Menzies School of Health Research Submission into the harmful impacts of addictive behaviours - GAMBLING

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The NT has a range of commercialised gambling products available for consumers including lotteries, instant scratch tickets, keno, electronic gaming machines (EGMs, pokies or poker machines), TAB, racetrack (horses and dogs) betting (online, on-course and off-course), and casino table games such as poker, roulette and blackjack, which can be played in the Alice Springs and Darwin casinos. The following submission will focus on:

1. EGMs or pokies as they are more commonly referred to;
2. Problem gambling risk and harms from gambling; and
3. Gambling harm in the NT Aboriginal and Torres Strait Islander population – applying a health promotion framework.

Electronic gaming machines

As a form of gambling, EGMs have long been known to be the gambling product most associated with problem gambling risk and associated harms [1, 2]. The higher risk is linked to a range of features including the rapid or continuous speed at which players can gamble [3, 4], factors such as 'near misses' and 'losses disguised as wins' (LDWs) [5-7], and in their accessibility in community venues [8-11]. Interestingly, the link between LDWs, heightened arousal and more frequent gambling was established as far back as the 1980's [12].

There were four changes to EGM policy and regulation over the period 2003 to 2017 that have likely affected EGM player losses and the number of EGMs operating in the NT over the last several years:

- Smoking ban in all venues started from 1 January 2010.
- Note acceptors allowed in community venues (hotels and clubs) from 28 May 2013, allowing players a maximum loading limit of $1,000 using $20, $50 or $100 notes (previously EGM gamblers could insert up to $250 in $1 coins).
- Previous caps of 10 EGMs per hotel and 45 EGMs per club were lifted in July 2015 to allow hotels up to 20 EGMs and clubs up to 55 EGMs, though no new EGMs were installed until after social impact assessments were carried out and reviewed by the government, which was December 2015 and early 2016.
- Minimum percentage return to player (RTP) was amended on 21 September 2015 for casinos from 88% to 85%, which brought them into line with community venues.

Figure 1 shows that the number of EGMs in the NT increased steadily from 2003 to 2011, with numbers after this either slightly lower for the next few years before increasing again in2016 and 2017. The increase in EGMs since 2015 reflects the change in EGMs policy, where by hotels cap was increased from 10 to 20 and 45 to 55 for clubs. A notable feature of the distribution of EGMs in the NT is that from 2010 to 2015 between 47% and 50% of EGMs were located in the casinos; however, in 2017, with the increase in EGMs in community venues, the split between hotels, clubs and the casinos is now 36%, 25% and 39% respectively, with the 25% (577) of EGMs in hotels the highest this has been since EGMs were introduced into the NT.

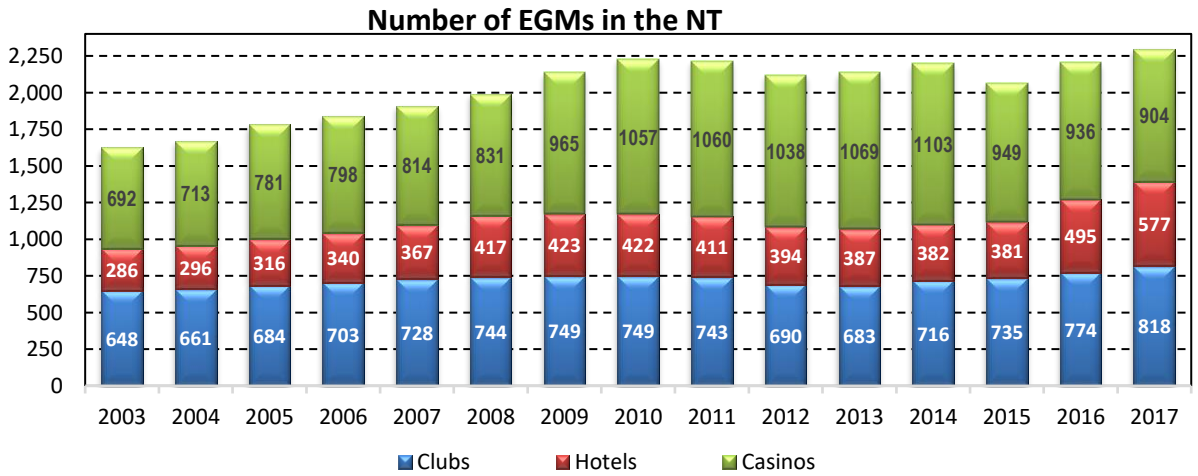

Figure 1: Number of EGMs in the NT by venue type, 2003-2007

Figure 2 shows EGM player losses by venue type for the NT. In 2017, EGM player losses reached $170 million, of which $96 million was in community venues (hotels and clubs). In 2015 the player losses in the community venues overtook player losses from EGMs in the casinos for the first time since EGMs were introduced to community venues in the mid 1990's, with more than $96 million lost to EGMs in community venues in 2017, compared with $74 million to EGMs in the casinos. EGM player losses rose steadily from 2003 to 2009, before dropping sharply because of the smoking ban, with player losses then remaining steady from 2010 to 2013, before increasing dramatically from 2014 to 2017. So, from 2013 to 21017 EGM player losses increased 89% in hotels, 35% in clubs, 53% in community venues (hotels and clubs), and decreased 9% in the casinos. Given the minimal change in player losses in the casino EGMs, and the fact that these EGMs always had note acceptors installed, these recent increases must be because of the installation of note acceptors into community EGMs and the increase in the amount of money to be loaded into an EGM when starting.

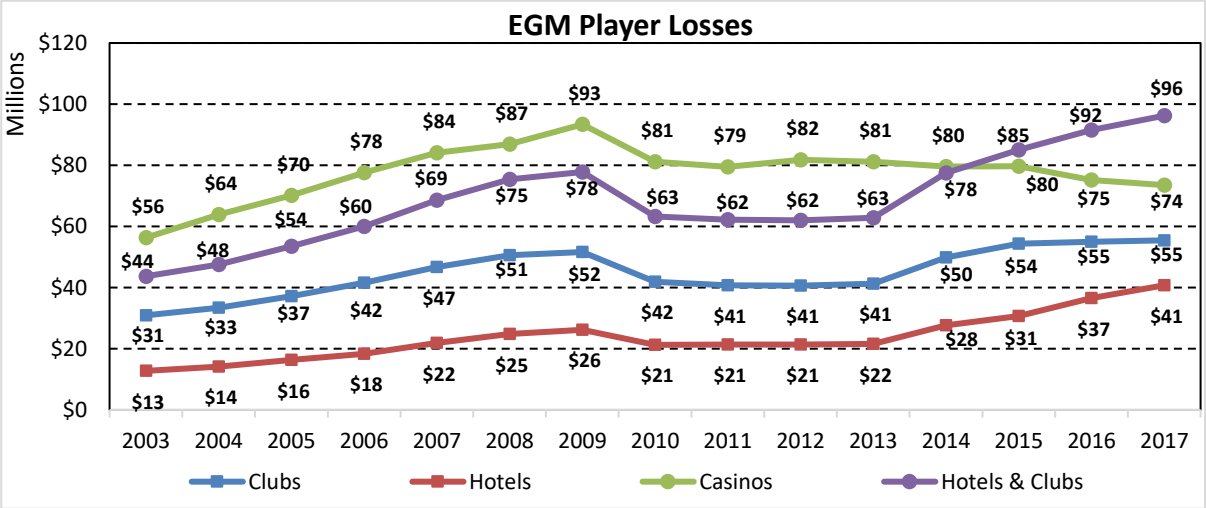

Figure 2: EGM player losses in the NT by venue type, 2003-2007

The 2015 NT Gambling Prevalence and Wellbeing Survey identified EGMs as the riskiest form of gambling, with over 50% of weekly EGM gamblers classified as either a problem or a moderate risk gambler [13]. Table 1 shows annual, monthly and weekly prevalence of EGM gambling, with corresponding problem/moderate risk and problem gambling prevalence. Just under a quarter of NT adults gambled on an EGM in the year prior to the survey, dropping to 4.1% for monthly play, and 1.4% for weekly play. Not shown, but just 6.2% of EGM gamblers gambled weekly or more and 11.8% monthly or more. Problem/moderate risk gambling prevalence among people who played EGMs was 10.5% and significantly higher compared with people who did not play EGMs (2.2%). Problem/moderate risk gambling increased to 34% amongst monthly EGM gamblers, and further increased to 53% amongst weekly EGM gamblers. In 2005 and 2015 problem gambling prevalence amongst non-EGM gamblers was less than 0.5%, increasing to 4% (2005) and 2.7% (2015) amongst annual EGM gamblers. Around 8% of monthly EGM gamblers were classified as problem gamblers in 2005 and 14% in 2015, while 19% of weekly EGM gamblers were classified as problem gamblers in 2005 and 13% in 2015.

Table 1: Population prevalence and problem/moderate risk gambling prevalence by non-EGM gambling, annual, monthly and weekly EGM gambling, 2005 and 2015

	Population prevalence		Problem/MR gambler[1]		Problem gambler[1]	
	% (SE)	Popul-ation (N)	% (SE)	Popul-ation (N)	% (SE)	Popul-ation (N)
2005 survey						
Non-EGM gambler	73.0 (1.5)	100,918	0.7 (0.3)	733	0.02 (0.02)	24
Annual EGM participation	27.0 (1.5)	37,307	12.0 (1.6)	4,492	4.0 (2.0)	1,500
Monthly or more EGM	6.5 (0.8)	9,019	19.4 (5.0)	1,753	7.8 (1.5)	701
Weekly or more EGM	2.5 (0.3)	3,391	44.1 (5.2)	1,494	19.0 (3.8)	645
2015 survey						
Non-EGM gambler	77.1 (1.3)	136,345	1.5 (0.5)	2,067	0.07 (0.05)	95
Annual EGM participation	22.9 (1.3)	40,571	10.5 (1.8)	4,268	2.7 (0.9)	1,111
Monthly or more EGM	2.7 (0.4)	4,784	24.8 (7.4)	1,187	13.7 (6.4)	654
Weekly or more EGM	1.4 (0.3)	2,498	52.8 (9.1)	1,320	13.3 (6.3)	333

[1] 2005 annual and monthly problem/moderate risk gambling estimates adjusted for bias caused by only sampling regular gamblers in the 2005 survey: 2015 proportion of monthly and less than monthly EGM gamblers that were problem/moderate risk gamblers was applied to the 2005 EGM participation data

Sources: 2005 NT Gambling Prevalence Survey and 2015 NT Gambling Prevalence and Wellbeing Survey

Using EGM participation rates from the 2005 and 2015 Gambling Prevalence Survey's and by making some assumptions, it is possible to calculate an estimated player loss per EGM gambler and per EGM problem gambler for 2005 and 2015. Table 2 shows EGM losses per NT adult, per EGM gambler, per EGM problem gambler. So, after applying three assumptions of 10, 20 and 30% of EGM player losses coming from non-NT residents (e.g. tourists), the average loss per EGM player ranged between $2,321 and $2,985 per year in 2005 and increased to between $2,841 and $3,653 in 2015; a 22% increase or 19% after adjusting for inflation. Using the Productivity Commission's estimate that 40% of EGM player losses are attributable to problem gamblers, then in 2005 the average player loss per EGM problem gambler was between $23,094 and $29,692 per year, and this increased to between $41,504 and $53,362 in 2015, representing an 80% increase or 75% inflation adjusted increase. So, while the number if EGM gamblers only increased slightly between the 2005 and 2015 surveys, the burden of player losses on this group has increased dramatically, particularly amongst problem (and moderate) risk gamblers.

Table 2: 2015 EGM player losses, losses per EGM player, estimate for losses per problem or moderate risk gambler, and player loss per NT adult

	2005	2015	% Change	Real[€] % Change
EGM player losses ($)	$123,716,768	$164,682,559	33.1	29.9
NT adult population (N)	138,225	176,916	28.0	-
Player loss per NT adult ($) [1]	$806	$838	4.0	1.5
Player loss per NT adult ($) [2]	$716	$745	4.0	1.5
Player loss per NT adult ($) [3]	$627	$652	4.0	1.5
EGM population (N)	37,307	40,571	8.7	-
Player loss per EGM gambler ($) [1]	$2,985	$3,653	22.4	19.4
Player loss per EGM gambler ($) [2]	$2,653	$3,247	22.4	19.4
Player loss per EGM gambler ($) [3]	$2,321	$2,841	22.4	19.4
EGM problem gamblers (N)	1,500	1,111	-25.9	-
Player loss per EGM problem gambler ($) [1,4]	$29,692	$53,362	79.7	75.3
Player loss per EGM problem gambler ($) [2,4]	$26,393	$47,433	79.7	75.3
Player loss per EGM problem gambler ($) [3,4]	$23,094	$41,504	79.7	75.3

[€] 2005 $ adjusted to 2015 $ using Recreation & Culture Consumer Price Index [14];

[¥] PG/MR = problem /moderate risk gambler

[1] Assumes 10% of EGM player losses from non-NT residents; [2] Assumes 20% of EGM player losses from non-NT residents [3] Assumes 30% of EGM player losses from non-NT residents; [4] Assumes 40% of EGM player losses from problem gamblers [Source: 2]

Sources: 2005 NT Gambling Prevalence Survey; 2015 NT Gambling Prevalence and Wellbeing Survey; NTG EGM data

EGM harm minimisation measures

The recent regulatory changes in EGM policy in the NT have led to significant increases in EGM player losses from community venues. State and Territory governments around Australia continue to ignore recommendations made by the Productivity Commission and public health gambling researchers to implement appropriate harm minimisation measures for EGMs, particularly those located in community venues. The NT should immediately reduce the EGM loading amount to $20 in community venues (hotels and clubs), as recommended by the Productivity Commission [2], and begin to reduce the caps in hotels and clubs to pre-2016 levels of 10 EGMs per hotel and 45 per club. Reductions in EGMs in community venues was supported by more than 50% of adults in the 2015 survey, so it would not be expected that the policy change would be politically unpalatable [13]. The reduction in the minimum return to player to 85% for casino EGMs in 2013 was an unusual policy change, given analysis by M Stevens, M Thoss and T Barnes [13] showed that casinos return to player has consistently hovered around 91%, while community venues have been increasing the return to player on their EGMs from 87% in 2003/4 to 90.5% in 2015/15. Any reduction in the return to player means EGM gamblers lose money faster and are less likely to win overall. It is recommended that the minimum return to player be increased to 90%. It is not clear why someone can put more money into an EGM than they can withdraw from an ATM located in the venue. However, currently there is no legislated daily withdrawal limit on ATMs in community venues

in the NT (currently it is the bank or ATM operator default), so the introduction of a daily withdrawals limits of $250 would be appropriate.

These are just a few regulatory changes that would reduce harms associated with EGM gambling, though other clearly needed options include reducing maximum bets (from current $5 to $1 or $2); prohibiting LDWs; lessening accessibility through reduced operating hours of gaming rooms in venues; and mandatory use of cards with simple pre-commitment options available set at low thresholds by default. Lastly, there needs to be a national approach to gambling regulation in Australia that by default uses a holistic public health approach to harm minimisation, which includes transparency and consultation around gambling policy changes; data availability for consistent monitoring and evaluation; national co-ordination of research, particularly on EGMs and online betting; improved health promotion around harms associated with gambling; and ensuring services are available not only for those experiencing gambling problem personally, but for those affected by other's gambling. The 2010 Productivity Commission report stated that "governments have improved their policy-making and regulations with respect to gambling, but significant governance flaws remain in most jurisdictions, including insufficient transparency, regulatory independence and coordination" [2, page 3]. It is State and Territory governments responsibility to balance the harms and benefits associated with gambling, particularly EGM gambling given its association with increased problem gambling risk.

Measuring the harms from gambling

Over the last decade, there has been an increasing interest in understanding the types of harms that people experience because of gambling. This includes harms to oneself from a person's own gambling and harms someone experiences because of someone else's gambling. This is conceptually important and changes the focus from the individual gambler and their 'problems' to broader harms from gambling. The 2015 NT Gambling Prevalence and Wellbeing Survey asked at-risk gamblers about the types of harms they experienced because of their own gambling, and asked all people whether they had been negatively affected by someone else's gambling, the relationship to this person, and the types of harms they experienced. In the 2015 survey around 23,000 NT adults or 13% of the adult population said they had been negatively affected by someone else's gambling. Characteristics associated with significantly higher reports of being negatively affected by someone else's gambling were being Aboriginal and Torres Strait Islander (28% or 10,600 people), single parent household (32% or 5,800 people), full-time student (40% or 4,200 people), gross annual income between $70,000 and $99,999 (22% or 10,500 people), heavy smokers (37% or 8,200 people); and people experiencing financial stress in the last 12 months (48% or 7,600 people). Gambling is causing significant harms, and particularly amongst vulnerable populations.

The 2015 survey also asked gamblers who were classified as at-risk gamblers about harms from their own gambling. Applying a public health approach to gambling means a primary focus on harm minimisation. The next figure and table show that gambling, like alcohol, is better treated as a public health issue with a focus on harm reduction, and shows that the most harms, numerically, are occurring not amongst at-risk gamblers, but amongst non-risk gamblers, and these harms are coming from another person's gambling. Table 3 shows the distribution of problem gambling risk through the NT adult population. Numerically, it can be seen the most harms occur amongst non-risk gamblers, with this group experiencing a total of 41,439 harms, equating to 48% of all harms related to gambling. Another way of looking at harms is the percentage of people experiencing at least one type of harm. It is clearly the case that a greater proportion of at-risk gamblers experiencing at least one harm (own or from someone else), but again numerically we find that 48% of people experiencing at least one harm were non-risk gamblers.

Table 3: 2015 EGM player losses, losses per EGM player, estimate for losses per problem or moderate risk gambler, and player loss per NT adult

	Population N	Own or other's gambling number of harms	Distribution of total harms %	Own or other's gambling 1 + harms %	Own or other's gambling 1 + harms N	Population distribution of own or other's gambling 1+ harm %
Problem gambler	1,206	6,842	7.9	60.5 (16.8)	730	2.7
Moderate risk	5,129	11,752	13.7	55.1 (9.0)	2,826	10.6
Low risk gambler	14,383	13,789	16.0	33.8 (5.5)	4,861	18.3
Non-risk gambler	113,574	41,439	48.1	11.4 (3.0)	12,947	48.8
Non-gambler	42,625	12,248	14.2	12.0 (4.1)	5,115	19.3
Total	**176,916**	**86,069**	100.0	**15.0 (2.2)**	**26,537**	**100.0**

Figure 3 plots the number of harms by own or someone else's gambling by problem gambling risk and gambling status. Visually it can be seen that most harms occur because of someone else's gambling, and the largest number of harms (41,439) occur within the non-risk gambler group.

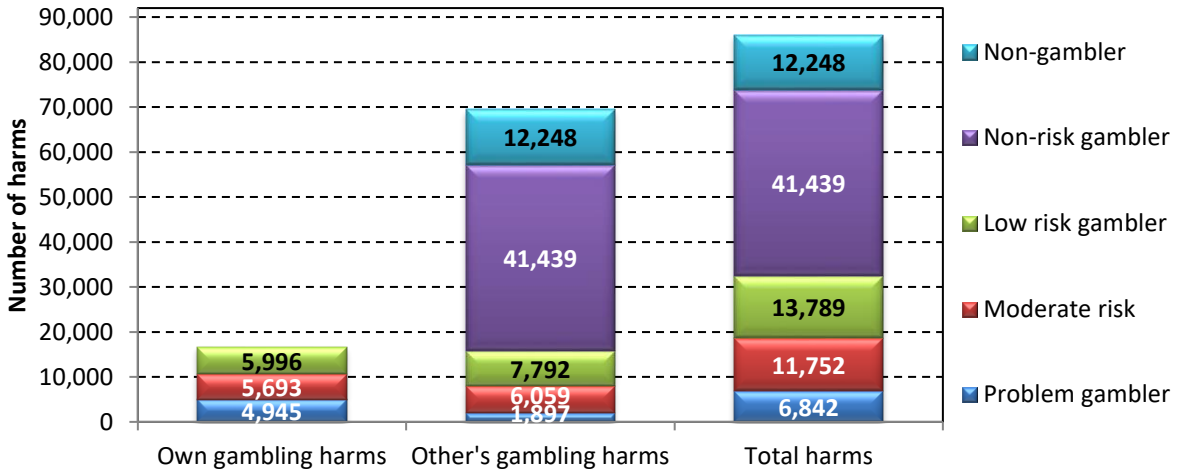

Figure 3: Negative consequences from own and another person's gambling, 2015 NT adults

There is a need to reduce stigma associated with experiencing gambling problems, and develop more health promotion materials to lower stigma, and increase the awareness of gambling-related problems, and ensure services to treat people more accessible. Many of the costs associated with gambling have often not been measured accurately or not included in economic modelling at all. Any future economic modelling must take full account of the direct and indirect harms associated with gambling in the NT, particularly now as there is much better information on indirect and direct harms from gambling.

Gambling in the NT Aboriginal and Torres Strait Islander population

Gambling is a popular recreational activity in Australia with a national participation rate of over 70% (Productivity Commission 1999). While the exact date of gambling introduction to Indigenous Australians is unknown, card games were being played for small twists of tobacco as early as the 1930's, though most games were played predominantly for entertainment within family and extended family groups [15]. Anthropological studies from the 1950's suggest that card games had become a ubiquitous activity across most parts of Australia, prompting Elders in some remote communities to lament that gambling (and alcohol use) was not 'Aboriginal' and sometimes interfered with Aboriginal Law and ceremony [16-18]. More recent research into gambling by Indigenous Australians in the 1980's indicated a mix of positive and negative consequences depending on the location of the research and the perspective of the researcher. For example, research in a small community (approximately 30 people) located in the Northern Territory found gambling to be largely unproblematic, with the games acting to distribute money at a time when resource distribution was inequitable, as well as enabling large sums of money to be raised for major purchases [19]. However, this and similar research noted that gambling did cause some problems including a relaxation of traditional Indigenous kinship relations (e.g. avoidance)[19] and in some instances a neglect of children by parents who were gambling [20]. Other research from the same period highlighted more specific negative effects of card games, including higher levels of anxiety amongst gamblers compared with non-gamblers, increased tensions within families, poor nutrition of children due to the reduced money available when gamblers lost, reduced school attendance by children due to sleep deprivation when card games ran through the night, and large winnings being spent outside the community, often on alcohol [17, 21-23]. In all of these studies females were identified as the more avid gamblers, with men generally only participating in high stakes games [20-23]. A study in a remote community in north Queensland found that money tended to be transferred from females to males and that larger winnings were nearly always spent obtaining alcohol, which involved chartering a plane or spending up to $200 on a return taxi trip to the nearest town where alcohol could be purchased [23]. A recent review seeking an Indigenous voice on gambling issues in New South Wales found that card games were still a significant leisure activity amongst Indigenous people, and particularly for those living in rural communities, but that popularity was on the decline due to access to regulated gambling and upon the death of older people who instigated the games [24].

Stevens and Young [25] analysed NT data from the 2002 National Aboriginal and Torres Strait Islander Social Survey and the 2002 General Social Survey, and compared estimates of 'reported gambling problems in respondents family and friend network' by remoteness and jurisdiction. Reported gambling problems were significantly higher in the Aboriginal and Torres Strait Islander population living in remote NT (32%) compared with those living in non-remote locations (11%). This study also found that gambling problems clustered with a range of other personal stressors related to social transgressions, and included 'alcohol or drug problems', 'witness to violence', 'physical abuse or violent crime' and 'trouble with the police'. This clustering of gambling problems with other social transgressions was consistent between the Aboriginal and Torres Strait Islander population and the general Australia population. Therefore, gambling problems, at a community level, for both Indigenous and non-Indigenous populations may be addressed by initiatives that increase social function and wellbeing.

The 2015 Gambling Prevalence and Wellbeing Survey was a population-based survey collecting information from just under 5,000 Territorians [13]. The following analyses compare problem gambling risk and harms from gambling between the NT Aboriginal and Torres Strait Islander and the non-Indigenous population. The Aboriginal and Torres Strait Islander sample of the survey is weighted to the adult Aboriginal and Torres Strait Islander population of the NT, which assumes that the sample is broadly representative of the population. However, the Aboriginal and Torres Strait Islander sample is under-represented in regional and remote locations, so the estimates for the Aboriginal and Torres Strait Islander population contained here should be treated with some caution, and are more representative of the working urban Aboriginal and Torres Strait Islander population. There was little difference between Indigenous and non-Indigenous participation in gambling, with around 75% of adults gambling on at least one activity in the last year (Table 4). There were significant differences in participation for three activities. Indigenous adults were more likely to gambling on EGMs (31% *cf*. 21%), less likely to participate in sports betting (4% *cf*. 8%), and less likely to participate in raffles (29% *cf*. 47%).

Table 4: Gambling particpation by activity and Indigenous status, 2015

	Non-Indigenous % (SE)	Indigenous % (SE)	Total % (SE)	p-value
Bingo	2.0 (0.4)	2.3 (1.3)	2.0 (0.4)	0.799
Informal games	2.1 (0.4)	4.5 (2.7)	2.6 (0.7)	0.223
Sports betting	8.3 (0.8)	4.4 (1.4)	7.5 (0.7)	**0.045**
Casino	12.4 (0.9)	17.0 (4.4)	13.4 (1.2)	0.262
Instant scratchies	17.4 (0.9)	17.9 (3.2)	17.5 (1.0)	0.895
Racetrack betting	22.3 (1.1)	24.4 (4.2)	22.8 (1.2)	0.617
Electronic gaming machines	20.6 (1.0)	31.4 (4.6)	22.9 (1.3)	**0.010**
Keno	25.2 (1.1)	25.9 (4.4)	25.4 (1.3)	0.881
Raffles	46.6 (1.2)	28.7 (4.0)	42.7 (1.3)	**0.000**
Lotteries	47.8 (1.2)	40.0 (4.5)	46.1 (1.4)	0.106
Any gambling	76.3 (1.0)	75.0 (4.2)	76.0 (1.2)	0.755
Population (N)	138,517	38,399	176,916	-

Table 5 shows that all problem gambling risk categories were significantly higher in the Aboriginal and Torres Strait Islander population compared with the non-Indigenous population, except for problem gambling, which was non-significant, but still nearly double compared with the non-Indigenous problem gambling estimate. Approximately 2,500 Aboriginal and Torres Strait Islander adults in the Territory were classified as a problem or moderate risk gambler compared with 3,700 non-Indigenous Territorians.

Table 5: Problem Gambling Severity Index (PGSI) risk categories by Indigenous status

	Non-Indigenous % (SE)	Indigenous % (SE)	Persons % (SE)	p-value[1]
Problem gambler	0.6 (0.2)	1.1 (0.5)	0.7 (0.2)	0.289
Moderate risk gambler	2.2 (0.4)	5.6 (1.9)	2.9 (0.5)	**0.011**
Low risk gambler	6.9 (0.7)	12.4 (3.3)	8.1 (0.9)	**0.040**
Non-risk gambler	66.7 (1.2)	55.9 (4.9)	64.3 (1.4)	**0.024**
Non-gambler	23.7 (1.1)	25.0 (4.2)	24.0 (1.2)	0.755
Total	**100.0**	**100.0**	**100.0**	-
Problem & moderate risk	2.7 (0.5)	6.7 (1.9)	3.6 (0.6)	**0.007**
Total at risk gamblers	9.7 (0.8)	19.1 (3.6)	11.7 (1.0)	**0.001**
Population (N)	138,517	38,399	176,916	-

1 Significant difference between Indigenous and non-Indigenous PGSI category

Aboriginal and Torres Strait Islander adults were significantly more likely than non-Indigenous people to experience harm from someone else's gambling, with 28% experiencing at least one harm, compared with 9% in the non-Indigenous population (Table 6). Aboriginal and Torres Strait Islander people were significantly more likely to 'feel stress, anxiety or depression' (10% *cf*. 4%), 'borrow money from family or friends' (7% *cf*. 3%), 'run out of money for bills' (12% *cf*. 3%), 'relationship problems with family' (11% *cf*. 3%), 'debt collectors repossess good' (1.2% *cf*. 0.1%), and 'kids miss out on something' (1.8% *cf*. 0.3%).

Table 6: Negative consequences from own gambling for at risk gamblers and negative consequences from another person's gambling for total population by Indigenous status

	Negative consequences because of another person's gambling			
	Non-Indigenous % (SE)	Indigenous % (SE)	Persons % (SE)	p-value[1]
At least one negative consequence	8.9 (1.6)	27.9 (8.3)	13.0 (2.3)	**0.002**
Raided savings accounts/funds	3.9 (1.2)	12.1 (7.9)	5.7 (2.0)	0.110
Felt stress, anxiety or depression	3.6 (0.7)	9.8 (3.7)	5.0 (0.9)	**0.014**
Borrowed money from family or friends	2.6 (0.6)	6.7 (2.2)	3.5 (0.7)	**0.017**
Ran out of money for other bills	2.5 (0.6)	12.2 (7.9)	4.6 (1.9)	**0.017**
Relationship problems with family	2.9 (0.7)	10.8 (3.9)	4.7 (1.0)	**0.002**
Ran out of money for food	1.9 (0.6)	2.9 (1.3)	2.1 (0.6)	0.429
Had a problem with work	1.6 (0.4)	1.6 (0.9)	1.6 (0.4)	0.983
Ran out of money for rent or mortgage	2.0 (0.6)	1.3 (0.6)	1.8 (0.5)	0.485
Relationship problem with friends	4.9 (1.5)	7.6 (2.8)	5.5 (1.3)	0.348
Debt collectors repossessed goods	0.1 (0.1)	1.2 (0.6)	0.4 (0.1)	**<0.001**
Physical or verbal violence toward you	1.5 (0.5)	3.1 (1.2)	1.8 (0.5)	0.167
Sold/hocked possessions	0.8 (0.3)	1.6 (0.7)	1.0 (0.3)	0.250
Kids did not attend school	0.2 (0.1)	0.6 (0.5)	0.2 (0.1)	0.204
Kids missed out on something	0.3 (0.1)	1.8 (0.9)	0.6 (0.2)	**0.001**
Did something outside the law	0.4 (0.2)	0.8 (0.6)	0.5 (0.2)	0.453
Number of negative consequences				
None	91.1 (1.6)	72.1 (8.3)	87.0 (2.3)	
One or two	5.0 (1.4)	22.0 (8.3)	8.7 (2.2)	**<0.001**
Three or more	3.9 (0.8)	5.8 (2.0)	4.3 (0.8)	
Population (N)	138,517	38,399	176,916	-

1 Significant difference between Indigenous and non-Indigenous

Table 7 shows the relationship to the person whose gambling was causing them harm. The most common response for Aboriginal and Torres Strait Islander people, with 52% of those negative affected by someone else's gambling was 'parent', compared with 8% for non-Indigenous people. Aboriginal and Torres Strait Islander people were less likely to nominate an 'ex-spouse/ex-partner' compared with non-Indigenous, though this was marginally non-significant.

Table 7: Relationship to person whose gambling caused them negative consequences by Indigenous status

	Non-Indigenous % (SE)	Indigenous % (SE)	Persons % (SE)	p-value[1]
Parent	8.3 (3.8)	51.9 (17.0)	28.3 (11.6)	**0.002**
Friend	36.2 (9.8)	15.6 (8.8)	26.8 (7.4)	0.154
Acquaintance	15.7 (9.6)	0.0 (0.0)	8.5 (5.6)	0.125
Other family member/relative	4.5 (3.2)	12.4 (7.1)	8.1 (3.4)	0.249
Spouse	6.5 (2.3)	5.3 (4.4)	5.9 (2.4)	0.820
Brother/sister	3.3 (2.4)	7.8 (5.0)	5.4 (2.5)	0.364
Ex-partner/ex-spouse	7.3 (4.9)	1.2 (1.0)	4.5 (2.8)	0.061
Father or mother In-law	7.5 (4.2)	0.0 (0.0)	4.1 (2.5)	0.097
Work colleague	5.0 (2.0)	1.7 (1.7)	3.5 (1.4)	0.313
Son/daughter	2.8 (1.4)	4.0 (4.0)	3.3 (2.0)	0.754
Other	3.0 (1.4)	0.0 (0.0)	1.6 (0.8)	0.097

1 Significant difference between Indigenous and non-Indigenous

Using health promotion to reduce gambling-related harms in Aboriginal communities

In 2016 the NTG funded a large 3-year project, *Evaluation of a pilot health promotion activity to reduce gambling-related harms in 3 Aboriginal communities*. The project is a partnership between Menzies School of Health Research, the Australian National University and Amity Community services Inc., with Amity develop and implement the health promotion activity to reduce gambling-related harms, while Menzies and ANU will carry out the evaluation. The health promotion approach is based on the 1986 WHO Ottawa Charter [26], which follows five key principles: building healthy public policy, developing personal skills, creating supportive environments, strengthening community action, and reorienting health services.

Baseline data collection has been completed and some preliminary findings are now presented, and where appropriate, comparisons are made with the 2015 NT Gambling Prevalence and Wellbeing Survey. Figure 5 shows that problem gambling risk was higher in the three Aboriginal communities (28%) compared with the total NT Aboriginal and Torres Strait Islander population (1.5%). This result confirms what past research has found that gambling problems are much more prevalent in remote communities and primarily related to gambling on card games.

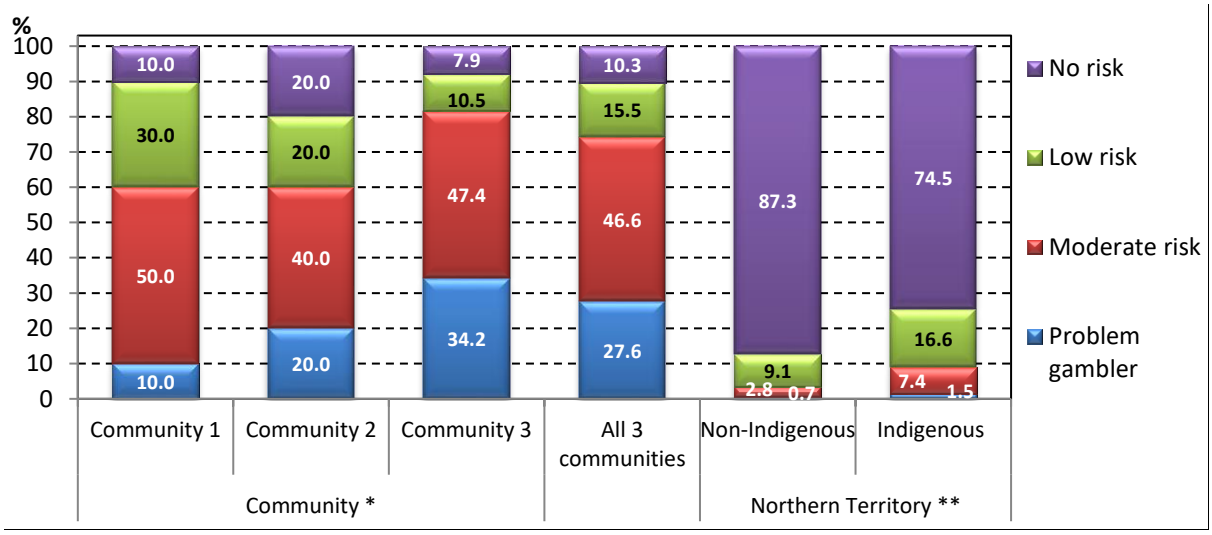

Figure 4: Problem gambling risk in three Aboriginal communities and the NT by Indigenous status

Around 60% of the people interviewed in the three communities reported being negatively affected by someone else's gambling, compared with 28% for the Aboriginal and Torres Strait Islander population in the 2015 Gambling Prevalence and Wellbeing Survey.

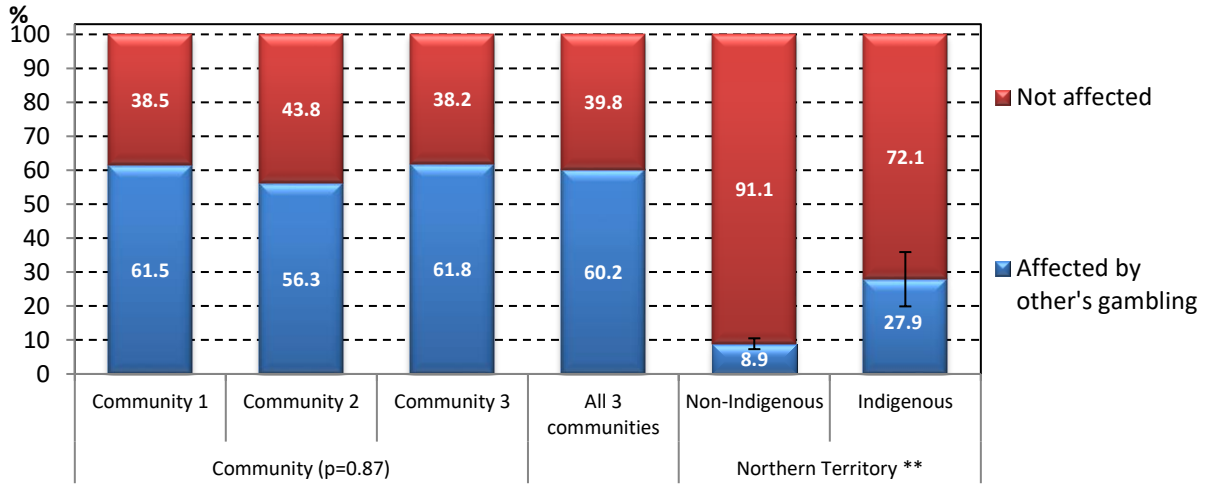

Figure 5: Negative affected by someone else's gambling for three Aboriginal communities and the NT by Indigenous status

Figure 6 shows the types of harms experienced because of someone else's gambling. Running out of money for food and bills were the most commonly reported harms, with more than 50% of Aboriginal people surveyed indicating this had happened a bit of the time or more, with 9% and 16% indicating this happened most or all the time. Around 46% of people reported feeling depressed, stressed or anxious, with 13% reporting this most or all of the time. Forty-four percent of people indicated that their children missed school because of someone else's gambling affecting them. More serious harms experienced included verbal or physical violence (37%), doing something illegal (20%), and relationship problems with family (48%).

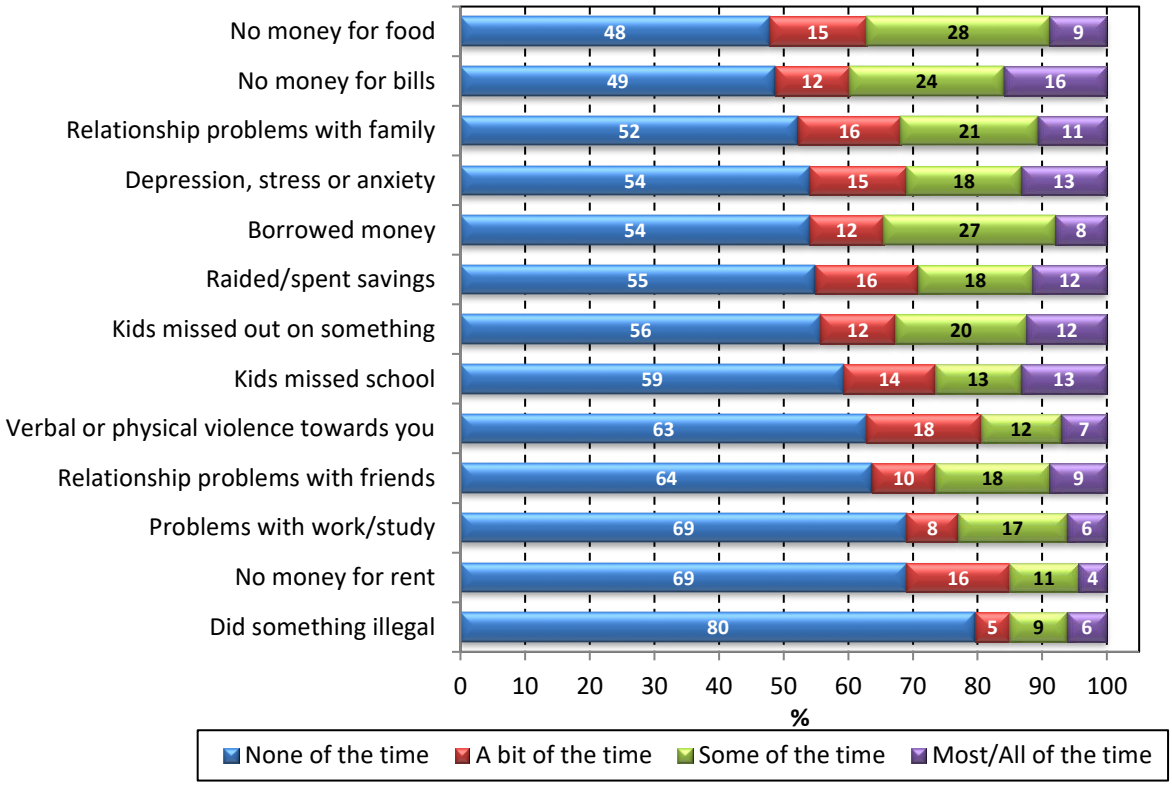

Figure 6: Types of harms experienced because of someone else's gambling in three Aboriginal communities

Final data collection for this evaluation will occur in 2019, and will provide further information on the impact gambling is having on remote Aboriginal communities, in addition to understanding the utility of applying health promotion in these settings.

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