this source.
3) SamplePages (an independent sample broker). A total of 6,670 mobile numbers loaded and attempted were from this source.

Prior to loading, de-duplication steps were undertaken between these three sources, as some numbers existed in more than one of the lists. A total of 51,167 mobile numbers were attempted for this survey.

This approach (RDD sampling of landlines, and random sampling of mobiles from available lists) sought to achieve a broad cross-section of the population within the overall sample frame, including households:

- with silent numbers;
- with new numbers not yet recorded in phone listings;

- which were solely mobile phone households with no landline number.

By conducting the survey via CATI people living in households without either a landline or a mobile phone were, in effect, excluded from the survey. In the case of the NT, this means that Indigenous people living in remote communities are relatively more likely to be outside the coverage of the sample frame.

Within the landline sampling frame, broadly population-proportional quotas were initially set for by the following geographical regions:

- Darwin/Palmerston
- Alice Springs
- Katherine
- Tennant Creek
- Nhulunbuy
- Rest of NT

The quotas for the dual frame sample were initially set to align the number of interviews conducted in each geographic stratum with population proportions, with some adjustments for the fact that a significant proportion of the population of the "Rest of NT" stratum was not likely to be contactable by telephone. As part of the survey, the postcode of each respondent was also collected to check that they were being allocated to the correct area.

2.2 Selection of respondent

For the mobile sample, the interview was conducted with the person who answered the phone, as long as they were aged 18 years or over.

For the landline RDD sample, a 'last birthday' approach was used to select the respondent within the household. Fieldwork commenced with the approach of asking to speak to the person with the most recent birthday. Reflecting the relative differences in contact and response rates for males, females and age, this approach was obtaining too many females and too many older people (i.e. aged 50 yrs+).

On 18 October (about one third the way through fieldwork) it was discussed and agreed between Roy Morgan and Menzies to switch to one of the other standard implementations of the birthday method, whereby the interviewer initially asked to speak to the male aged 18-34 in the household with the most recent birthday. If no-one in the household met this criterion, then we asked to speak with the female aged 18-34 with the most recent birthday. If no-one in the household met this criterion, then we asked to speak with the male aged 35 years and over with the most recent birthday. If no-one in the household met this criterion, then we asked to speak with the female age 35 years and over with the most recent birthday.

By 20 November (about 7 weeks into the survey), interviewing quotes were filled for the older age categories (50 years and over), so the procedure above was refined to only ask first for males aged 18-34 years, then females aged 18-34 years and then for males aged 35-49 years and finally for females aged 35-49 years.

Note that, even though the selection criteria were modified twice throughout fieldwork, no respondent substitution was permitted within the household called.

2.3 Sample breakdown

Seven in ten (70.4%) of sample attempted were landline numbers (See Table 2.3.1).

Table 2.3.1 Breakdown of the total sample attempted by Sample Type

Sample Type	Amount of Sample Attempted	
	No.	%
Mobile Sample	51,167	29.6%
Landline Sample	121,848	70.4%
Total Sample	**173,015**	**100.0%**

However, seven in ten of completed interviews were sourced from mobile numbers (See Table 2.3.2).

Table 2.3.2 Breakdown of completed interviews by Sample Type

Sample Type	Completed Interviews	
	No.	%
Mobile Sample	3,558	71.2%
Landline Sample	1,442	28.8%
Total Sample	**5,000**	**100.0%**

Respondents were asked about whether they had mobile phones and/or landlines in order to calculate phone status for each respondent. Whilst sample sizes are too small to calculate phone status for NT (and the sample does not include indigenous communities), Roy Morgan Single Source data for Australians aged 18 years and over compares favourably with the sample achieved for the NT Gambling Prevalence Survey for 2018 (See Table 2.3.3). Roy Morgan Single Source data for phone status is used by the Australian Communications and Media Authority (ACMA) as their source for calculating phone status for Australia.

Table 2.3.3 Completed interviews by phone status

Phone Status	Completed Interviews		Australia Sept 2018[1]
	No.	%	
Landline Only	151	3.0%	3.7%
Mobile Only	2,188	43.8%	42.3%
Both Landline and Mobile	2,661	53.2%	54.1%
Total Sample	**5,000**	**100.0%**	**100.0%**

1. *Source: Roy Morgan Single Source – Year ended 30 September 2018.*
Base: n = 47,895

The final overall age/sex breakdown of the achieved sample shows how difficult it is to obtain young males and females. Whilst 38.1% of the NT population are aged 18-34 years, only 16.6% of the final sample were of this age category. The disparity is greater for males aged 18-34 years (19.8% vs 7.5%) (See Table 2.3.4).

Table 2.3.4 Completed interviews by age by sex

Age by Sex		Sex (number)		Sex (%)		Total	
		Males	Females	Males	Females	No.	%
Age (Sample)	18-34 yrs	373	456	7.5%	9.1%	829	16.6%
	35-49 yrs	673	939	13.5%	18.8%	1,612	32.2%
	50-64 yrs	865	864	17.3%	17.3%	1,729	34.6%
	65 yrs+	415	415	8.3%	8.3%	830	16.6%
Total		**2,326**	**2,674**	**46.5%**	**53.5%**	**5,000**	**100.0%**

Age by Sex		Sex (number)		Sex (%)		Total	
		Males	Females	Males	Females	No.	%
Age (2018 Population Estimates)[1]	18-34 yrs	33,765	31,315	19.8%	18.3%	65,080	38.1%
	35-49 yrs	26,389	24,705	15.5%	14.5%	51,094	29.9%
	50-64 yrs	19,804	18,343	11.6%	10.7%	38,147	22.3%
	65 yrs+	8,583	7,784	5.0%	4.6%	16,367	9.6%
Total		**88,541**	**82,147**	**51.9%**	**48.1%**	**170,688**	**100.0%**

1. *Australian Bureau of Statistics – 2018 Population Estimates.*

As this survey can only obtain a small number of interviews with people living in indigenous communities (i.e. those that have their own mobile phone, are included in the mobile sample and are accessible at the time of interview), it is not surprising that the proportion of indigenous interviews is under-represented in the sample. However, number of indigenous interviews increased by more than 100 compared with the 2015 sample (n = 267). This would indicate that the inclusion of more mobile numbers in the sample frame has assisted in increasing the number of indigenous interviews in 2018 (See Table 2.3.5).

Table 2.3.5 Completed interviews by indigenous status

Indigenous Status	Completed Interviews		NT (2018 Pop'n Estimates)[1]
	No.	%	
Indigenous	371	7.4%	21.9%
Non-indigenous	4,629	92.6%	78.1%
Total Sample	**5,000**	**100.0%**	**100.0%**

1. *Australian Bureau of Statistics – 2018 Population Estimates.*

The survey sample tends to over-represent the urban areas of the NT. However, this is not surprising given that respondents from indigenous communities are less likely to be contacted for the survey (See Table 2.3.6).

Table 2.3.6 Completed interviews by region

Region	Completed Interviews		NT (2018 Pop'n Estimates)[1]
	No.	%	
Darwin/Palmerston[2]	3,491	69.8%	61.3%
Alice Springs	739	14.8%	10.9%
Katherine	233	4.7%	4.2%
Tennant Creek	67	1.3%	1.3%
Nhulunbuy	54	1.1%	1.2%
Rest of NT	416	8.3%	21.1%
Total Sample	**5,000**	**100.0%**	**100.0%**

1. *Australian Bureau of Statistics – 2018 Population Estimates.*
2. *Darwin Greater Capital City Statistical Area.*

The questionnaire was programmed to randomly select one in four 'non-problem gamblers' and one in four 'non-gamblers' as defined by their CPGI/PGSI scores, and allocate this sub-sample to receive the full questionnaire, along with 100% of those defined as 'problem gamblers', 'low-risk gamblers' and 'moderate-risk gamblers'. In addition, Indigenous respondents, and those defined as 'regular gamblers' (gamble at least weekly excluding lotto and instant scratch tickets) and 'monthly EGM gamblers' (play pokies/electronic gaming machines at least monthly) went through the full survey as well.

Table 2.3.7 shows the unweighted number of respondents by gambling type and by whether they were administered the 'short' or 'long' interview.

Table 2.3.7 Completed interviews by gambler type

Gambler Type	Long Interview		Short Interview		Total	
	No.	% Long Interviews	No.	% Short Interviews	No.	% Total
Non-gamblers	386	19.1%	871	29.2%	1,257	25.1%
Non-problem gamblers	1,116	55.4%	2113	70.8%	3,229	64.6%
Low-risk gamblers	342	17.0%	0	0.0%	342	6.8%
Moderate-risk gamblers	131	6.5%	0	0.0%	131	2.6%
Problem Gamblers	41	2.0%	0	0.0%	41	0.8%
Total	**2,016**	**100.0%**	**2,984**	**100.0%**	**5,000**	**100.0%**
Regular Gamblers	324	16.1%	0	0.0%	324	6.5%
Non-regular Gamblers	859	42.6%	1120	37.5%	1,979	39.6%
Monthly EGM Gambler	244	12.1%	0	0.0%	244	4.9%

3 Questionnaire Design and Pilot Testing

3.1 Questionnaire design

The questionnaire was developed and provided by Menzies primarily based to on the survey conducted in 2015. Roy Morgan worked with Menzies to refine the questionnaire. Demographic questions asked of respondents included the following: sex, age, location, ATSI status, phone status, number aged 18 years+ in household, English main language spoken at home, household type (i.e. couple, single, with/without children etc.), education, currently studying tertiary courses, work status, fly-in/fly-out or drive-in/drive-out and net personal income.

The questionnaire was also subjected to the customary questionnaire checking procedures as part of Roy Morgan's Quality Assurance program certified to AS/NZS ISO 9001 and AS/ISO 20252.

A copy of the final questionnaire is provided in Appendix C.

3.2 Pilot testing

The survey was piloted from 20-23 September 2018. At total of 95 completed surveys were achieved. Review of the data indicated all questionnaire routing appeared to be working as expected. Topline results of pilot data were provided to Menzies, along with responses to verbatim questions.

Average questionnaire length was calculated to be 13.81 minutes. It was recommended that occupation and industry questions be removed from the survey to reduce overall questionnaire length to 13 minutes. Other modifications included:

- Modifying the introduction to include "Northern Territory Government' for the mobile introduction to engender a greater response
- Allowing only Monthly Electronic Gaming Machine (EGM) users to be asked questions specifically relating to EGM gambling (Q46 to Q48e) to focus analysis and reduce questionnaire length
- Trimming of some responses to sources of help questions (Q59a-l and Q65a-l)

- Modifying the preamble for domestic and family violence questions (Q91 to Q94).

Based on Menzies review of the pilot database some minor changes were made to the way the data was proposed to be collected and provided for the main survey.

The questionnaire also included a request to respondents to provide their consent and additional contact details in case there was a need for any follow-up research or to link 2015 survey responses to 2018 data if the respondent participated in both surveys.

4 Fieldwork

The main survey was in field for a total of approximately 9½ weeks. Interviews commenced on Monday, October 1, 2018 and concluded on Friday, December 7, 2018.

Interviews were primarily conducted in the evenings and weekends. Field reports were provided to Menzies twice per week.

4.1 Interviewer management

4.1.1 CATI interviewer selection and training

In total, 125 interviewers worked on the survey. All of these interviewers had undergone Roy Morgan's multistage training program. Company background and information

- Field methodology
- Questioning techniques
- Asking and answering questions
- Practicing difficult questions
- Practice survey completion
- Assessments of surveys
- Refusal conversion techniques

In addition, all interviewers were trained on how to leave messages on answering machines and voicemails, which was a new procedure used for the 2018 survey. Selected interviewers were also trained on how to convert 'soft refusals', again a new innovation for the 2018 survey.

Roy Morgan believes that the quality of interviewing is vital to achieve successful research. Roy Morgan does not sub-contract to field companies to conduct interviews as we have our own fully integrated facilities and interviewing teams.

Interviewers working on this project also participated in a briefing session specifically for this project, conducted by the project team and field supervisors. Details of the interviewer briefing are provided in Appendix B.

4.1.2 CATI interviewer supervision and auditing

Roy Morgan interviewers work under very strict controls and understand the need for adherence to all specified contact, call-back and reporting procedures. CATI interviewing is supervised and a minimum of 10% of interviews are audited. Our auditing system enables the supervisor to monitor live interviews and therefore assure our quality and authenticity of interviews. The auditing of an interview means that at least part of the interview is observed and listened to by the supervisor. Auditing includes monitoring all stages of interviewing, such as the conduct of an interview as well as refusals and how interviewers assign non-contact records.

We provide a ratio of one supervisor to 12 interviewers. As well as supervising interviewers, the supervisors deal with issues raised by respondents that could not be adequately addressed by interviewers. For every telephone survey:

- There are supervisors present for all shifts to oversee interviewers; and
- Supervisors randomly listen in on phone calls to ensure interviews are being conducted correctly.

Where respondents require clarification of the intent of the study, they are referred to a supervisor or the researcher for further explanation. When required, field queries and issues are logged via CATI debrief forms or emails to the researcher. The required action is noted and the researcher follows the issue up immediately.

4.2 Interviewer briefing

Before commencing work on the survey, interviewers participated in a survey-specific briefing session. The initial briefing session was conducted by the Project Director and Project Manager. Subsequent briefing sessions were conducted by the Field Manager and supervisor. The following key points were highlighted in the briefing session:

- Importance of the survey and how to introduce it.
- The town or suburb respondents were in was important to accurately quota the survey.
- Accurately collecting the data on the amount respondents spent on gambling activities
- The importance of statements that relate to time periods (e.g. “Thinking about the past 12 months…”
- Helplines for respondents

The interviewer briefing notes are provided in Appendix B.

4.3 Number of calls made to complete an interview

Almost 465,000 calls were made during the fieldwork period. The approach applied to the survey was to attempt up to 5 calls to a number in order to seek to establish contact,

then if contact was established, up to 5 more calls to obtain an interview, unless at any point a final outcome was achieved. Table 4.3 shows that almost half of all numbers in the survey sample received one phone call (48.6%). One call was made to 60.4% of landline numbers and 22.7% of mobile numbers. Just over one in six sample numbers received 2 to 4 calls (17.3%) while almost one quarter received 5 calls (24.8%).

In terms of completed interviews around one third of interviews came on the first call (33.6%) and this did not differ by whether the call was made to a landline or a mobile number (33.4% and 33.7% respectively). Proportions receiving 2, 3, 4 or 5 calls to complete an interview were similar across both landline and mobile samples.

On average, 2.81 calls were made to all numbers in the sample, with mobile sample receiving a greater number of calls on average when compared with landline numbers (3.90 and 2.32 respectively). It took on average 2.52 calls to obtain a completed interview, with the average number of calls to landlines slightly lower and for mobiles (2.40 and 2.57 respectively).

Table 4.3 Number of calls made by sample type

Number of Calls	Total Sample			Completed Interviews		
	Landline Nos.	Mobile Nos.	Total	Landline Nos.	Mobile Nos.	Total
1	60.4%	22.7%	48.6%	33.4%	33.7%	33.6%
2	6.8%	9.1%	7.5%	26.5%	23.0%	24.0%
3	4.7%	7.4%	5.5%	18.7%	17.8%	18.1%
4	2.8%	7.4%	4.2%	12.1%	11.7%	11.8%
5	20.2%	34.9%	24.8%	7.6%	9.3%	8.8%
6	4.3%	13.0%	7.0%	1.2%	3.0%	2.5%
7	0.7%	3.3%	1.5%	0.2%	0.9%	0.7%
8	0.1%	1.0%	0.4%	0.2%	0.3%	0.3%
9	0.0%	0.7%	0.2%	0.0%	0.1%	0.1%
10+	0.0%	0.6%	0.2%	0.0%	0.2%	0.1%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**
Nos. Available	113,744	51,617	165,361	1,442	3,558	5,000
Calls Made	263,752	201,237	464,989	3,455	9,129	12,584
Ave. Calls/No.	**2.32**	**3.90**	**2.81**	**2.40**	**2.57**	**2.52**

For the 2018 survey two new procedures were implemented:

1. If an answering machine or mobile phone voicemail was obtained, then a message was left. Two different messages were left, based on whether the connection was to an answering machine or to a voicemail. Voicemail only allows a 10 second message to be left, so the message left was truncated:

   If answering machine - *Hello I'm [name] from Roy Morgan. We'd like to conduct a survey with you on an important health and welling being issue in the NT. One of our interviewers will call you back later to give you the opportunity to participate. Thank you for your time.*" (about 13-14 seconds)

If voicemail - *I'm [name] from Roy Morgan. We'd like to conduct a survey with you on a health and wellbeing issue in the NT. An interviewer will call you back later. Thank you." (about 9-10 seconds.)*

2. If a respondent or household registered a 'soft' refusal (i.e. refused because interviewed before/too often, not now/no time/too busy, didn't like the survey topic, could not understand English well or had hearing difficulty/was elderly/drunk/drugged) a specialist team of 3 experienced survey interviewers were used to call back and attempt to convert the refusal/termination into an interview. Interviewers could use their own words to convert, but a guide was provided for each circumstance, as follows:

   Refused – Interviewed before/too often
   I know that you been interviewed often recently, but it is important to obtain the views of all people in the NT, even those who have helped out with surveys in the past. Could you spare 10-15 minutes to assist us with this survey?

   Refused – Not now/ no time/ too busy (appointment rejected)
   I know that you are busy, but the views of busy people are also important. We want to obtain the views of all people in the NT. Could you spare 10-15 minutes to assist us with this survey? We can call back at a time that's more convenient to you.

   Refused – Subject matter
   I understand that the topic of this survey is not of relevance to you, but it is to the NT as a whole. It's important to obtain the views of all different types of people in the NT, even those who don't have strong views on the subject. Could you spare 10-15 minutes to assist us with this survey?

   Termination – Language problem
   Is there anyone else in the household who can speak English who may be able to translate for you? What languages do you speak? We may be able to arrange for someone to interview in your language if you like?

   Termination – Hearing difficulty/ very elderly/ drunk/ drugged
   Is there anyone else in the household who can assist us with this survey? If drunk/drugged – we can call back at another time when it is more convenient for you to complete the survey.

These two new procedures added to the number of calls, as on each occasion the number was called at least a second time in order to convert to interview.

For those recorded as a termination due to a language problem interviewers attempted to determine the language spoken. This was then recorded. If the number in any language reached 20, a bilingual interviewer in that language would be used to call back these respondents and survey them in their own language. In fact, no one language recorded 20 distinct numbers and so the bi-lingual interviewing process was not required for the survey.

4.4 Response rates

As part of Roy Morgan's multistage interviewer training program, interviewers are thoroughly trained in maximising response rates. Strategies employed to minimise cases of non-contact and non-response included:

- Emphasising the importance of the survey

- Having interviewers arrange appointments at suitable times for the respondent
- Re-assuring respondents about the confidentiality of their responses
- Implementing techniques to convert households/respondents on call back (as detailed in 4.3 above).

To maximise the response rates, Roy Morgan interviewers attempted up to 5 telephone calls at different times on different days to try to establish contact with the household or mobile user. Furthermore, up to five (and in some cases more) attempts were made to complete an interview with the selected respondent, once contact had been made.

During fieldwork, detailed breakdowns of the number and type of refusal and termination were provided to Menzies. Menzies was encouraged to provide feedback on this with the aim of fine-tuning the interviewing practices so as to minimise refusals, maximise the consent rate and fine-tune the usage of various categories of reasons for refusal. No additional procedures were proposed by Menzies.

From the total sample of phone numbers loaded for the survey (166,219 numbers), 5,000 participants completed the survey. A detailed breakdown of the outcomes for these 166,219 numbers is provided in tables 4.4.1, 4.4.2 and 4.4.3. Overall, 1,442 interviews were completed with landline sample and 3,558 were completed with mobile sample as shown in Table 2.3.2.

The following three tables provide a breakdown of all sample records activated for the survey. "Fresh" sample – i.e. numbers not attempted – is shown in these tables (only 17 landline numbers were not used for the survey).

Each table also provides a percentage breakdown by:

- Total sample
- Total usable numbers (i.e. excluding numbers that were disconnected, fax, modem, etc.)
- Total contacts (i.e. those numbers that were answered, other than those answered by an answering machine etc.).

Of the 114,123 landline numbers available for use, half were uncontactable/not connected (50.1%). A further 2.2% of landline numbers were modems or faxes, with 6.1% being answering machines or voicemails. Whilst a message was left on these numbers about the survey, no further outcome was obtained (i.e. the respondent/household was not available when called or was using the message service as a call screening mechanism). A small 0.4% of numbers were not called, as they were found to be on Roy Morgan's "Do Not Call' register.

A total of 46,983 usable landline numbers were attempted, from which contact was made with 15,556 numbers (i.e.1 in 3.02 usable landline numbers were made contact with). Almost six in ten of usable landline numbers were attempted at least 5 times, or had 3 consecutive no replies (57.4%), while 9.2% were no replies.

Of the 15,556 landline numbers where contact was made, more than half were business numbers (53.6%). Almost one third of landline contacts were refusals or terminations (32.7%), with just over one in ten contacts being refusals or terminations in attempting to convert 'soft' refusals/terminations (11.4%). Completed interviews accounted for just under one in ten contacts (9.3%).

Table 4.4.1 Landline number sample disposition

Landline Sample Records	Landline Sample Records	% of sample Loaded	% of usable Nos. attempted	% of contacts made
Contacts:				
Completed	1,442	1.3%	3.1%	9.3%
Appointment	16	0.0%	0.0%	0.1%
Soft appointment	245	0.2%	0.5%	1.6%
Business number	8,334	7.3%	17.7%	53.6%
Refusal	1,267	1.1%	2.7%	8.1%
Refusal – after re-contact attempted	1,454	1.3%	3.1%	9.3%
Terminated	2,036	1.8%	4.3%	13.1%
Termination – after re-contact attempted	324	0.3%	0.7%	2.1%
Failed screener / Quota failure / Out of scope	432	0.4%	0.9%	2.8%
Interrupted by interviewer	6	0.0%	0.0%	0.0%
Non-contacts:				
No reply	4,342	3.8%	9.2%	
Busy	99	0.1%	0.2%	
5+ calls (or 3 consecutive no replies)	26,986	23.6%	57.4%	
Unusable Numbers:				
Answering machine / voicemail	6,942	6.1%		
Modem	1,173	1.0%		
Fax	1,359	1.2%		
On 'Do not call' list	443	0.4%		
Unobtainable / Not connected etc.	57,206	50.1%		
Fresh sample	17	0.0%		
Total landline sample	**114,123**	**100.0%**		
Usable numbers attempted	**46,983**		**100.0%**	
Contacts made	**15,556**			**100.0%**

Of the 52,096 mobile numbers available for use, fewer than one in six were uncontactable/not connected (15.3%). A further 2.6% of mobile numbers were answering machines or voicemails. A total of 2.6% of numbers were not called, as they were found to be on Roy Morgan's "Do Not Call' register, while only 0.1% of calls went to modems or fax machines.

A total of 41,334 usable mobile numbers were attempted, from which contact was made with 15,622 numbers (i.e.1 in 2.65 usable mobile numbers were made contact with). Almost six in ten of usable landline numbers were attempted at least 5 times, or had 3 consecutive no replies (59.0%), while 3.2% were no replies).

Of the 15,622 mobile numbers where contact was made, over half were refusals or terminations (51.7%), with just over one in five contacts being refusals or terminations as a result of 'soft' refusal/termination conversion attempt (22.1%). Completed interviews accounted for just over one in ten mobile contacts (22.8%), while only 7.4% were categorised as business numbers.

Table 4.4.2 Mobile number sample disposition

Mobile Sample Records	Mobile Sample Records	% of sample Loaded	% of usable Nos. attempted	% of contacts made
Contacts:				
Completed	3,558	6.8%	8.6%	22.8%
Appointment	9	0.0%	0.0%	0.1%
Soft appointment	72	0.1%	0.2%	0.5%
Business number	1,162	2.2%	2.8%	7.4%
Refusal	1,553	3.0%	3.8%	9.9%
Refusal – after re-contact attempted	3,111	6.0%	7.5%	19.9%
Terminated	3,058	5.9%	7.4%	19.6%
Termination – after re-contact attempted	348	0.7%	0.8%	2.2%
Failed screener / Quota failure / Out of scope	2,744	5.3%	6.6%	17.6%
Interrupted by interviewer	7	0.0%	0.0%	0.0%
Non-contacts:				
No reply	1,332	2.6%	3.2%	
Busy	11	0.0%	0.0%	
5+ calls (or 3 consecutive no replies)	24,369	46.8%	59.0%	
Unusable Numbers:				
Answering machine / voicemail	1,379	2.6%		
Modem	54	0.1%		
Fax	15	0.0%		
On 'Do not call' list	1,347	2.6%		
Unobtainable / Not connected etc.	7,967	15.3%		
Fresh sample	0	0.0%		
Total mobile sample	**52,096**	**100.0%**		
Usable numbers attempted	**41,334**		**100.0%**	
Contacts made	**15,622**			**100.0%**

Overall, 166,219 numbers were activated for use, with 166,202 actually attempted. Just under four in ten were classified as unobtainable or not connected (39.2%). Five percent were answering machines or voicemails, with 1.6% connections to modems or faxes. Just over one percent of numbers were on the 'Do not call' list.

Of the 88,317 numbers attempted just over three in ten were attempted at least 5 times, or had 3 consecutive no replies (30.9%), while 3.4% were no replies. A total of 31,178 contacts were made, representing 35.3% of all numbers attempted (i.e.1 in 2.83 usable numbers were made contact with).

Of contacts made, three in ten were business numbers (30.5%), while four in ten were refusals or terminations (42.2%). One in six contacts were refusals or terminations after a re-contact attempt to convert a 'soft' refusal or termination was made (16.8%). Just under one in six contacts made became completed interviews (16.0%).

Table 4.4.3 Overall sample disposition

Overall Sample Records	Overall Sample Records	% of sample Loaded	% of usable Nos. attempted	% of contacts made
Contacts:				
Completed	5,000	3.0%	5.7%	16.0%
Appointment	25	0.0%	0.0%	0.1%
Soft appointment	317	0.2%	0.4%	1.0%
Business number	9,496	5.7%	10.8%	30.5%
Refusal	2,820	1.7%	3.2%	9.0%
Refusal – after re-contact attempted	4,565	2.7%	5.2%	14.6%
Terminated	5,094	3.1%	5.8%	16.3%
Termination – after re-contact attempted	672	0.4%	0.8%	2.2%
Failed screener / Quota failure / Out of scope	3,176	1.9%	3.6%	10.2%
Interrupted by interviewer	13	0.0%	0.0%	0.0%
Non-contacts:				
No reply	5,674	3.4%	6.4%	
Busy	110	0.1%	0.1%	
5+ calls (or 3 consecutive no replies)	51,355	30.9%	58.1%	
Unusable Numbers:				
Answering machine / voicemail	8,321	5.0%		
Modem	1,227	0.7%		
Fax	1,374	0.8%		
On 'Do not call' list	1,790	1.1%		
Unobtainable / Not connected etc.	65,173	39.2%		
Fresh sample	17	0.0%		
Total sample	**166,219**	**100.0%**		
Usable numbers attempted	**88,317**		**100.0%**	
Contacts made	**31,178**			**100.0%**

In relation to refusals and terminations, an accurate assessment of their number is not possible because of the 'soft' refusal/termination conversion process. Once an attempt to convert the 'soft' refusal or termination was made, the outcome status changes (e.g. to a complete, an appointment, a no reply, engaged, a refusal etc.), thereby losing the ability to track the record as a refusal or termination. However, Table 4.4.4 below details the refusals and terminations prior to the 'soft' refusal process being conducted. It shows that just over one quarter of refusals or terminations from landline numbers were 'soft' (27.5%), whereas one third of mobile number refusals or terminations were classified as 'soft' (33.5%).

Table 4.4.4 Intial refusals/terminations by sample type

Original Refusal / Termination Type	From Landline Sample	From Mobile Sample	Total
'Soft' Refusals attempted to convert			
Refused - Interviewed before / too often	0.7%	0.5%	0.6%
Refused - Not now / no time / too busy	14.6%	23.5%	20.3%
Refused - Subject matter	1.7%	2.8%	2.4%
Total 'Soft' Refusals	**17.0%**	**26.8%**	**23.3%**
Hard Refusals			
Refused - Hung up during introduction	36.4%	32.1%	33.6%
Refused - After introduction	16.3%	16.0%	16.1%
Refused to call qualifying person to phone	1.1%	0.5%	0.7%
Refused - Access appointed respondent denied on recall	0.2%	0.1%	0.1%
Total Hard Refusals	**54.0%**	**48.6%**	**50.5%**
Total Refusals	**71.0%**	**75.4%**	**73.8%**
'Soft' Terminations attempted to convert			
Termination - Language problem	3.7%	1.2%	2.1%
Termination - Hearing difficulty / very elderly / drunk / drugged	3.7%	1.6%	2.3%
Termination - Other	3.2%	3.9%	3.7%
Total 'Soft' Terminations	**10.6%**	**6.7%**	**8.1%**
Hard Terminations			
Termination - Respondent did not wish to continue interview	1.9%	1.9%	1.9%
Termination - Named sample respondent not at this number	0.2%	0.7%	0.5%
Termination - No-one in household fits introduction criteria	16.2%	15.1%	15.5%
Termination - Respondent completed interview and asked for it to be deleted	0.1%	0.1%	0.1%
Termination - Other	0.1%	0.0%	0.0%
Total Hard Terminations	**18.5%**	**17.9%**	**18.1%**
Total Terminations	**29.0%**	**24.6%**	**26.2%**
Total 'Soft' Refusals / Terminations	**27.5%**	**33.5%**	**31.4%**
Total Hard Refusals / Terminations	**72.5%**	**66.5%**	**68.6%**
Total Refusals / Terminations	**100.0%**	**100.0%**	**100.0%**

In relation to 'soft' refusal or termination success or failure, it can only be determined whether the 'soft' refusal or termination remained as a refusal or termination or not. We cannot determine the proportion that ended up being completed interviews/ Table 4.4.5 shows that four in five 'soft' refusals or terminations remained as refusals or terminations after the conversion attempt (80.0%). The success rate in conversion was better for 'soft' refusals and terminations from mobile numbers than from landline numbers (i.e. 23.7% vs 11.8%). This is not surprising as a call to a mobile number is very likely to result in a call to the person initially refusing, so the interviewer can speak directly with the 'refuser to convert them. However, a call to a landline number is likely to result in being answered by another member of the household or a 'gatekeeper' who would be more likely to refuse the conversion attempt or refuse to call the original 'refuser' to the phone.

Table 4.4.5 Refusal conversion outcome by sample type

Refusal Conversion Outcome	From Landline Sample	From Mobile Sample	Total
Attempted 'soft' refusal/termination coversion	2,015	4,533	6,548
No. remaining as refusals/terminations after conversion attempt	1,778	3,459	5,237
No. changing outcome status after conversion attempt	237	1,074	1,311
% remaining as refusals/terminations after conversion attempt	88.2%	76.3%	80.0%
% changing outcome status after conversion attempt	11.8%	23.7%	20.0%

The overall consent rate, defined as *completes/(completes + refusals)* was 24.5%, comprising 21.7% for calls to mobile numbers and 25.9% for calls to mobiles.

The overall response rate defined as *completes/(in-scope contacts)* was 22.1%. The response rate for landline numbers was 17.3% and for mobile numbers was 24.8%.

4.5 Interview length

Interview length varied considerably according to the extent of gambling activity that respondents undertook, and whether the respondent was randomly allocated to the long or the short interview. The objective was to keep the survey average under 13 minutes. In fact, the average interview length was 12.67 minutes. Respondents going through the full survey averaged 19.26 minutes, whilst those going through the short survey averaged 8.19 minutes. Interviews obtained from mobile numbers tended to be slightly longer in duration than those obtained from landline numbers.

Table 4.5 Average interview length by sample type and survey type

Average Length	Short Survey	Full Survey	All Completes
Landline Completes	7.88	18.38	11.86
Mobile Completes	8.32	19.58	13.00
Overall Completes	**8.19**	**19.26**	**12.67**

5 Analysis and weighting

5.1 Coding

There were three fully open-ended questions in the survey requiring code frame development and 14 ‘other-specify’ questions. Draft code frames were developed by Roy Morgan and approved by Menzies.

Back-coding was also undertaken of ‘other-specify’ responses, i.e. identifying any open-ended responses that could be back-coded to existing response options.

5.2 Editing

As the survey was conducted using CATI, data entry was automatic at the point of interviewing. The questionnaire programming had built in routing. Programming checked responses and directed interviewers to ask respondents questions that were applicable to them depending on the responses given to previous questions. As a result, there was little need to edit the data for any inconsistencies. A small number of respondents had to be edited/flagged as they had initially indicated they undertook a 'gambling other – specify' response, their responses had to be allocated to a different gambling category There were also several cases where post-interview backcoding of an other-specify response resulted in respondents not having an answer to a relevant subsequent question, as they had not been asked it. In such cases these respondents were allocated a 'don't know' code.

5.3 Weighting

The final weighting design was in essence the same process developed by Roy Morgan and Menzies for the 2015 survey. The design takes into account the need to be able to weight both the overall sample and the sub-sample asked the long questionnaire. It also takes into account phone connectedness, age, sex, region and indigenous status. An appropriate approach to probability weighting for this survey was also addressed.

5.3.1 Probability of selection

When using a dual sample frame approach and random respondent selection, Roy Morgan typically adopts a weighting design which initially adjusts for the probability of selection, then adjusts for non-response and demographic factors. This standard approach, with some adjustments, was used for this survey. The standard approach is as follows:

Let p = sampling fraction for interviews via mobile phone (number of interviews achieved divided by number of mobile phone owners).

Let h = sampling fraction for interviews via landline (number of interviews achieved divided by number of households with a landline phone).

Let e = number of persons in respondent's household eligible for the survey.

Let k = number of separate landlines (i.e. the number of different telephone numbers, not handsets for the same phone number) in respondent's household.

Let n = number of mobile phones, capable of receiving calls, owned by the respondent.

Let s = number of eligible persons sharing the mobile phone on which the respondent is contacted.

For a person living in a household with at least one landline the probability of being interviewed by landline is = hk/e. This is the same whether or not that person also has a mobile phone.

For a person with a mobile, the probability of being interviewed via that mobile phone is *pn/s*, again irrespective of whether or not that person has a landline at home.

A mobile phone owner who also has a landline at home could be interviewed via either channel. The probability in the case of each channel is as given above. As the sampling fractions in both cases will be very small, the probability of being interviewed via both channels in the same survey is small enough to be disregarded. So the probability of being interviewed at all, i.e. via either channel, can for practical purposes be regarded as the *sum* of the two probabilities, or *pn/s + hk/e*.

To summarise, the probabilities for respondents in the three channel segments are:

landline only	*hk/e*
mobile only	*pn/s*
both	*pn/s + hk/e*.

The weight to be applied to counter the biases in a dual frame sample design is therefore the reciprocal of whichever probability the respondent turns out to have.

For this survey of Northern Territory residents, this standard approach required some amendment, partly as some of the population (particularly the more remote indigenous population) was out of the scope of a telephone survey and partly as information on telephone connectedness of the Northern Territory population is limited. The necessary modifications are discussed throughout this section.

5.3.2 Treatment of indigenous status in the weighting

It was recognised by both Menzies and Roy Morgan that while the survey methodology was likely to produce a reasonably representative sample of non-indigenous Territorians, it was not able to produce a representative sample of indigenous Territorians, chiefly as a large proportion are not reachable by a telephone methodology. A weighting design that weighted the data to total Territorians would therefore have been inappropriate. The approach agreed with Menzies in 2015 and applied to 2018 data was to weight the non-indigenous sample to the non-indigenous population. The indigenous sample was also weighted, using a slightly different approach. Just two geographical categories were used for the indigenous sample: Darwin and Remainder of Territory.

5.3.3 Main weighting – all non-indigenous sample (weight set one)

Geography: The small strata of Tennant Creek and Nhulunbuy were combined for weighting purposes.

Age/Sex: The age/sex categories used to monitor sampling were 18-34; 35-49; 50-64 and 65 plus. It was agreed with Menzies to use the four age bands 18-34; 35-49; 50-64 and 65 plus for weighting.

Phone Connectedness: The sampling involved an RDD landline sample frame and three lists of mobile numbers. Menzies requested that the weighting take account of phone connectedness as far as possible. Ideally this would take the form of a selection weight, but there was insufficient data collected in the survey and insufficient data for phone connectedness for all areas of the NT, or for more than a small proportion of indigenous Territorians, to be able to take account of this in the manner of the standard Roy Morgan approach summarised above. A simplified form of this weighting step, applying only to the non-indigenous sample, was adopted.

Number of adults in household: For the landline sample frame, just one respondent was selected per household. The main weighting included an adjustment for the probability of selection, given the household size. To avoid creating extreme individual weights, it was agreed with Menzies that a limit be set on this particular adjustment, whereby respondents from a household with 5 or more eligible adults be allocated a value of 5.

First stage: Probability of selection (non-indigenous sample)

The following details the steps for the first stage of weighting of the non-indigenous sample – adjustment for probability of selection. It also details the variations required from the standard Roy Morgan approach.

Let *p* = sampling fraction for interviews via mobile phone (number of interviews achieved divided by number of mobile phone owners). The number of non-indigenous mobile phone owners aged 18+ in NT is not known precisely but was based on results from Roy Morgan Single Source, which only covers Darwin and Alice Springs. In order to improve the reliability of this estimate, Single Source data for 2017-2018 was used – giving an estimate of 95.5%.

> *Therefore 95.5% of NT non-indigenous people 18+ are estimated to have a mobile. This equates to 95.5% of 133,288 = 127,251. A total of 3,300 non-indigenous respondents were interviewed by mobile. Therefore p= 3,300/127,251 = 0.0259329*

Let *h* = sampling fraction for interviews via landline (number of interviews achieved divided by number of households with a landline phone). The total number of non-indigenous households in NT with a landline phone is also not known precisely, but was based on results from Roy Morgan Single Source for Darwin and Alice Springs for 2013-2015 – an estimate of 50.2%.

> *Therefore 50.2% of NT non-indigenous households are estimated to have a landline. This equates to 51.1% of 54,856 = 28,031. A total of 1,329 non-indigenous were interviewed by landline. Therefore h= 1,329/28,031 = 0.0474117*

Let *e* = number of persons in respondent's household eligible for the survey. (To avoid creating extreme individual weights, it was agreed that a limit be set on this particular element, whereby respondents from a household with 5 or more eligible adults be allocated an *e* value of 5).

Let *k* = number of separate landlines (i.e. the number of different telephone numbers, not handsets for the same phone number) in respondent's household. (To avoid creating extreme individual weights, it was agreed that the value for this component for households with 3 or more landlines be set at 3.)

The standard approach would be to let *n* = number of mobile phones, capable of receiving calls, owned by the respondent. However, this question was not asked of respondents in this survey. The latest Roy Morgan data available showed that the proportion of adults without a mobile phone was very low (0.5% nationally), so in this case it was reasonable to assume that *n*=1 and effectively ignore this element of the weighting.

The standard approach would be to let *s* = number of eligible persons sharing the mobile phone on which the respondent is contacted. However, this question was not asked in this survey, so *s* was assumed to be 1.

Taking into account all the above points with respect to the probability weighting stage, the probabilities for respondents were calculated as:

mobile only (i.e. mobile-interviewed, no landline) p (i.e. 0.0259329)

all other respondents $p + hk/e$ (i.e. 0.0259329 + *0.04741177* multiplied by number of landlines in the respondent's household divided by the number of adults in the respondent's household)

The final result of this first weighting stage was the reciprocal of each respondent's selection probability.

Second stage - Non response (demographic) weighting

This second stage of weighting for non-indigenous respondents corrected proportions of respondents across the groups within the following variables, and projected the weighted sample to the population:

- Age
- Sex
- Region

The targets used for this step were age by sex by region data derived by applying Census 2016 proportions for the non-indigenous population to the August 2018 ABS population estimates.

(As the first weighting stage had already made broad corrections for phone connectedness, it was agreed with Menzies not to include phone-connectedness as an element of the second stage.)

Effectively in this stage the weighted sample was also scaled to match population data.

5.3.4 Weight set two – sub-sample adjustments, non-indigenous

The questionnaire was programmed to randomly select one in four 'non-problem gamblers' and one in four 'non-gamblers' as defined by their CPGI/PGSI scores, and allocate this sub-sample to receive the full questionnaire, along with 100% of Indigenous respondents, at least monthly EGM gamblers, regular gamblers (weekly excluding lotto and instant scratch tickets) and those defined as 'problem gamblers', 'low-risk gamblers' and 'moderate-risk gamblers'. Menzies requested that a second set of weights be provided to allow for this sub-sampling. Roy Morgan has considerable experience in this particular task – the re-weighting of a sub-sample to represent the already weighted sample.

In addition to the basic requirement of this second set of weights (i.e. to multiply the weight of each selected non-problem gambler and non-gambler by the inverse of the proportion actually selected) slight corrections to other parameters were required so that the characteristics of the overall weighted sample, using this second set of weights remained largely the same as the main weighted sample. Initial checks of the raw data show that the age, sex, region, ATSI status and phone type of the two sub-samples *very* closely matched the patterns for the two total samples from which they were drawn.

The second set of weights is that used for the sub-sample of one in four non-gamblers and one in four non-problem gamblers (all non-indigenous). The agreed approach for this survey is outlined below:

For each of the two relevant groups (non-problem gamblers and non-gamblers) calculate the following figures for each of the 8 age-by-sex cells:

a) Sum of weights for **all** the relevant group (e.g. sum of weights for male non-gamblers aged 18-34)
b) Sum of weights for the **sub-sampled** members of the relevant group (e.g. sum of weights for male non-gamblers aged 18-34 who were selected to complete the long questionnaire)

Divide (a) by (b) for each age/sex group for each of the two relevant groups, giving 16 adjustment factors (c).

For Weight Set Two, set each respondent's weight as follows:

- For non-gamblers who were *not* in the sub-sample, set their weight to zero
- For non-gamblers who *were* selected for the sub-sample to get the long questionnaire, multiply their weight by the relevant (c) factor.
- For non-problem gamblers who were *not* in the sub-sample, set their weight to zero
- For non-problem gamblers who *were* selected for the sub-sample to get the long questionnaire, multiply their weight by the relevant (c) factor.
- All other respondents retain the same weight they have for Weight Set One.

Generally speaking, Weight Set One should be used for all analysis involving the first half of the questionnaire, and Weight Set Two should be used only for analysis involving the second half of the questionnaire (the part where the sub-sampling applied). The two weight sets will not produce identical results, but the differences should be very minor.

5.3.5 Weight set three – indigenous respondents

There is much less available, reliable information about the phone connectedness status of indigenous Territorians, and the proportion who are even contactable by telephone is likely to be quite low outside the main cities. Menzies requested a simple approach to weighting the indigenous sample.

On the assumption that, despite the lack of phone connectedness, the sample may be broadly representative of the total indigenous population, then the following approach was agreed.

- Collapse the regions into just two: Darwin and Remainder of Territory.
- Using simple age by sex by region cell weighting, weight the indigenous respondents to the estimated indigenous population of Darwin and Remainder of Territory (created from August 2015 ABS population estimates adjusted by the 2011 ABS Census figures for the proportion that are indigenous.)

5.3.5 Weight set four – sun-sample adjustments, indigenous

The fourth set of weights is that used for the sub-sample of one in four non-gamblers and one in four non-problem gamblers, as applied to **indigenous** respondents. Cell sizes were too small to adopt the same approach as Weight Set Two. Rather, a simpler approach was agreed:
For each of the two relevant groups (non-problem gamblers and non-gamblers) calculate the following figures:

c) Sum of weights for **all** the relevant group (e.g. sum of weights for indigenous non-gamblers)
d) Sum of weights for the **sub-sampled** members of the relevant group (e.g. sum of weights for indigenous non-gamblers who were selected to complete the long questionnaire)

Divide (a) by (b) for each of the two relevant groups, giving 2 adjustment factors (c).

For Weight Set Four, set each indigenous respondent's weight as follows:

- For non-gamblers who were *not* in the sub-sample, set their weight to zero
- For non-gamblers who *were* selected for the sub-sample to get the long questionnaire, multiply their weight by the relevant (c) factor.
- For non-problem gamblers who were *not* in the sub-sample, set their weight to zero
- For non-problem gamblers who *were* selected for the sub-sample to get the long questionnaire, multiply their weight by the relevant (c) factor.
- All other indigenous respondents retain the same weight they have for Weight Set Three.

The final SPSS data file also included two additional weight sets, Weight 5 and Weight 6, which were created to simplify the task for researchers who may wish to run tables etc including both indigenous and non-indigenous respondents in the same table.

- Weight 5 (total sample) equals Weight 1 for all non-indigenous respondents and equals Weight 3 for all indigenous respondents.
- Weight 6 (sub-sample adjustment) equals Weight 2 for all non-indigenous respondents and would equal Weight 4 for all indigenous respondents.

6 Appendix A – RDD sampling Frame generation

6.1 Roy Morgan Sample

Roy Morgan has three internal sources from which we can draw sample: The Australian Telephone Database, the New Zealand Telephone Database and the Confirmit Panel.

Both the Australian and New Zealand Telephone databases are based on the latest White Pages listing for each country (Australia on Disc and NZ on Disk). These listed numbers have been geocoded to SA1 level in Australia and meshblock level in New Zealand. This allows us to draw telephone sample from precise geographic areas as each SA1 or meshblock contains only a few hundred households.

The telephone databases also include generated 'unlisted' numbers to ensure all potential numbers are available to be drawn. Whilst the unlisted landline numbers are geocoded to postcode level, unlisted mobile numbers are unable to be geocoded and therefore our ability to draw targeted sample is limited.

The Confirmit Panel on the other hand contains the details of all respondents from Australia and New Zealand that have completed a survey with Roy Morgan. The vast majority are Establishment survey respondents obtained from random sampling face-to-face interviewing in Australia and telephone sampling in New Zealand. Therefore, we are able to draw highly targeted sample based on their responses to any combination of the survey variables. Also, because we collect address, phone number and email from these respondents this sample can be utilised for any of face-to-face, telephone and online surveys.

As of February 2018, there are 19.6 million numbers in the Australian database with 1 million being mobile numbers. Almost 5 million are listed numbers sourced from

Australia on Disc, with the remainder generated. For New Zealand, there are close to 3.8 million numbers with 417,000 being mobile numbers. 900,000 are listed numbers sourced from NZ on Disc with the remainder generated.

Every year the databases are updated with new listed numbers obtained from the latest United Directory Systems release. Every day we add any new numbers that have been called, along with the call outcome for each number dialled in the previous night's CATI interviewing.

6.2 RDD Sample Frame Generation

1. All listed residential numbers (landline and mobile) are obtained from the Electronic White Pages (EWP) and similar sources (including numbers from Single Source respondents).
2. The numbers are then sorted into numerical order.
3. A file of blocks is generated for all those blocks having at least one listed number in the white pages. For example, if the number 0396296888 is listed in the white pages, then generate a block of 100 numbers going from 0396296**00** to 0396296**99**, or if 0446332115 is listed, then generate a block of 100 numbers going from 0446332**00** to 0446332**99**.
4. Records are flagged or removed according to the business rules described below:
    - Numbers that are coded as listed in the Yellow Pages, but are not listed in the White Pages are removed from the sampling frame.
    - Any block, where all of its listed white page numbers are also listed in the yellow pages, is excluded from the sampling frame.
    - All other numbers that are listed in both the White Pages and the Yellow Pages are kept in the sampling frame and flagged as Yellow Pages numbers.
5. Initially, all 'listed' landline and mobile phone numbers are geo-coded. Where available, listed numbers are geo-coded based on SA1. Where SA1 are not available, listed numbers are geo-coded based on their postcode.
6. Geo-coding for unlisted landline numbers only is assigned based on the dominant codes within each block of 100 numbers. Generated mobile numbers are not geo-coded
7. The geo-coding of phone numbers within the landline RDD sampling frame is for the purpose of *apriori* allocation of numbers to geographical strata. When interviewed, postcode is collected from respondents to allow each respondent to be allocated to their correct geographical stratum.

6.3 Drawing/Using RDD Sample

For any particular project, the RDD sample is randomly selected from the sampling frame within each specified stratum (obviously only regionalised mobile sample could be used from Roy Morgan Telephone Sample). Once selected, the sample is randomised before being loaded into the interviewing system.

All RDD sample selected for any particular project is run against our "do not contact" list of numbers before use. This list is used to record telephone numbers where the respondent never wants to be contacted again.

6.4 Other Mobile Sample

Mobile sample obtained from Accountable List Brokers and SamplePages was regionalised. Therefore this mobile sample could be randomly selected from the sampling frame within each specified stratum.

APPENDIX B: SAMPLE CHARACTERISTICS

B1 Unweighted and weighted Indigenous sample comparison, 2015 to 2018

Table 53: Unweighted and weighted distribution of socio-demographics variables for Indigenous sample, 2015 to 2018

	Unweighted data			Weighted data		
	2018 % (n)	2015 % (n)	Sig. Diff.	2018 % (SE)	2015 % (SE)	Sig. Diff.
Region			ns			ns
Darwin & Palmerston	59.3 (220)	61.1 (163)		20.0 (1.3)	21.7 (2.1)	
Alice Springs	15.6 (58)	19.1 (51)		27.8 (2.5)	31.6 (3.6)	
Regional towns	13.8 (51)	8.2 (22)		25.1 (1.9)	18.5 (3.7)	
Rest of NT	11.3 (42)	11.6 (31)		27.1 (2.5)	28.3 (4.1)	
Age			ns			ns
18-29	14.6 (54)	16.5 (44)		29.1 (3.4)	27.3 (4.9)	
30-39	19.1 (71)	18.4 (49)		26.3 (3.5)	29.0 (4.9)	
40-49	25.3 (94)	23.6 (63)		21.0 (1.9)	21.3 (2.8)	
50-64	33.2 (123)	29.6 (79)		17.7 (1.4)	15.7 (2.0)	
65+	7.8 (29)	12.0 (32)		5.9 (2.0)	6.7 (1.1)	
Sex			ns			ns
Female	61.2 (227)	61.1 (163)		51.2 (2.5)	51.6 (4.1)	
Male	38.8 (144)	39.0 (104)		48.8 (2.5)	48.4 (4.1)	
Language spoken at home			ns			ns
English	92.7 (344)	92.5 (246)		88.1 (2.7)	89.5 (3.4)	
Not English	7.3 (27)	7.5 (20)		11.9 (2.7)	10.5 (3.4)	
Adults in house			ns			ns
One	34.8 (129)	28.8 (77)		34.2 (3.8)	27.0 (4.2)	
Two	41.2 (153)	40.1 (107)		38.8 (3.9)	43.7 (4.9)	
Three or more	24.0 (89)	31.1 (83)		27.1 (3.4)	29.2 (4.3)	
Household type			ns			ns
Couple with children	30.5 (113)	31.7 (84)		34.3 (3.8)	32.7 (4.4)	
Couple with no children	21.0 (78)	18.1 (48)		17.8 (3.0)	14.3 (3.1)	
Single parent	13.8 (51)	16.6 (44)		11.3 (2.3)	20.8 (4.1)	
Single person	17.5 (65)	15.9 (42)		16.4 (2.7)	14.0 (3.3)	
Group house	10.0 (37)	10.2 (27)		13.0 (2.6)	11.8 (3.3)	
Other	7.3 (27)	7.6 (20)		7.2 (2.0)	6.4 (2.6)	
Total	**100.0 (371)**	**100.0 (267)**		**100.0**	**100.0**	
Weighted population (N)	**-**	**-**		**44,410**	**38,399**	

*** p<0.001; ** p<0.01; * p<0.05: Significant difference in distribution between 2015 and 2018; ns: Not significant

Table 54: Unweighted and weighted distribution of socioeconomic variables for Indigenous sample, 2015 to 2018

	Unweighted data			Weighted data		
	2018 % (n)	2015 % (n)	Sig. Diff.[1]	2018 % (SE)	2015 % (SE)	Sig. Diff.
Student status			ns			ns
Full-time student	2.7 (10)	4.9 (13)		2.5 (0.9)	6.6 (2.8)	
Part-time student	12.7 (47)	13.2 (35)		14.7 (2.7)	9.5 (2.2)	
Not-studying	84.6 (314)	82.0 (218)		82.8 (2.8)	83.9 (3.4)	
Labour force status			ns			ns
Full-time work	57.0 (211)	50.8 (135)		56.3 (4.0)	59.0 (4.8)	
Part-time/Casual	11.9 (44)	13.9 (37)		14.7 (3.0)	14.0 (3.5)	
Unemployed	10.5 (39)	8.3 (22)		15.0 (3.1)	7.4 (2.6)	
NILF/other	20.5 (76)	27.1 (72)		14.1 (2.5)	19.6 (3.3)	
FIFO/DIDO Status [2]			**			ns
Not FIFO/DIDO	86.7 (221)	75.9 (129)		83.6 (3.7)	73.2 (5.3)	
FIFO/DIDO	13.3 (34)	24.1 (41)		16.4 (3.7)	26.8 (5.3)	
Highest education			**			**
Bachelor or more	19.5 (72)	21.1 (56)		13.8 (2.3)	16.9 (3.1)	
Certificate 3/Diploma	29.5 (109)	27.9 (74)		24.9 (3.0)	26.8 (4.6)	
Year 12	17.0 (63)	10.6 (28)		25.9 (3.6)	9.0 (2.9)	
Year 10	26.5 (98)	24.2 (64)		28.9 (3.7)	29.4 (5.0)	
Less than year 10	7.6 (28)	16.2 (43)		6.5 (1.7)	17.8 (3.2)	
Personal income			**			ns
Less than $20,000	13.2 (49)	19.5 (52)		16.9 (3.2)	16.8 (3.1)	
$20,000-$29,000	12.7 (47)	12.7 (34)		13.7 (2.6)	11.5 (3.2)	
$30,000-$49,000	11.3 (42)	17.6 (47)		8.6 (2.0)	18.5 (4.0)	
$50,000-$69,000	15.4 (57)	15.7 (42)		21.5 (3.5)	19.2 (3.9)	
$70,000-$99,000	23.7 (88)	21.4 (57)		19.3 (3.0)	22.3 (4.3)	
$100,000-$119,000	11.3 (42)	6.7 (18)		9.7 (2.0)	4.5 (1.6)	
$120,000 or more	12.4 (46)	6.4 (17)		10.3 (2.1)	7.2 (2.8)	
Total	**100.0 (371)**	**100.0 (267)**	-	**100.0**	**100.0**	-
Weighted population (N)	-	-	-	**44,410**	**38,399**	-

[1] Significant difference; [2] FIFO/DIDO Fly in-Fly out or Drive in-Drive out worker; Not in labour force, other and unemployed excluded.

*** p<0.001; ** p<0.01; * p<0.05: Significant difference in distribution between 2015 and 2018

ns: Not significant

Table 55: Unweighted and weighted distribution of health risk factors for Indigenous sample, 2015 to 2018

	Unweighted data			Weighted data		
	2018 % (n)	2015 % (n)	Sig. Diff.	2018 % (SE)	2015 % (SE)	Sig. Diff.
Drank alcohol last 12 months			ns			ns
No	26.5 (98)	32.4 (36)		27.0 (3.5)	23.3 (5.4)	
Yes, drank alcohol	73.5 (272)	67.6 (75)		73.0 (3.5)	76.7 (5.4)	
CAGE Alcohol problems [1]			**			ns
No problem	81.6 (222)	65.8 (50)		79.3 (3.8)	71.8 (8.2)	
Alcohol problem	18.4 (50)	34.2 (26)		20.7 (3.8)	28.2 (8.2)	
Smoking status			ns			ns
Never smoker	41.4 (153)	44.1 (49)		43.8 (3.9)	47.2 (8.8)	
Ex-/non-daily smoker	28.7 (106)	25.2 (28)		25.3 (3.3)	16.9 (4.9)	
Daily smoker	30.0 (111)	30.6 (34)		30.9 (3.3)	35.9 (8.8)	
Smoke free home status			ns			ns
Never smokes inside	83.2 (307)	79.3 (88)		79.8 (3.1)	75.8 (6.6)	
Sometimes smokes inside	5.7 (21)	9.9 (11)		4.8 (1.5)	13.1 (5.9)	
Most/all the time	11.1 (41)	10.8 (12)		15.4 (2.9)	11.2 (5.2)	
Self-assessed health status			ns			ns
Excellent	14.8 (55)	16.4 (18)		17.2 (3.1)	19.1 (7.9)	
Very good	20.2 (75)	20.0 (22)		20.7 (3.2)	19.0 (6.5)	
Good	35.3 (131)	43.6 (48)		37.1 (3.9)	51.6 (8.9)	
Fair	20.0 (74)	14.6 (16)		18.2 (3.0)	8.5 (3.0)	
Poor	9.7 (36)	5.5 (6)		6.7 (1.6)	1.9 (0.8)	
Ran out of money for essentials			ns			ns
Not in last year	79.0 (293)	83.6 (92)		79.1 (2.9)	83.5 (7.8)	
Yes, in the last 12 months	21.0 (78)	16.4 (18)		20.9 (2.9)	16.5 (7.8)	
Total	**100.0 (371)**	**100.0 (112)**		**100.0**	**100.0**	
Weighted population (N)	-	-	-	**44,410**	**38,399**	-

[1] CAGE [13]; Non-drinkers in last 12 months excluded

*** p<0.001; ** p<0.01; * p<0.05: Significant difference in distribution between 2015 and 2018
ns: Not significant

B2 Unweighted and weighted Non-Indigenous sample comparison, 2015 to 2018

Table 56: Unweighted and weighted distribution of socio-demographics variables for Indigenous sample, 2015 to 2018

	Unweighted data			Weighted data		
	2018 % (n)	**2015 % (n)**	**Sig. Diff.**	**2018 % (SE)**	**2015 % (SE)**	**Sig. Diff.**
Region			***			ns
Darwin & Palmerston	70.7 (3271)	68.0 (3183)		74.3 (0.6)	71.6 (0.9)	
Alice Springs	14.7 (681)	17.2 (806)		13.4 (0.5)	15.1 (0.7)	
Regional towns	6.6 (303)	7.7 (362)		6.2 (0.3)	7.3 (0.4)	
Rest of NT	8.1 (374)	7.0 (327)		6.2 (0.3)	6.0 (0.5)	
Age			ns			ns
18-29	8.6 (396)	7.3 (342)		19.4 (0.8)	17.8 (1.1)	
30-39	16.8 (776)	17.2 (806)		25.9 (0.9)	27.9 (1.2)	
40-49	22.7 (1050)	23.5 (1101)		20.4 (0.6)	19.7 (0.8)	
50-64	34.7 (1606)	35.1 (1643)		23.6 (0.5)	24.1 (0.7)	
65+	17.3 (801)	16.8 (786)		10.7 (0.4)	10.5 (0.5)	
Sex			ns			ns
Female	52.9 (2447)	54.2 (2536)		47.9 (0.7)	46.6 (1)	
Male	47.1 (2182)	45.8 (2142)		52.1 (0.7)	53.4 (1)	
Language spoken at home			***			***
English	93.4 (4318)	95.5 (4463)		90.9 (0.6)	94.4 (0.6)	
Not English	6.6 (306)	4.5 (211)		9.1 (0.6)	5.6 (0.6)	
Adults in house			***			***
One	23.7 (1096)	20 (933)		21 (0.7)	14.6 (0.9)	
Two	55.6 (2575)	59.5 (2779)		54.9 (0.9)	59.3 (1.2)	
Three or more	20.7 (958)	20.5 (958)		24.1 (0.8)	26.1 (1)	
Household type			***			**
Couple with children	36.1 (1669)	40.8 (1904)		37.4 (0.9)	40.6 (1.2)	
Couple with no children	30.6 (1416)	30.9 (1443)		27.5 (0.8)	30.1 (1.1)	
Single parent	6.5 (299)	5.6 (262)		6.1 (0.4)	4.3 (0.4)	
Single person	17 (789)	15.7 (732)		14.3 (0.6)	12.7 (0.9)	
Group house	6.3 (290)	4.8 (224)		10.6 (0.7)	9.7 (0.9)	
Other	3.6 (166)	2.3 (107)		4 (0.4)	2.5 (0.4)	
Total	**100.0 (4,629)**	**100.0 (4,678)**	-	**100.0**	**100.0**	-
Weighted population (N)	-	-	-	**136,546**	**138,517**	-

*** p<0.001; ** p<0.01; * p<0.05: Significant difference in distribution between 2015 and 2018; ns: Not significant

Table 57: Unweighted and weighted distribution of socioeconomic variables for Indigenous sample, 2015 to 2018

	Unweighted data			Weighted data		
	2018 % (n)	2015 % (n)	Sig. Diff.[1]	2018 % (SE)	2015 % (SE)	Sig. Diff.
Student status			ns			ns
Full-time student	2.6 (118)	2.4 (113)		4.5 (0.5)	4.2 (0.6)	
Part-time student	8.4 (388)	8.4 (390)		10.2 (0.6)	9.4 (0.7)	
Not-studying	89.1 (4115)	89.2 (4167)		85.3 (0.7)	86.4 (0.9)	
Labour force status			***			***
Full-time work	59.9 (2770)	60.7 (2837)		64 (0.9)	68.7 (1)	
Part-time/Casual	16.9 (783)	15.2 (708)		18.2 (0.7)	13.4 (0.8)	
Unemployed	3.4 (159)	2.2 (104)		3.9 (0.4)	3 (0.5)	
NILF/other	19.7 (911)	21.9 (1024)		13.9 (0.5)	15 (0.7)	
FIFO/DIDO Status [2]						
Not FIFO/DIDO	89.5 (3160)	88.5 (3101)		88.1 (0.7)	85.7 (1.1)	
FIFO/DIDO	10.5 (370)	11.5 (402)		11.9 (0.7)	14.3 (1.1)	
Highest education			**			*
Bachelor or more	37.4 (1730)	38.8 (1808)		36.2 (0.9)	37.6 (1.2)	
Certificate 3/Diploma	31.9 (1473)	30.2 (1407)		33.5 (0.9)	31.2 (1.1)	
Year 12	13.6 (630)	15.7 (732)		15.4 (0.7)	17.2 (0.9)	
Year 10	13.6 (628)	11.5 (533)		12.2 (0.6)	10.5 (0.7)	
Less than year 10	3.5 (160)	3.8 (177)		2.7 (0.3)	3.5 (0.5)	
Personal income			*			ns
Less than $20,000	8.9 (411)	9.1 (426)		8.5 (0.5)	7.9 (0.6)	
$20,000-$29,000	8 (371)	7.5 (351)		6.9 (0.5)	5.7 (0.5)	
$30,000-$49,000	13.5 (625)	15 (700)		13.1 (0.6)	12.7 (0.8)	
$50,000-$69,000	15.6 (722)	16.3 (760)		16.8 (0.7)	17.9 (1)	
$70,000-$99,000	22.5 (1039)	23.9 (1120)		24.1 (0.8)	26.4 (1.1)	
$100,000-$119,000	14.8 (683)	12.7 (596)		13.8 (0.6)	12.3 (0.8)	
$120,000 or more	16.8 (778)	15.5 (725)		16.8 (0.7)	17.1 (0.9)	
Total	**100.0 (4,629)**	**100.0 (4,678)**	-	**100.0**	**100.0**	-
Weighted population (N)	-	-	-	**136,546**	**138,517**	-

[1] Significant difference; [2] FIFO/DIDO Fly in-Fly out or Drive in-Drive out worker; Not in labour force, other and unemployed excluded.

*** p<0.001; ** p<0.01; * p<0.05: Significant difference in distribution between 2015 and 2018

ns: Not significant

Table 58: Unweighted and weighted distribution of health risk factors for Indigenous sample, 2015 to 2018

	Unweighted data			Weighted data		
	2018 % (n)	2015 % (n)	Sig. Diff.	2018 % (SE)	2015 % (SE)	Sig. Diff.
Drank alcohol last 12 months			ns			ns
No	12.8 (210)	15.2 (218)		12.6 (1.1)	13.7 (1.5)	
Yes, drank alcohol	87.2 (1434)	84.8 (1216)		87.4 (1.1)	86.3 (1.5)	
CAGE Alcohol problems [1]			ns			
No problem	82.6 (1184)	81.9 (996)		82.5 (1.4)	84.8 (1.6)	
Alcohol problem	17.4 (250)	18.1 (220)		17.5 (1.4)	15.2 (1.6)	
Smoking status			**			ns
Never smoker	45.1 (742)	50.2 (720)		50.4 (1.7)	54.1 (2.3)	
Ex-/non-daily smoker	34.9 (573)	33.1 (474)		30.5 (1.5)	30.3 (2)	
Daily smoker	20 (329)	16.7 (239)		19.1 (1.3)	15.6 (1.6)	
Smoke free home status			ns			ns
Never smokes inside	89.8 (1474)	91.3 (1307)		90.1 (1)	92.5 (1)	
Sometimes smokes inside	4.8 (78)	4.8 (68)		5.2 (0.8)	4.8 (0.9)	
Most/all the time	5.4 (89)	4 (57)		4.7 (0.7)	2.7 (0.6)	
Self-assessed health status			*			ns
Excellent	14.2 (233)	17.1 (244)		15.9 (1.3)	20.5 (2.1)	
Very good	31.3 (513)	33.1 (473)		31.9 (1.6)	34.4 (2.2)	
Good	37.9 (622)	34.7 (496)		36.7 (1.6)	32.9 (2.1)	
Fair	13.3 (218)	11.3 (162)		12.3 (1.1)	9.4 (1.3)	
Poor	3.3 (54)	3.9 (55)		3.1 (0.7)	2.9 (0.6)	
Ran out of money for essentials			*			ns
Not in last year	92.1 (1514)	94.1 (1347)		90.3 (1.1)	93 (1.5)	
Yes, in the last 12 months	7.9 (130)	5.9 (84)		9.7 (1.1)	7 (1.5)	
Total	**100.0 (1,645)**	**100.0 (1,434)**		**100.0**	**100.0**	
Weighted population (N)	-	-	-	**136,546**	**138,517**	-

[1] CAGE [13]; Non-drinkers in last 12 months excluded

*** p<0.001; ** p<0.01; * p<0.05: Significant difference in distribution between 2015 and 2018

ns: Not significant

B3 Unweighted and weighted 2018 Indigenous sample comparisons by phone type

Table 59: Unweighted and weighted distribution of socio-demographics variables by phone type for the Indigenous sample, 2018

	Unweighted data			Weighted data		
	Mobile % (n)	**Landline % (n)**	**Sig. Diff.**	**Mobile % (SE)**	**Landline % (SE)**	**Sig. Diff.**
Region			***			***
Darwin & Palmerston	68.6 (177)	38.1 (43)		28.0 (1.7)	8.2 (1.4)	
Alice Springs	15.9 (41)	15.0 (17)		34.4 (3.4)	18.0 (3.8)	
Regional towns	10.5 (27)	21.2 (24)		24.1 (2.9)	26.5 (4.2)	
Rest of NT	5.0 (13)	25.7 (29)		13.5 (3.7)	47.3 (4.2)	
Age			ns			ns
18-29	14.3 (37)	15.0 (17)		26.7 (4.4)	32.7 (5.7)	
30-39	21.7 (56)	13.3 (15)		27.9 (4.4)	23.9 (5.7)	
40-49	23.6 (61)	29.2 (33)		18.3 (2.4)	25.1 (3.5)	
50-64	33.3 (86)	32.7 (37)		19.9 (1.7)	14.3 (2.4)	
65+	7.0 (18)	9.7 (11)		7.1 (0.7)	4.1 (0.9)	
Sex			ns			ns
Female	60.1 (155)	63.7 (72)		49.7 (2.8)	53.4 (4.2)	
Male	39.9 (103)	36.3 (41)		50.3 (2.8)	46.6 (4.2)	
Indigenous status			ns			ns
Non-Indigenous	36.4 (94)	31.0 (35)		90.8 (3.1)	84.2 (4.8)	
Indigenous	41.5 (107)	40.7 (46)		9.2 (3.1)	15.8 (4.8)	
Language spoken at home	22.1 (57)	28.3 (32)				*
English			*	39.5 (4.6)	26.3 (5.1)	
Not English	94.6 (244)	88.5 (100)		40.4 (4.8)	36.2 (6.2)	
Adults in house	5.4 (14)	11.5 (13)		20.1 (3.6)	37.5 (6.4)	
One			ns			*
Two	31.8 (82)	27.4 (31)		36.0 (4.6)	31.7 (6)	
Three or more	21.3 (55)	20.4 (23)		18.3 (4.1)	17 (4.2)	
Household type	15.5 (40)	9.7 (11)		13.8 (3.3)	7.6 (3.1)	
Couple with children	17.4 (45)	17.7 (20)		19.1 (4.2)	12.5 (3.2)	
Couple with no children	9.3 (24)	11.5 (13)		10.6 (2.8)	16.6 (5.2)	
Single parent	4.7 (12)	13.3 (15)		2.3 (0.9)	14.6 (4.8)	
Single person			ns			ns
Group house	14.3 (37)	15.0 (17)		26.7 (4.4)	32.7 (5.7)	
Other	21.7 (56)	13.3 (15)		27.9 (4.4)	23.9 (5.7)	
Total	**100.0 (258)**	**100.0 (113)**		**100.0**	**100.0**	-
Weighted population (N)	-	-		**26,574**	**17,836**	-

*** p<0.001; ** p<0.01; * p<0.05: Significant difference in distribution between mobile and landlines samples; ns: Not significant

Table 60: Unweighted and weighted distribution of socioeconomic variables by phone type for the Indigenous sample, 2018

	Unweighted data			Weighted data		
	Mobile % (n)	Landline % (n)	Sig. Diff.	Mobile % (SE)	Landline % (SE)	Sig. Diff.
Student status			ns			ns
Full-time student	1.9 (5)	4.4 (5)		2.1 (1.1)	3.2 (1.5)	
Part-time student	14.0 (36)	9.7 (11)		16.9 (3.6)	11.5 (4.2)	
Not-studying	84.1 (217)	85.8 (97)		81.1 (3.6)	85.3 (4.4)	
Labour force status			***			*
Full-time work	63.4 (163)	42.5 (48)		65.2 (4.7)	43.2 (6.4)	
Part-time/Casual	12.1 (31)	11.5 (13)		13.4 (3.4)	16.5 (5.1)	
Unemployed	7.4 (19)	17.7 (20)		8.7 (3.1)	24.2 (5.9)	
NILF/other	17.1 (44)	28.3 (32)		12.7 (3.1)	16.1 (4.1)	
FIFO/DIDO Status [2]			ns			ns
Not FIFO/DIDO	85.6 (166)	90.2 (55)		82.9 (4.7)	85.1 (6.7)	
FIFO/DIDO	14.4 (28)	9.8 (6)		17.1 (4.7)	14.9 (6.7)	
Highest education			**			ns
Bachelor or more	21.7 (56)	14.3 (16)		15.5 (3.0)	11.3 (3.6)	
Certificate 3/Diploma	33.0 (85)	21.4 (24)		27.0 (3.4)	21.8 (5.2)	
Year 12	16.7 (43)	17.9 (20)		29.7 (4.7)	20.3 (5.5)	
Year 10	23.3 (60)	33.9 (38)		22.4 (4.4)	38.6 (6.7)	
Less than year 10	5.4 (14)	12.5 (14)		5.5 (2.0)	8.1 (2.9)	
Personal income			**			**
Less than $20,000	10.5 (27)	19.5 (22)		11.1 (3.2)	25.5 (6.1)	
$20,000-$29,000	9.7 (25)	19.5 (22)		9.2 (2.3)	20.5 (5.3)	
$30,000-$49,000	10.9 (28)	12.4 (14)		8.9 (2.4)	8.2 (3.1)	
$50,000-$69,000	15.1 (39)	15.9 (18)		24.5 (4.2)	17.1 (5.0)	
$70,000-$99,000	26.7 (69)	16.8 (19)		22.6 (3.8)	14.4 (4.5)	
$100,000-$119,000	12.0 (31)	9.7 (11)		9.1 (2.3)	10.5 (3.7)	
$120,000 or more	15.1 (39)	6.2 (7)		14.6 (3.1)	3.8 (1.8)	
Total	**100.0 (258)**	**100.0 (113)**		**100.0**	**100.0**	-
Weighted population (N)	-	-		**26,574**	**17,836**	-

[1] Significant difference; [2] FIFO/DIDO Fly in-Fly out or Drive in-Drive out worker; Not in labour force, other and unemployed excluded.

*** p<0.001; ** p<0.01; * p<0.05: Significant difference in distribution between mobile and landline samples; ns: Not significant

Table 61: Unweighted and weighted distribution of health risk factors by phone type for the Indigenous sample, 2018

	Unweighted data			Weighted data		
	Mobile % (n)	**Landline % (n)**	**Sig. Diff.**	**Mobile % (SE)**	**Landline % (SE)**	**Sig. Diff.**
Drank alcohol last 12 months			***			**
No	19.5 (50)	42.5 (48)		19.4 (3.7)	38.4 (6.1)	
Yes, drank alcohol	80.5 (207)	57.5 (65)		80.6 (3.7)	61.6 (6.1)	
CAGE Alcohol problems [1]			ns			ns
No problem	80.7 (167)	84.6 (55)		78.0 (4.8)	81.9 (6.8)	
Alcohol problem	19.3 (40)	15.4 (10)		22.0 (4.8)	18.1 (6.8)	
Smoking status			ns			ns
Never smoker	39.2 (101)	46.4 (52)		41.7 (4.3)	47.0 (6.5)	
Ex-/non-daily smoker	31.0 (80)	23.2 (26)		28.0 (4.2)	21.2 (5.1)	
Daily smoker	29.8 (77)	30.4 (34)		30.3 (3.7)	31.8 (5.9)	
Smoke free home status			*			ns
Never smokes inside	85.6 (219)	77.9 (88)		85 (3.2)	72.1 (5.8)	
Sometimes smokes inside	6.3 (16)	4.4 (5)		4.5 (1.4)	5.2 (3)	
Most/all the time	8.2 (21)	17.7 (20)		10.4 (3)	22.7 (5.6)	
Self-assessed health status			ns			ns
Excellent	14.7 (38)	15.0 (17)		16v (3.8)	19.0 (5)	
Very good	21.7 (56)	16.8 (19)		23.1 (4.1)	17.3 (5)	
Good	35.3 (91)	35.4 (40)		36.0 (4.9)	38.9 (6.2)	
Fair	19.8 (51)	20.4 (23)		18.7 (4.1)	17.4 (4.3)	
Poor	8.5 (22)	12.4 (14)		6.2 (1.7)	7.4 (3.1)	
Kessler-5			**			ns
Low/no distress	82.6 (209)	68.3 (71)		81.1 (3.5)	69.7 (5.7)	
High/very high distress	17.4 (44)	31.7 (33)		18.9 (3.5)	30.3 (5.7)	
Ran out of money for essentials			*			*
Not in last year	82.2 (212)	71.7 (81)		84.0 (3.2)	71.7 (5.5)	
Yes, in the last 12 months	17.8 (46)	28.3 (32)		16.0 (3.2)	28.3 (5.5)	
Total	**100.0 (258)**	**100.0 (113)**		**100.0**	**100.0**	-
Weighted population (N)	-	-		**26,574**	**17,836**	-

[1] CAGE [13]; Non-drinkers in last 12 months excluded

*** p<0.001; ** p<0.01; * p<0.05: Significant difference in distribution between mobile and landline samples; ns: Not significant

B4 Unweighted and weighted 2018 non-Indigenous sample comparisons by phone type

Table 62: Unweighted and weighted distribution of socio-demographics variables by phone type for the non-Indigenous sample, 2018

	Unweighted data			Weighted data		
	Mobile % (n)	Landline % (n)	Sig. Diff.	Mobile % (SE)	Landline % (SE)	Sig. Diff.
Region			***			***
Darwin & Palmerston	75.8 (2500)	58.0 (771)		76.7 (0.6)	59.2 (1.3)	
Alice Springs	13.2 (436)	18.4 (245)		12.5 (0.4)	18.9 (1.1)	
Regional towns	5.8 (190)	8.5 (113)		5.8 (0.3)	8.4 (0.7)	
Rest of NT	5.3 (174)	15.1 (200)		5.0 (0.3)	13.5 (0.7)	
Age			***			***
18-29	9.4 (311)	6.4 (85)		20.1 (0.9)	14.8 (1.4)	
30-39	19.0 (627)	11.2 (149)		27.7 (1.0)	14.4 (1.2)	
40-49	22.8 (752)	22.4 (298)		20.0 (0.6)	23.0 (1.2)	
50-64	35.0 (1,154)	34.0 (452)		23.0 (0.4)	27.1 (1.0)	
65+	13.8 (456)	26.0 (345)		9.1 (0.3)	20.7 (0.9)	
Sex			ns			ns
Female	53.0 (1,749)	52.5 (698)		48.0 (0.6)	46.9 (1.3)	
Male	47.0 (1,551)	47.5 (631)		52.0 (0.6)	53.1 (1.3)	
Indigenous status			ns			*
Non-Indigenous	93.0 (3,066)	94.4 (1,252)		90.5 (0.7)	93.1 (0.9)	
Indigenous	7.0 (232)	5.6 (74)	ns	9.5 (0.7)	6.9 (0.9)	
Language spoken at home						***
English	23.2 (767)	24.8 (329)		21.9 (0.9)	15.3 (0.9)	
Not English	55.3 (1,825)	56.4 (750)		54.8 (1.0)	55.6 (1.6)	
Adults in house	21.5 (708)	18.8 (250)		23.3 (0.9)	29.1 (1.6)	
One			***			***
Two	36.4 (1200)	35.3 (469)		36.5 (1.0)	42.8 (1.5)	
Three or more	29.8 (984)	32.5 (432)		27.1 (0.9)	30.2 (1.3)	
Household type	6.8 (225)	5.6 (74)		6.3 (0.5)	4.7 (0.6)	
Couple with children	16.1 (532)	19.3 (257)		14.7 (0.7)	12.2 (0.8)	
Couple with no children	7.3 (240)	3.8 (50)		11.5 (0.8)	5.2 (0.8)	
Single parent	3.6 (119)	3.5 (47)		3.9 (0.4)	5.0 (0.8)	
Single person			***			***
Group house	9.4 (311)	6.4 (85)		20.1 (0.9)	14.8 (1.4)	
Other	19.0 (627)	11.2 (149)		27.7 (1.0)	14.4 (1.2)	
Total	**100.0 (3,300)**	**100.0 (1,329)**		**100.0**	**100.0**	-
Weighted population (N)	-	-		**118,896**	**17,649**	-

*** p<0.001; ** p<0.01; * p<0.05: Significant difference in distribution between mobile and landlines samples; ns: Not significant

Table 63: Unweighted and weighted distribution of socioeconomic variables by phone type for the non-Indigenous sample, 2018

	Unweighted data			Weighted data		
	Mobile % (n)	Landline % (n)	Sig. Diff.	Mobile % (SE)	Landline % (SE)	Sig. Diff.
Student status			**			***
Full-time student	2.8 (93)	1.9 (25)		4.7 (0.5)	3.1 (0.7)	
Part-time student	9.2 (303)	6.4 (85)		10.8 (0.7)	6.5 (0.8)	
Not-studying	88 (2,898)	91.7 (1,217)		84.5 (0.8)	90.4 (1.0)	
Labour force status			***			***
Full-time work	62.4 (2,056)	53.8 (714)		65.2 (1.0)	56.4 (1.5)	
Part-time/Casual	17.5 (578)	15.5 (205)		18.3 (0.8)	18 (1.3)	
Unemployed	3.7 (121)	2.9 (38)		4 (0.4)	3.3 (0.6)	
NILF/other	16.4 (541)	27.9 (370)		12.5 (0.6)	22.3 (1.1)	
FIFO/DIDO Status [2]			ns			ns
Not FIFO/DIDO	89.6 (2,345)	89.2 (815)		88.1 (0.8)	88.2 (1.3)	
FIFO/DIDO	10.4 (271)	10.8 (99)		11.9 (0.8)	11.8 (1.3)	
Highest education			***			***
Bachelor or more	37.4 (1232)	37.6 (498)		36.3 (1.0)	35.5 (1.5)	
Certificate 3/Diploma	33.5 (1105)	27.8 (368)		34.3 (1.0)	28.2 (1.4)	
Year 12	13.2 (435)	14.7 (195)		15.1 (0.8)	17.5 (1.3)	
Year 10	13.3 (438)	14.4 (190)		11.9 (0.6)	14.3 (1.1)	
Less than year 10	2.6 (87)	5.5 (73)		2.4 (0.3)	4.4 (0.6)	
Personal income			***			***
Less than $20,000	7.9 (259)	11.4 (152)		7.9 (0.6)	11.9 (1.1)	
$20,000-$29,000	6.8 (224)	11.1 (147)		6.3 (0.5)	10.1 (0.9)	
$30,000-$49,000	12.9 (424)	15.1 (201)		12.8 (0.7)	15 (1.1)	
$50,000-$69,000	15.6 (514)	15.7 (208)		16.8 (0.8)	17 (1.2)	
$70,000-$99,000	24.0 (792)	18.6 (247)		24.9 (0.9)	19.1 (1.2)	
$100,000-$119,000	15.3 (505)	13.4 (178)		13.9 (0.7)	12.7 (1.0)	
$120,000 or more	17.6 (582)	14.8 (196)		17.2 (0.8)	14.2 (1.1)	
Total	**100.0 (3,300)**	**100.0 (1,329)**		**100.0**	**100.0**	-
Weighted population (N)	-	-		**118,896**	**17,649**	-

[1] Significant difference; [2] FIFO/DIDO Fly in-Fly out or Drive in-Drive out worker; Not in labour force, other and unemployed excluded.

*** p<0.001; ** p<0.01; * p<0.05: Significant difference in distribution between mobile and landline samples; ns: Not significant

Table 64: Unweighted and weighted distribution of health risk factors by phone type for the non-Indigenous sample, 2015 to 2018

	Unweighted data			Weighted data		
	Mobile % (n)	Landline % (n)	Sig. Diff.	Mobile % (SE)	Landline % (SE)	Sig. Diff.
Drank alcohol last 12 months			**			*
No	11.2 (136)	17.2 (74)		12 (1.3)	16.8 (2.1)	
Yes, drank alcohol	88.8 (1,077)	82.8 (357)		88 (1.3)	83.2 (2.1)	
CAGE Alcohol problems [1]			ns			ns
No problem	82.1 (884)	84.0 (300)		82.1 (1.6)	85.2 (2.4)	
Alcohol problem	17.9 (193)	16.0 (57)		17.9 (1.6)	14.8 (2.4)	
Smoking status			ns			*
Never smoker	45.6 (553)	44.0 (189)		51 (1.9)	46.5 (3)	
Ex-/non-daily smoker	33.9 (411)	37.7 (162)		29.4 (1.6)	37.9 (2.9)	
Daily smoker	20.6 (250)	18.4 (79)		19.6 (1.5)	15.6 (2.0)	
Smoke free home status			ns			ns
Never smokes inside	89.4 (1083)	91.1 (391)		89.9 (1.1)	91.4 (1.9)	
Sometimes smokes inside	5.2 (63)	3.5 (15)		5.3 (0.8)	4.5 (1.7)	
Most/all the time	5.5 (66)	5.4 (23)		4.8 (0.8)	4.1 (1.0)	
Self-assessed health status			*			**
Excellent	15.8 (191)	9.8 (42)		17 (1.4)	8.8 (1.5)	
Very good	30.4 (368)	33.9 (145)		31 (1.8)	38.1 (3)	
Good	37.5 (455)	39.0 (167)		36.5 (1.8)	38.3 (2.9)	
Fair	13.2 (160)	13.6 (58)		12.2 (1.2)	12.3 (1.9)	
Poor	3.1 (38)	3.7 (16)		3.2 (0.8)	2.5 (0.7)	
Kessler-5			**			
Low/no distress	83 (214)	69.9 (79)		87.2 (1.4)	92.9 (1.5)	
High/very high distress	17.1 (44)	30.1 (34)		12.8 (1.4)	7.1 (1.5)	
Ran out of money for essentials			*			*
Not in last year	91.3 (1,108)	94.4 (406)		89.7 (1.2)	94.5 (1.3)	
Yes, in the last 12 months	8.7 (106)	5.6 (24)		10.3 (1.2)	5.5 (1.3)	
Total	**100.0 (3,300)**	**100.0 (1,329)**		**100.0**	**100.0**	-
Weighted population (N)	-	-		**118,896**	**17,649**	-

[1] CAGE [13]; Non-drinkers in last 12 months excluded

*** p<0.001; ** p<0.01; * p<0.05: Significant difference in distribution between mobile and landline samples; ns: Not significant

APPENDIX C: SURVEY INSTRUMENT

2018 Northern Territory Gambling Prevalence Survey

The following is provided to every interviewer as a handout:

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. We hope to understand how to protect people from developing problem gambling and poor mental health because of gambling.

So would you please take part? It would be much appreciated (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 and why some people do not develop gambling problems, while others do. So, we need to understand the views of people who don't gamble, to compare them to people who do gamble.

Mental distress
Problem gambling counselling for those affected or families (24/7) - 1800 858 858
gamblinghelponline.org.au (Online counselling)
Lifeline 13 11 14

Respondent Anger
Perhaps it may be useful if I get one of the study researchers to call you directly
[If consent - Record name and number]

Landline introduction – Landline sample

Good [morning/afternoon/evening]. This is [name] from Roy Morgan calling on behalf of Menzies School of Health Research and the Northern Territory Government Community Benefit Fund. We are conducting a study into an important health and wellbeing issue in the NT.

May I speak to the person in your household, 18 years or older, with the most recent birthday.

Mobile introduction – Mobile sample

Good [morning/afternoon/evening]. This is [name] from Roy Morgan calling on behalf of Menzies School of Health Research. We are conducting a study into an important health and wellbeing issue in the NT and are speaking to adults aged 18 years and older.
Is it convenient to talk now?

IF NECESSARY SAY: The Menzies School of Health Research and the Northern Territory Government Community Benefit Fund have commissioned this research.

If agreed

Thanks. Your responses are strictly confidential. Depending on your answers the survey will take between 5 minutes up to 20 minutes to complete.

ASK ALL:
[Single]
Q1 May I just confirm you are currently living in the Northern Territory
1 YES
2 NO
IF NOT LIVING IN NT (Code 2 on Q1) SAY:
Thanks but this is for Northern Territory residents only. Thank you for your time.
[Record sample disposition as non-Northern Territory resident]

[00-999]
Q2 What is your current age?
Record Number
(998 REFUSED, 999 DON'T KNOW)
IF UNDER 18:
I'm sorry but we need to speak with people age 18 years and over for this study.
[Record sample disposition as under 18]

IF EXACT AGE NOT PROVIDED (Code 998 or 999 on Q2) ASK:
[Single]
Q2a No worries, could you indicate whether you fall into any of the following broad age categories?
READ OUT

1 UNDER 18
2 18-24
3 25-29
4 30-34
5 35-39
6 40-44
7 45-49
8 50-54
9 55-59
10 60-64
11 65 OR MORE

IF REFUSED ENTER CODE 98. IF DON'T KNOW ENTER CODE 99

IF UNDER 18:
I'm sorry but we need to speak with people age 18 years and over for this study.
[Record sample disposition as under 18)]
IF DON'T KNOW/REFUSED (Code 98 or 99 on Q2a) SAY:
Thank you for your time, but we need this information to continue with this survey.
[Record sample disposition as age not provided]

ASK ALL:
[Single]
Q3 Record gender

1 MALE
2 FEMALE

[Single]
Q4 Are you of Aboriginal or Torres Strait Islander origin?
1 YES
2 NO

[00-999]
Q5 Including yourself, what is the total number of people aged 18 years or older who live in your household?
Record Number: (1-25)
IF REFUSED ENTER CODE 98. IF DON'T KNOW ENTER CODE 99
IF DON'T KNOW/REFUSED (Code 98 OR 99 on Q5) SAY:
Thank you for your time, but we need this information to continue with this survey.

IF CALLED ON LANDLINE ASK:
[0-99]
Q6a Apart from this line that I'm calling you on, how many other telephone landlines are there in this household?
Record Number (0-9)
IF REFUSED ENTER CODE 98. IF DON'T KNOW ENTER CODE 99

[Single]
Q6b Do you personally have a mobile phone?
1 YES
2 NO
IF REFUSED ENTER CODE 98. IF DON'T KNOW ENTER CODE 99
IF DON'T KNOW/REFUSED (Code 98 OR 99 on Q6b) SAY:
Thank you for your time, but we need this information to continue with this survey.

IF CALLED ON MOBILE ASK:
[Single]
Q6c Does your household have a landline telephone?
1 YES
2 NO
IF REFUSED ENTER CODE 98. IF DON'T KNOW ENTER CODE 99
IF DON'T KNOW/REFUSED (Code 98 OR 99 on Q6c) SAY:
Thank you for your time, but we need this information to continue with this survey.

IF HAS A LANDLINE (CODE 1 ON Q6c) ASK:
[0-99]
Q6d How many land telephone lines does your household have?
Record Number (0-9)
IF REFUSED ENTER CODE 98. IF DON'T KNOW ENTER CODE 99
IF DON'T KNOW/REFUSED (Code 98 OR 99 on Q6b) SAY:
Thank you for your time, but we need this information to continue with this survey.

ASK ALL:
[Single]
Q7 What suburb or locality in NT do you live in?

INSERT PULL DOWN LIST OF NORTHERN TERRITORY LOCALITIES [Provided in separate spreadsheet – Locality-Region List for 2018 NT Gambling Prevalence Survey.xls]
997 OTHER - Specify
998 REFUSED
999 DON'T KNOW

IF OTHER/DON'T KNOW/REFUSED SUBURB/LOCALITY (codes 997-999), ASK:
[0000-9999]
Q7a What is the postcode where you live?
RECORD POSTCODE [Provided in separate spreadsheet - legal postcodes for NT commence 08_ _ or 4825 – Postcode-Region List for 2018 NT Gambling Prevalence Survey.xls]
9998 REFUSED
9999 DON'T KNOW
IF DON'T KNOW/REFUSED (Code 9998 or 9999 on Q7a) SAY:
Thank you for your time, but we need this information to continue with this survey.

ASK ALL:
The first set of questions are about the types of gambling activities you may have undertaken in the last 12 months.
INTERVIEWER NOTE: If respondent says they haven't gambled, say there are some activities that some people might not think are gambling activities, which in fact are.

Pokies (electronic gaming machines)
[Single]
Q8 Have you spent any money on pokies or gaming machines in the last 12 months?
1 YES
2 NO

IF PLAYED POKIES (Code 1 on Q8) ASK:
[Multiple]
Q9 In the last 12 months did you play the pokies or gaming machines at a …
READ OUT
a. Pub – 1 Yes, 2 No
b. Club – 1 Yes, 2 No
c. Casino – 1 Yes, 2 No
d. Online – 1 Yes, 2 No
e. In any other way – Specify - 1. Yes, 2. No

[0-999]
Q10 Overall, how often did you play the pokies in the last 12 months? [Enter number as per respondent's base]
1. PER WEEK _____
2. PER MONTH _____
3. PER YEAR _____

[0-99999]
Q10a When you play the pokies, how much money would you usually spend in a session?
RECORD DOLLARS

[00-01 to 23-59 or 24-00]
Q10b When you play the pokies, how long do you gamble for in a usual session?
INTERVIEWER NOTE: If respondent provides a time that is both in hours and minutes, record time in both boxes
Record hours [00-24]
Record minutes [00-9999]

ASK ALL:

Betting on horse or harness racing or greyhounds - excluding sweeps
[Single]
Q11 Have you spent any money on horse, harness or greyhound races, but EXCLUDING sweeps in the last 12 months?
1. YES
2. NO

IF BET ON RACING (code 1 on Q11) ASK:
[Multiple]
Q12 In the last 12 months did you bet on horse, harness or greyhound races at a …
READ OUT
a. Racetrack – 1 Yes, 2 No
b. TAB – 1 Yes, 2 No
c. Pub – 1 Yes, 2 No
d. Club – 1 Yes, 2 No
e. Casino – 1 Yes, 2 No
f. Over the Phone – 1 Yes, 2 No
g. Online – 1 Yes, 2 No
h. In any other way – Specify - 1. Yes, 2. No

[0-999]
Q13 How often did you bet on horse, harness or greyhound races in the last 12 months? [Enter number as per respondents base]
1 PER WEEK _____
2 PER MONTH _____
3 PER YEAR _____

ASK ALL:

Instant Scratchies
[Single]
Q14 Have you bought instant scratch tickets for yourself in the last 12 months?
1 YES
2 NO

IF BUY INSTANT SCRATCHIES (Code 1 on Q14) ASK:
[0-999]
Q15 How often did you buy instant scratch tickets for your own use in the last 12 months?

1 PER WEEK _____
2 PER MONTH _____
3 PER YEAR _____

ASK ALL:

Keno

[Single]

Q16 Have you played Keno in the last 12 months?

1 YES
2 NO (Go to **Q19** Lotto, powerball or the pools)

IF PLAY KENO (Code 1 on Q16) ASK:

[Multiple]

Q17 In the last 12 months did you play Keno at a …

READ OUT

a. Pub – 1 Yes, 2 No
b. Club – 1 Yes, 2 No
c. Casino – 1 Yes, 2 No
d. Online – 1 Yes, 2 No
e. In any other way – Specify - 1. Yes, 2. No

[0-999]

Q18 How often did you play Keno in the last 12 months?

1 PER WEEK _____
2 PER MONTH _____
3 PER YEAR _____

ASK ALL:

Lotto, Powerball or the Pools

[Single]

Q19 Have you bought lottery tickets such as Lotto, Powerball, Lucky Lotteries, TattsLotto or 6 from 38 Pools for yourself in the last 12 months?

1 YES
2 NO

IF PLAY LOTTO (Code 1 on Q19) ASK:

[0-999]

Q20 How often did you buy any of these tickets for yourself in the last 12 months?

1 PER WEEK _____
2 PER MONTH _____
3 PER YEAR _____

ASK ALL:

Bingo

[Single]

Q21 Have you played bingo for money in the last 12 months?

1 YES

2 NO

IF PLAY BINGO (Code 1 on Q21) ASK:
[0-999]
Q22 How often did you play bingo for money in the last 12 months?
1 PER WEEK _____
2 PER MONTH _____
3 PER YEAR _____

ASK ALL:

Casino table games like Blackjack, baccarat, or Roulette or poker
[Single]
Q23 Have you played casino table games such as Blackjack, Baccarat, Roulette or Poker in the last 12 months?
1 YES
2 NO

IF PLAY CASINO TABLE GAMES (Code 1 on Q23) ASK:
[Multiple]
Q24 In the last 12 months did you play casino table games at a …
READ OUT
a. Casino – 1 Yes, 2 No
b. Online – 1 Yes, 2 No
c. In some other way – Specify- 1 Yes, 2. No

[0-999]
Q25 How often did you play casino table games in the last 12 months?
1 PER WEEK _____
2 PER MONTH _____
3 PER YEAR _____

[Multiple]
Q25a Which ONE of the following casino table games did you spend the MOST money on in the last 12 months?
READ OUT
1 Blackjack
2 Baccarat
3 Roulette
4 Poker
5 Some other casino table game - Specify

ASK ALL:

Sports betting like on soccer, AFL, cricket or tennis

Q26 Have you bet on a sport like AFL, cricket or tennis in the last 12 months? This does not include fantasy sports or footy tipping competitions.
1 YES
2 NO

IF SPORTS BET (Code 1 on Q26) ASK:

[Multiple]
Q26a In the last 12 months did you bet on a sport at a …
READ OUT
a. Pub – 1 Yes, 2 No
b. Club – 1 Yes, 2 No
c. TAB – 1 Yes, 2 No
d. Casino – 1 Yes, 2 No
e. Over the telephone – 1 Yes, 2 No
f. Online – 1 Yes, 2 No
g. In some other way – Specify - 1. Yes, 2. No

[0-999]
Q27 How often did you bet on a sporting event in the last 12 months?
1 PER WEEK _____
2 PER MONTH _____
3 PER YEAR _____

ASK ALL:

Non-sporting events betting like betting on Logies, Fantasy Sports or an election
[Single]
Q28 Have you bet on a non-sporting event like the Logies, fantasy sports or an election in the last 12 months?
1 YES
2 NO

IF NON-SPORT BET (Code 1 on Q28) ASK:
[0-999]
Q29 How often did you bet on a non-sporting event in the last 12 months?
1 PER WEEK _____
2 PER MONTH _____
3 PER YEAR _____

ASK ALL:

Raffles or sweeps, lottery tickets, footy tipping competitions and other phone/internet/mail/SMS and competitions
Q30 Have you spent money on raffles, lottery tickets, sweeps, footy tipping competitions or any email/internet/mail/SMS/phone-in competitions in the last 12 months?
1 YES
2 NO

IF PLAY RAFFLES (Code 1 on Q30) ASK:
[0-999]
Q31 How often did you spend money on these activities in the last 12 months?
1 PER WEEK _____
2 PER MONTH _____
3 PER YEAR _____

ASK ALL:

Betting on Informal private games like cards, darts, mah-jong or pool for money

[Single]

Q32 Have you bet on any informal private games for money such as betting on cards, darts, mah-jong, pool etc. in the last 12 months?

1 YES
2 NO

IF PLAY PRIVATE GAMES (Code 1 on Q32) ASK:

[0-999]

Q33 How often did you bet on these informal private games in the last 12 months?

1 PER WEEK _____
2 PER MONTH _____
3 PER YEAR _____

ASK ALL:

Other gambling activity

[Single]

Q34 Is there any other gambling activity you've spent money on in the last 12 months?

1 YES
2 NO

IF OTHER GAMBLING (Code 1 on Q34) ASK:

[Single]

Q34a What did you gamble on?

INTERVIEWER NOTE: If more than one activity provided ask which one they played most often, and record again in pop-up box below.

98 Specify (Record MAIN ACTIVITY only)

[0-999]

Q35 How often did you play/bet on this activity in the last 12 months?

1 PER WEEK _____
2 PER MONTH _____
3 PER YEAR _____

IF GAMBLER (GAMBLER_TYPE=1) ASK:

Highest spend activity

QHS1 Of all the gambling activities you spent money on in the past 12 months, on which activity did you spend the most money?

READ OUT IF NECESSARY

[For each respondent, only display activities with code 1on Q8, Q11, Q16, Q19. Q21, Q23, Q26, Q28, Q30, Q32, Q34 for each respondent]

1 Playing the pokies or gaming machines
2 Betting on horse or harness or greyhound racing, but excluding sweeps
3 Instant scratch tickets
4 Keno
5 Lotto, Powerball or the Pools
6 Bingo

7 Betting on casino table games like blackjack, baccarat, or roulette or poker
8 Betting on sports - like on AFL, cricket or tennis
9 Betting on non-sporting events like Logies, fantasy sports or an election
10 Raffles, lottery tickets, sweeps, footy tipping competitions or any email/internet/mail/SMS/phone-in competitions
11 Informal private games for money such as betting on cards, darts, mah-jong, snooker
12 Other gambling activity

[0 to 999999]

IF MOST MONEY SPENT NOT ON POKIES (Codes 2-12 on QHS1) ASK:

QHS2 How much money did you spend on average, when you [insert GAMBLING TYPE DYNAMIC TEXT] [insert FREQUENCY DYNAMIC TEXT]?

INTERVIEWER NOTE: A person gambled two times a week and spent $50 each time (so type in $50). 'Each time' is the same as 'per session'.

RECORD NUMBER
(999998, Refused, 999999. Don't Know)

PROGRAM DYNAMIC TEXT

INTERVIEWER NOTE: PLEASE CONFIRM THE AMOUNT IS FOR THE AMOUNT OF TIMES PLAYED E.g.: Just to confirm, you've bet [$XX] per session and that you played [YY] times per [ZZ]?"

IF GAMBLER (GAMBLER_TYPE=1) ASK:

PGSI Now I'd like you to think about all your gambling in the past 12 months... Please use the following scale for these activities – never, sometimes, most of the time, and almost always.

INTERVIEWER NOTE: PLEASE READ OUT "thinking about the last 12 months" READ OUT BEFORE EVERY STATEMENT. READ OUT ANSWER SCALE IF NECESSARY

DO NOT FLIP – KEEP GRID IN ORDER	Never	Some times	Most of the time	Almost always
PGSI1 - Thinking about the past 12 months, how often have you bet more than you could really afford to lose? Would you say: (1)	0	1	2	3
PGSI2 - Thinking about the past 12 months, how often have you needed to gamble with larger amounts of money to get the same feeling of excitement? (2)	0	1	2	3
PGSI3 - Thinking about the past 12 months, how often have you gone back another day to try to win back the money you lost? (3)	0	1	2	3
PGSI4 - Thinking about the past 12 months, how often have you borrowed money or sold anything to get money to gamble? (4)	0	1	2	3
PGSI5 - Thinking about the past 12 months, how often have you felt that you might have a problem with gambling? (5)	0	1	2	3
PGSI6 - Thinking about 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? (6)	0	1	2	3

DO NOT FLIP – KEEP GRID IN ORDER	Never	Some times	Most of the time	Almost always
PGSI7 - Thinking about the past 12 months, how often have you felt guilty about the way you gamble, or what happens when you gamble? (7)	0	1	2	3
PGSI8 - Thinking about the past 12 months, how often has gambling caused you any health problems, including stress or anxiety? (8)	0	1	2	3
PGSI9 - Thinking about the past 12 months, how often has your gambling caused any financial problems for you or your household? (9)	0	1	2	3

Q45 CPGI_SCORE = PGSI1 + PGSI2 + PGSI3 + PGSI4 + PGSI5 + PGSI6 + PGSI7 + PGSI8 + PGSI9

IF MONTHLY EGM GAMBLER (Code 1 on MONTHLY_EGM):

[Single]
Q46 In the last 12 months, at which venue did you most frequently play the pokies?

INSERT PULL DOWN LIST OF NORTHERN TERRITORY LOCALITIES [Provided in separate spreadsheet – Venues.xlsx]

READ OUT VENUES IF NECESSARY

95 OTHER VENUE - Specify
96 [DO NOT READ] NO REGULAR VENUE
97 [DO NO READ] PLAYS ONLINE MOSTLY
98 [DO NOT READ] REFUSED
99 [DO NOT READ] DON'T KNOW

Q48 Since May 2013 pubs and clubs could install note acceptors on their pokies. Has the introduction of note acceptors on pokies increased, decreased or not changed the amount of money you spend on pokies?
1 INCREASED
2 NO CHANGE
3 DECREASED
4 RARELY PLAYED/DIDN'T PLAY POKIES BEFORE MAY 2013
98 REFUSED
99 DON'T KNOW

[1-9999]
Q48a Thinking about the last 12 months, what is the LARGEST amount of money you have LOADED into a pokie machine when you started playing?
RECORD DOLLARS
9998 REFUSED
9999 DON'T KNOW

[Single]

Q48b Did you experience any negative consequences because of this? For example, running short of money?

1 YES
2 NO
3 DON'T GAMBLE IN VENUES
98 REFUSED
99 DON'T KNOW

[Single]

Q48c Thinking about the five closest family, friends or people that you often spend time with, excluding children under 18 years old, how many of these five people gamble on pokies at least once per month?

1 NONE
2 ONE
3 TWO
4 THREE
5 FOUR
6 ALL FIVE
98 REFUSED
99 DON'T KNOW

IF OTHERS PLAYING POKIES AT LEAST ONCE A MONTH (codes 3-6 on Q48c), ASK:

[Single]

Q48d Now thinking about the closest (one) of these five family or friends, do they gamble on pokies at least once per month?

1 YES
2 NO
98 REFUSED
99 DON'T KNOW

[0-99]

IF MONTHLY EGM GAMBLER (Code 1 on MONTHLY_EGM):

Q48e Including yourself, how many of the adults living in your household gamble on pokies at least once per month?

RECORD NUMBER
98 REFUSED
99 DON'T KNOW

IF LOW RISK, MODERATE OR PROBLEM GAMLER, REGULAR GAMBLER, MONTHLY EGM GAMBLER (codes 2-4 on PROB_GAMBLER_TYPE OR code 1 on REGULARITY_TYPE OR code 1 on MONTHLY_EGM) ASK:

[Single]

Q49 In the last 12 months have you accessed cash from an ATM for gambling when in a gambling venue (such as in a pub, club, TAB or casino)?

1 YES
2 NO
3 DON'T GAMBLE IN VENUES
98 REFUSED
99 DON'T KNOW

[Single]
IF ACCESSED CASH FROM ATM AT GAMBLING VENUE (code 1 on Q49) ASK:
Q50 On average per gambling session, how many times did you access cash from the ATM?
1 LESS THAN ONCE
2 ONCE
3 TWO TIMES
4 THREE TIMES
5 FOUR OR MORE TIMES
98 REFUSED
99 DON'T KNOW

[Single]
IF LOW RISK, MODERATE OR PROBLEM GAMLER, REGULAR GAMBLER, MONTHLY EGM GAMBLER (codes 2-4 on PROB_GAMBLER_TYPE OR code 1 on REGULARITY_TYPE OR code 1 on MONTHLY_EGM) ASK:
Q51 In the last 12 months, has a staff member of a gambling venue or betting company ever spoken with you to check if you were okay while you were gambling?
1 YES
2 NO
98 REFUSED
99 DON'T KNOW

[Single]
Q52 In the last 12 months, have you asked to be self-excluded from a venue or gambling operator because of problems you were experiencing because of your gambling?
1 YES
2 NO
98 REFUSED
99 DON'T KNOW

IF SELF_EXCLUDED (code 1 ON Q52), ASK:
[Single]
Q53 Were you successful in self-excluding from the venue or gambling operator?
1 YES
2 NO
98 REFUSED
99 DON'T KNOW

[Single]
IF SUCCESSFUL IN SELF EXCLUDING (code 1 on Q53), ASK:
Q56 Did your self-exclusion help reduce your gambling problems?
1 YES
2 NO
98 REFUSED
99 DON'T KNOW

[Single]

IF LOW RISK, MODERATE OR PROBLEM GAMLER, REGULAR GAMBLER, MONTHLY EGM GAMBLER (codes 2-4 on PROB_GAMBLER_TYPE OR code 1 on REGULARITY_TYPE OR code 1 on MONTHLY_EGM) ASK:

Negative consequences because of own gambling

[Multiple]
Q57 In the last 12 months, how often has your own gambling affected you in any of the following ways? [If someone says one or two times a year, use higher number) READ OUT

a. Ran out of money for rent or mortgage
b. Ran out of money for food
c. Ran out of money for other bills (e.g. electricity or phone)
d. Increased credit card debt
e. Raided savings accounts/funds
f. Borrowed money from family or friends
g. Debt collectors repossessed goods
h. Sold or hocked possessions
i. Felt ashamed or had regrets
j. Relationship problems with close friends or family
k. Physical or verbal violence toward you
l. Children did not attend school or missed out on something (e.g. school excursion)
m. Felt stressed or anxious
n. Felt depressed
o. Did something outside the law/illegal
p. Missed work or study classes
q. Underperformed at work or study
r. Lost your job or kicked out of study
s. Another way gambling affected you - Specify

Each of the above negative consequences items to have following scale –

0 NOT IN THE LAST 12 MONTHS
1 PER WEEK _____
2 PER MONTH _____
3 PER YEAR _____
98 REFUSED
99 DON'T KNOW

[Single]
Q58 In the last 12 months did you seek help for problems related to your own gambling?
IF NECESSARY READ OUT - Such as help from a counsellor or a friend
1 YES
2 NO
98 REFUSED
99 DON'T KNOW

IF SOUGHT HELP FOR PROBLEMS (code 1 on Q58), ASK:
[Single response for each row]
Q59 Did you seek help from any of the following?
READ OUT

DO NOT FLIP – KEEP GRID IN ORDER	Yes	No	Refused	Don't Know
a. Gambling helpline	1	2	98	99
b. Self-excluded from venue	1	2	98	99
c. Gambling counsellor	1	2	98	99
d. Social worker or psychologist	1	2	98	99
e. Staff member at gambling venue	1	2	98	99
f. Gamblers Anonymous	1	2	98	99
g. Church or religious worker	1	2	98	99
h. Internet online help	1	2	98	99
i. Doctor	1	2	98	99
j. Spouse or partner	1	2	98	99
k. Other family	1	2	98	99
l. Friends	1	2	98	99
m. Sought help in another way - Specify	1	2	98	99

IF FULL SURVEY RESPONDENT (code 1 on SURVEY_STATUS), ASK:

Full Survey Respondent
Affected by another person's gambling
[Single]
Q60 In the last 12 months have you been negatively affected by someone else's gambling?
1 YES
2 NO
98 REFUSED
99 DON'T KNOW

IF AFFECTED BY ANOTHER PERSONS GAMBLING (Code 1 on Q60), ASK:
[Single]
Q61 Is this person your …?
INTERVIEWER NOTE: If respondent replies there is more than one person, ask them to think about the person that has affected them the most
READ OUT
1 Parent
2 Son or daughter
3 Friend
4 Work colleague

5 Spouse
6 Acquaintance
7 Other - Specify
98 [DO NOT READ] REFUSED
99 [DO NOT READ] DON'T KNOW

[Multiple – Max 2]
Q62 What was the main type of gambling they were doing when you were negatively affected? You can choose up to two types.
1 . PLAYING THE POKIES OR GAMING MACHINES
2. BETTING ON HORSE OR HARNESS OR GREYHOUND RACING, BUT EXCLUDING SWEEPS
3. INSTANT SCRATCH TICKETS
4. KENO
5. LOTTO, POWERBALL OR THE POOLS
6. BINGO
7. BETTING ON CASINO TABLE GAMES LIKE BLACKJACK, BACCARAT, OR ROULETTE OR POKER
8. BETTING ON SPORTS - LIKE ON AFL, CRICKET OR TENNIS
9. BETTING ON NON-SPORTING EVENTS LIKE LOGIES, FANTASY SPORTS OR AN ELECTION
10. RAFFLES, LOTTERY TICKETS, SWEEPS OR INTERNET/MAIL/SMS OR PHONE-IN COMPETITIONS
11. INFORMAL PRIVATE GAMES FOR MONEY SUCH AS BETTING ON CARDS, DARTS, MAH-JONG, SNOOKER
12. OTHER GAMBLING ACTIVITY - Specify
98. REFUSED
99. DON'T KNOW

[Multiple]
Q63 In the last 12 months, how often has this person's gambling affected you in any of the following ways?
READ OUT
a. Ran out of money for rent or mortgage
b. Ran out of money for food
c. Ran out of money for other bills (e.g. electricity or phone)
d. Increased credit card debt
e. Raided savings account/funds
f. Borrowed money from family or friends
g. Debt collectors repossessed goods
h. Sold or hocked possessions
i. Felt ashamed or had regrets
j. Relationship problems with close friends or family
k. Physical or verbal violence toward you
l. Children did not attend school or missed out on things (e.g. school excursion)
m. Felt stressed or anxious
n. Felt depressed
o. Did something outside the law/illegal
p. Missed work or study classes
q. Underperformed at work or study
r. Lost your job or kicked out of study

s. Other - Specify

Each of the above negative consequences items to have following scale –

0 NOT IN THE LAST 12 MONTHS
1 PER WEEK _____
2 PER MONTH _____
3 PER YEAR _____
98 REFUSED
99 DON'T KNOW

[Single]
Q64 Did you seek help when you were affected by this person's gambling?
INTERVIEWER PROMPTS IF NECESSARY: Such as help from a counsellor or a friend
1 YES
2 NO
98 REFUSED
99 DON'T KNOW

IF SOUGHT HELP FOR OTHERS GAMBLING (Code 1 on Q64), ASK:
[Single response for each row]
Q65 Did you seek help from any of the following?
READ OUT

DO NOT FLIP – KEEP GRID IN ORDER	Yes	No	Refused	Don't Know
a. Gambling helpline	1	2	98	99
b. Police Officer/Police	1	2	98	99
c. Gambling counsellor	1	2	98	99
d. Social worker or psychologist	1	2	98	99
e. Staff member at gambling venue	1	2	98	99
f. Gamblers Anonymous	1	2	98	99
g. Church or religious worker	1	2	98	99
h. Internet online help	1	2	98	99
i. Doctor	1	2	98	99
j. Spouse or partner	1	2	98	99
k. Other family	1	2	98	99
l. Friends	1	2	98	99
m. Sought help in another way - Specify	1	2	98	99

IF FULL SURVEY RESPONDENT (code 1 on SURVEY_STATUS), ASK:
[Single]
Q66_Pubs Should the number of pokies IN PUBS be increased, decreased or stay the same?
1 INCREASE
2 STAY THE SAME
3 DECREASE
98 REFUSED
99 DON'T KNOW

Q66_Clubs Should the number of pokies IN CLUBS be increased, decreased or stay the same?
[Single]

1 INCREASE
2 STAY THE SAME
3 DECREASE
98 REFUSED
99 DON'T KNOW

IF FULL SURVEY RESPONDENT (code 1 on SURVEY_STATUS), ASK:
Attitudes to Gambling Scale – 8
[Single response for each row]
Q71 The following questions are about your attitudes to gambling. Please indicate whether you strongly agree, agree, neither agree nor disagree, disagree or strongly disagree with each statement.
READ OUT STATEMENTS. READ OUT ANSWER SCALE IF NECESSARY.

DO NOT FLIP – KEEP GRID IN ORDER	Strongly Agree	Agree	Neither	Disagree	Strongly Disagree	Refused	Don't know
a. People should have the right to gamble whenever they want	5	4	3	2	1	98	99
b. There are too many opportunities for gambling nowadays	5	4	3	2	1	98	99
c. Gambling should be discouraged	5	4	3	2	1	98	99
d. Most people who gamble do so sensibly	5	4	3	2	1	98	99
e. Gambling is dangerous for family life	5	4	3	2	1	98	99
f. On balance gambling is good for society	5	4	3	2	1	98	99
g. Gambling livens up life	5	4	3	2	1	98	99
h. It would be better if gambling was banned altogether	5	4	3	2	1	98	99

Now please indicate whether you strongly agree, agree, neither agree nor disagree, disagree or strongly disagree with each for the following statements.

[Single]
Q72 There is too much gambling in NT clubs. READ OUT ANSWER SCALE IF NECESSARY.
1 STRONGLY DISAGREE
2 DISAGREE

3 NEITHER
4 AGREE
5 STRONGLY AGREE
98 REFUSED
99 DON'T KNOW

[Single]
Q73 There is too much gambling in NT pubs. READ OUT ANSWER SCALE IF NECESSARY.
1 STRONGLY DISAGREE
2 DISAGREE
3 NEITHER
4 AGREE
5 STRONGLY AGREE
98 REFUSED
99 DON'T KNOW

[Single]
Q74 People playing pokies in the NT should have to set limits on time and money spent playing pokies. READ OUT ANSWER SCALE IF NECESSARY.
1 STRONGLY DISAGREE
2 DISAGREE
3 NEITHER
4 AGREE
5 STRONGLY AGREE
98 REFUSED
99 DON'T KNOW

Public Health Questions
Alcohol

[Single]
Q80 Have you drunk alcohol in the last 12 months?
1 YES
2 NO
98 REFUSED
99 DON'T KNOW

IF DRUNK ALCOHOL IN LAST YEAR (Code 1 on Q80), ASK:
[Single]
Q81 In the last 12 months, have you ever felt you should cut down on your drinking?
1. YES
2. NO

[Single]
Q82 In the last 12 months, have people annoyed you by criticising your drinking?
1 YES
2 NO

[Single]
Q83 In the last 12 months, have you ever felt bad or guilty about your drinking?

1 YES
2 NO

[Single]
Q84 In the last 12 months, have you ever had a drink first thing in the morning to steady your nerves or to get rid of a hangover (i.e. An eye opener)?
1 YES
2 NO

IF FULL SURVEY RESPONDENT (code 1 on SURVEY_STATUS), ASK:
[Single]
Q85 Do you currently smoke?
1 YES
2 NO
98 REFUSED
99 DON'T KNOW

IF CURRENTLY SMOKE (Code 1 on Q85), ASK:
[Single]
Q86 Do you smoke regularly, that is, at least once a day?
1 YES
2 NO
98 REFUSED
99 DON'T KNOW

IF DON'T CURRENTY SMOKE OR DON'T SMOKE REGULARLY (Codes 2, 98 or 99 on Q85 or Codes 2, 98 or 99 on Q86), ASK:
[Single]
Q87 Have you ever smoked regularly, that is, at least once a day?
1 YES
2 NO
98 REFUSED
99 DON'T KNOW

IF FULL SURVEY RESPONDENT (code 1 on SURVEY_STATUS), ASK:
[Single]
Q88 How often do you or anyone smoke inside your home?
INTERVIEWER NOTE: READ OUT ANSWER SCALE IF NECESSARY
1 NEVER
2 SOMETIMES
3 MOST OF THE TIME
4 ALWAYS
98 REFUSED
99 DON'T KNOW

[Single]
Q89 In general, would you say your health is …?
READ OUT
1 Excellent
2 Very good
3 Good

4 Fair
5 Poor
98 [DO NOT READ] REFUSED
99 [DO NOT READ] DON'T KNOW

[Single response for each row]
Q89a Using a scale of all of the time, most of the time, some of the time, a little of the time or none of the time, in the last 4 weeks, how often did you feel …?
READ OUT STATEMENT. READ OUT ANSWER SCALE IF NECESSARY.

DO NOT FLIP – KEEP GRID IN ORDER	All of the time	Most of the time	Some of the time	A little of the time	None of the time	Refused	Don't Know
a Nervous	1	2	3	4	5	98	99
b Without hope	1	2	3	4	5	98	99
c Restless or jumpy	1	2	3	4	5	98	99
d Everything was an effort	1	2	3	4	5	98	99
e So sad that nothing could cheer you up	1	2	3	4	5	98	99

[Single]
Q89b In the last 12 months, have you run out of money or gone into debt to pay for essentials such as food?
1 YES
2 NO
98 REFUSED
99 DON'T KNOW

I would like to remind you that your answers are completely confidential and protected by law (Privacy Act 1988). Your responses are for research purposes and you will never be identified. Accurate and honest answers to the following survey questions are important an appreciated.

[Multiple]
Q90a In the last 12 months have you …?
READ OUT
1 Used illicit drugs, such as marijuana, ice, heroin and cocaine etc.
2 Used legal drugs in an illegal manner, such as prescription drugs to have or enhance a drug experience or feeling, for performance enhancement or for body shaping
3 Used substances you inhale such as nitrous oxide, glue or petrol to have a drug experience or feeling
4 [DO NOT READ] NONE OF THESE
98 [DO NOT READ] REFUSED
99 [DO NOT READ] DON'T KNOW

IF USED LEGAL DRUGS IN AN ILLEGAL MANNER (Code 2 on Q90a) ASK:
[Multiple]
Q90b In the last 12 months, what legal drugs have you used in an illegal manner and how often have you used them?

a. Legal drugs used in an illegal manner - Specify
1 PER WEEK _____
2 PER MONTH _____
3 PER YEAR _____
98 REFUSED
99 DON'T KNOW

IF USED INHALENTS (Code 3 on Q90a), ASK:
[Multiple]
Q90c In the last 12 months, what inhalents have you used how often have you used them?

b. Inhalents - Specify
1 PER WEEK _____
2 PER MONTH _____
3 PER YEAR _____
98 REFUSED
99 DON'T KNOW

IF USED ILLICIT DRUGS (Code 1 on Q90a), ASK:
[Multiple]
Q90d In the last 12 months, how often have you used the following illicit drugs?

c. Marijuana/Cannabis (e.g. Pot, Grass, Ganja, etc.)
d. Meth/amphetamine/Ice (e.g. Speed, Crystal, Meth etc.)
e. Ecstasy (e.g. MDMA, XTC, E, etc.)
f. Cocaine (e.g. Coke, Crack etc.)
g. Heroin and other opioid drugs (e.g. Morphine, Fentanyl, Smack, Junk etc.)
h. LSD or magic mushrooms (acid, blue meanies, gold tops etc.)
i. Any other illicit drug – Specify

Each of the above drugs to have following scale –
0 NOT IN THE LAST 12 MONTHS/NEVER
1 PER WEEK _____
2 PER MONTH _____
3 PER YEAR _____
98 REFUSED
99 DON'T KNOW

IF FULL SURVEY RESPONDENT (code 1 on SURVEY_STATUS), ASK:
Domestic and Family violence questions
The following few questions are about domestic and family violence. I would like to remind you that you do not have to answer a question if it will be too upsetting for you. We ask that you please be on your own while answering these questions on domestic and family violence. Phone numbers for assistance services can be provided to you at the end of the survey.

[Single response for each row]
Q91 Thinking about the last 12 months, has a partner or adult family member done any of the following to you?
READ OUT

DO NOT FLIP – KEEP GRID IN ORDER	Yes	No	Refused	Don't Know
g. Constantly checked up on you	1	2	98	99
e. Deliberately and consistently put you down or criticised you	1	2	98	99
d. Deliberately humiliated or embarrassed you in front of family or friends	1	2	98	99
c. Tried to stop you from seeing your own family or friends	1	2	98	99
b. Controlled or limited your access to money, phone or transport	1	2	98	99
a. Hit, pushed, punched or physically hurt you	1	2	98	99
f. Forced or coerced you into having sex	1	2	98	99
h. Harmed you mentally or physically in some other way - Specify	1	2	98	99

If code 1 NOT ON ANY of rows a-h go to Q98.

IF DOMESTIC VIOLENCE (code 1 on at least one of rows a-h on Q91), ASK:
[Single response for each row]
Q92 Did your experience with domestic or family violence affect you in any of the following ways with regards to employment?
READ OUT

DO NOT FLIP – KEEP GRID IN ORDER	Yes	No	Don't Work	Refused	Don't Know
b. I missed days of work	1	2	97	98	99
d. My work performance was affected	1	2	97	98	99
a. I could not hold down a job	1	2	97	98	99
c. The domestic or family violence continued while I was at work (e.g. harassed through phone calls, social media, email etc., person turned up at workplace)	1	2	97	98	99
e. Affected my employment in another way - Specify	1	2	97	98	99

If code 97 on all rows a-e go to Q98. If code 1 NOT ON ANY of rows a-e go to Q98

IF AFFECTED AT WORK (code 1 on at least one of rows a-e on Q92), ASK:
[Single response for each row]
Q93 Did you discuss the domestic or family violence with any of the following people at your workplace?
READ OUT

DO NOT FLIP – KEEP GRID IN ORDER	Yes	No	Refused	Don't Know
a. A colleague working at the same level as you or below	1	2	98	99
b. A supervisor, manager or HR person	1	2	98	99
c. Someone else at work - Specify	1	2	98	99

If codes 1-99 on Q93a or Q93c or codes 2-99 on Q93b go to Q98

IF DISCUSSED WITH SUPER/MANAGER (code 1 on Q93b), ASK:
[Single response for each row]
Q94 Did any of the following outcomes occur after you discussed your domestic or family violence with Supervisor, Manager or HR person?
READ OUT

DO NOT FLIP – KEEP GRID IN ORDER	Yes	No	Refused	Don't Know
a. I was given paid time off work	1	2	98	99
b. I was given unpaid time off work	1	2	98	99
e. I was provided with counselling	1	2	98	99
c. My workplace changed or screened my work email or phone calls	1	2	98	99
d. Security staff were alerted	1	2	98	99
g. I was performance managed in my job	1	2	98	99
h. I was demoted	1	2	98	99
f. I was terminated from my job	1	2	98	99
i. I was offered no support or assistance	1	2	98	99
j. Some other outcome occurred - Specify	1	2	98	99

ASK ALL:

Demographics

I am now going to ask you a few questions to ensure we survey a good cross-section of the community. All information is strictly confidential and only reported for the survey overall.

[Single]
Q98 Is English the main language spoken in your household?
1 YES
2 NO
98 REFUSED
99 DON'T KNOW

[Single]
Q99 Which of the following best describes your household?
READ OUT
1 Couple with no children
2 Couple with children still at home
3 Couple with children not living at home
4 Single person household (no children)
5 Single with children still at home
6 Single with children not living at home
7 Group or shared household
8 Other living arrangement
98 [DO NOT READ] REFUSED
99 [DO NOT READ] DON'T KNOW

[Single]

Q100 Are you currently studying at University, College or TAFE? IF YES: READ OUT - Would that be Full-time or Part-time?

1 Full-time
2 Part-time
3 Not studying
98 [DO NOT READ] REFUSED
99 [DO NOT READ] DON'T KNOW

[Single]
Q101 Which of the following best describes your current work status?
READ OUT

1 Working full-time
2 Working part-time
3 Working casual
4 Home duties
5 Retired (self-supporting, in receipt of superannuation)
6 Pensioner
7 Unemployed (or looking for work)
8 Other [Do not read]
98 [DO NOT READ] REFUSED
99 [DO NOT READ] DON'T KNOW

IF WORKING (Codes 1-3 on Q101), ASK:
[Single]
Q102 Are you a Fly-in Fly-out or Drive-in Drive-out worker?

1 YES
2 NO
98 REFUSED
99 DON'T KNOW

ASK ALL:
[Single]
Q103 What is the highest completed education qualification you have received?
IF NECESSARY - READ OUT

1. University, Bachelor degree or above
2. A trade, technical certificate (III or IV) or Diploma
3. Completed Year 12 (Senior high school)
4. Completed Year 10 (Junior high school)
5. Less than year 10

98 [DO NOT READ] REFUSED
99 [DO NOT READ] DON'T KNOW

[Single]
Q104 Could you please tell me your personal annual income from all sources before tax?
IF NECESSARY – READ OUT

1. Less than $20,000 (less than $769 per fortnight)
2. $20,000 - $29,999 ($770 – $1,154 per fortnight)
3. $30,000 - $49,999 ($1,155 – $1,884 per fortnight)
4. $50,000 - $69,999 ($1,885 – $2,654 per fortnight)
5. $70,000 - $99,999 ($2,655 – $3,808 per fortnight)

6. $100,000- $119,999 ($3,809 – $4,615 per fortnight)
7. $120,000 or more ($4,615 or more per fortnight)
98 [DO NOT READ] REFUSED
99 [DO NOT READ] DON'T KNOW

If completed survey in 2015 go to Q105a, otherwise go to Q106

IF COMPLETED SURVEY IN 2015 (Flag on Sample):
[Single]
Q105a We carried out a similar survey to this in 2015. Did you participate in this survey in 2015?
1 YES
2 NO
98 REFUSED
99 DON'T KNOW

IF CLAIMED PARTICIPATED IN 2015 (CODE 1 on Q105a), ASK:
[Single]
Q105b We would like to be able to link your responses in this current survey to your responses in the 2015 survey. Do you give consent/permission for us to do this?
1 YES
2 NO

ASK ALL:
Q106 In 2019 we are likely to conduct some follow-up research to this survey, most likely in the form of a one on one interview (either in person or over the phone) between you and a researcher. May we contact you about this future research?
INTERVIEWER NOTE: If NO – You would receive a payment for assisting us with this future research and of course you can opt out of the research at any time.
1 YES
2 NO

IF AGREED TO RE-CONTACT (Code 1 on Q106), ASK:
Q107 May I have your first name and contact details? [respondent can name one or more of b-e]
a. Name: _____
b. Home phone number: _____ [pre-fill if number called – Interviewer to confirm]
c. Mobile number: _____ [pre-fill if number called – Interviewer to confirm]
d. Work number: _____
e. Email address: _____

IF DID NOT AGREE TO RE-CONTACT (Code 2 on Q106), ASK:
QEND This completes the survey. My supervisor may call to check that the interview, so could I have your first name please?
Record Name _____

ASK ALL:
Thank you very much for your time and assistance. Your co-operation is greatly appreciated.

Would you like any numbers for the Gambling Helpline or Life line?

Crisis counselling
Lifeline:.....13 11 14
Domestic violence helpline: 1800 737 732
Gambling help online: 1800 858 858

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