

9 ELECTRONIC GAMING MACHINES

9.1 Background

Electronic Gaming Machines (EGMs) are widespread throughout Australia, except in Western Australia, where they are only located in the single casino (Productivity Commission 2010). EGMs are the gambling activity most associated with problem gambling (Productivity Commission 2010, Young, Markham & Doran 2012), and in the 2005 NT survey, some 90% of problem gamblers played EGMs (Young et al. 2008). Nationally, the 2010 Productivity Commission report estimated that among those who play weekly or more on EGMs, around 15 per cent are problem gamblers with an additional 15 per cent at 'moderate risk'. Furthermore, the Productivity Commission estimated that around 40% of EGM player losses come from problem gamblers and a further 20% from moderate risk gamblers (Productivity Commission 2010).

9.1.1 Chapter contents

This chapter brings together all EGM related information collected in the survey, and includes additional information on EGMs to that provided in Chapter 3 of this report. Specifically, it contains:

- EGM participation and frequency of play by socio-demographics
- Venue type where plays EGMs by socio-demographics
- Venue preference and distance to venue by socio-demographics
- EGM gambling policy and change to spending on EGMs by socio-demographics
- EGMs patterns of play and problem gambling risk, negative consequences from own and from another person's gambling.

9.2 Chapter highlights

- EGM participation in the NT adult population was 23%, with just over 30% of people who gambled, playing EGMs in the last year.
- There was no statistically significant variation in EGM participation across regions, by gender and age, though most (33%) EGM players are aged 25 to 34 years.
- EGM gamblers gambled more frequently for all gambling compared with non-EGM gamblers, with weekly EGM play associated with being 55 years or more, and monthly EGM play more common for those living in Regional Towns or the Rest of the NT.
- Eighty-five percent of EGM gamblers had a regular venue where they usually gambled, with younger people preferring hotels, and older people clubs.
- Ninety-two percent of problem gamblers played EGMs.
- Just over 60% and just under 50% of weekly and monthly EGM gamblers respectively, were classified as either problem or moderate risk gamblers.
- Weekly EGM gamblers had significantly increased prevalence across all PGSI risk categories, with 13% of weekly and 14% of monthly EGM gamblers classified as problem gamblers, compared with less than 1% amongst less than monthly EGM gamblers and all gamblers.
- Casino EGM gamblers were significantly more likely to be classified as moderate and low risk gamblers, while online EGM gamblers were significantly more likely to be problem gamblers.

9.3 EGM participation in the NT

Figure 77 shows that 23% of the NT adult population played EGMs in the previous year, and 30% of the NT adult gambling population played EGMs. EGM participation varied across regions; however, this association was not statistically significant. Darwin/Palmerston recorded the highest EGM participation rate (24.3%), followed by Regional Towns (24.0%), Alice Springs (23.9%), and the Rest of the NT (12.5%).

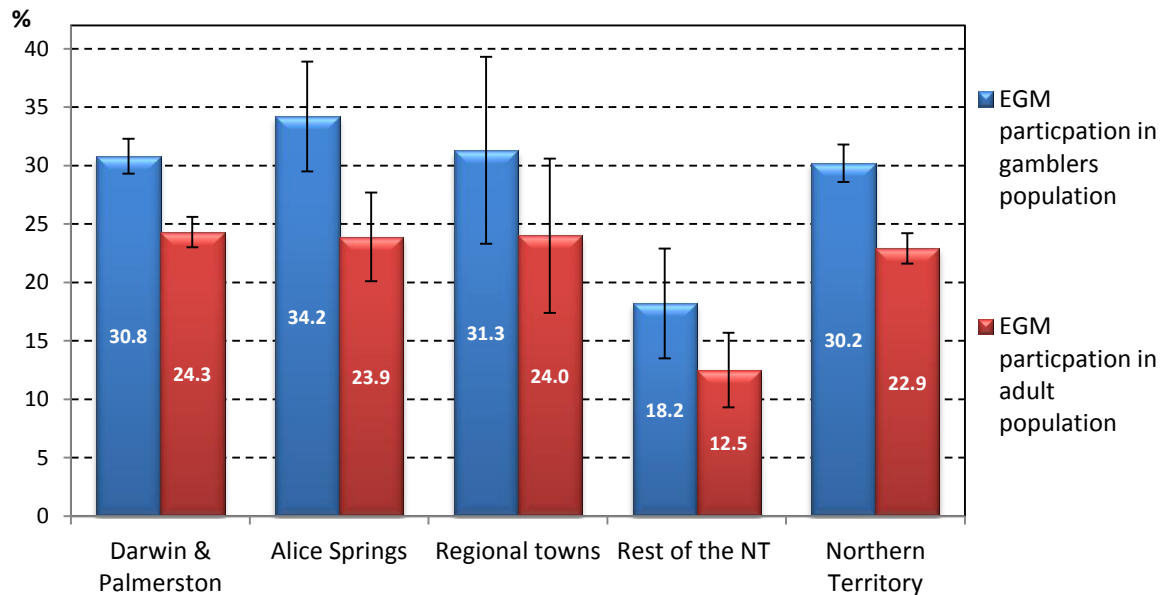


Figure 77: EGM participation by region, gamblers population and NT adult population

Figure 78 shows the EGM participation rate in the last year by gender in the NT adult and gamblers populations, while Figure 79 shows the same by age. There was no significant difference in EGM participation between men (22.5%) and women (23.4%) in the adult and gamblers populations.

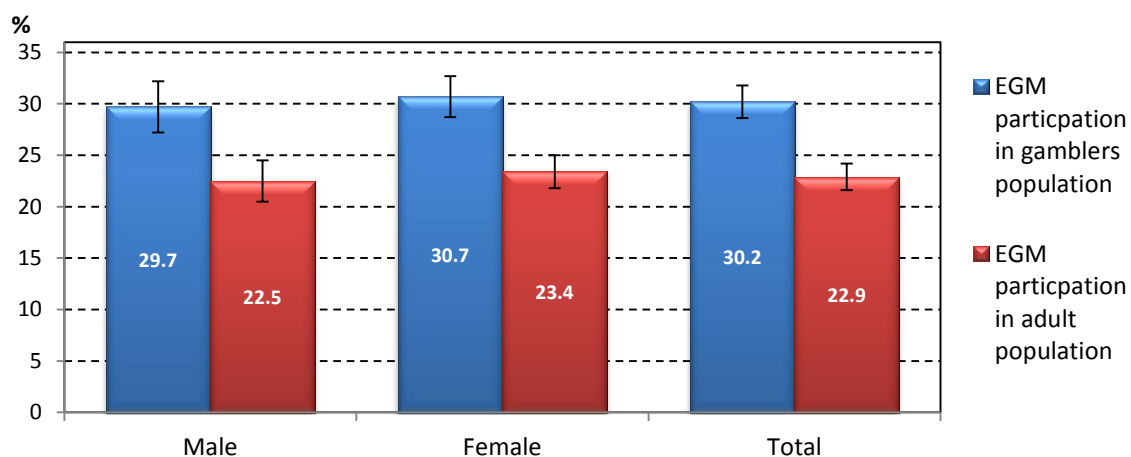


Figure 78: EGM participation by gender, gamblers population and NT adult population

The association between EGM participation and age was not statistically significant (Figure 79), though EGMs were most popular among people aged 18-24 years (30.5%) and 25-34 years (25.6%). Across all other age groups, EGM participation was similar and ranged between 19.6% and 22.6%. Amongst gamblers, EGMs were slightly more popular among the 18-24 years age group, where 41.8% of gamblers played EGMs, compared with 30.5% of the 18-24 years total population (1.37 times higher), compared with the total, where 30.2% of gamblers, and 22.9% of the population played EGMs (1.32 times higher).

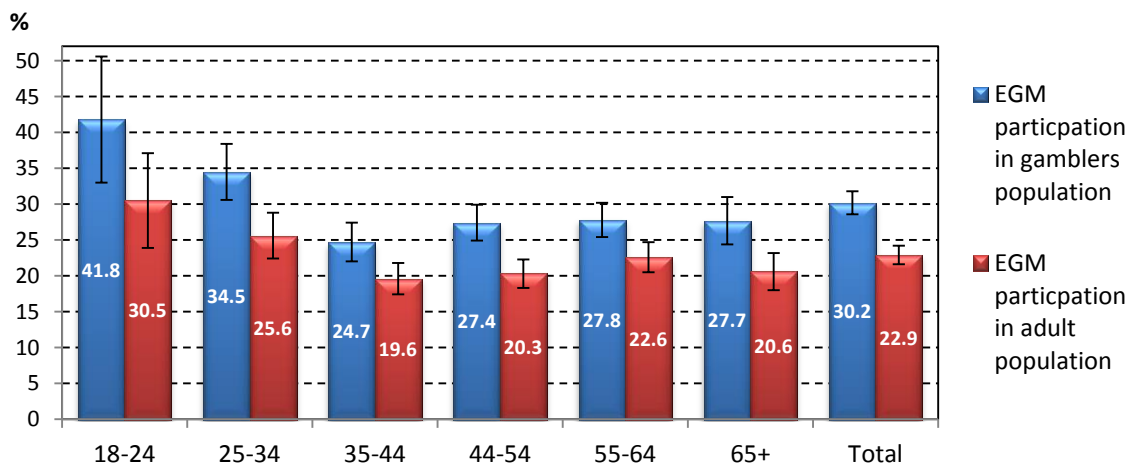


Figure 79: EGM participation by age, gamblers population and NT adult population

Although EGM participation was highest for the 18-24 years age group, the age distribution of EGM players shown in Figure 80 indicates that the majority of EGM players are aged 25-34 years (33.2% for males and 33.5% for females), followed by 35-44 years for males (19.6%) and 44-54 years for females (18%). Although the association between gender and participation was not significant, the percentage of EGM players over the age of 44 years was higher amongst females (43.3%) compared to males (33.9%).

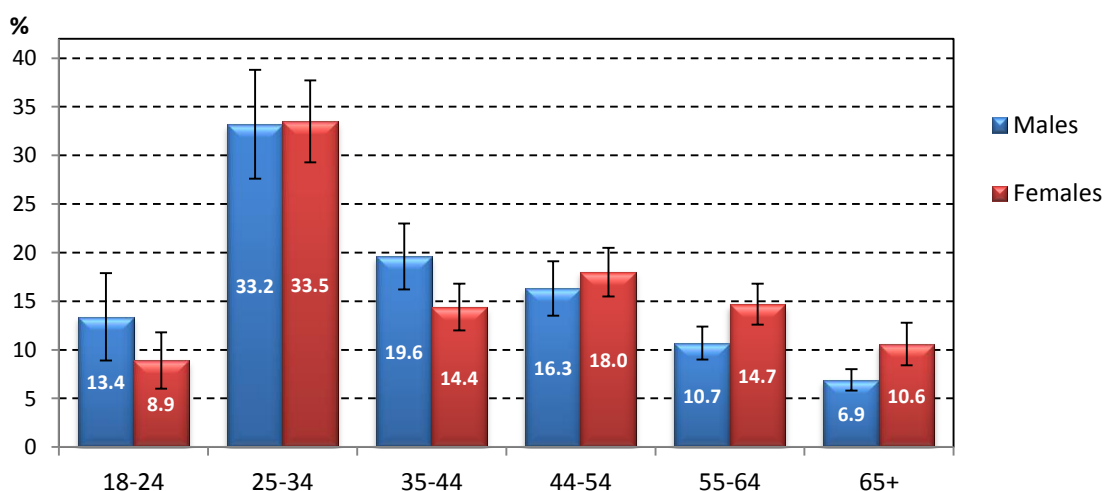


Figure 80: Age distribution of EGM players by gender

9.4 EGM frequency of play

EGM frequency of play provides a more nuanced picture of EGM gamblers than participation in the last year. Research has found as the intensity of EGM play increases, the risks associated with problem gambling also increase (Parke, Parke & Blaszczynski 2016, Young et al. 2006). Figure 81 shows EGM frequency of play for EGM gamblers, all gamblers and in the total population. Most people (82%) who gambled on EGMs did so less than once a month in the year preceding the survey; however, 6% (2,495 people) played weekly and 12% (4,784 people) played one to three times per month. About 4% of the NT adult population (7,300 people) played EGMs at least once per month in the year preceding the survey, and less than 1.5% played them weekly.

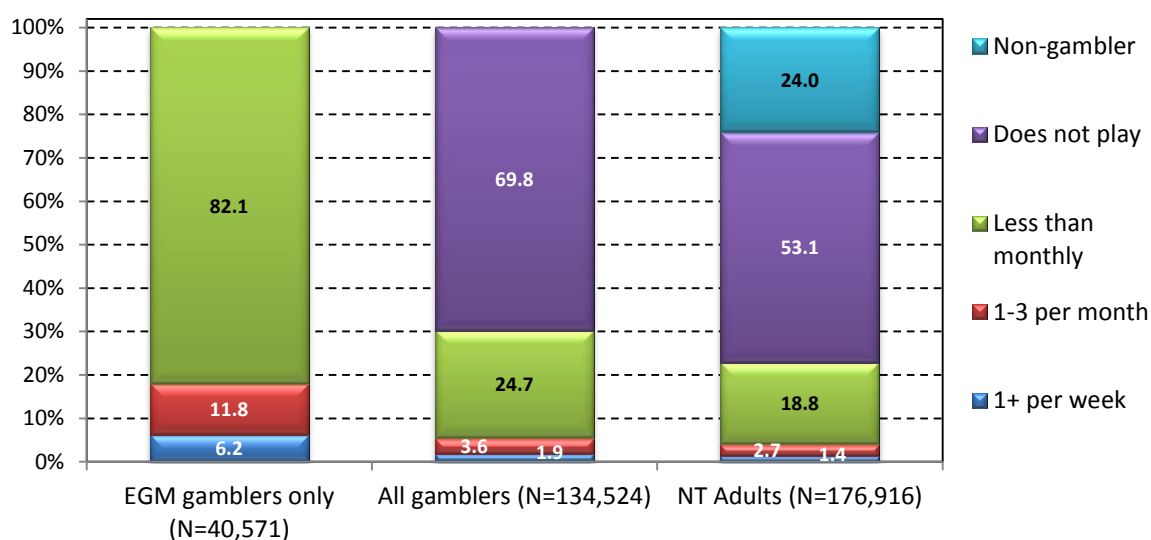


Figure 81: Frequency of EGM play in the EGM gamblers, all gamblers and the NT adult populations

There was a non-significant association between EGM frequency of play and region (Figure 82), with the Rest of the NT (22%) and Regional Towns (19%) having more monthly EGM players than Darwin/Palmerston (12%) and Alice Springs (6%). Darwin/Palmerston (7%) had the highest percentage of weekly EGM players, followed by Rest of NT (6%), Alice Springs (5%), and Regional Towns (2%).

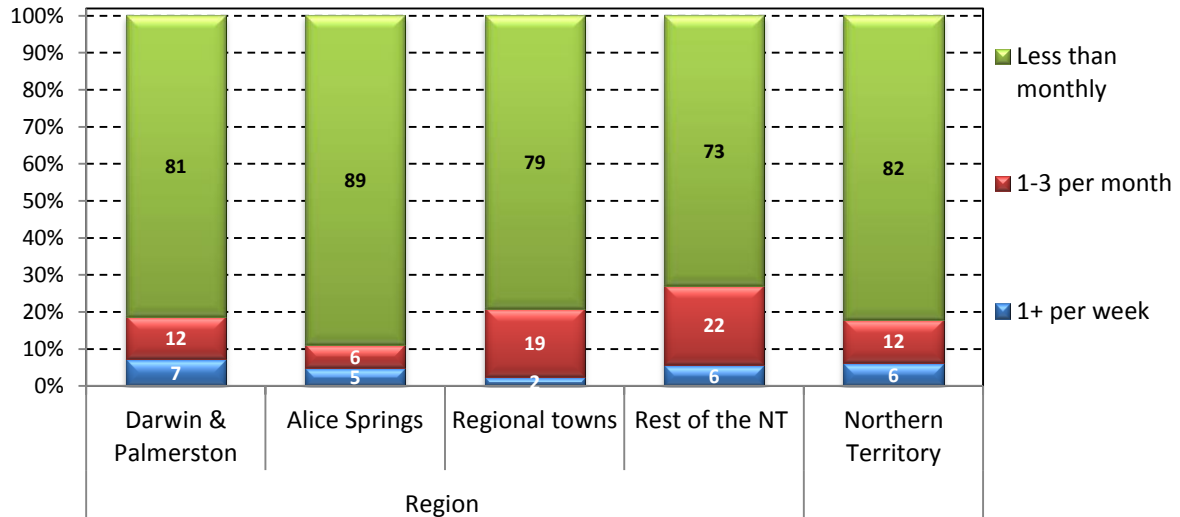


Figure 82: Frequency of EGM play by region, EGM players

There was no significant difference between men and women in EGM frequency of play (Figure 83), though, a slightly higher percentage of men (7%) were weekly players compared with women (5%), and a higher percentage of women were monthly players (14%) compared with men (10%).

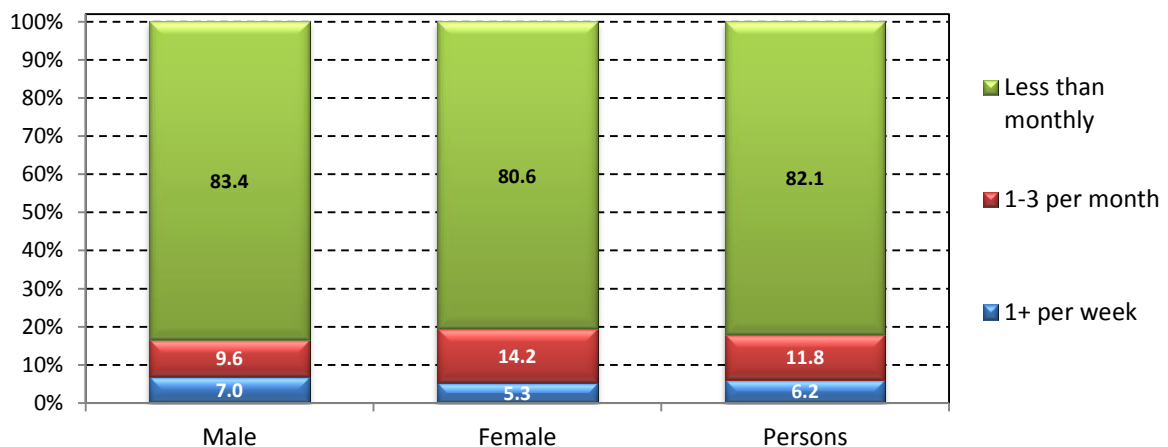


Figure 83: Frequency of EGM play by gender, EGM players

There was a significant association between age and EGM frequency of play, with older age groups more likely to be weekly or monthly EGM players, and those less than 25 years the least likely to be weekly or monthly EGM players (Figure 84).

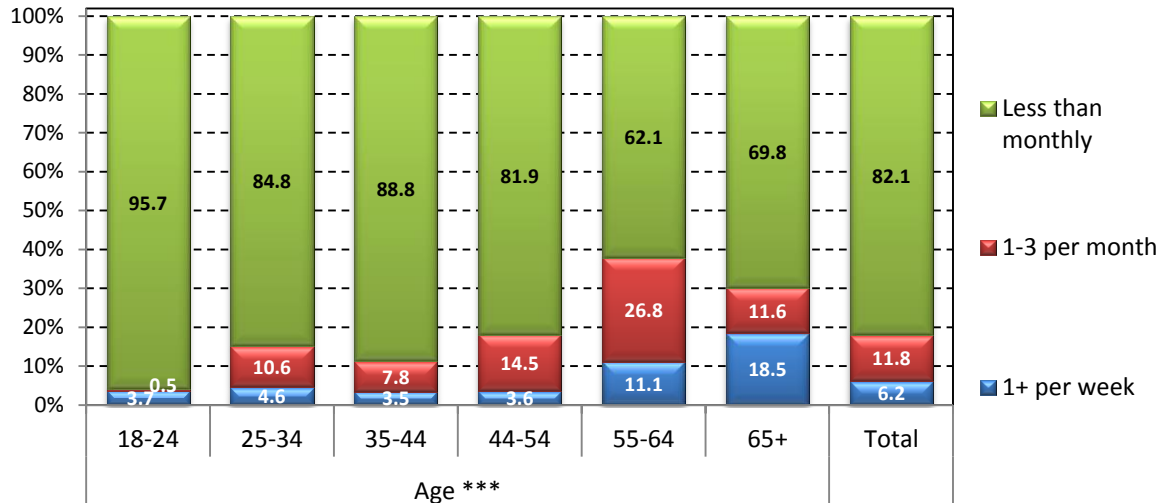


Figure 84: Frequency of EGM play by age, EGM players

Significant association between age and EGM frequency of play: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

9.5 EGM players venue preferences

9.5.1 Venue type for playing EGMs

Table 49 and Figure 85 show the mode and venue type where EGM players gambled by region. The most common venue for playing EGMs was the casinos (56.6%), followed by hotels (40%), clubs (36%) and online (8%). There was large variation across regions in where EGM players gambled, though differences between regions were only significant for playing EGMs at a casino. Regional Towns had the lowest EGM participation at casinos (27%), while Alice Springs (74%) had the highest, and Darwin/Palmerston and the Rest of the NT were intermediate (58.1% and 39.1% respectively). Playing EGMs in clubs was more common in Regional Towns and the Rest of the NT (remote regions), compared with EGM players in Darwin/Palmerston and Alice Springs. Playing EGMs in hotels was most common in Regional Towns (47%) and Darwin/Palmerston (46%), and least common in Alice Springs (19%), and the Rest of NT (36%). Playing EGM style games online was the lowest for Darwin EGM players (5%), and highest for EGM players in Regional Towns and the Rest of the NT at 14%.

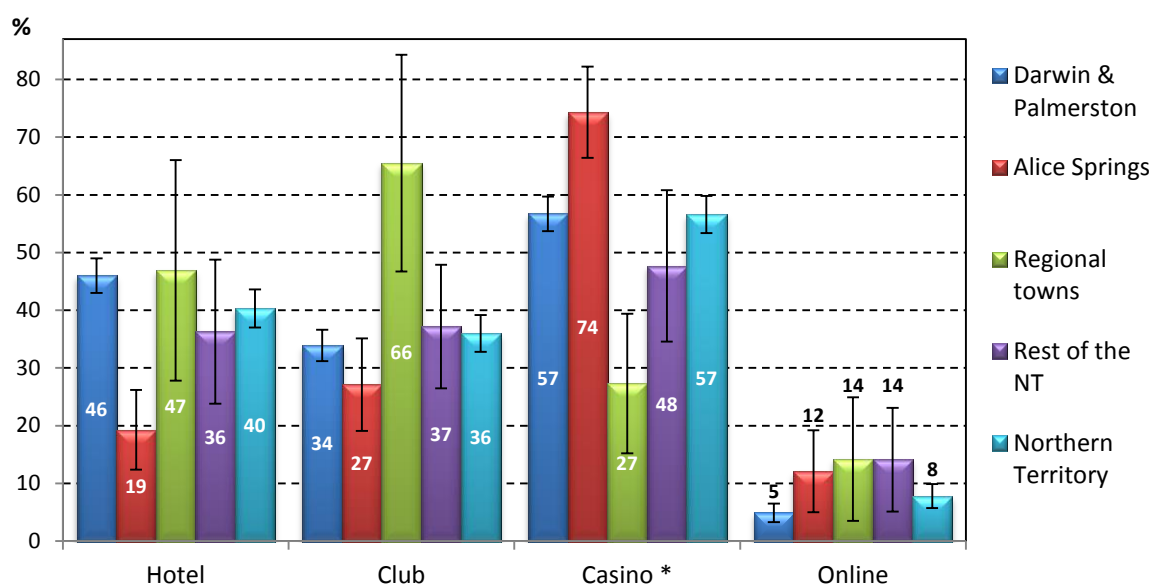


Figure 85: Mode/venue type where played EGMs by region, EGM players

Significant association between regions and venue: *** p < 0.001, ** p < 0.01, * p < 0.05

Table 49: Mode/venue type & number of modes where played EGMs by region, EGM players

	Darwin & Palmerston % (SE)	Alice Springs % (SE)	Regional Towns % (SE)	Rest of the NT % (SE)	Northern Territory % (SE)
Hotel	46.0 (3.0)	19.3 (6.9)	46.9 (19.1)	36.3 (12.5)	40.3 (3.3)
Club	33.9 (2.7)	27.1 (8.0)	65.5 (18.8)	37.2 (10.7)	36.0 (3.2)
Casino *	56.7 (3.0)	74.3 (7.9)	27.3 (12.1)	47.7 (13.1)	56.6 (3.2)
Online	4.9 (1.6)	12.1 (7.1)	14.2 (10.7)	14.1 (9.0)	7.8 (2.1)
Number of betting modes					
One	71.8 (2.8)	76.2 (7.8)	72.3 (12.2)	79.4 (8.1)	73.2 (2.7)
Two	17.9 (2.3)	15.8 (5.8)	14.6 (6.6)	12.2 (5.4)	16.8 (2.1)
3 to 5	10.3 (2.0)	8.0 (5.9)	13.1 (10.7)	8.4 (6.3)	10.0 (2.1)
Total	100.0	100.0	100.0	100.0	100.0
Population playing(N)	26,153	7,879	4,143	2,396	40,571

Note: Percentages will not add up to 100% in top half of table as people play at multiple venues
Significant association between regions and venue: *** p < 0.001, ** p < 0.01, * p < 0.05

Figure 86 shows that amongst EGM players, casinos were the most popular place to play EGMs in the last year for both men (54.7%) and women (58.7%), followed by clubs for women (39.2%) and pubs for men (43%). There were no significant differences between men and women in the mode/venue type where they played EGMs. A higher percentage of women (10%) played EGMs online in the last year compared with men (5.7%), though this was not statistically significant.

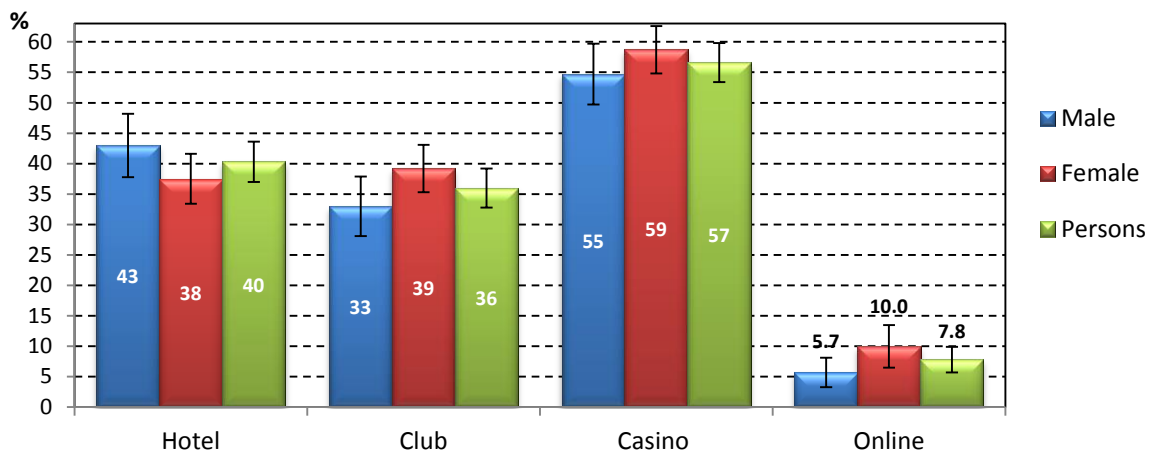


Figure 86: Mode/venue type where played EGMs by gender, EGM players

The number of betting modes that men and women used to play EGMs was also not statistically different (Table 50), with most EGM players (73.2%) playing in one type of venue or mode only, though a slightly higher percentage of women gambled on two or more modes/venues (29.1% of women, cf. 24.8% of men).

Table 50: Mode/venue type & number of modes where played EGMs by gender, EGM players

	Males %	Females %	Persons %
Hotel	43.0 (5.2)	37.5 (4.1)	40.3 (3.3)
Club	33.0 (4.9)	39.2 (3.9)	36.0 (3.2)
Casinos	54.7 (5.0)	58.7 (3.9)	56.6 (3.2)
Online	5.7 (2.4)	10.0 (3.5)	7.8 (2.1)
Other	0.2 (0.1)	0.3 (0.2)	0.3 (0.1)
Number of betting modes			
One	75.2 (3.6)	71.0 (4.0)	73.2 (2.7)
Two	16.0 (3.0)	17.7 (2.8)	16.8 (2.1)
3 to 5	8.8 (2.2)	11.4 (3.5)	10.0 (2.1)
Total	100.0	100.0	100.0
Population playing EGMs (N)	20,879	19,692	40,571

Figure 87 graphs the association between age and EGM venue type and mode of play. The association between age and playing EGMs in a hotel was significant ($p < 0.01$), while for clubs it was marginally non-significant ($p = 0.056$). There is a clear downward trend in EGM play at hotels as people become older, with 74% of 18-24 years playing EGMs in hotels, and only 11% of 65 years and over playing EGMs in hotels. The association between age and playing in clubs was the reverse of that seen in hotels. That is, 18-24 years EGM players had the lowest participation in clubs, with playing in EGMs in clubs increasing with age and peaking for the 55-64 years age group (55%), and then declining to 43% for players 65 years and over. Younger people were more likely to play EGMs online.

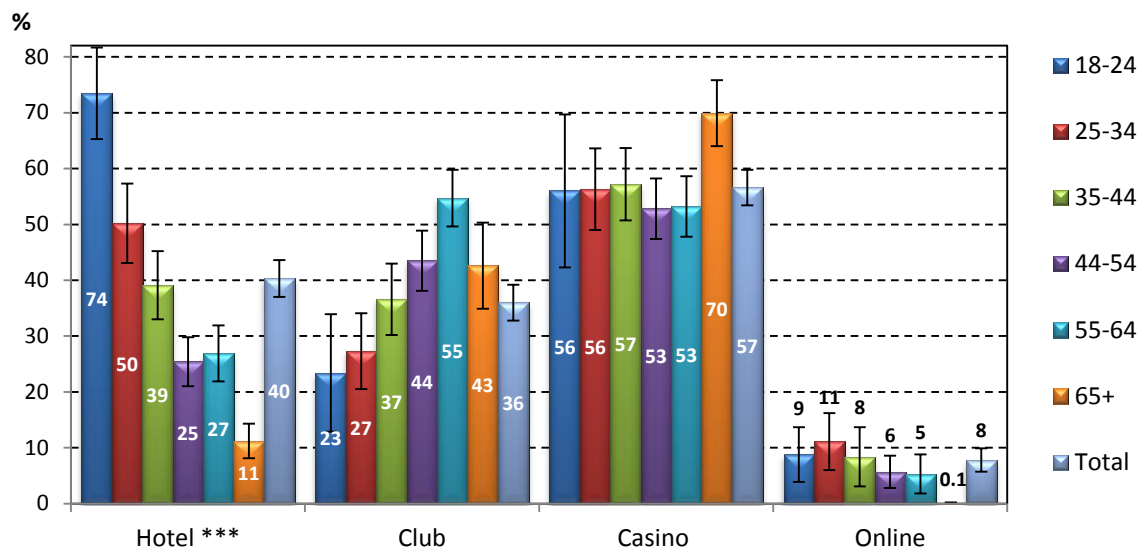


Figure 87: Mode/venue type where played EGMs by age, EGM players

Significant association between where plays EGMs and age: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

The association between age and number of modes of EGM play shown in Table 51 was not significant, though there was a slight trend present for younger players to engage in more activities.

Table 51: Mode/venue type & number of modes where played EGMs by age, EGM players

	18-24 % (SE)	25-34 % (SE)	35-44 % (SE)	44-54 % (SE)	55-64 % (SE)	65+ % (SE)	Total % (SE)
Hotel ***	73.5 (8.2)	50.2 (7.1)	39.1 (6.1)	25.4 (4.4)	26.9 (5)	11.2 (3.1)	40.3 (3.3)
Club	23.4 (10.5)	27.3 (6.8)	36.6 (6.4)	43.5 (5.4)	54.7 (5.1)	42.6 (7.7)	36.0 (3.2)
Casino	56.0 (13.7)	56.3 (7.3)	57.2 (6.5)	52.8 (5.4)	53.2 (5.4)	69.9 (5.9)	56.6 (3.2)
Online	8.8 (4.9)	11.1 (5.1)	8.4 (5.3)	5.7 (2.9)	5.3 (3.5)	0.1 (0.1)	7.8 (2.1)
Other	-	-	1.0 (0.6)	-	0.6 (0.4)	0.3 (0.3)	0.3 (0.1)
Number of betting modes							
One	64.6 (11.8)	73.5 (5.6)	70.5 (6.4)	78.7 (3.9)	72.8 (5.0)	77.7 (6.6)	73.2 (2.7)
Two	15.0 (7.2)	14.6 (3.8)	19.7 (5.8)	17.3 (3.6)	16.9 (3.8)	20.8 (6.6)	16.8 (2.1)
3 to 5	20.4 (10.3)	11.9 (4.3)	9.8 (3.9)	4.0 (1.6)	10.3 (4.0)	1.5 (0.8)	10.0 (2.1)
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Population playing EGMs (N)							
	4,548	13,521	6,922	6,934	5,120	3,525	40,571

Significant association between where plays EGMs and age: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

9.5.2 Regular venue where plays EGMs

Table 52 shows that most EGM players in the NT (84.9%) had a regular venue where they played EGMs, and this did not vary significantly across regions. However, EGM players from Regional Towns had the highest percentage playing at regular venue (88%), while EGM players in the Rest of the NT had the lowest percentage of players having a regular venue (82.4%). Due to small numbers of people playing online, these estimates had very high standard errors limiting comparison between regions.

Table 52: Has a regular venue where plays EGMs by region, EGM players

	Darwin & Palmerston	Alice Springs	Regional Towns	Rest of the NT	Northern Territory
Regular	84.3 (2.2)	86.0 (6.0)	88.0 (5.1)	82.4 (8.1)	84.9 (2.0)
No regular	10.6 (2.0)	7.6 (4.6)	9.4 (4.6)	7.0 (3.2)	9.7 (1.7)
Usually play online	0.8 (0.6)	4.6 (4.5)	0.7 (0.7)	7.2 (6.9)	1.9 (1.0)
Don't know	4.2 (0.9)	1.8 (0.8)	1.9 (1.3)	3.4 (2.4)	3.4 (0.6)
Total	100.0	100.0	100.0	100.0	100.0
Population (N)	26,153	7,879	4,143	2,396	40,571

Notes: Caution advised interpreting some estimates in this table due to large relative standard errors

Table 53 shows the percentage of male and female EGM players who had a regular venue where they gambled. Females (87%) were more likely than males (83%) to have a regular venue, though this difference was not statistically significant.

Table 53: Has a regular venue where plays EGMs by gender, EGM players

	Male % (SE)	Female % (SE)	Persons % (SE)
Regular venue	83.0 (3.3)	87.0 (2.2)	84.9 (2.0)
No regular venue	11.0 (2.7)	8.3 (1.8)	9.7 (1.7)
Usually play online	2.5 (1.8)	1.3 (0.9)	1.9 (1.0)
Don't know	3.5 (1.0)	3.4 (0.8)	3.4 (0.6)
Total	100.0	100.0	100.0
Population playing EGMs (N)	20,879	19,692	40,571

Notes: Caution advised interpreting some estimates in this table due to large relative standard errors

Figure 88 shows that younger and older players were more likely to have a regular venue where they played EGMs, with this association being marginally non-significant ($p=0.051$).

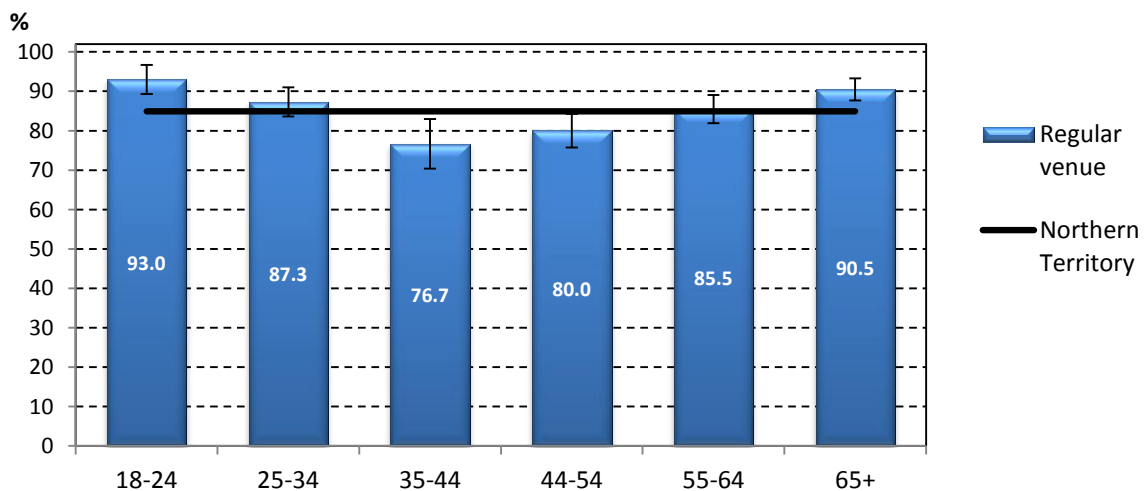


Figure 88: Regular EGM venue by age, EGM players

Table 54 presents the data from the previous figure, but includes the additional categories of no regular venue, plays online and don't know/not sure. Across the NT less than 2% of EGM players played online. Across age groups, online play was most popular amongst EGM players aged 35 to 44 years, though this estimate had high standard errors relative to the estimate and was not significant.

Table 54: Preferred EGM venue/mode of play by age, EGM players

	18-24 % (SE)	25-34 % (SE)	35-44 % (SE)	44-54 % (SE)	55-64 % (SE)	65+ % (SE)	Total % (SE)
Regular venue	93.0 (3.7)	87.3 (3.7)	76.7 (6.3)	80.0 (4.3)	85.5 (3.6)	90.5 (2.9)	84.9 (2.0)
No regular venue	6.3 (3.5)	9.4 (3.5)	12.1 (5.0)	12.7 (3.4)	10.1 (2.9)	4.3 (2.3)	9.7 (1.7)
Usually play online	0.0 (0.0)	0.2 (0.2)	7.8 (5.3)	3.1 (2.5)	0.0 (0.0)	0.1 (0.1)	1.9 (1.0)
Don't know/not sure	0.7 (0.8)	3.2 (1.2)	3.5 (1.2)	4.2 (1.7)	4.4 (2.2)	5.1 (1.6)	3.4 (0.6)
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
EGM Population (N)	4,548	13,521	6,922	6,934	5,120	3,525	40,571

The next five figures list the venues that were most commonly chosen as an EGM player's regular venue, firstly for the NT and then for each of the four regions. The two casinos (Darwin and Alice springs) were the most commonly selected regular venues for EGM players across the NT (Figure 89). Five of the top six regular venues were located in Darwin and Palmerston.

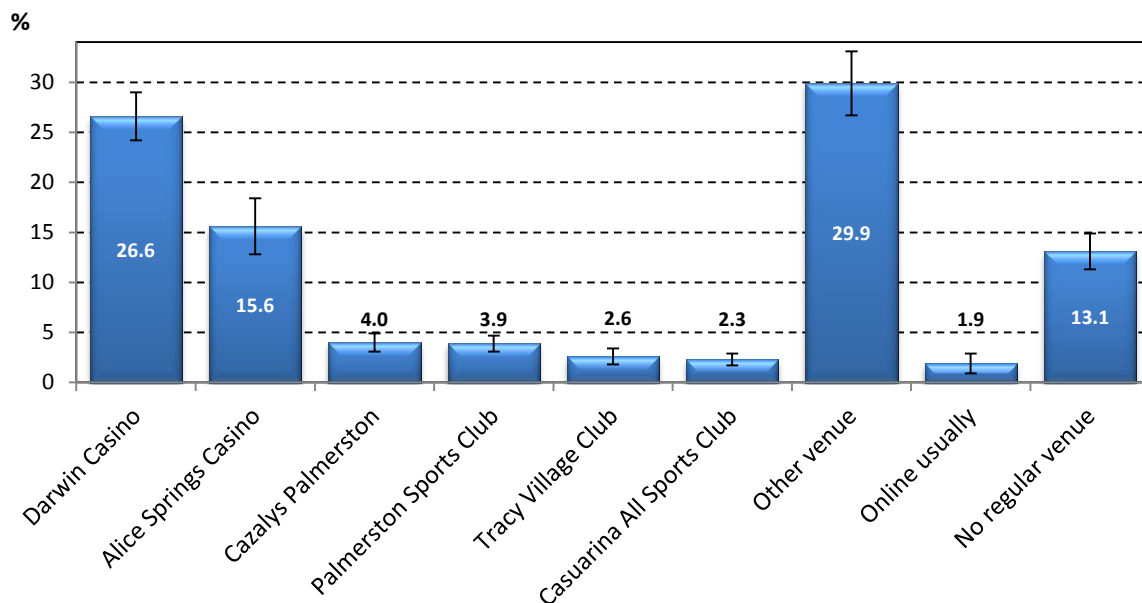


Figure 89: Preferred regular venue for playing EGMs for the NT, EGM players

Figure 90 shows preferred regular venues for Darwin/Palmerston EGM gamblers. Darwin casino (37%) was the most common regular venue, followed by two large clubs located in Palmerston (Cazalys and Palmerston Sports Club), and then the two largest clubs in the Darwin region (Tracy Village and Casuarina Club). Monsoons, Hibiscus Tavern and Parap Hotel were the only hotels in the top nine regular venues.

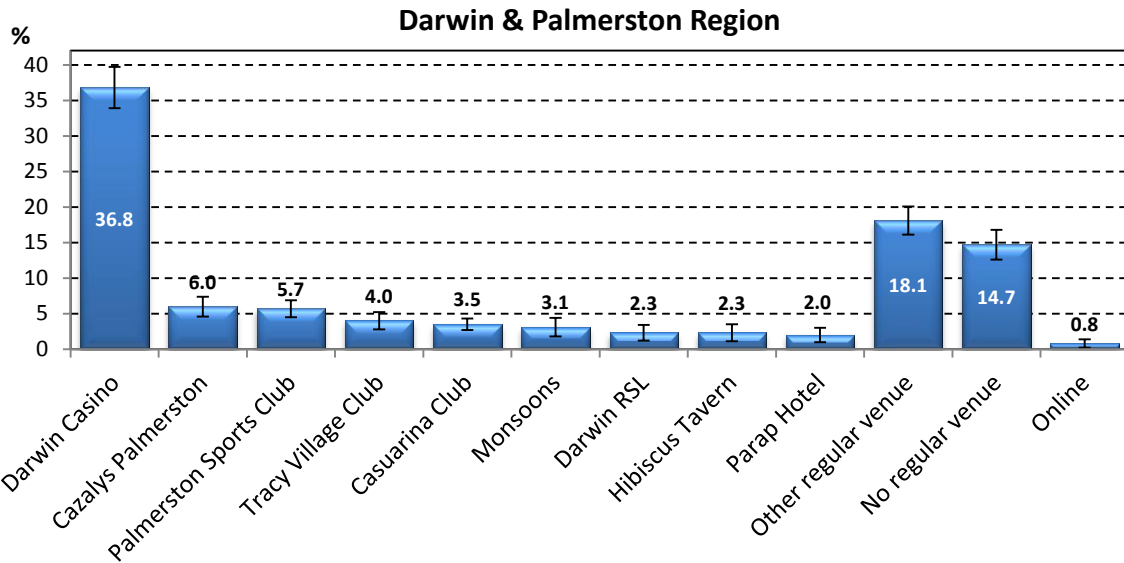


Figure 90: Preferred regular venue for playing EGMs, Darwin and Palmerston EGM players

For Alice Springs EGM players, the Alice Springs Casino was the most endorsed regular venue, followed by the Gillen Club, Club Eastside, Alice Springs Memorial Club, and the Gapview Resort Hotel (Figure 91).

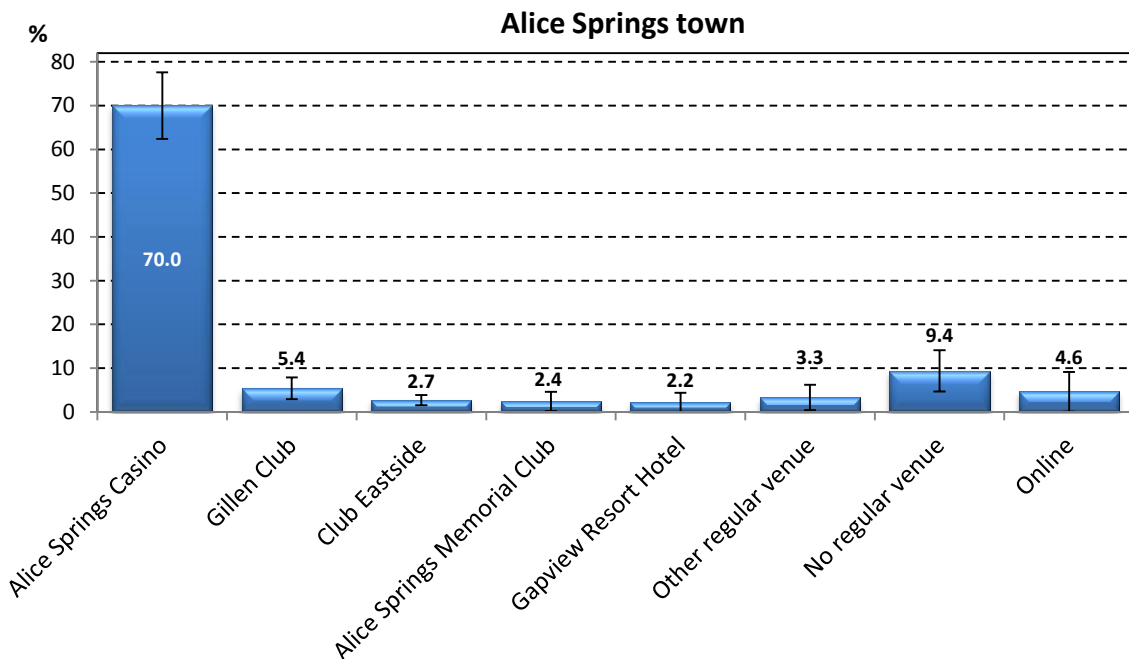


Figure 91: Preferred regular venue for playing EGMs, Alice Springs EGM players

Three clubs in Katherine were the most common regular venues for EGM players from Regional Towns, with this likely reflecting that Katherine is the largest of the three towns making up this regional grouping (Figure 92). The pulling power of the two NT casinos was again apparent, with both Darwin and Alice Springs casinos making the top five regular EGM venues for people living in Regional Towns.

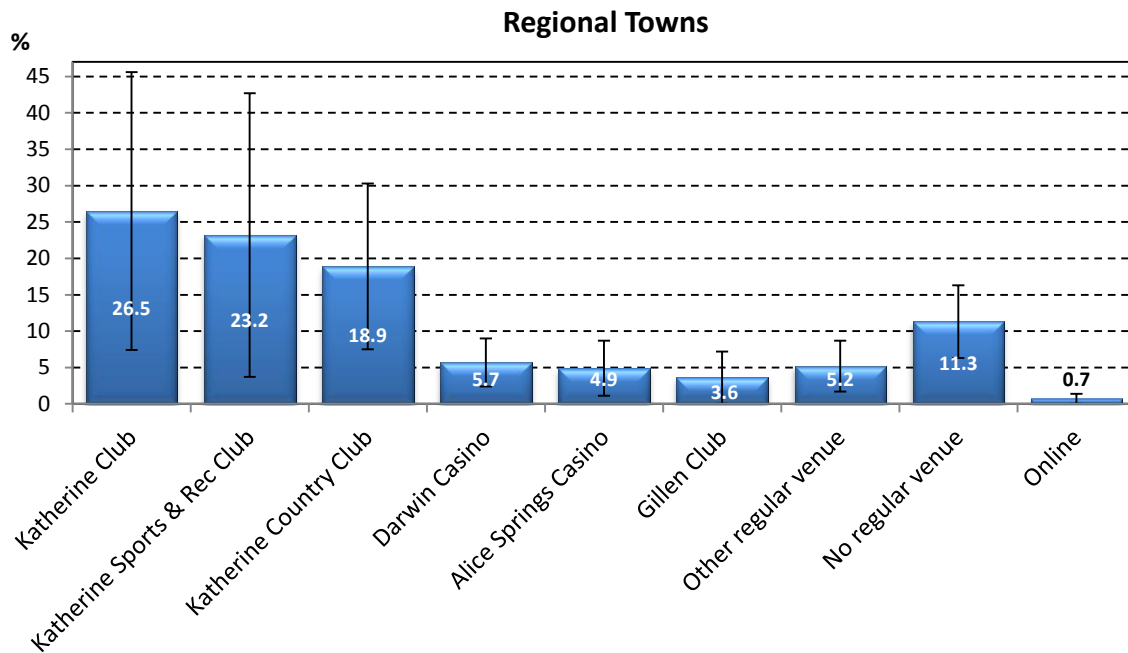


Figure 92: Preferred regular venue for playing EGMs, Regional Towns EGM players

Notes: Caution advised interpreting estimates in this figure due to large relative standard errors

The Darwin Casino was the most endorsed regular venue for EGM players living in the Rest of the NT, followed by Alyangula Recreation Club, the Alice Springs Casino, Jabiru Sports and Social Club, the Arnhem Club and Cazalys Palmerston (Figure 93).

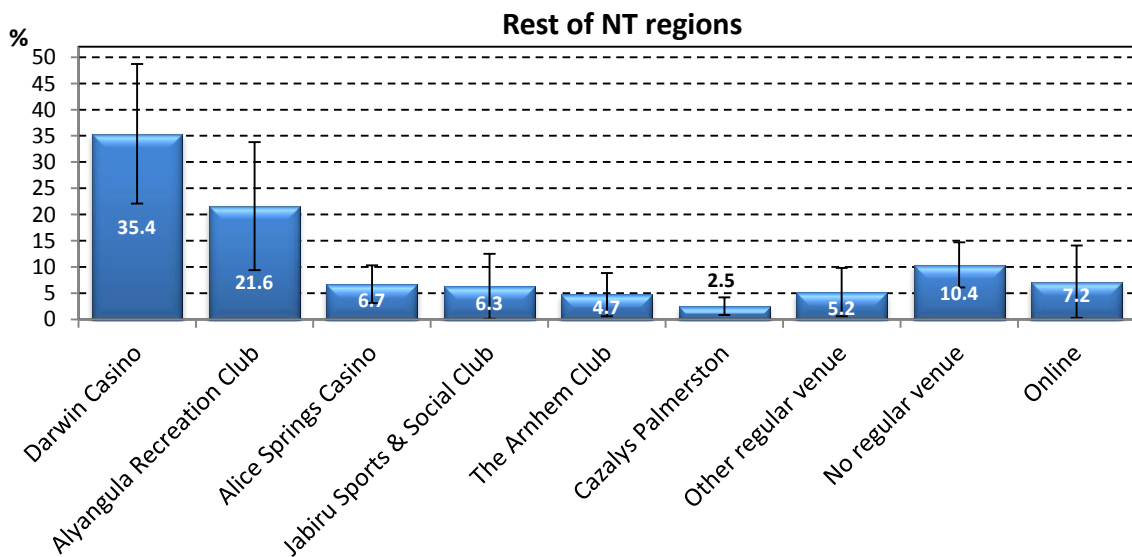


Figure 93: Preferred regular venue for playing EGMs, Rest of NT EGM players

Notes: Caution advised interpreting estimates in this figure due to large relative standard errors

9.5.3 Distance to regular EGM venue

Figure 94 shows the relationship between region and distance from home to EGM players preferred venue. Unsurprisingly, there was variation between regions in the distance respondents lived from their regular EGM venue; however, this association

was marginally non-significant ($p=0.054$). For the NT, most people (36%) who had a regular EGM venue lived between 1 and 5 km away, while 31% of people lived 10 km or more. This pattern was similar in Alice Springs, but not for the Rest of the NT and Regional Towns, where most people with a regular EGM venue lived 10 km or more away.

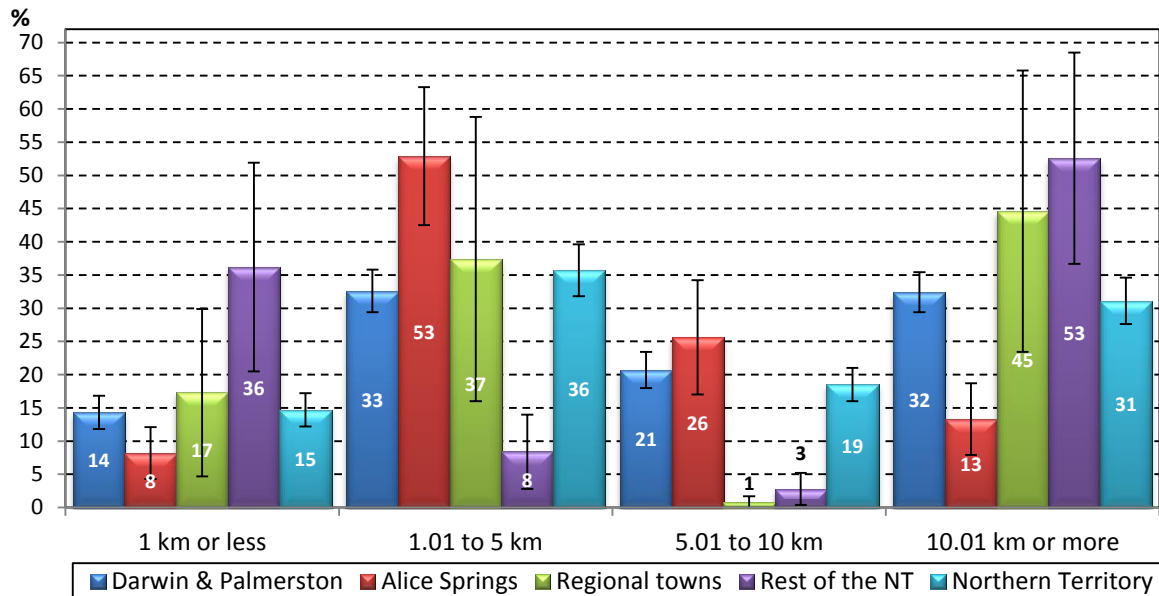


Figure 94: Distance from home to regular EGM venue by region, EGM players with regular venue

Notes: Caution advised interpreting some estimates in this figure due to large relative standard errors

There was no significant difference between men and women in how far they lived from their regular EGM venue (Figure 95), with most men (38%) and women (33%) living 1 to 5 km away, followed by 10 km or more away (35% and 28% respectively).

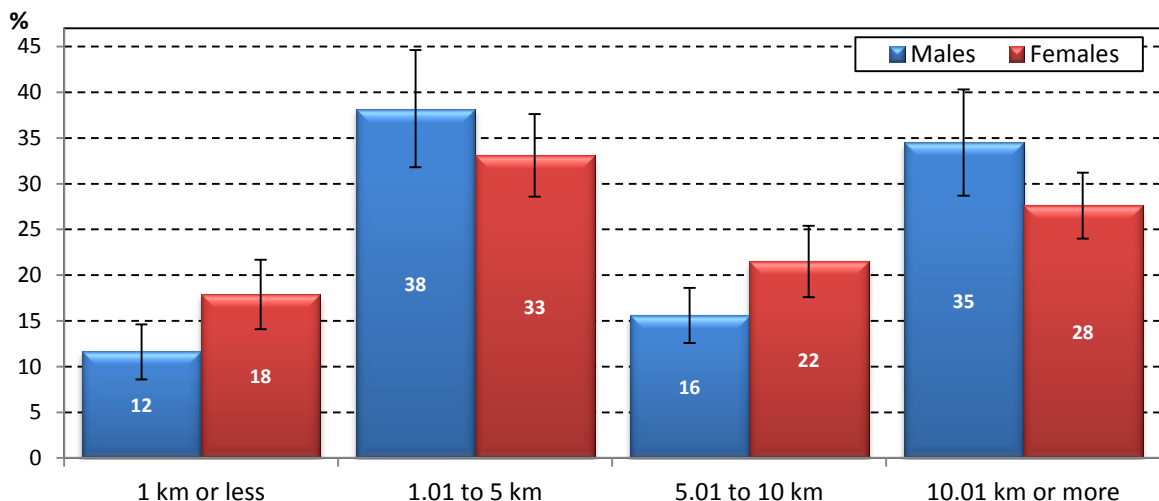


Figure 95: Distance from home to regular EGM venue by gender, EGM players with regular venue

Figure 96 shows that there was a non-significant association between distance to regular EGM venue and age.

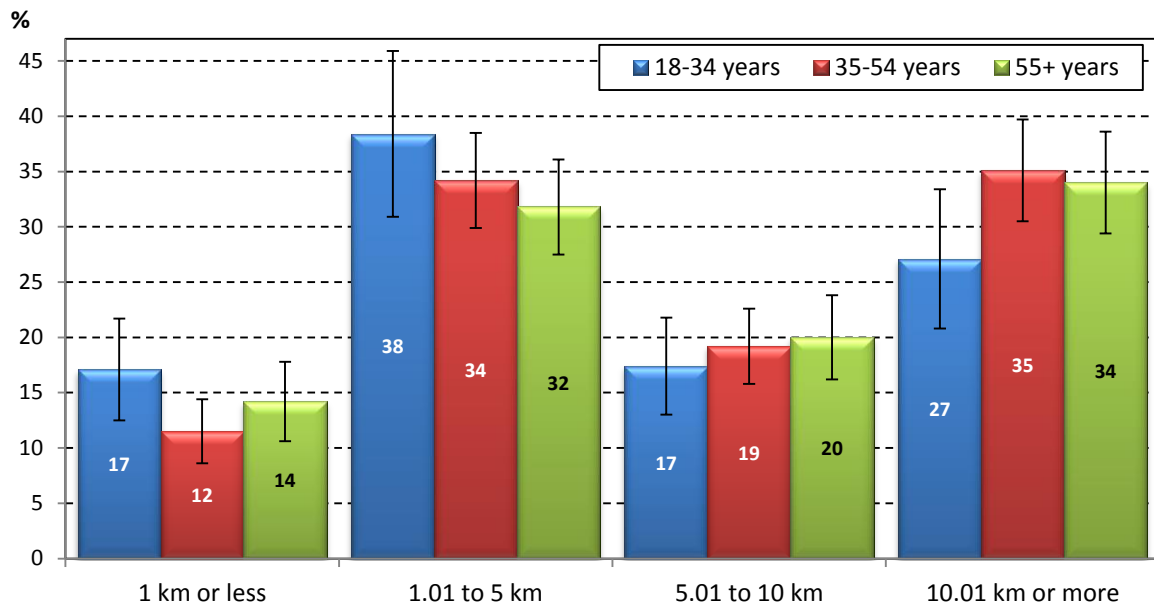


Figure 96: Distance from home to regular EGM venue by age, EGM players with regular venue

9.6 EGMs as highest spend gambling activity

9.6.1 Characteristics of gamblers nominating EGMs as highest spend

Thirteen percent of gamblers across the NT nominated EGMs as the gambling activity they spent the most money on in the year before the survey (Figure 97), while 42% of EGM gamblers nominated EGMs as their highest spending activity. Across regions, there was variation in nominating EGMs as the highest spend activity, but this association was not statistically significant. EGM gamblers living in Regional Towns (18%) and Alice Springs (16%) had a higher percentage of gamblers nominating EGMs as their highest spend activity, compared with Darwin/Palmerston (12%) and the Rest of the NT (9%).

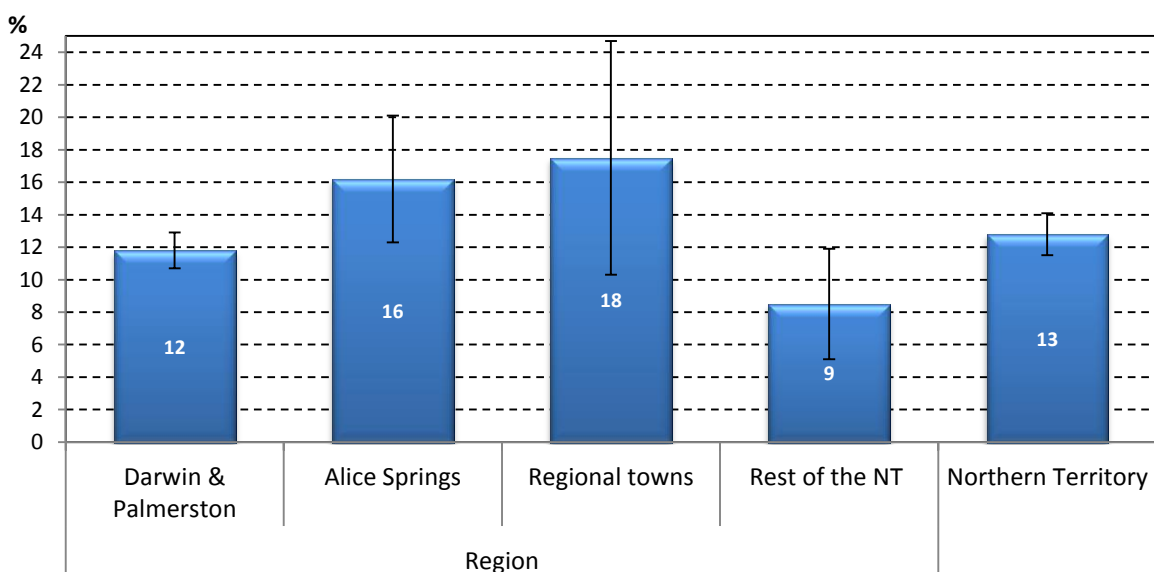


Figure 97: EGMs as highest spend gambling activity by region, All gamblers

Notes: Caution advised interpreting some estimates in this figure due to large relative standard errors

Figure 98 shows that women (15%) were more likely to nominate EGMs as their highest spend gambling activity compared with men (10%), though this association was marginally non-significant ($p=0.054$).

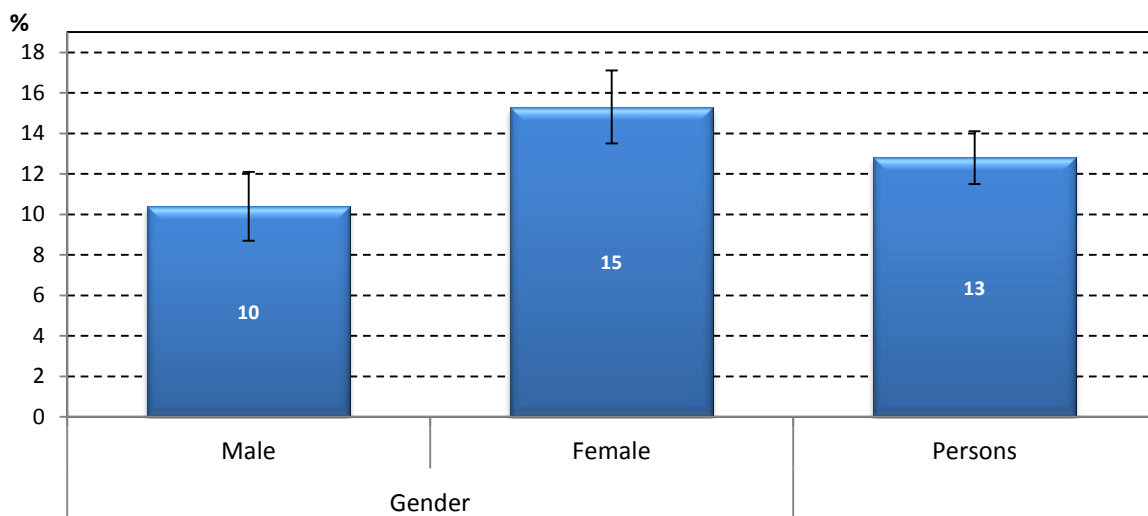


Figure 98: EGMs as highest spend gambling activity by gender, All gamblers

There was a significant association between age and nominating EGMs as the gamblers highest spend activity (Figure 99). Gamblers aged 35 to 54 years were less likely to nominate EGMs as their highest spend activity, compared with younger and older gamblers.

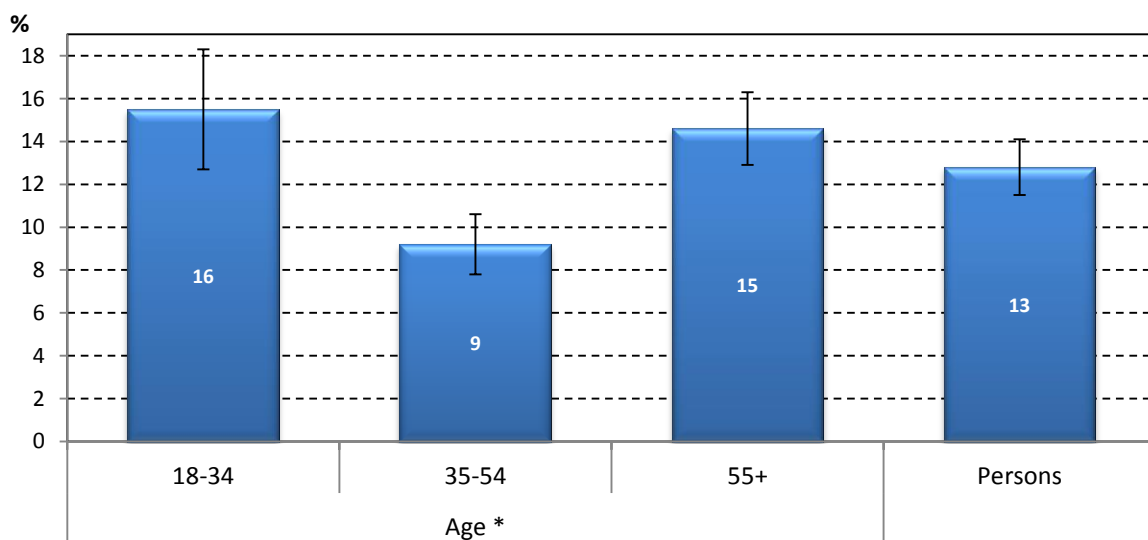


Figure 99: EGMs as highest spend gambling activity by age, All gamblers

Significant association between EGM highest spend and age: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

There was a significant association between frequency of EGM gambling and nominating EGMs as the gamblers highest spend activity (Figure 100). Across all EGM gamblers, 42% nominated EGMs as their highest spend activity. Weekly (62%) and monthly (72%) EGM gamblers were more likely than less than monthly (37%) EGM gamblers to nominate EGMs as their highest spend activity.

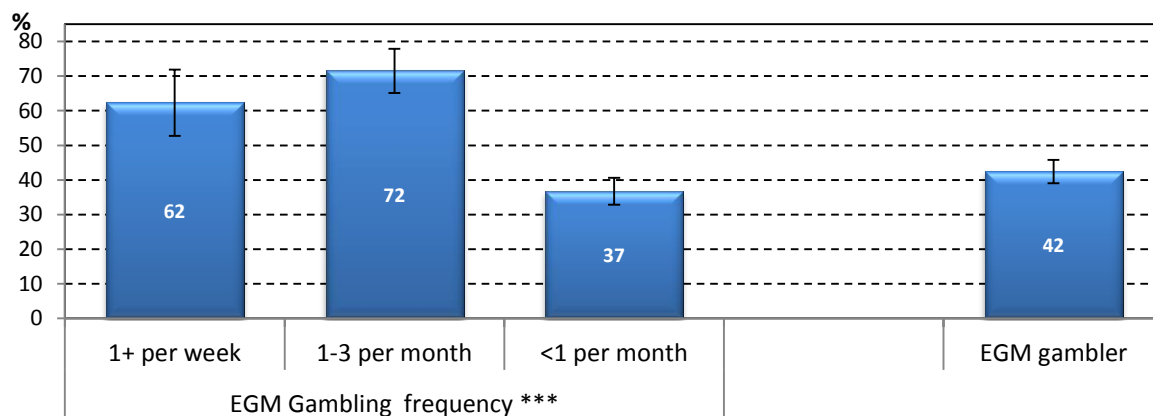


Figure 100: EGMs as highest spend gambling activity by EGM frequency of play, EGM gamblers

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

Figure 101 graphs the distribution of gamblers highest spend activity by whether they were an EGM gambler or not. There was a significant difference between EGM gamblers and non-EGM gamblers in the distribution of their highest spend activity. EGM gamblers were statistically less likely than non-EGM gamblers to have a highest spend activity for lotteries (20% cf. 40%), instant scratch tickets (0.9% cf. 3.2%), raffles (4% cf. 25%), and informal private games (0.1% cf. 1.2%).

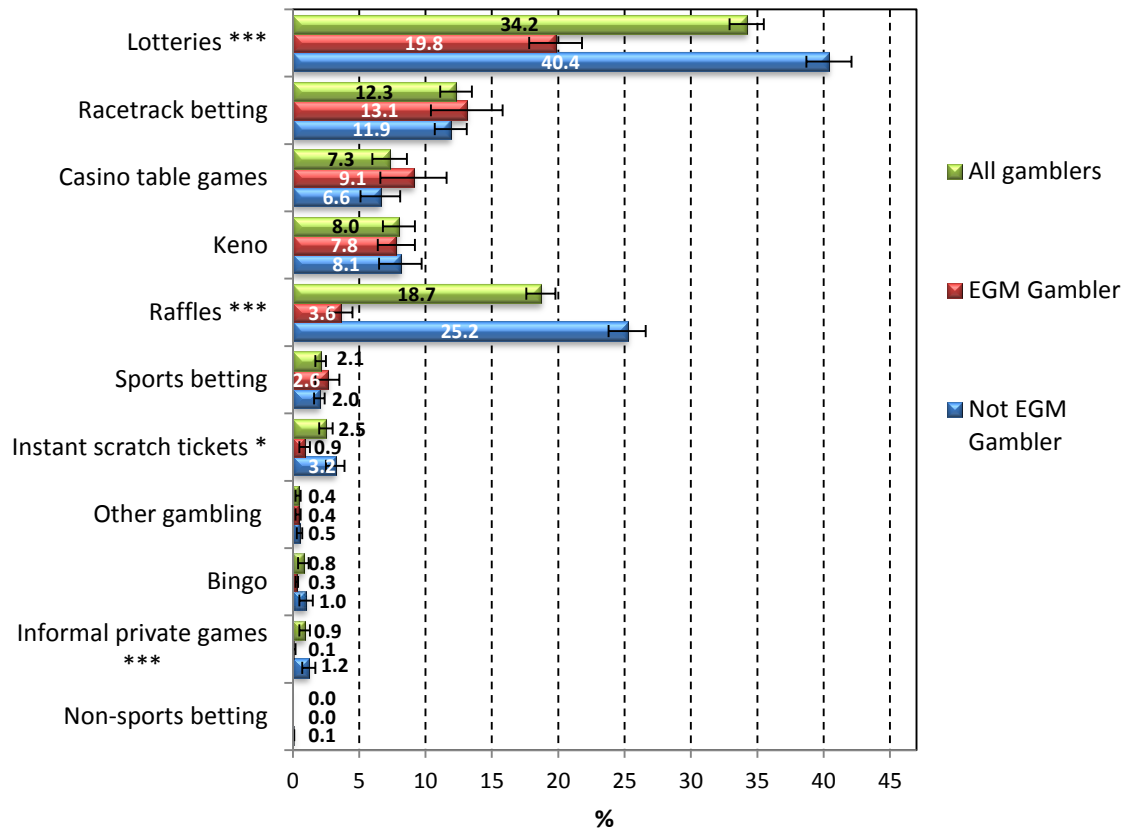


Figure 101: Distribution of highest spend activity of whether gambles on EGMs, EGM gamblers whose highest spend was not EGMs

Significant association between EGM player & highest spend activity: *** p<0.001, ** p<0.01, * p<0.05

9.6.2 Weekly expenditure for EGM highest spend gambling activity

Table 55 shows the distribution of EGM weekly expenditure quartiles and the median by region. There was significant variation between regions, with Darwin/Palmerston most closely resembling the NT expenditure quartiles distribution. The Rest of the NT stands out, in having the highest median EGM expenditure of \$34.62, compared with other regions ranging between \$2.88 and \$4.81.

Table 55: EGM weekly expenditure quartiles and median EGM expenditure (IQR) by region, gamblers whose highest spend activity was EGMs

	Region ***				
	Darwin & Palmerston % (SE)	Alice Springs % (SE)	Regional Towns % (SE)	Rest of NT % (SE)	Northern Territory % (SE)
1st Quartile: < \$1.74	29.8 (4.7)	14.8 (6.3)	9.3 (6.5)	10.2 (7.4)	22.5 (3.6)
2nd Quartile: \$1.74-\$4.62	21.0 (4.1)	60.6 (10.3)	1.6 (1.2)	10.4 (5.4)	26.3 (4.4)
3rd Quartile: \$4.63-\$19.24	23.4 (4.1)	6.7 (4.9)	79.8 (11.8)	2.7 (2.0)	26.0 (5.5)
4th Quartile: >\$19.24	25.9 (4.1)	18.0 (7.5)	9.3 (7.4)	76.7 (12.2)	25.2 (3.9)
Median weekly spend (IQR) ¹	\$4.62 (0.96-20.77)	\$2.88 (1.92-4.62)	\$4.81 (4.81-11.54)	\$34.62 (27.69-46.15)	\$4.81 (1.92-20.00)
Population (N)	10,017	3,734	2,313	1,122	17,185

Significant association between region and EGM spend: *** p < 0.001, ** p < 0.01, * p < 0.05

¹ IQR = Inter-quartile range

Darwin/Palmerston were over-represented in the lowest spend quartile of EGM highest spend gamblers (Figure 102). The high median in the Rest of NT is also reflected in the 77% of EGM highest spend gamblers in this region being in the top quartile of EGM weekly expenditure. Regional Towns were over-represented in the 3rd quartile of EGM weekly gambling expenditure, and under-represented in all other quartiles. Alice Springs EGM highest spend gamblers were over-represented in the 2nd quartile (61%).

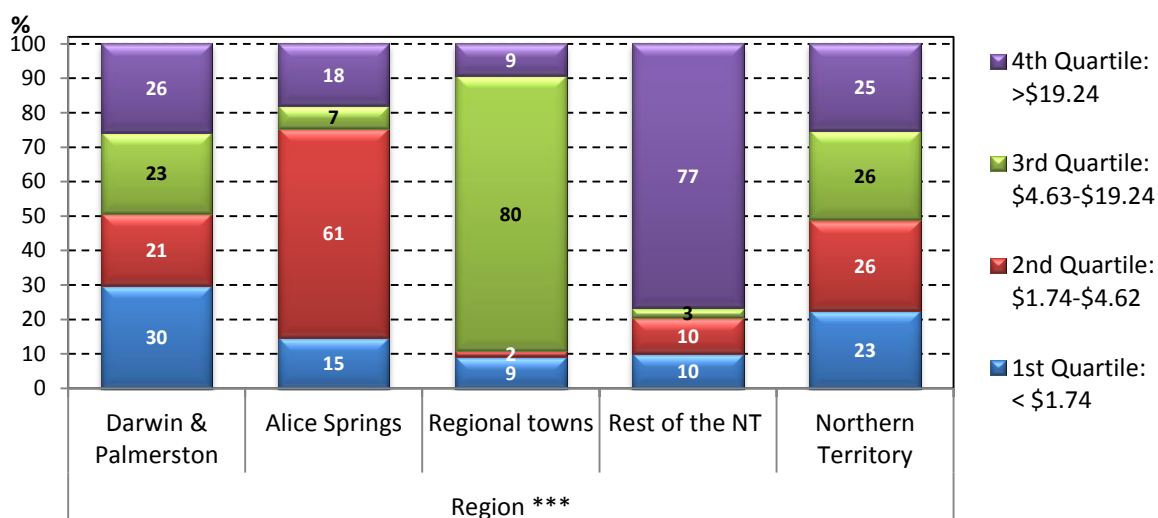


Figure 102: EGM weekly expenditure quartiles by region, gamblers whose highest spend activity was EGMs

Significant association between region and EGM spend: *** p < 0.001, ** p < 0.01, * p < 0.05

The association between gender and EGM weekly expenditure quartiles was not significant (Table 56). The median EGM weekly spend for men was the same as the overall median at \$4.81, while women's median spend was slightly lower at \$4.61.

Table 56: EGM weekly expenditure quartiles and median EGM expenditure (IQR) by gender, gamblers whose highest spend activity was EGMs

	Gender		Persons % (SE)
	Male % (SE)	Female % (SE)	
1st Quartile: < \$1.74	28.2 (7.0)	18.2 (3.9)	22.5 (3.6)
2nd Quartile: \$1.74-\$4.62	18.7 (6.5)	32.0 (5.8)	26.3 (4.4)
3rd Quartile: \$4.63-\$19.24	25.8 (10.2)	26.1 (5.8)	26.0 (5.5)
4th Quartile: >\$19.24	27.3 (7.0)	23.7 (4.5)	25.2 (3.9)
Median weekly spend (IQR)	\$4.81 (1.35-23.08)	\$4.62 (1.92-19.23)	\$4.81 (1.92-20.00)
Population (N)	7,326	9,859	17,185

Figure 103 shows the distribution of EGM highest spend gamblers weekly expenditure quartiles by gender. There was no statistical difference between men and women, though men were slightly under-represented in the 3rd quartile, and women were slightly over-represented in this quartile, and under-represented in the lowest spend quartile.

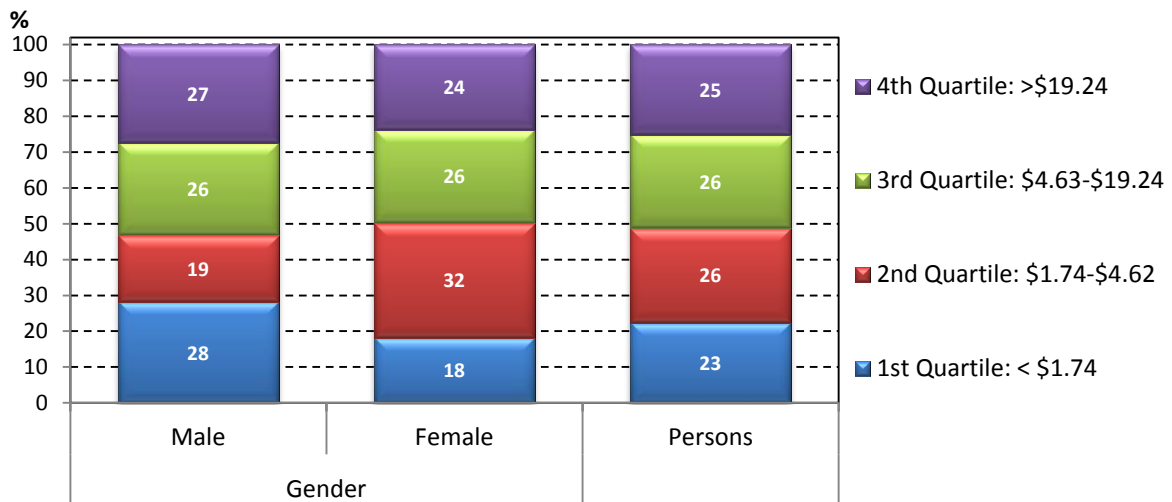


Figure 103: EGM weekly expenditure quartiles by gender, gamblers whose highest spend activity was EGMs

Table 57 shows the distribution of weekly EGM expenditure by age and the median spend for each age group. There were significant differences across age groups in weekly EGM spend, with 18-34 years having the lowest weekly median spend at \$3.85, followed by 35-54 years at \$4.81 and then gamblers 55 years and over at \$13.85.

Table 57: EGM weekly expenditure quartiles and median EGM expenditure (IQR) by age, gamblers whose highest spend activity was EGMs

	Age *			Persons % (SE)
	18-34 years % (SE)	35-54 years % (SE)	55+ years % (SE)	
1st Quartile: < \$1.74	23.4 (6.7)	27.0 (6.6)	16.0 (3.3)	22.5 (3.6)
2nd Quartile: \$1.74-\$4.62	37.1 (8.3)	20.8 (7.5)	13.8 (4.5)	26.3 (4.4)
3rd Quartile: \$4.63-\$19.24	28.7 (10.5)	19.6 (6.2)	28.3 (6.4)	26.0 (5.5)
4th Quartile: >\$19.24	10.9 (4.6)	32.6 (8.1)	41.9 (6.6)	25.2 (3.9)
Median weekly spend	\$3.85	\$4.81	\$13.85	\$4.81
(IQR)	(1.92-6.92)	(1.35-27.69)	(2.40-46.15)	(1.92-20)
Population (N)	7,751	4,891	4,543	17,185

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

Figure 104 graphs the significant association between EGM weekly expenditure by age. The percentage of EGM gamblers in the highest spend quartile increased from younger (11%) to older (42%) EGM highest spend gamblers. The reverse of this pattern was present in the bottom two quartiles, with 18-34 years having a greater share (23% and 37%) in these quartiles, decreasing to 27% and 21% for gamblers aged 35-54 years, while those 55 years and over had 14% and 16% in the bottom two lowest spend quartiles respectively.

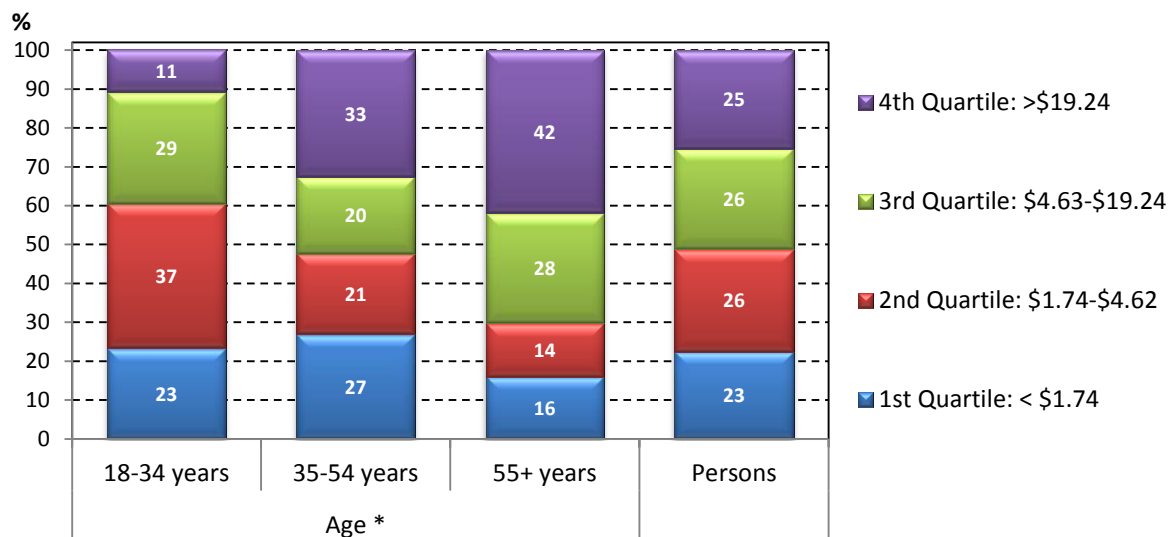


Figure 104: EGM weekly expenditure quartiles by age, gamblers whose highest spend activity was EGMs

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

Unsurprisingly, there was a significant association between EGM frequency of gambling and weekly spend (Table 58). Median weekly EGM expenditure amongst those who gambled one or more times per week was \$150, dropping to \$23 for those who gambled one to three times per month, and dropping again to \$2.88 for those playing EGMs less than monthly.

Table 58: EGM weekly expenditure quartiles and median EGM expenditure (IQR) by EGM frequency of gambling, gamblers whose highest spend activity was EGMs

	EGM frequency of gambling ***			Total % (SE)
	1+ per week % (SE)	1-3 per month % (SE)	<1 per month % (SE)	
1st Quartile: <\$1.74	1.1 (1.1)	2.1 (2.1)	30.9 (5.2)	22.5 (3.6)
2nd Quartile: \$1.74-\$4.62	0.0 (0.0)	6.4 (3.0)	35.2 (6.0)	26.3 (4.4)
3rd Quartile: \$4.63-\$19.24	6.3 (4.3)	25.2 (11.3)	28.7 (6.9)	26.0 (5.5)
4th Quartile: >\$19.24	92.7 (4.5)	66.3 (10.9)	5.2 (3.0)	25.2 (3.9)
Median weekly spend	\$150	\$23.08	\$2.88	\$4.81
(IQR)	(55.38-400.00)	(13.85-43.27)	(0.96-4.81)	(1.92-20)
Population (N)	1,556	3,420	12,208	17,185

Significant association between EGM frequency of play and EGM spend: *** p < 0.001, ** p < 0.01, * p < 0.05

Figure 105 graphs the distribution of EGM weekly expenditure quartiles by EGM frequency of gambling. This association was highly significant, with 93% of weekly EGM gamblers in the highest spend quartile, compared with 66% of monthly and 5% of less than monthly EGM gamblers.

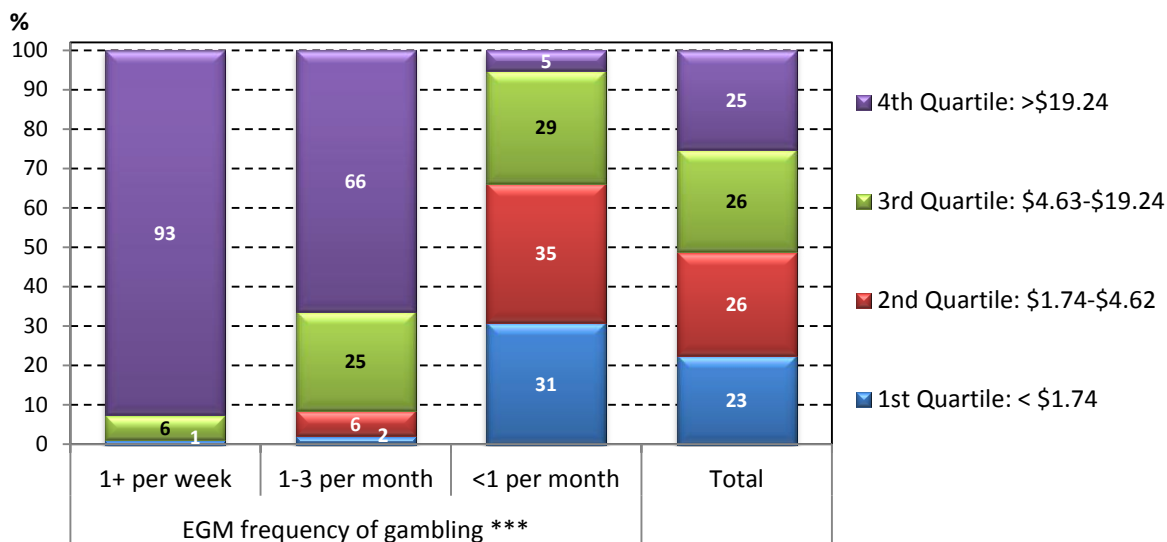


Figure 105: EGM weekly expenditure quartiles by EGM frequency of gambling, gamblers whose highest spend activity was EGMs

Significant association between EGM frequency of play and EGM spend:

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 60 reports total EGM spend for EGM highest spend gamblers for EGM frequency of gambling by socio-demographic factors and problem gambling risk. It also includes population, EGM spend per person and the percentage share of EGM spending by weekly gamblers.

Approximately \$687,000 was spent on EGM by 17,185 gamblers whose highest spend was EGMs, which equated to \$40 per person per week. Across the NT, weekly EGM players for which EGMs was their highest spend activity, accounted for 73% of the total EGM spending by these gamblers. EGM highest spend gamblers living in Darwin/Palmerston spent \$54 per person, compared with \$41 per person per week in the Rest of NT, \$18 per person per week in Regional Towns and \$15 per person per week in Alice Springs. While Alice Springs EGM spend per person was low, weekly EGM gamblers accounted for 60% of total EGM spend, compared with 80% in Darwin/Palmerston, 33% in Regional Towns and 30% in the Rest of NT. Men (\$45 per person), spent slightly more than women (\$36 per person), and men's weekly EGM gamblers share of total EGM spend was 78%, compared with 69% for female weekly EGM gamblers.

EGM highest spend gamblers 35 years and over spent between \$51 and \$53 per person per week on EGM, compared with \$25 per person per week for those under 35 years. Across age groups, there was little variation in the percentage share of weekly EGM gamblers of total spend, ranging from 72% for EGM gamblers 35 years and over to 77% for those under 35 years.

EGM highest spend gamblers who were classified as problem gamblers spent on average \$215 per person per week, while those classified as moderate risk spent \$133 per person per week, and low risk \$41 per person per week and no risk \$10 per person per week. For weekly EGM gamblers, moderate risk gamblers had the highest share of total spend at 90%, followed by problem gamblers at 79%, low risk gamblers 71%, and no risk gamblers at 32%.

Table 59: EGM frequency of gambling by socio-demographic factors, total EGM spend per week, population and spend per person per week, EGM highest spend activity

	EGM frequency of gambling				Population N	EGM weekly spend per person \$	Weekly EGM gamblers share %
	1+ per week \$	1-3 per month \$	<1 per month \$	Total \$			
Northern Territory	503,712	119,885	63,269	686,867	17,185	40	73
Regions							
Darwin & Palmerston	442,771	68,443	32,552	543,766	10,017	54	81
Alice Springs	33,297	13,041	8,889	55,226	3,734	15	60
Regional Towns	14,104	19,453	8,864	42,421	2,313	18	33
Rest of the NT	13,541	18,948	12,964	45,453	1,122	41	30
Gender							
Males	256,696	39,132	32,628	328,457	7,326	45	78
Females	247,016	80,753	30,641	358,410	9,859	36	69
Age							
18-34 years	151,388	25,606	20,088	197,082	7,751	25	77
35-54 years	177,313	40,962	29,385	247,661	4,891	51	72
55+ years	175,011	53,316	13,796	242,124	4,543	53	72
PGSI							
Problem gambler	163,708	40,672	1,716	206,096	959	215	79
Moderate risk gambler	206,480	17,225	5,152	228,856	1,721	133	90
Low risk gambler	96,831	27,062	12,345	136,238	3,295	41	71
No risk	36,694	34,927	44,056	115,677	11,211	10	32

9.7 In-venue regulation and EGM gambling behaviour

The following three figures look at whether the 2009 in-venue smoking ban changed how much EGM players usually spend. Figure 106 shows that 87% of EGM players across the NT said the smoking ban did not affect how much they spend. The association between region and change in spend because of the smoking ban was not significant, though there was variation across regions, with EGM players from Regional Towns more likely to say that it made no change in how much they spent on EGMs.

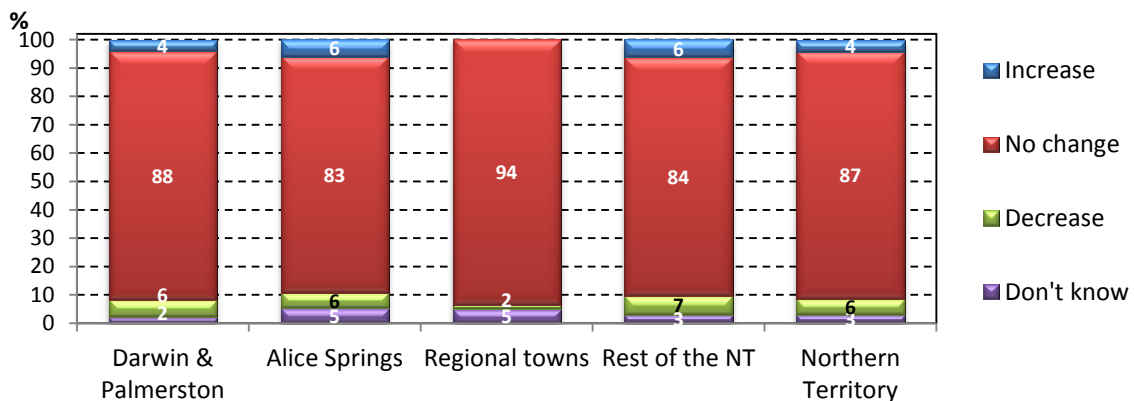


Figure 106: Has the ban on smoking in gaming areas changed how much you spend on EGMs by region, EGM players

There was a significant difference ($p < 0.01$) between men and women in how they answered the smoking ban and EGM spend question (Figure 107). Nine percent of men compared with 2% of women said that the smoking ban led to a decrease in how much they spend on EGMs, while conversely, only 2% of men said that it led to an increase, compared with 7% of women.

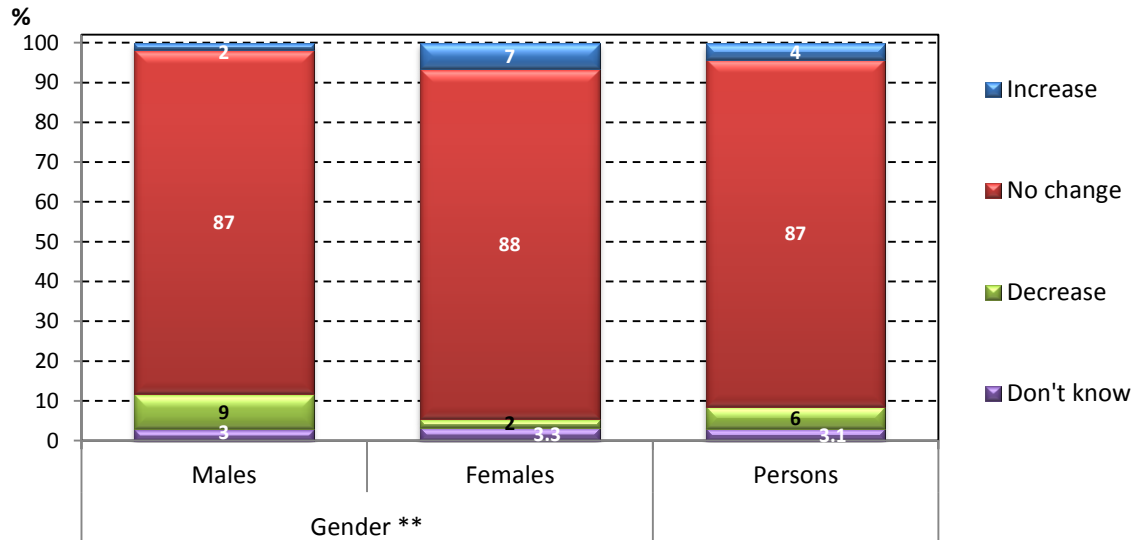


Figure 107: Has the ban on smoking in gaming areas changed how much you spend on EGMs by gender, EGM players

Significant association between gender and smoking ban EGM spend: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Figure 108 shows the association between age and the effect of the smoking ban on EGM spend. There was some variation between age groups, but this association was not significant. The main difference was that older EGM players were less likely to say that the bans led to a decrease compared with players less than 55 years.

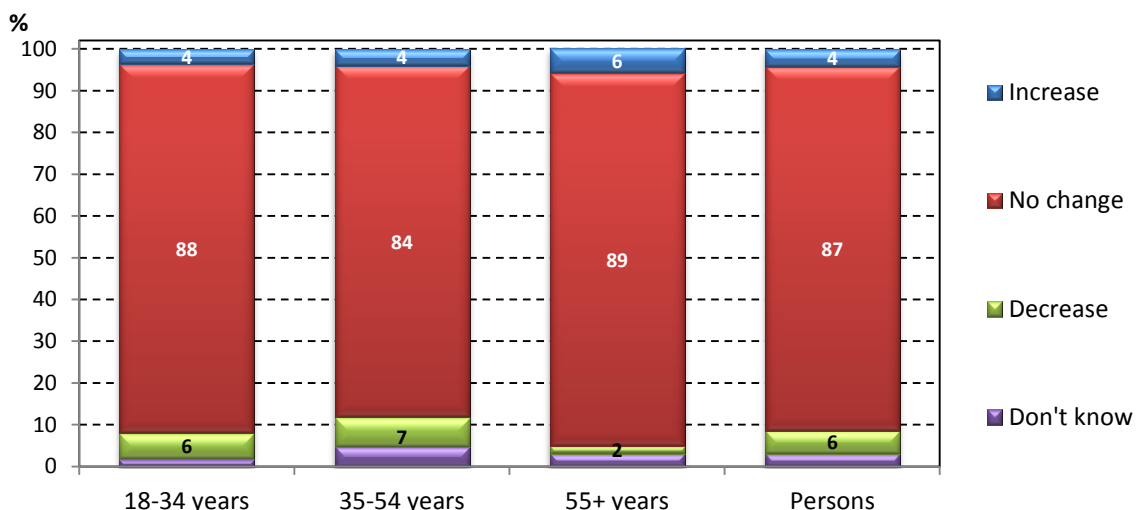


Figure 108: Has the ban on smoking in gaming areas changed how much you spend on EGMs by region, EGM players

Across the NT, 92% of EGM players said that putting the ATM out of view of the gaming area did not affect how much they spent playing (Figure 109). There was

some variation across regions, but the association with region was not significant. Similar to smoking ban question, a larger percentage of EGM players in Regional Towns (99%) said the policy made no change to their EGM spending patterns.

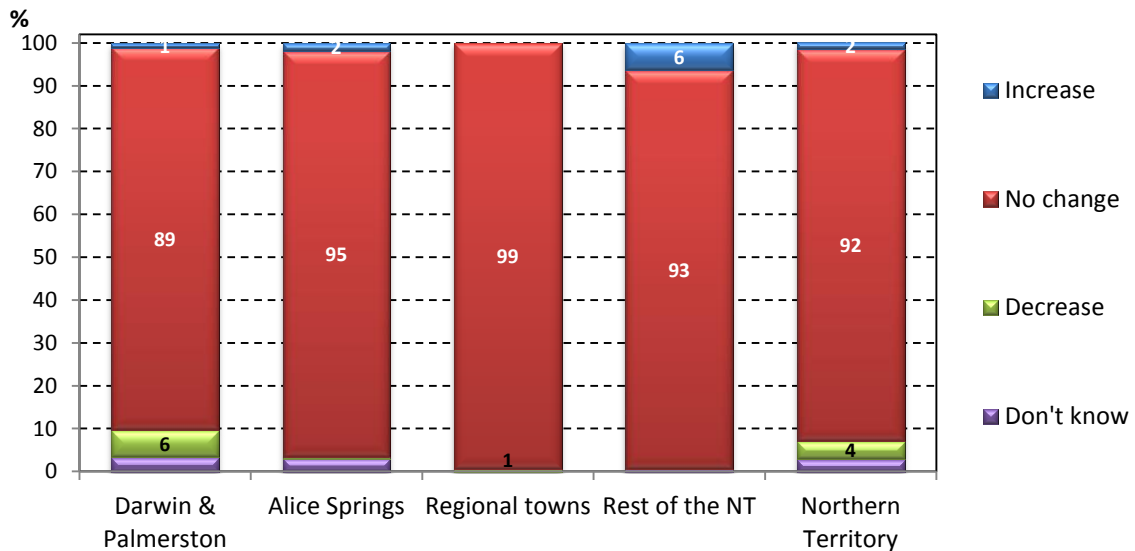


Figure 109: Has moving the ATM out of sight of the gaming area changed how much you spend on EGMs by region, EGM players

There was no significant difference between men and women in EGM spending patterns associated with the ATM policy change (Figure 110), though 5% of men said it led to a decrease in spending, compared with 3% of women.

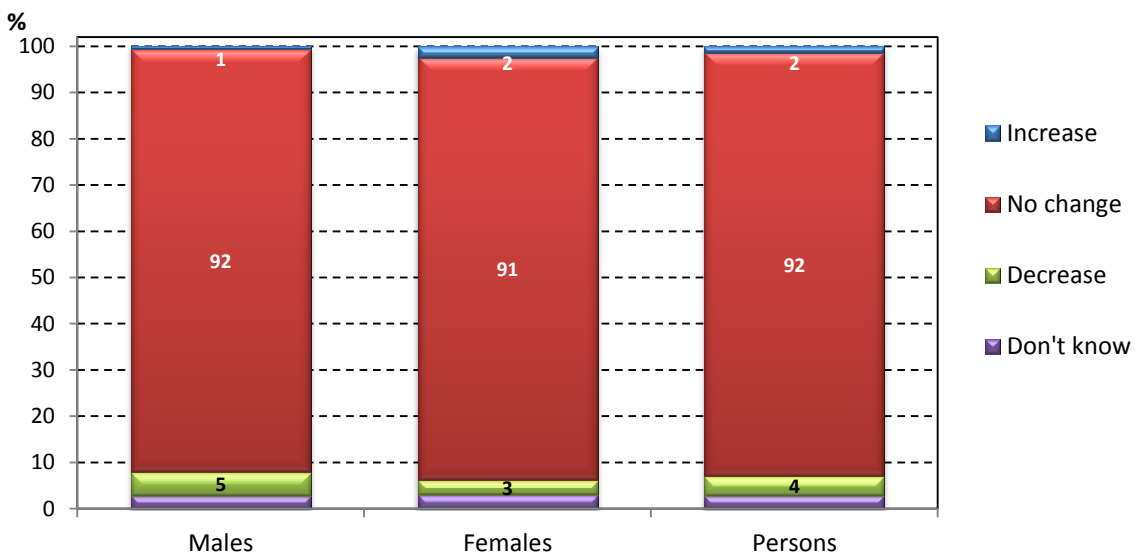


Figure 110: Has moving the ATM out of sight of the gaming area changed how much you spend on EGMs by gender, EGM players

The association between age and change in spending associated with the policy change of placing the ATM out of sight was marginally non-significant (Figure 111). Younger EGM players were slightly more likely to say they spent less because of the

ATM policy change, while older players were more likely to say they increased how much they spent on EGMs.

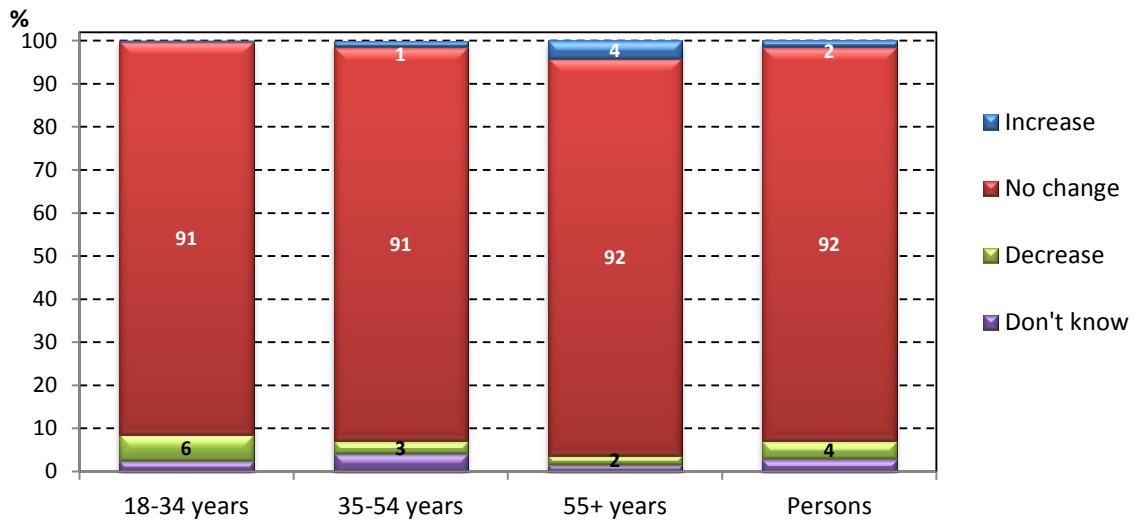


Figure 111: Has moving the ATM out of sight of the gaming area changed how much you spend on EGMs by age, EGM players

9.8 EGM play and problem gambling risk

Figure 112 graphs PGSI estimates for EGM players and non-EGM players (but gamblers). This association was highly significant ($p < 0.001$), with EGM players over-represented in all categories of problem gambling risk. EGM players were 27 times more likely to be problem gamblers, 3.7 times more likely to be moderate risk gamblers, and 2.5 times for likely to be low-risk gamblers, compared with non-EGM gamblers. EGM players were more than three times likely to be at-risk gamblers.

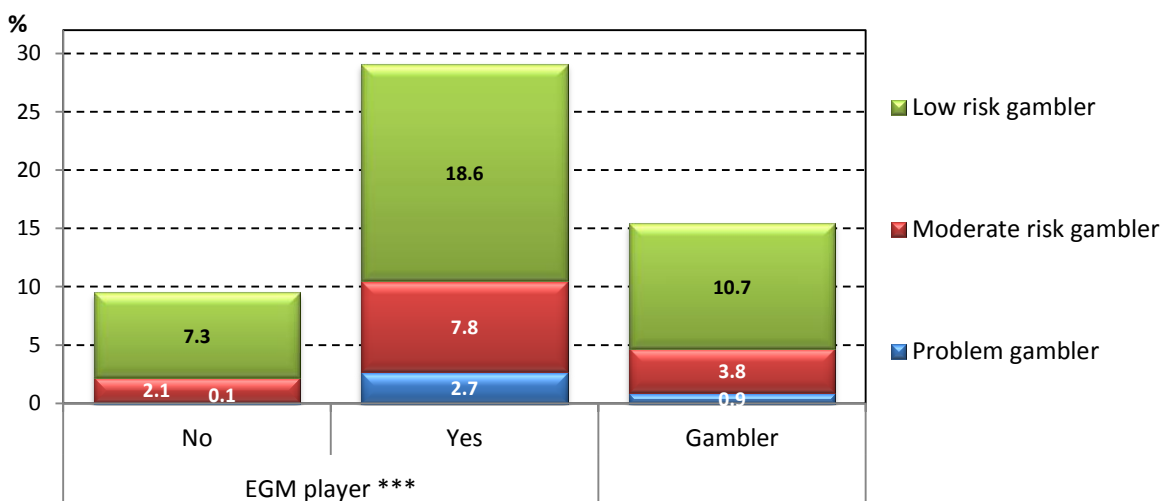


Figure 112: PGSI by EGM player, all gamblers

Significant association between EGM play and PGSI: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Table 60 presents the counts of people for the data in Figure 112. EGM players make up 30% of all gamblers, but are over-represented across all problem gambling risk categories (3.1 times for problem gamblers, 2 times for moderate risk

gamblers and 1.7 times for low risk gamblers), and under-represented amongst no risk gamblers.

Table 60: PGSI by EGM player and percentage EGM player, all gamblers

	Not EGM player N	EGM player N	All gamblers N	% EGM gambler	Rate ratio [¥]
Problem gambler	95	1,111	1,206	92.1	3.1
Moderate risk gambler	1,972	3,157	5,128	61.6	2.0
Low risk gambler	6,835	7,548	14,383	52.5	1.7
Non-risk gambler	85,052	28,755	113,807	25.3	0.8
Total	93,953	40,571	134,524	30.2	1.0

¥ = Ratio of % EGM gamblers of problem gambling risk category divided by total %

Figure 113 shows that an increase in frequency of playing EGMs, is significantly associated with an increase in problem gambling risk, with 13% of weekly EGM gamblers classified as problem gamblers, 40% as moderate risk gamblers and 23% as low risk gamblers. Problem gambling risk was also higher amongst monthly EGM gamblers, with 14% problem gamblers, 11% moderate risk gamblers and 24% low risk gamblers. Therefore, EGM gamblers compared with all gamblers had higher problem gambling risk across all frequency of gambling categories, except for problem gamblers for less than monthly EGM gamblers.

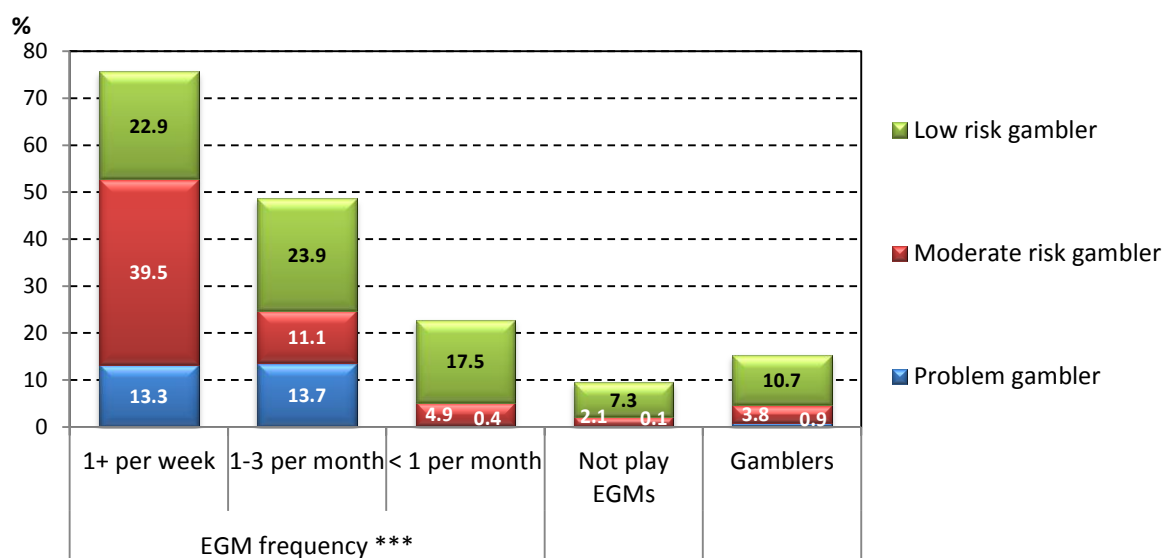


Figure 113: PGSI by frequency of EGM play, all gamblers

Significant association between EGM frequency of play and PGSI: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

The next five figures show where people played EGMs and problem gambling risk. of the 40.3% of EGM gamblers who played EGMs in a hotel there was a higher prevalence of problem gamblers (4.3% cf. 1.7%), though this association was not statistically significant (Figure 114).

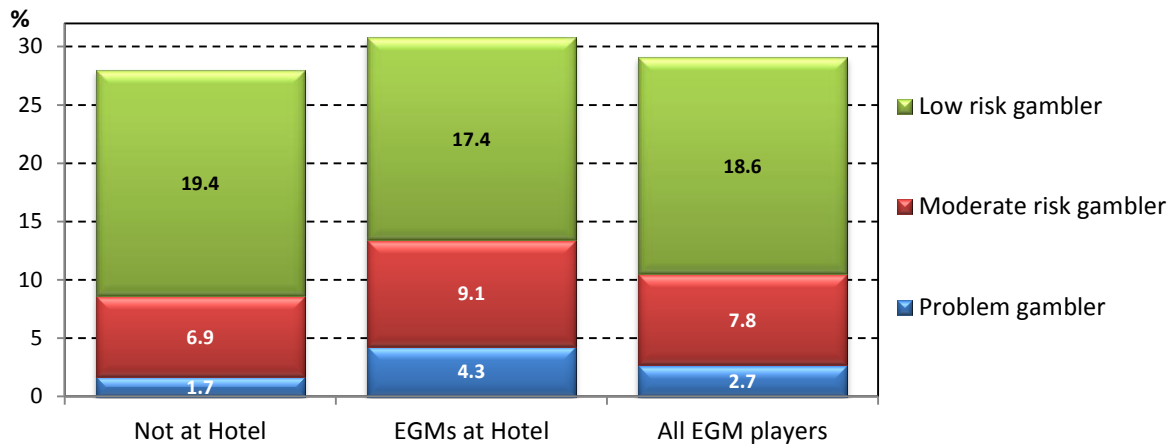


Figure 114: PGSI by plays EGMs at a Hotel, EGM players

Of the 36% of EGM gamblers who played EGMs in clubs, there was no statistically significant association with problem gambling risk (Figure 115), and problem gambling risk showed a similar distribution to that observed for EGM players in hotels.

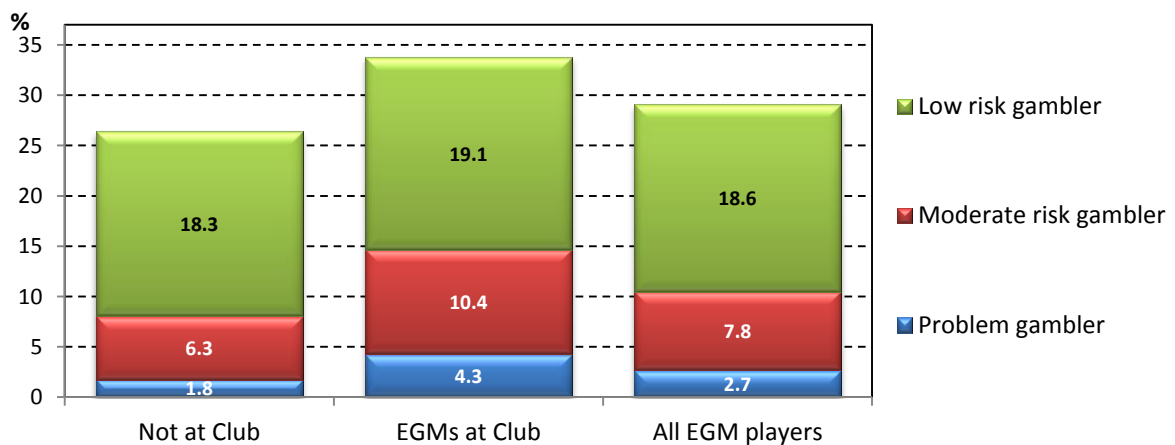


Figure 115: PGSI by plays EGMs at a Club, EGM players

Playing EGMs in casinos was significantly associated with problem gambling risk amongst the 56% of EGM gamblers who played in casinos (Figure 116). Specifically, there was no difference in problem gambling prevalence between casino and non-casino EGM players, but playing at the casinos was associated with an over-representation in moderate and low risk gambler categories compared with EGM players who did not play in the casino.

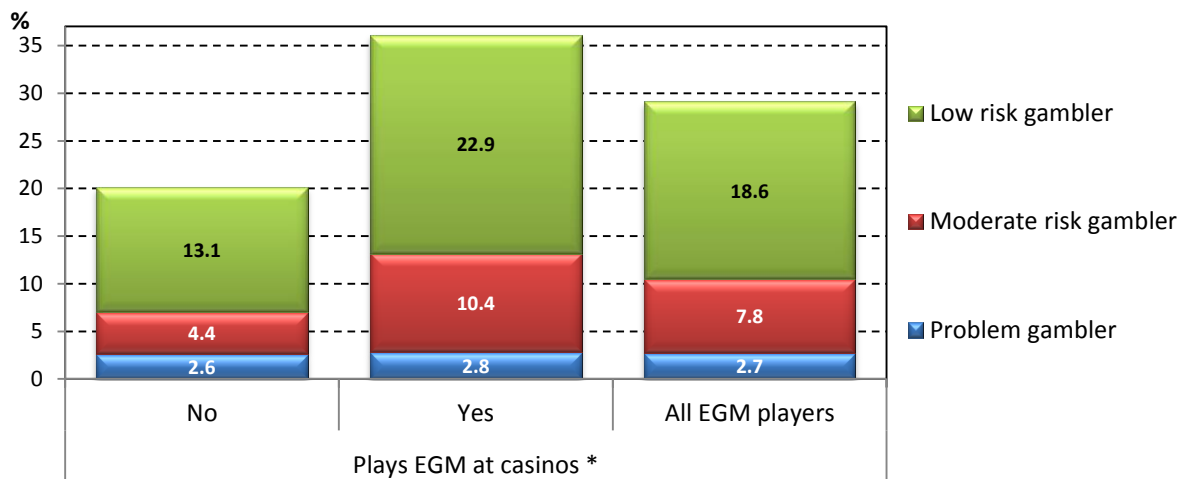


Figure 116: PGSI by plays EGMs at a Casino, EGM players

Significant association between EGM play at casinos and PGSI: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

While only a small percentage of EGM players gambled online (7.8%), those who did were significantly more likely to be problem gamblers (Figure 117). Specifically, they were 15 times more likely to be problem gamblers (20% cf. 1.3%), but there was little difference in the moderate and low risk gambler groups.

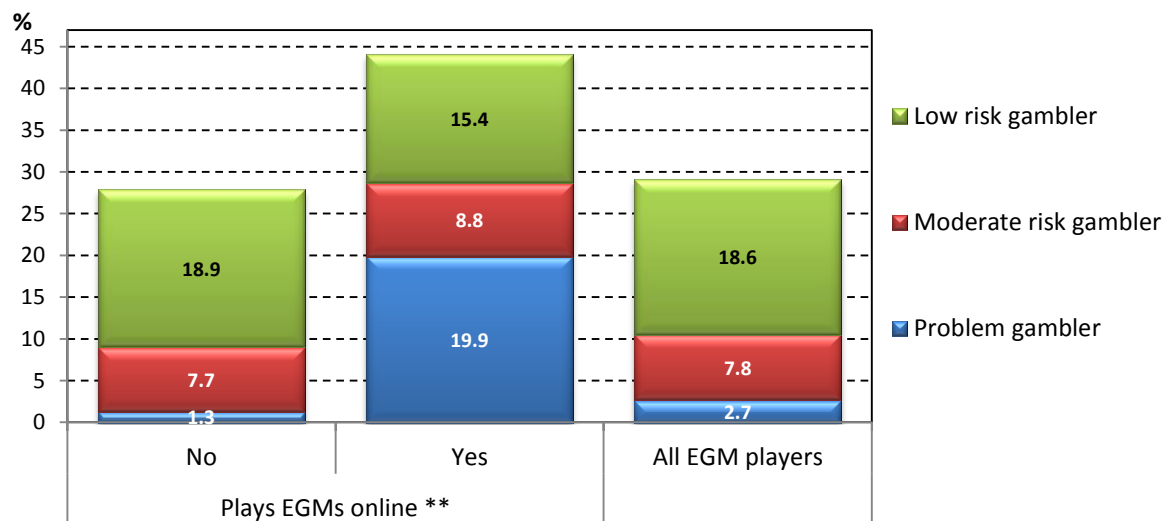


Figure 117: PGSI by plays EGMs at a Online, EGM players

Significant association between plays EGMs online and PGSI: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Figure 118 shows the relationship between the number of different places where people played EGMs and problem gambling risk. This association was highly significant, with EGM players who play in two or more venues compared with one venue, 3.6 times more likely to be problem gamblers, 3.4 times more likely to be moderate risk gamblers and 1.6 times more likely to be low risk gamblers.

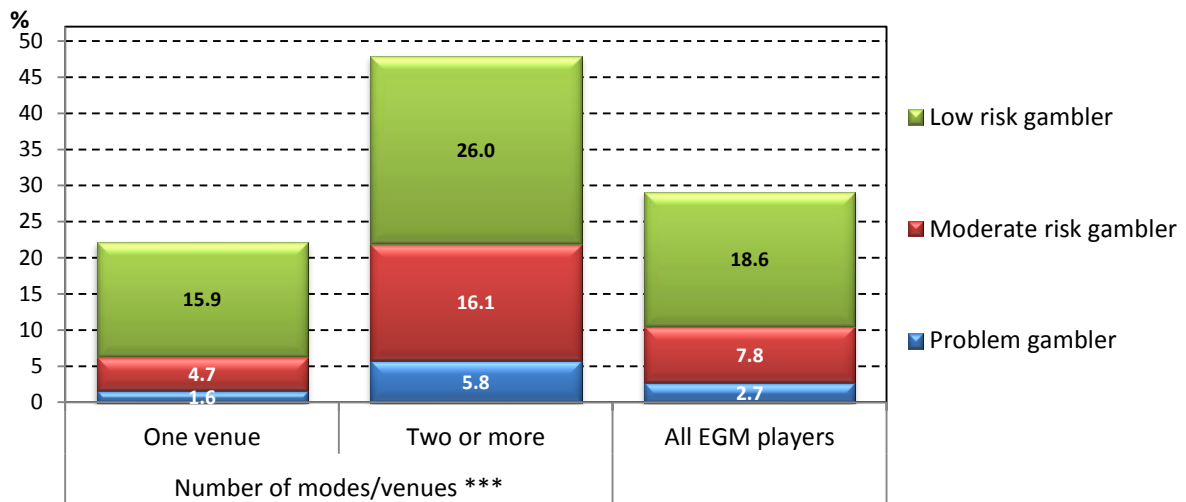


Figure 118: PGSI by number of modes/venues where plays EGMs, EGM players

Significant association between plays EGMs online and PGSI: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

The next three figures show the relationship between having a regular EGM venue and problem gambling risk for all EGM players and gender. The association between regular EGM venue and the PGSI was not significant, though there was variation on some PGSI categories, but with large standard errors (not shown) around estimates (Figure 119).

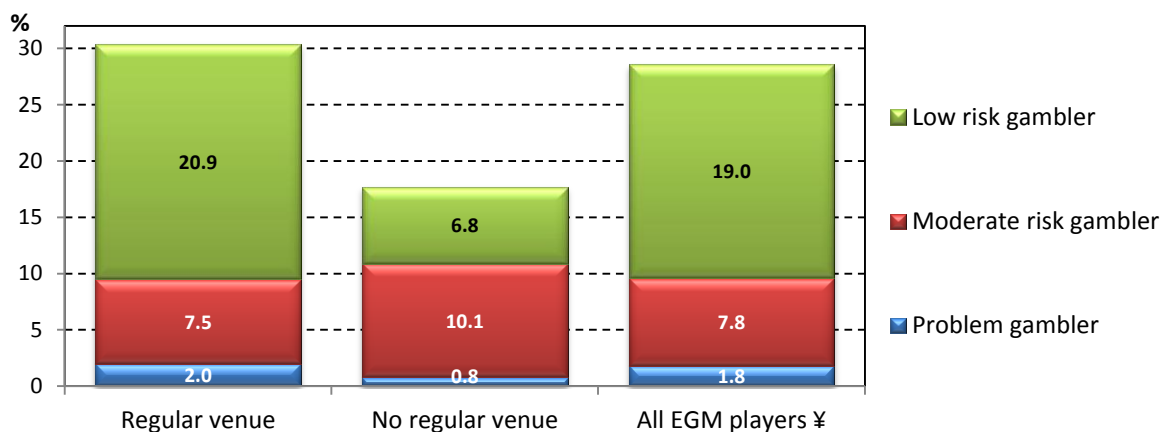


Figure 119: PGSI by has a regular venue where plays EGMs, all EGM players

NOTES: ¥ Excludes EGM online only players

Figure 120 shows that there was a non-significant association between the PGSI and having a regular EGM venue for males, though a higher percentage of male regular venue EGM players were problem gamblers (2.6%) compared with non-regular venue EGM players (0.9%).

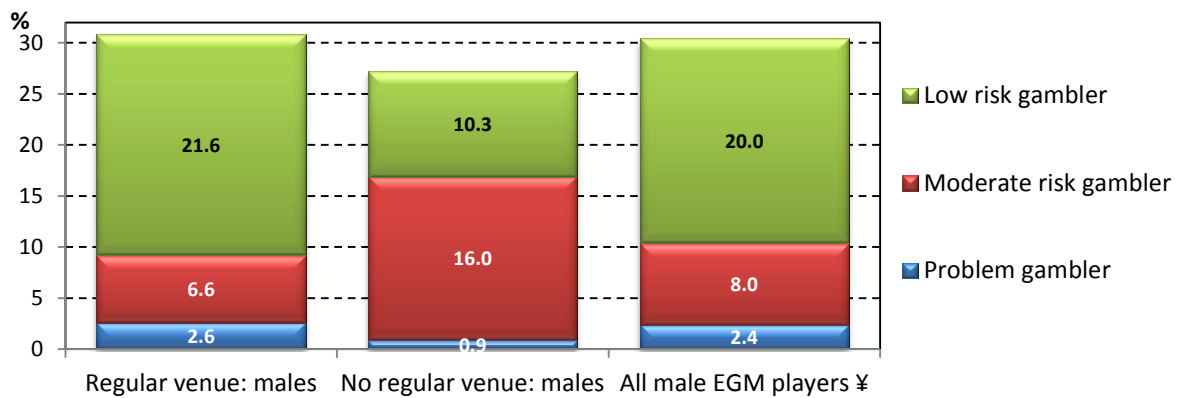


Figure 120: PGSI by has a regular venue where plays EGMs, male EGM players

NOTES: ¥ Excludes EGM online only players

The association between regular venue and the PGSI for women was statistically significant (Figure 121). Female EGM players with a regular venue compared with no regular venue were two times more likely to be a problem gambler (1.4% cf. 0.7%), 3.5 times for moderate risk gambler (8.3% cf. 2.4%), and 8.8 times for low risk gamblers (20.2% cf. 2.3%). The consistent association between having a regular venue and problem gambling risk for females is in contrast to that seen for males.

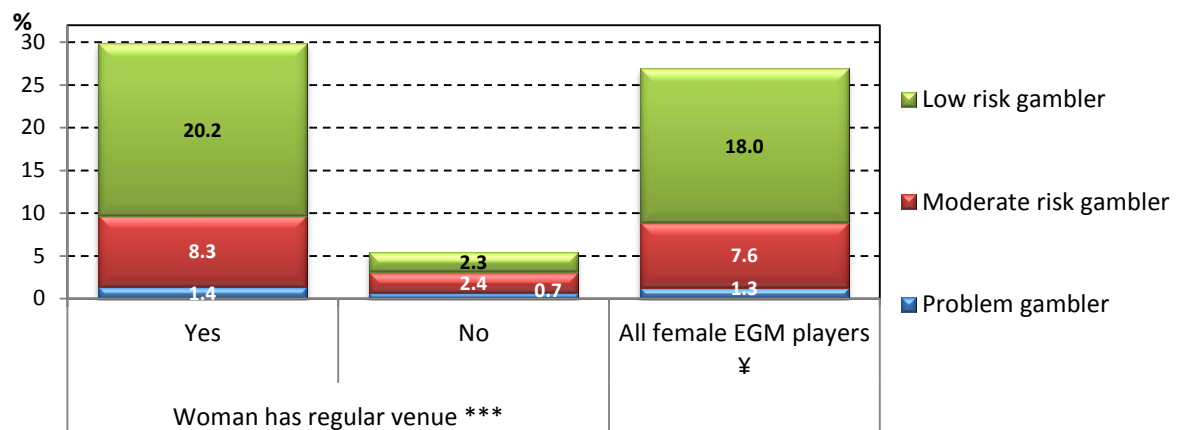


Figure 121: PGSI by has a regular venue where plays EGMs, female EGM players

NOTES: ¥ Excludes EGM online only players

Significant association between regular EGM venue and PGSI: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

9.9 EGM players and harm from their own or another person's gambling

EGM gamblers are at a higher risk of problem gambling and negative consequences associated. From the previous section, we know that 29% (11,815 people) of EGM gamblers are at-risk problem gamblers, as classified by the PGSI, and the association between EGM play and problem gambling was highly significant. Figure 122 shows whether these at-risk EGM players identified additional negative consequences because of their own gambling compared with non-EGM gamblers. Around 30% of at-risk EGM gamblers identified negative consequences from their own gambling compared with 19% amongst non-EGM gamblers, though this association was not significant. Breaking this up, 16% of EGM gamblers identified one or two negative consequences and a further 13% three or more,

compared with 8% of non-EGM gamblers identifying one or two and 10% three or more negative consequences.

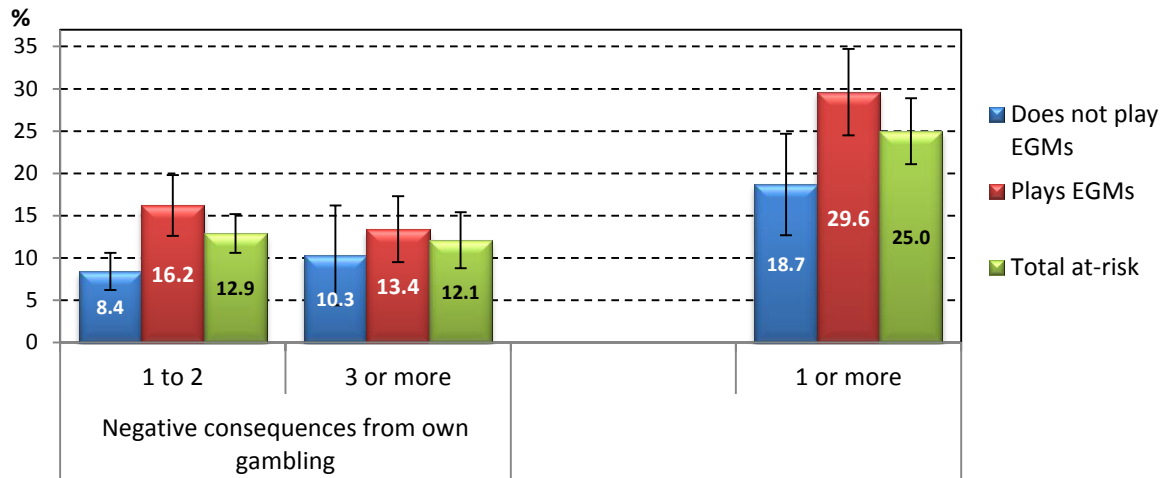


Figure 122: EGM gamblers by negative consequences of their own gambling, at-risk gamblers

Figure 123 shows the relationship between gambling on EGMs and experiencing negative consequences from another person's gambling. This association was significant, with EGM gamblers (22%) more likely to be negatively affected by another person's gambling, compared with non-EGM gamblers (10%). EGM gamblers were more likely to experience one or two negative consequences compared with non-EGM gamblers (16% cf. 6%) and three or more negative consequences (6% cf. 4%). The types of negative consequences experienced because of another person's gambling (not shown) differed significantly between EGM gamblers and non-EGM gamblers for ran out of money for bills (10% cf. 2.4%), raided savings account/funds (10% cf. 3%), sold or hocked possessions (2% cf. 0.6%), physical or verbal violence towards you (3.6% cf. 1.2%), and did something outside the law (1.6% cf. 0.1%).

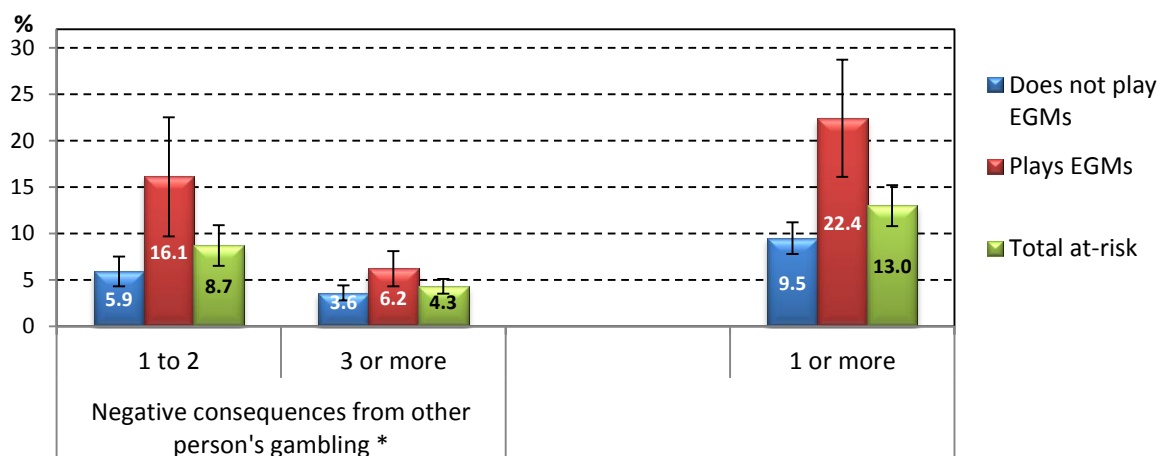


Figure 123: EGM gamblers by negative consequences of their own gambling, at-risk gamblers

Significant association between negative consequences & EGM play: *** p<0.001, ** p<0.01, * p<0.05