

Problem Gambling and the Circumstances Facing Older People

A Study of Gaming Machine Players Aged 60+ in Licensed Clubs

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Abstract Local gambling venues are an important contemporary context for older people's gambling in many parts of the world typically being more accessible to this segment of the population than traditional, centralised gambling venues, such as casinos. This study, undertaken in South East Queensland, analyses older people's electronic gaming machine (EGM) behaviour and motivations, specifically in the context of licensed social and recreational clubs—a popular local gambling venue in many parts of Australia. The study gathered data via a postal survey of 80 managers of licensed clubs, interviews with Gambling Help services and a survey of 414 people aged 60+ who regularly play EGMs, self-administered on site at local clubs. The analysis undertaken suggests that certain age-related circumstances of older people—such as being without a partner, having a disability that impacts on everyday activities, having a low annual income, and no longer participating in the workforce—are associated with higher overall levels of motivation for playing EGMs and greater reliance on EGMs to meet social, recreational and mental health needs. Over a quarter of the older people surveyed (27%) reported drawing on their savings to fund their EGM gambling. Certain categories of older people, including those who were without a partner and those with a disability, were more likely to report drawing on their savings to fund EGM play and betting more than they could afford to lose, pointing to age-related vulnerabilities older people may experience to the negative impacts of gambling given the greater likelihood of their dependency on smaller, fixed incomes. The explanatory contribution of a range of demographic and motivational variables on problem/moderate risk gambling status was computed via a logistic regression model. Younger age (60–69), male gender, single marital status and being motivated to play EGMs to experience excitement and to win money all emerged as significant predictors in the model.

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Introduction

Older people have often been overlooked as legitimate subjects of problem gambling research and related public policy because they are typically under-represented in problem gambling prevalence statistics. However, the deregulation of the gambling industry in many jurisdictions in recent decades has contributed to a substantial increase in gambling participation in host populations, and a concomitant increase in older people's participation rates. Studies in Australia, for example, indicate that older people's gambling participation has increased significantly over the last 10–15 years largely due to the greater range of gambling activities that have become available and growing opportunities to participate in gambling at a local level, most notably through the increase in electronic gaming machines (EGMs) in suburban hotels and licensed clubs (Boreham et al. 1996; Dickerson et al. 1995; Kimberley 2005; McCormack et al. 2003; Productivity Commission 1999; Roy Morgan 1997). With research linking a rise in problem gambling to the spread of legalised gambling opportunities, older people are likely to begin to experience higher levels of gambling problems as gambling participation increases in this age group (Petry 2002). Evidence of the increasing interest in EGM use by an older cohort was indicated more than a decade ago in the study by Boreham et al. (1996) who reported that those in the 46–66 age group were three times more likely to gamble on EGMs weekly or more than those in the 26–45 age group (1996:18). Moreover, the age-related circumstances of older people (for example, that many are dependent on smaller, fixed incomes) may make them vulnerable to some of the negative impacts from gambling.

The purpose of this study is to explore the circumstances of older people who regularly gamble on EGMs at local licensed clubs—a popular and ostensibly benign context for older people's gambling in many parts of Australia—and their vulnerability to experiencing gambling problems. In particular, the study aims to explore whether the gambling motivations and behaviours of older EGM gamblers are influenced by particular personal circumstances or characteristics; whether there are identifiable groups of older EGM players that are more prone to problem gambling types of behaviour; whether there are distinguishing characteristics of older EGM users that are classified as 'problem' and 'moderate risk' gamblers (using the Canadian Problem Gambling Index); and whether venue promotions impact on older people's gambling behaviour, specifically their expenditure of time and money on EGMs.

Background

The specific focus on older people's EGM gambling is motivated by a number of observations. In Australia, EGM use constitutes the most frequently participated in form of non-lottery gambling (Productivity Commission 1999:9, 3.16) with 59% of total gambling expenditure in 2003–2004 attributable to EGMs (ANU Centre for Gambling Research 2005:1). Importantly, EGMs represent the greatest source of gambling expenditure for problem gamblers (Productivity Commission 1999:22) and have been found to be the most significant source of problem gambling (Productivity Commission 1999:6.54). In concert with findings of research conducted in other national jurisdictions (Munro et al. 2003:11,

112), older people in Australia have been found to display a particular preference for EGMs: while their gambling participation overall is lower than for the rest of the population, their EGM gambling in licensed clubs approximates that of the general population (McCormack et al. 2003).

In 2005, licensed clubs were allocated 58% of all EGM licenses in Australia, over one and a half times the number allocated to pubs, taverns and bars, and nine times that allocated to casinos (ABS 2006a:8). Clubs are voluntary, not-for-profit associations that provide facilities for socialising, spaces for community groups to meet, sporting facilities, childcare, and inexpensive dining and entertainment. Most clubs rely very heavily on EGMs to fund the range of services and facilities they offer members with an average of 61 percent of clubs' revenue being derived from EGMs (ABS 2006b:16).

Like similar establishments in other countries, clubs provide an important social and recreational outlet for many older Australians. Recognising the economic value of this older segment of the market, clubs nurture older people's patronage with special services and incentives, such as door-to-door transportation, discount drinks and meals, competitions, gambling coupons and age-group-specific entertainment. It is not surprising, therefore, that this comfortable, local and ostensibly safe environment is for many older people, and particularly women, a preferred context for participating in gambling (Borrell 2003; McCormack et al. 2003; Roy Morgan 1997; Hing and Breen 2001).

Previous research offers some insights into older people's broad motivations for gambling. A recent United States study found that older recreational gamblers were marginally less likely than their younger counterparts to report gambling to win money as a motivation (Desai et al. 2004:1675). Older people were found to agree with statements that related primarily to the fun and sociable aspects of gambling in a study of older Victorians undertaken shortly after the introduction of EGMs in that State (Roy Morgan 1997). Winning appeared to be of lesser importance, but it was nonetheless the second most important reason for gambling given by older people in the study (Roy Morgan 1997:vi). These findings are mirrored in Munro et al.'s (2003:12–15) comprehensive review of the international literature on older people and gambling which found evidence that older people gamble because it facilitates a sense of escape, pleasure, excitement, social enjoyment, independence and empowerment as well as offering a means to financial gain.

The motivations of certain categories of older gamblers tend to vary. McNeilly and Burke (2000) found that the motivations of older casino gamblers surveyed in gambling venues were significantly different to those of older casino gamblers surveyed in the general community. Those surveyed in gambling venues were more likely to report casino gambling to relax and have fun; to get away for the day; to pass the time; to relieve boredom; and to take advantage of the inexpensive meals (McNeilly and Burke 2000:409–410). The group of older people sampled from within the community were more likely to report going to casinos to meet new people. Interestingly, neither group tended to identify venue promotions and incentives, such as free transportation and slot-club promotions, as motivations for casino gambling.

Unfortunately there is little other research comparing the gambling motivations of different groups of older people. A growing body of research on gender differences in gambling preferences may, however, point to differences in the gambling motivations of older women and men. Hing and Breen (2001), for example, found that women club-users, when compared with their male counterparts, preferred certain types of gambling activity, such as bingo, lotto, lotteries and gaming machines, gambling less frequently than men on casino tables and racing. Delfabbro (2000:148) argues that women's attraction for luck-based gambling activities over ones requiring experience and know-how may be linked to

gender differences in gambling motivation. While critical of the design of various sociological and psychological studies investigating such differences, Delfabbro concedes there is evidence that women more commonly use gambling as a way to relieve or escape negative mood states, such as depression or anxiety. This theory—that gender-specific motivations drive gambling preferences—may also explain Hing and Breen's (2001) observation that women club users tend to display patterns of EGM play that maximise session duration—presumably maximising freedom from negative mood states. That women gamble primarily to relieve boredom, loneliness and isolation was similarly concluded by authors of a study involving both a phone-in of women with gambling problems and analysis of gambling support service data (Brown and Coventry 1997). A subsequent study by Trevorrow and Moore (1998), comparing female EGM gamblers and non-gamblers drawn from the same geographic area and matched for age and education, did not find higher levels of reported loneliness or social isolation amongst female EGM users. Women classified as problem gamblers, however, were found to be significantly more lonely (in terms of alienation, rather than friendlessness) than women EGM players who experienced minor problems with gambling (Trevorrow and Moore 1998:281–282). These findings may well have relevance for understanding the motivations and psychological wellbeing of older women gamblers.

The relationship more generally between older people's recreational gambling and indices of mental and physical health has been the subject of several recent studies in the United States (Desai et al. 2004; Vander Bilt et al. 2004). Based on a telephone survey of a nationally representative sample, Desai et al. (2004:1672) concluded that 'in contrast to findings in younger adults' recreational gambling, recreational gambling in older people is not associated with negative measures of health and wellbeing'. The authors noted, however, that older recreational gamblers were more likely to report gambling everyday or at least once a week, and that it is unclear whether high frequency gambling, and specific types of high frequency gambling, affect health and wellbeing in older adults. Analysis of cross-sectional and longitudinal data gathered from a representative community sample in a rural, low socio-economic status area in Pennsylvania, found that recreational gambling is positively correlated with indicators of health and social wellbeing, such as current and future social support and an absence of depressive symptoms (Vander Bilt et al. 2004:387). It concluded that gambling may offer a forum of social support to older people who are often isolated as they age. In considering the findings of these studies, it is noteworthy that neither provides specific evidence on the health correlates of EGM gambling in older people. Indeed participants in the Pennsylvania study only had access to gambling on State lottery, racing tracks and charitable bingo—forms of gambling that are less commonly associated with the development of gambling problems.

Older retired people usually have smaller fixed incomes and might conceivably experience financial hardship more easily on account of gambling participation. Little research has looked specifically at this issue, however, the Victorian study previously referred to (Roy Morgan 1997:iv) examined the sources of funds used by older people for gambling. The most common sources of gambling funds reported by survey respondents were 'pocket money' (50%) and 'personal or household entertainment budget' (22%). A small but significant proportion indicated that they drew on less sustainable budgetary sources. Twelve percent reported that their money for gambling came from 'savings', eight percent from 'money for food, bills and transport' and one percent from 'money set aside for major purchases'. The study did not analyse budgetary sources by type of gambling activity, which is unfortunate as certain forms of gambling, such as EGMs, are commonly associated with much higher levels of expenditure, and may accordingly incline older people

towards greater reliance on unsustainable sources of funds. Some further evidence on this issue comes from a Queensland survey of 1,200 individuals who had used EGMs at least once in the past 12 months (Boreham et al. 1996). The authors reported that money spent on EGMs had been diverted from ‘household costs’ by 33% of women but only 16% of men and ‘savings’ by 14% of women and 12% of men. Overall, the data allowed the authors to suggest that women were more likely to divert money from essentials and thus were more likely to experience hardship as a result of their EGM use.

Previous research offers some insights into the characteristics of older problem gamblers. A Canadian study (Wiebe 2002:89ff) identified older problem gamblers in the following way: They spend more time and money gambling than other older non-problem gamblers; similarly to non-problem gamblers, they gamble for the entertainment and to win money; they gamble to escape loneliness and depression; and the most common indicator of problem gambling is gambling more than intended and feeling guilty about gambling. A report on older people and gambling in British Columbia (Neufeld 1999:4), which drew on both a Social Gaming Survey and analysis of gambling support service and helpline data, noted that older problem gamblers typically suffer from chronic pain, have an abundance of free time and are motivated to gamble for a range of reasons. These include the enjoyment of a leisurely activity with a spouse or, conversely, the creation of distance or assertion of independence from a spouse or relative. In a study comparing older and younger problem gamblers calling a gambling helpline, Potenza et al. (2006) observed a range of differences between the two groups, including that older gamblers were involved in fewer types of problematic gambling, and more commonly encountered problems with slot machines (a form of EGM). Studies examining the psychological differences between problem and non-problem gamblers more generally (Ladouceur et al. 1997; Clarke 2004) have found that problem gamblers are distinguished by greater levels of depression, motivation to release tension or negative mood states, motivation to achieve excitement or stimulation, and also amotivation (e.g. they wonder what they are getting out of gambling). This may have pertinence for older problem gamblers, as might the observation that men in general tend to be more prone to experiencing gambling problems and/or gambling problems of greater severity (for example: Productivity Commission 1999; Queensland Treasury 2002a, 2002b; Wiebe et al. 2004, 2002).

While previous research on older people and gambling offers various insights into the gambling motivations and behaviours of this cohort, a range of questions remain unanswered. A number of specific issues surrounding the behaviour and motivations of older EGM players that are explored in this study include:

Are the gambling motivations and behaviours of older EGM gamblers influenced by particular personal circumstances or characteristics such as age, gender, marital status or the presence of a disability that restricts daily activity?

Are there any identifiable categories of older EGM players that are more prone to problem gambling types of behaviour (such as spending more than intended; experiencing reduced control over session length and expenditure; drawing more on less sustainable budgetary sources such as savings; and holding erroneous beliefs about their capacity to influence the outcome of their betting)?

What are the distinguishing characteristics of older EGM users who are classified as ‘problem’ and ‘moderate risk’ gamblers (using the Canadian Problem Gambling Index)? Are they more likely to be male, as might be hypothesised from the literature? Are they more likely to be motivated to escape negative mood states or to

achieve excitement and stimulation, as might also be hypothesised from the literature?

Which older EGM players participate in venue promotions and what impact, if any, do venue promotions have on their gambling behaviour, specifically their expenditure of time and money on EGMs?

The following section sets out the methods used to collect data in order to explore these issues in more detail.

Methodology

Research Design

A two-stage methodology was employed to meet the research objectives. This is summarised in detail in Table 1. The first stage involved consultations with key stakeholder groups including: a web/postal survey of managers of licensed clubs with EGMs across the southeast Queensland region; semi-structured interviews with all 13 of the State's Gambling Help services and the 24-hour Queensland Gambling Help Line; and semi-structured interviews with other relevant non-government organisations (such as peak bodies representing the needs of older people). The purpose of these consultations was to gather information from knowledgeable third parties about older people's EGM gambling behaviours and motivations; personal characteristics and circumstances associated with problem gambling; and the extent and impact of venue promotions directed specifically at older people.

The second stage of the project (and the main focus of the analysis presented in this paper) was a self-administered survey of 414 regular EGM users¹ aged 60 years and older, conducted on site at seven licensed clubs across the greater metropolitan area of Brisbane, the State's capital. Club selection was based on ensuring a range of geographical locations and club types. The survey sought demographic information from respondents as well as information regarding their gambling behaviour, attitudes and motivations. Respondents' perceptions of issues that impact on their control over either their expenditure on EGMs or the length of their EGM sessions were also explored. The development of the survey instrument was informed by the results of the survey of Club Managers. Respondents' problem gambling risk status was assessed by incorporating the nine core questions of the Canadian Problem Gambling Index (CPGI, Canadian Centre on Substance Abuse 2001). This instrument was used in preference to the South Oaks Gambling Screen – Revised (SOGS-R), in light of criticisms that have been made about the utility of SOGS-R for measuring problem gambling among older people (Munro et al. 2003:34; Weibe 2002).

Sample Characteristics

In the survey of older EGM users, women were disproportionately represented (65%, cf. 53% in the Queensland population aged 60+ (ABS 2006c:17)). The spread of respondent ages corresponds relatively closely with Queensland population estimates. Only 10% of respondents were in some form of paid employment and over half the sample (55%)

¹ 'Regular EGM user' defined as using EGMs at least once every 3 months.

Table 1 Summary of methodology

| Population | Data collection method | Main focus of investigation | Sample size and characteristics |
|---|---|---|--|
| <p>Stage 1 – Stakeholder consultations</p> <p>Managers of licensed clubs with EGMS across SE Queensland region (<i>n</i> = 370)</p> | <p>Postal/web survey</p> | <p>Type of club</p> <p>Size and demographic features of membership</p> <p>Number of EGMs in operation</p> <p>Information about clubs' patronage by older members</p> <p>Observations of club use by older people</p> <p>Observations of EGM gambling behaviour and problem gambling behaviour by older patrons</p> <p>Nature of venue promotions directed specifically at older patrons</p> | <p>Survey responded to by 80 clubs (response rate = 22%).</p> <p>Clubs ranged in size from <100 members to >25,000. Twenty-nine percent had less than 800 members.</p> <p>22% reported operating less than 10 EGMs, while 37% operated more than 80 EGMs.</p> <p>35% reported that patrons aged 65+ constituted at least half of their total membership.</p> |
| <p>Managers of Queensland Gambling Help Services (<i>n</i> = 13) and Gambling Help Line (<i>n</i> = 1)</p> | <p>Semi-structured telephone interviews</p> | <p>Proportion of clients aged 60+ and demographic features of this group</p> <p>Propensity for EGMs to play a role in older people's problem gambling behaviour</p> <p>Awareness of issues that commonly contribute to problem gambling in older clients</p> <p>Views and observations concerning the impact of venue promotions on older people's gambling behaviour</p> | <p>All 14 agencies participated in the consultation. Data predominantly qualitative and impressionistic only.</p> |

Table 1 continued

| Population | Data collection method | Main focus of investigation | Sample size and characteristics |
|---|--|---|---|
| Managers of other relevant non-government organisations, representing the needs of older people ($n = 5$) | Semi-structured telephone interviews | Awareness of the extent to which older Queenslanders experience gambling related problems, particularly with EGMs | All 5 identified organisations participated in the consultation. Data predominantly qualitative and impressionistic only. Most organisations had limited information to report. |
| Awareness of and views about the impact of EGM venue promotions directed at older people | | Awareness of characteristics of older people experiencing gambling problems | |
| Stage 2 – Survey of Older EGM Users | Self-administered survey conducted on site at 7 clubs in Greater Brisbane | Respondents' demographic characteristics and personal circumstances | 1,620 older patrons approached at random across 7 clubs, 704 of whom were in scope, resulting in 414 completed surveys (i.e. response rate 59%). |
| | Greater Brisbane | Respondents' reported EGM gambling behaviour, attitudes and motivations | 65% of respondents were female. |
| | People aged 60 + who play EGMs regularly (i.e. at least every 3 months) in local clubs | Views about factors that impact on respondents' sense of control over EGM use | Only 10% of respondents were in some form of paid employment. |
| | | Reported participation in venue promotions and perceived impact of these on EGM use | 55% reported a personal pre-tax income of less than \$20,000. |
| | | Problem Gambling Risk Classification – assessed using 9 core items of the Canadian Problem Gambling Index | Problem Gambling classification for the sample: 2% 'problem gamblers', 15% 'moderate risk gamblers', 20% 'low-risk gamblers', and 64% 'non-problem gamblers'. |
| | | | The spread of respondent ages in the present study corresponds relatively closely with Queensland population estimates. |

reported a *personal* pre-tax income of less than \$20,000 per annum, again not inconsistent with relevant population data for this age cohort.

Using the CPGI, the prevalence of problem gambling in the sample was found to be two percent. Fifteen percent were classified ‘moderate risk gamblers’, 20% ‘low risk gamblers’ and 64% ‘non-problem gamblers’.

Statistical Analysis

Statistical analysis of the data was undertaken for the survey of older EGM users. Descriptive frequencies and cross-tabulations were computed and compared for categorical variables. Pearson Chi-Square statistical analyses were utilised to detect and describe associations between categorical variables, while *t*-tests were used to assess the equality of means for interval variables. Associations were explored between EGM users’ gambling attitudes, motivations and behaviour, and a range of demographic variables including age, gender, income, disability, employment and marital status. The relationship between multiple categorical variables was assessed using logistic regression analysis, and the explanatory contribution of a range of demographic and motivational variables on problem gambling risk status was computed via a logistic regression model constructed by forward selection of variables.

Results

Gambling Behaviour and Motivations

A key objective of the study was to investigate the gambling behaviours and motivations of older EGM players and whether these are influenced by particular personal circumstances or characteristics. Club managers offered various insights into the gambling behaviours of their older patrons. Most (78%) observed that their older patrons tended to treat their gambling as more of a social activity than did other patrons. With regard to time and financial investment in playing EGMs, very few clubs believed that their older patrons spent longer periods of time using EGMs (8%) or more money on EGMs (6%) than other patrons on average. Some commented that older patrons tended to bet low credits to extend the time they spent on a machine, an observation consistent with the results reported in the study by Boreham et al. (1996). A considerable proportion of clubs (39%) felt that their older patrons spent more time at the club than their younger patrons and most (69%) thought that their older patrons were more likely than other patrons to use other facilities of the club and not EGMs. These observations suggest that many older people attend clubs for a range of social and recreational purposes in addition to, or even to the exclusion of, EGM gambling.

Analysis of data from the patron survey suggests that older people’s level of financial investment in EGMs is negatively associated with their age ($\chi^2 = 15.552$, $p = 0.016$, $df = 6$). While this observation may be attributable to the greater earning power of those aged under 70, no relationship was evident between expenditure on EGMs and either income level or participation in the workforce.

With regard to older gamblers’ time investment in EGM play, 40% of those surveyed spent less than one hour per week playing EGMs while 14% spent more than 5 hours per week playing. Interestingly, respondents who were without a partner ($n = 162$ —including

‘never married’ (9%), ‘separated’ (4%), ‘divorced’ (27%) or widowed (60%) were twice as likely as those who were partnered ($n = 242$) to spend 5 h or more per week gambling on EGMs (21% cf. 9%, $\chi^2 = 11.503$, $p = 0.001$, $df = 1$).

The observation by club managers that older patrons tend to treat their gambling as more of a social activity is partially supported by older patrons’ self-reports, with 41% indicating that ‘making friends and socialising’ was a reason for their EGM play. The social impetus for gambling was a recurrent theme in the extended responses: Respondents said they played EGMs because:

‘[it is a] social outing.’

‘[it is an opportunity to] socialise and take others out.’

‘[it enables me to] spend time with my wife who enjoys playing.’

‘[it enables me to] sometimes play with my friends.’

‘[it is an opportunity to] just play with my husband.’

‘[it is an opportunity] for relaxation, enjoyment and friendship.’

Winning money was slightly more commonly stated as a reason for playing (45%) than socialising. However, the most popular reason given for gambling was ‘to support my club’ (46%), a finding that perhaps indicates the extent to which older people value the social and recreational opportunities provided by the club and their recognition of the role that EGM revenue plays in delivering these. At least one third of respondents said they played EGMs to reduce their boredom (39%) or isolation (34%), or to ‘forget about problems when [they] feel depressed or stressed’ (33%). The escape from everyday stress was a particularly notable theme in the extended responses to this question:

‘I can lose myself in the game.’

‘Just switching off from everything.’

‘Relieves stress.’

‘To relax.’

A smaller proportion of respondents stated that they played EGMs to reduce suffering from pain (14%), and just less than one fifth (18%) were motivated by the possibility of winning back money previously lost on EGMs.

As reported in Table 2, older people’s different personal circumstances and characteristics appear to be associated with significant differences in their specific motivations for playing EGMs. Moreover, certain sub-groups within the sample appear to be more motivated to play EGMs. As a general measure of overall motivation to play EGMs, an Aggregate Motivation Score (AMS) was calculated for each respondent corresponding to the number of pre-coded motivators that they nominated (0–9). The mean AMS for a range of sub-groups is summarised in Table 3 (mean AMS across sample = 3.00, $SD = 2.37$).

Women were more likely than men to be motivated by the opportunity to socialise and to make friends (44% cf. 33%, $\chi^2 = 4.631$, $p = 0.031$, $df = 1$) and by the opportunity to forget about problems when they feel stressed or depressed (38% cf. 25%, $\chi^2 = 7.035$, $p = 0.008$, $df = 1$). While women appeared to be more motivated overall to play EGMs (mean AMS = 3.13 cf. 2.76), this difference was not statistically significant.

Those with a disability that restricted everyday activities had a significantly higher overall motivation to play EGMs than those without a disability (mean AMS = 3.61 cf.

Table 2 Motivations of regular EGM users aged 60+ by demographic variables

| Motivation to play EGMs | All eligible respondents (n = 414) | | Has disability that restricts everyday activity | | Currently works for pay on full-time, part-time or casual basis | | Annual personal income | | Marital status | |
|--|------------------------------------|---------------|---|----------------|---|--------------|------------------------|---------------------|--------------------|------------------------------|
| | M (%) n | F (%) n | Yes (%) n | No (%) n | No (%) n | Yes (%) n | < \$20,000 (%) n | \$20,000 + (%) n | Partnered (%) n | Single ^a (%) n |
| It is an opportunity to support my club | 46 (189/414) | 47 (67/144) | 44 (44/99) | 45 (138/306) | 47 (174/373) | 37 (15/41) | 49 (112/229) | 42 (34/81) | 46 (113/247) | 46 (74/162) |
| I can win money | 45 (186/414) | 45 (121/269) | 53 (52/99) | 43 (131/306) | 46 (170/373) | 39 (16/41) | 53 (121/229) | 42 (34/81) | 44 (109/247) | 47 (76/162) |
| It is an opportunity to socialise and make friends | 41 (168/414) | 44* (119/269) | 35 (35/99) | 42 (129/306) | 40 (150/373) | 44 (18/41) | 44 (101/229) | 33 (27/81) | 36 (88/247) | 49* (80/162) |
| It decreases my boredom | 39 (130/414) | 41 (59/144) | 56 (55/99) | 33** (102/306) | 39 (145/373) | 37 (15/41) | 41 (93/229) | 35 (28/81) | 36 (89/247) | 43 (69/162) |
| I get to be around others and this reduces my sense of isolation | 34 (141/414) | 37 (100/269) | 44 (44/99) | 31* (94/306) | 36 (134/373) | 17* (7/41) | 41 (93/229) | 21* (17/81) | 29 (72/247) | 42* (68/162) |
| I can forget about my problems when I feel stressed or depressed | 33 (138/414) | 38* (102/269) | 44 (44/99) | 29* (90/306) | 35 (131/373) | 17* (7/41) | 40 (92/229) | 20** (16/81) | 30 (75/247) | 37 (60/162) |
| It is exciting | 31 (130/414) | 29 (42/144) | 42 (42/99) | 28* (85/306) | 33 (123/373) | 17* (7/41) | 36 (82/229) | 28 (23/81) | 29 (72/247) | 35 (56/162) |
| I can win back money lost playing EGMs | 18 (75/414) | 17 (24/144) | 19 (19/99) | 18 (55/306) | 19 (70/373) | 12 (5/41) | 21 (48/229) | 14 (11/81) | 17 (43/247) | 20 (32/162) |
| It relieves pain that I suffer | 14 (57/414) | 12 (17/144) | 22 (22/99) | 11* (34/306) | 14 (51/373) | 15 (6/41) | 17 (39/229) | 10 (8/81) | 12 (29/247) | 17 (28/162) |

Significance based on Pearson Chi-Square tests. * $p \leq 0.05$, ** $p \leq 0.001$, $df = 1$ for all calculations. ^a ‘Single’ includes ‘never married’ (n = 16), ‘separated’ (n = 6), ‘divorced’ (n = 43) and ‘widowed’ (n = 97)

Table 3 Survey of regular EGM players aged 60 years and over: Aggregate Motivation Score (AMS) for EGM gambling by sub-groups of respondents^a

| Sample sub-group(<i>ranked from most to least highly motivated</i>) | Mean AMS ^a | N | SD | Standard error of mean | Difference from mean AMS for sample ^b |
|---|-----------------------|-----|------|------------------------|--|
| Moderate risk/Problem gambler ^c | 3.80 | 64 | 2.33 | .292 | 0.80 |
| Has disability that restricts everyday activities | 3.61 | 99 | 2.62 | .263 | 0.61 |
| Spends 1 hour or more per week playing EGMs | 3.52 | 247 | 2.40 | .153 | 0.52 |
| Spends more than \$10 per week on EGMs | 3.48 | 215 | 2.35 | .160 | 0.48 |
| Has annual personal income less than \$20,000 | 3.41 | 229 | 2.52 | .167 | 0.41 |
| Single (never married, divorced, separated, widowed) | 3.35 | 162 | 2.40 | .189 | 0.35 |
| Female | 3.13 | 269 | 2.42 | .147 | 0.13 |
| Does not currently work for pay | 3.08 | 373 | 2.38 | .123 | 0.08 |
| Aged 60–69 years | 3.03 | 233 | 2.42 | .158 | 0.03 |
| All eligible respondents | 3.00 | 414 | 2.37 | .116 | 0.00 |
| Aged 70 years and over | 2.94 | 180 | 2.28 | .170 | -0.06 |
| Low risk/Non-problem gambler ^c | 2.82 | 323 | 2.32 | .129 | -0.18 |
| Does not have disability that restricts everyday activities | 2.80 | 306 | 2.26 | .129 | -0.20 |
| Partnered (married, de facto) | 2.79 | 247 | 2.32 | .148 | -0.21 |
| Male | 2.76 | 144 | 2.25 | .188 | -0.24 |
| Has annual personal income of \$20,000 or more | 2.44 | 81 | 1.89 | .210 | -0.56 |
| Spends \$10 or less per week on EGMs | 2.46 | 138 | 2.26 | .192 | -0.54 |
| Has annual personal income of \$20,000 or more | 2.44 | 81 | 1.89 | .210 | -0.56 |
| Currently works for pay | 2.34 | 41 | 2.14 | .334 | -0.66 |
| Spends less than 1 hour per week playing EGMs | 2.21 | 161 | 2.04 | .161 | -0.79 |

^a Corresponds to the average number of motivators to play EGMs nominated (0–9). The higher this figure, the greater the sub-group's overall motivation to play EGMs

^b Positive difference indicates greater than average motivation to play EGMs; negative difference indicates lower than average motivation to play EGMs

^c Problem gambling risk status classified using the Canadian Problem Gambling Index (Canadian Centre on Substance Abuse 2001)

280, $t = 2.948$, $p = 0.003$, $df = 403$). They were more commonly motivated to play EGMs than those without a disability in relation to all but two motivators surveyed, the difference being significant in most cases, as shown in Table 2. The largest differences in the frequency with which motivations were reported by the two groups were in relation to 'decreasing boredom' (56% cf. 33%, $\chi^2 = 15.561$, $p = 0.000$, $df = 1$), and being able to 'forget about problems when I feel stressed or depressed' (44% cf. 29%, $\chi^2 = 7.635$, $p = 0.006$, $df = 1$).

Table 2 also indicates that employment status appears to influence motivations for playing EGMs, with those not currently employed being significantly more motivated overall to play EGMs than those in employment (mean AMS = 3.08 cf. 2.34, $t = 2.066$, $p = 0.044$, $df = 52$). The largest differences in the frequency with which motivations were reported by the two groups were in relation to 'being around others which reduces my sense of isolation' (36% cf. 17%, $\chi^2 = 5.845$, $p = 0.016$, $df = 1$), and being able to 'forget about problems when I feel stressed or depressed' (35% cf. 17%, $\chi^2 = 5.414$, $p = 0.020$, $df = 1$).

Similarly to those outside the workforce, respondents with a personal annual income of less than \$20,000 had a higher overall motivation to play EGMs than those on a higher income (mean AMS = 3.41 cf. 2.44, $t = 3.141$, $p = 0.002$, $df = 308$) (Table 2). As with those outside the workforce, the largest differences in the frequency with which motivations were reported by the two groups were in relation to 'being around others which reduces my sense of isolation' (41% cf. 21%, $\chi^2 = 10.065$, $p = 0.002$, $df = 1$), and being able to 'forget about problems when I feel stressed or depressed' (40% cf. 20%, $\chi^2 = 10.992$, $p = 0.001$, $df = 1$).

As suggested by their tendency to invest more time in EGM play, the overall motivation to play EGMs of those who were without a partner was significantly greater than that of respondents who were partnered (mean AMS = 3.35 cf. 2.79, $t = 2.340$, $p = 0.020$, $df = 407$). Single older people were more likely than those living with a partner to report playing EGMs in order to be 'around others which reduces my sense of isolation' (42% cf. 29%, $\chi^2 = 7.148$, $p = 0.008$, $df = 1$). They were also more likely to play EGMs for the 'opportunity to socialise and make friends' (49% cf. 36%, $\chi^2 = 7.648$, $p = 0.006$, $df = 1$).

Propensity for Behaviour Associated with Problem Gambling

A central objective of this study was to explore the impact of older people's personal circumstances and characteristics on their propensity to behave in ways that might indicate emerging or potential problems with gambling such as: spending more than intended; experiencing reduced control over session length and expenditure; drawing on less sustainable budgetary sources, such as personal savings, to finance gambling; and holding erroneous beliefs about their capacity to influence the outcome of their betting. This is the focus of the analysis presented below.

Betting Outside Self-Determined Limits of Expenditure

Just over one fifth of older EGM players surveyed (22%) indicated that they had bet more than they could afford to lose on at least one occasion. Betting outside of self-determined limits of expenditure was related to various demographic variables including age, disability

Table 4 Survey of regular egm players aged 60 years and over: propensity for problem gambling types of behaviour by players' personal characteristics

| Behaviour | All eligible respondents (%) | | Age | | Marital status | | Gender | | Has disability that restricts everyday activity | |
|---|------------------------------|-------------|----------------|----------------|----------------|-------------------------|----------------|----------------|---|----------------|
| | <i>n</i> | (%) | 60–69 (%) | 70+ (%) | Partnered (%) | Single ^b (%) | M (%) | F (%) | Yes (%) | No (%) |
| | <i>n</i> = 414 ^a | | <i>n</i> = 233 | <i>n</i> = 180 | <i>n</i> = 247 | <i>n</i> = 162 | <i>n</i> = 144 | <i>n</i> = 269 | <i>n</i> = 99 | <i>n</i> = 306 |
| I have bet more than I could really afford to lose on at least one occasion | 22 (89/400) | 28 (62/223) | 15* (27/171) | 18 (42/234) | 29* (46/155) | 26 (36/136) | 20 (53/257) | 32 (31/94) | 20* (58/295) | |
| At times I have felt a lesser sense of control over the amount I spend on EGMs or the length of my EGM sessions | 15 (63/414) | 19 (43/233) | 11* (20/180) | 14 (35/247) | 17 (27/162) | 22 (32/144) | 12* (31/269) | 17 (17/99) | 14 (44/306) | |
| Draws in part on personal savings to finance EGM gambling ^a | 27 (85/312) | 28 (51/181) | 26 (34/131) | 23 (42/184) | 34* (43/126) | 32 (33/104) | 25 (52/207) | 36 (28/78) | 24* (55/230) | |
| At least once I have thought that losing many times in a row is likely to increase my chances of winning | 17 (68/397) | 21 (47/218) | 12* (21/171) | 16 (37/232) | 19 (30/154) | 23 (31/134) | 14* (37/254) | 16 (15/93) | 18 (53/292) | |
| At least once I have thought that if I use a certain strategy or system I could win more money | 16 (62/398) | 20 (45/218) | 10* (17/171) | 15 (36/232) | 16 (25/154) | 21 (29/135) | 13* (33/253) | 14 (14/93) | 16 (48/292) | |

* $p \leq 0.05$, ** $p \leq 0.001$. Significance based on Pearson Chi-Square tests: $df = 1$ for all calculations

^a Questions about expenditure and budgets were only presented to 358 of 414 respondents

^b 'Single' includes 'never married' ($n = 16$), 'separated' ($n = 6$), 'divorced' ($n = 43$) and 'widowed' ($n = 97$)

Table 5 Survey of regular EGM players aged 60 years and over: Propensity for problem gambling types of behaviour by players' patterns of EGM play

| Behaviour | All eligible respondents (%) n = 414 | Amount spent per week on EGMs ^a | | Hours spent playing EGMs per week | | | | | |
|---|--|--|-------------------------|-----------------------------------|-------------------------|------------------------|-------------------------------|-------------------------------|-----------------------|
| | | \$10 or less (%) n = 138 | >\$10 (%) n = 215 | \$30 or less (%) n = 237 | >\$30 (%) n = 116 | <1 h (%) n = 161 | 1 h or more (%) n = 247 | 5 h or less (%) n = 352 | >5 h (%) n = 56 |
| I have bet more than I could really afford to lose on at least one occasion | 22 (89/400) | 9 (12/134) | 32** (66/205) | 14 (33/228) | 40** (45/111) | 11 (17/152) | 29** (70/236) | 18 (60/333) | 49** (27/55) |
| At times I have felt a lesser sense of control over the amount I spend on EGMs or the length of my EGM sessions | 15 (63/414) | 7 (9/138) | 20** (43/215) | 8 (19/237) | 28** (33/116) | 8 (13/161) | 19* (48/247) | 12 (43/352) | 32** (18/56) |
| Draws in part on personal savings to finance EGM gambling ^a | 27 (85/312) | 12 (23/116) | 32* (61/192) | 21 (42/204) | 41** (42/104) | 21 (24/115) | 30 (58/194) | 24 (63/268) | 46* (19/41) |
| At least once I have thought that losing many times in a row is likely to increase my chances of winning | 17 (68/397) | 10 (13/133) | 23* (47/204) | 11 (26/227) | 30** (34/110) | 12 (18/150) | 21* (49/234) | 15 (50/329) | 31* (17/55) |
| At least once I have thought that if I use a certain strategy or system I could win more money | 16 (62/398) | 8 (11/133) | 19* (39/203) | 10 (23/226) | 24** (27/110) | 14 (21/151) | 17 (41/233) | 14 (47/329) | 27* (15/55) |

* $p \leq 0.05$, ** $p \leq 0.001$. Significance based on Pearson Chi-Square tests: $df = 1$ for all calculations

^a Questions about expenditure and budgets were only presented to 358 of 414 respondents

and marital status as illustrated in Table 4 and patterns of EGM play as shown in Table 5. Those aged in their sixties were much more likely than older players to have bet more than they could afford to lose (28% cf. 15%, $\chi^2 = 9.273$, $p = 0.010$, $df = 2$). Those with a disability that restricts everyday activities were also more likely than other players to have bet more than they could afford to lose (32% cf. 20%, $\chi^2 = 10.492$, $p = 0.005$, $df = 2$), as were those who were currently without a partner compared with those who were partnered (29% cf. 18%, $\chi^2 = 7.438$, $p = 0.024$, $df = 2$).

Reduced Control Over EGM Session Duration and Expenditure

Fifteen percent of respondents acknowledged that there were times when they were conscious of having less control over their EGM use, specifically in relation to session length or the amount of money expended during sessions. Table 6 summarises the range of factors that were identified as contributing to reduced control. Just over a third (35%) of those reporting problems with control ($n = 63$) identified stress or anxiety as a factor that decreases their control over EGM gambling. Depression (29%) and a sense of loneliness (30%) were the next most commonly indicated factors. A quarter reported having less control when in a state of excitement, and the same number had observed that being angry similarly diminished their control. When asked what helped most to increase their sense of control at these times, the most common response was to ‘stay away from the club when I feel vulnerable’ (38%), suggesting that these players do not consider that there are adequate protections in the gaming environment to safeguard them from their vulnerability to uncontrolled EGM use.

Table 6 Survey of regular EGM players aged 60 years and over: factors perceived to reduce or increase sense of control over EGM gambling^a

| Things that <i>reduce</i> sense of control over amount spent or length of EGM session | Frequency ($n = 63$) (%) | Things that <i>increase</i> sense of control over amount spent or length of EGM session | Frequency ($n = 63$) (%) |
|---|----------------------------|---|----------------------------|
| Feeling stressed or anxious | 35 | Staying away from the club when I feel vulnerable | 38 |
| Feeling lonely | 30 | Being asked by a friend to take a break | 32 |
| Feeling depressed | 29 | Eating a meal | 30 |
| Feeling angry | 25 | Finding out the time of day | 16 |
| Feeling excited | 25 | Not being able to smoke in the gaming area | 16 |
| Experiencing family or relationship problems | 21 | Having to leave the building to get more money | 13 |
| Flashing lights and sounds from the EGMs | 19 | Being forced to stop because the gaming area is closing | 10 |
| Having a few alcoholic drinks | 16 | Having a friend or club staff member express concern about me | 10 |
| Experiencing financial hardship | 13 | Doing exercise | 6 |
| Experiencing physical illness or pain | 11 | | |
| Taking medication | 8 | | |
| Feeling tired | 6 | | |

^a These questions were only presented to 63 respondents who indicated that there were times that they had experienced a lesser sense of control over their spending on EGMs or the length of their EGM sessions

Table 4 indicates that difficulties with control over EGM gambling were associated with age and gender (Table 4). Those in their sixties were again more likely than older players to report difficulties with control (19% cf. 11%, $\chi^2 = 4.237$, $p = 0.040$, $df = 1$) as were men compared with women (22% for men cf. 12% for women, $\chi^2 = 8.304$, $p = 0.004$, $df = 1$). Reporting experiences of reduced control was also positively associated with certain patterns of EGM play, namely greater weekly expenditure on EGMs and more hours spent playing EGMs per week (Table 5). The association between reporting difficulties with control and greater hours spent playing EGMs per week was not significant, however, when age, gender and weekly expenditure were controlled for.

Drawing on Savings to Finance EGM Gambling

A surprisingly substantial proportion of older people surveyed (27%) reported financing their EGM gambling, at least in part, out of their personal savings. Propensity to draw on savings was greatest amongst moderate risk/problem gamblers (Table 8), but certain aged-related personal circumstances would also appear to impact on older people's behaviour in this regard (Table 5). Those who were single were more likely than those who were partnered to draw on their savings (34% cf. 23%, $\chi^2 = 4.799$, $p = 0.028$, $df = 1$) as were those with a disability that restricts everyday activity compared with those without a disability (36% cf. 24%, $\chi^2 = 4.250$, $p = 0.039$, $df = 1$).

Holding Erroneous Beliefs About Capacity to Influence the Outcome of Gambling

Seventeen percent of respondents had thought that losing many times in a row was likely to increase their chances of winning; similarly 16% had thought that through using a certain strategy or system, they could win more money. Propensity to hold these erroneous beliefs was related to respondents' age and gender (Table 4) as well as patterns of EGM play (Table 5). Men, those in their sixties, and those who spent more money and time playing EGMs per week, were more likely to report holding these views.

Profiling Moderate Risk/Problem Gamblers

A key objective of the study was to distinguish characteristics of older EGM gamblers who are classified, using the CPGI, as 'problem' or 'moderate risk' gamblers from those classified as 'low risk' or 'non-problem gamblers'. Problem gambling status was cross-tabulated with a wide range of variables to reveal that certain personal characteristics and circumstances, as well as various gambling behaviours, attitudes and motivations, were associated with moderate risk/problem gamblers. These results are reported in Tables 7 and 8.

Older moderate risk/problem gamblers were characterised by spending more time and money gambling than other older gamblers and being motivated to gamble by the possibility of winning money, of being entertained, and of escaping stress and depression. While the relationship between having a disability that restricts everyday activities and being classified as a moderate risk/problem gambler fell just short of statistical significance ($\chi^2 = 3.718$, $p = 0.054$, $df = 1$), moderate risk/problem gamblers were significantly more likely to report gambling on EGMs to relieve pain that they suffer ($\chi^2 = 4.341$,

Table 7 Survey of regular EGM players aged 60 years and over: problem gambling risk status by demographic variables^a

| Variables | Low risk/ Non-problem gamblers (%) <i>n</i> = 323 | Moderate risk/ Problem gamblers (%) <i>n</i> = 64 | χ^2 | <i>p</i> -value |
|---|--|--|----------|-----------------|
| Annual Personal Income | | | | |
| <\$20,000 | 75 (185/246) | 70 (35/50) | .590 | 0.443 |
| \$20,000 or more | 25 (61/246) | 30 (15/50) | | |
| Gender* | | | | |
| Male | 32 (103/322) | 48 (31/64) | 6.374 | 0.012* |
| Female | 68 (219/322) | 52 (33/64) | | |
| Age | | | | |
| 60–69 years | 54 (175/323) | 67 (43/64) | 3.674 | 0.055 |
| 70 years or older | 46 (148/323) | 33 (21/64) | | |
| Has disability that restricts everyday activity | 23 (73/318) | 34 (22/64) | 3.718 | 0.054 |
| Employment Status | | | | |
| Employed | 10 (31/292) | 11 (7/64) | 0.108 | 0.742 |
| Unemployed | 90 (292/323) | 89 (57/64) | | |
| Marital Status* | | | | |
| Partnered | 63 (202/321) | 46 (29/63) | 6.273 | 0.012* |
| Single ^b | 37 (119/321) | 54 (34/63) | | |

* $p \leq 0.05$, ** $p \leq 0.001$. Significance based on Pearson Chi-Square tests: $df = 1$ for all calculations

^a Problem gambling risk status classified using the Canadian Problem Gambling Index (Canadian Centre on Substance Abuse 2001)

^b 'Single' includes 'never married' ($n = 16$), 'separated' ($n = 6$), 'divorced' ($n = 43$) and 'widowed' ($n = 97$)

$p = 0.037$, $df = 1$). Moderate risk/problem gamblers were also significantly more likely than the rest of the sample to be without a partner ($\chi^2 = 6.273$, $p = 0.012$, $df = 1$), male ($\chi^2 = 6.374$, $p = 0.012$, $df = 1$), to gamble at the casino ($\chi^2 = 5.209$, $p = 0.022$, $df = 1$), to draw on their savings to fund EGM gambling ($\chi^2 = 15.626$, $p = 0.000$, $df = 1$), and to have held erroneous beliefs about their capacity to influence the outcome of their gambling (see Table 8). As would be expected, they were considerably more likely to have bet more than they could really afford to lose on at least one occasion, and to have acknowledged experiencing reduced control over the duration and expenditure associated with their EGM sessions.

The explanatory contribution of a range of demographic and motivational variables on problem gambling risk status was computed via a logistic regression model constructed by forward selection of variables. Variables included in the model were selected according to hypotheses generated from the literature on problem gambling, specifically that problem gamblers are more likely to be male and to be motivated to gamble by the possibility of winning money, of experiencing excitement, and of escaping negative mood states and/or chronic pain. Other demographic variables that appeared to have some association with problem gambling behaviour in bivariate analyses—such as disability and marital status—were also included in the model. Younger age (60–69), male gender, single marital status and being motivated to play EGMs to experience excitement and to win money all emerged as significant in the

Table 8 Survey of regular EGM players aged 60 years and over: problem gambling risk status by gambling behaviours, motivations and attitudes^a

| Gambling behaviours, motivations and attitudes | Low risk/Non-problem gamblers (%) <i>n</i> = 323 | Moderate risk/Problem gamblers (%) <i>n</i> = 64 | χ^2 | <i>p</i> -value |
|---|---|---|------------------|-----------------|
| Time spent playing EGMs per week** | | | | |
| Less than 1 h per week | 43 (139/320) | 19 (12/63) | 13.111 | 0.000 |
| One hour or more per week | 57 (181/320) | 81 (51/63) | | |
| Weekly Expenditure** | | | | |
| \$10 or less | 45 (128/283) | 13 (7/55) | 20.280 | 0.000 |
| > \$10 | 55 (155/283) | 87 (48/55) | | |
| Draws on savings to finance EGM play** | 22 (55/252) | 49 (24/49) | 15.626 | 0.000 |
| Motivations for Playing EGMS | | | | |
| It is an opportunity to support my club | 44 (143/323) | 48 (31/64) | .374 | 0.541 |
| I can win money** | 42 (135/323) | 66 (42/64) | 12.222 | 0.000 |
| It is an opportunity to socialise and make friends | 41 (132/323) | 36 (23/64) | 0.541 | 0.462 |
| It decreases my boredom* | 36 (115/323) | 55 (35/64) | 8.196 | 0.004 |
| I get to be around others and this reduces my sense of isolation | 32 (102/323) | 41 (26/64) | 1.975 | 0.160 |
| I can forget about my problems when I feel stressed or depressed* | 31 (100/323) | 45 (29/64) | 4.952 | 0.026 |
| It is exciting** | 27 (88/323) | 50 (32/64) | 12.929 | 0.000 |
| I can win back money lost playing EGMs | 18 (57/323) | 17 (11/64) | 0.008 | 0.930 |
| It relieves pain that I suffer* | 12 (39/323) | 22 (14/64) | 4.341 | 0.037 |
| Mean AMS (overall motivation to play EGMs)* ^b | 2.82 (<i>SD</i> = 2.26) | 3.80 (<i>SD</i> = 2.33) | <i>t</i> = 3.069 | 0.002 |
| At times has experienced reduced control over length of time spent playing or money expended on EGMs* | 8 (27/323) | 45 (29/64) | 58.937 | 0.000 |
| Has bet more than could afford to lose on at least one occasion* | 10 (33/317) | 83 (53/64) | 159.716 | 0.000 |
| Participation in Club Promotions | | | | |
| When participating in a venue promotion, usually spends more time playing EGMs than they would have done without the promotion* | 14 (20/142) | 33 (11/33) | 6.807 | 0.009 |

Table 8 continued

| Gambling behaviours, motivations and attitudes | Low risk/Non-problem gamblers (%) <i>n</i> = 323 | Moderate risk/Problem gamblers (%) <i>n</i> = 64 | χ^2 | <i>p</i> -value |
|--|---|---|----------|-----------------|
| When participating in a venue promotion, usually spends more money playing EGMs than they would have done without the promotion* | 11 (16/140) | 27 (9/33) | 5.423 | 0.020 |
| Erroneous Beliefs About Capacity to Influence Outcome of Gambling | | | | |
| At least once thought that 'losing many times in a row is likely to increase my chances of winning'*** | 12 (35/316) | 45 (29/63) | 45.731 | 0.000 |
| At least once thought that 'If I use a certain strategy or system I could win more money'** | 9 (30/316) | 44 (28/62) | 50.762 | 0.000 |

^a Problem gambling risk status classified according to the Canadian Problem Gambling Index (Canadian Centre on Substance Abuse 2001)

^b Corresponds to the average number of motivators to play EGMs nominated (0–9)

* $p \leq 0.05$, ** $p \leq 0.001$. Significance based on Pearson Chi-Square tests for all variables except AMS, where *p* is based on a *t*-test for equality of means for independent sample. *df* = 1 in significance tests for all variables except AMS, where *df* = 385

model, as shown in Table 9. Approximately 12% of variation in problem gambling risk status is explained by the model.

Venue Promotions

The final objective of the study was to explore the characteristics of older EGM players who participate in venue promotions and consider what impact, if any, venue promotions have on their gambling behaviour, specifically their expenditure of time and money on EGMs. Half of the older gamblers surveyed had participated in a venue promotion: most commonly discount meals (72% of those who had participated in a promotion), entertainment (56%) and membership number draws (54%). Participation in venue promotions did not appear to be associated with specific personal circumstances or characteristics, with the exception of age. Those aged 70 and over were more likely than those in their sixties to have participated in promotions (59% cf. 43%, $\chi^2 = 10.758$, $p = 0.001$, *df* = 1), a finding that may be attributable to the older cohort's childhood during the Great Depression and Second World War, where thriftiness and the collecting of discount coupons would have been formative cultural experiences for many.

Most clubs (71%), acknowledged running promotions directed specifically at older people. A number of gambling support services consulted in the study observed that these promotions are often designed in ways that encourage older people to attend for extended periods of time (e.g. all-day bus trips) and/or encourage them to play EGMs (e.g. EGM credits). Support services expressed concern about the impact that this may have on older

Table 9 Survey of regular EGM players aged 60 years and over: characteristics predictive of moderate risk/problem gambling status^a

| Characteristics | Odds ratio | Standard error | z | p-value |
|--------------------------------------|------------|----------------|------|---------|
| Gender (Male) | 2.87 | 0.11 | 3.36 | 0.001 |
| Age (60–69 years) | 2.12 | 0.15 | 2.40 | 0.016 |
| Marital Status (Single) | 2.86 | 0.89 | 3.36 | 0.001 |
| Plays EGMs because ‘it is exciting’ | 2.05 | 0.66 | 2.24 | 0.025 |
| Plays EGMs because ‘I can win money’ | 2.09 | 0.68 | 2.25 | 0.024 |

Log likelihood = -151.17; Pseudo R^2 = 0.12; Obs = 383

^a Problem gambling risk status classified using the Canadian Problem Gambling Index (Canadian Centre on Substance Abuse 2001)

people’s EGM use. On the basis of older people’s self-reports participation in venue promotions would appear to be associated with greater time and financial expenditure on EGMs for a minority of respondents. Of those participating in promotions ($n = 206$), 18% said they usually spent more time playing EGMs than they would have done without a promotion, and 14% said that they usually spent more money on EGMs than they would have done without a promotion. Moreover, 8% of those who had participated in a venue promotion said that they had been introduced to playing EGMs through a venue promotion.

The impact of venue promotions on gambling behaviour was significantly greater for moderate risk/problem gamblers. Amongst those who participated in promotions, moderate risk/problem gamblers reported more commonly than non-problem/low-risk gamblers that they usually spent more time playing EGMs than they would have done without a promotion (33% cf. 14%, $\chi^2 = 6.807$, $p = 0.009$, $df = 1$). They also indicated more commonly than non-problem/low risk gamblers that they spent more money playing EGMs on these occasions (27% cf. 11%, $\chi^2 = 5.423$, $p = 0.020$, $df = 1$).

Discussion and Conclusion

To our knowledge, this is the first study to have analysed older people’s gambling behaviour and motivations specifically in the context of their local clubs. While it is acknowledged that convenience sampling limits the extent to which the data generated can be used to make reliable inferences about the population of older Queenslanders who use EGMs on a regular basis, it was nevertheless possible to test relationships between gambling motivations, attitudes and behaviours of older people and a range of demographic variables to identify relationships of significance. Emerging patterns in turn provide the basis for future studies of older gamblers undertaken with more representative samples.

Local gambling venues are an important contemporary context for older people’s gambling, being much more accessible to this segment of the population than traditional, centralised providers of EGMs, such as casinos. In Australia, clubs, more so than hotels and bars, are perceived as safe spaces for older people and as supportive of older people’s particular social and recreational needs. Gambling support services consulted as part of this study emphasised that ‘clubs are a central social focus’ in many of their older clients’ lives; ‘the club scene is their outlet’; ‘it is the hub of their existence’. The popular perception of such venues less as businesses and more as benign spaces for the delivery of valued community services, may limit the willingness or ability of older

people and policy makers alike, to appreciate the risks that may be faced by older people in using these spaces, or more specifically, in having such ready access to EGM gambling. The findings of this study draw attention to certain vulnerabilities of older people that might need to be considered more carefully in the provision and regulation of EGMs at a local level.

The analysis of gambling motivations undertaken here suggests that certain groups of older people who regularly gamble on EGMs may have a higher overall motivation to use EGMs that is associated with various age-related circumstances, such as being without a partner, having a disability that impacts on everyday activities, having a low annual income, and no longer participating in the workforce. Examination of the specific motivators nominated by older EGM gamblers suggests that these groups of older people may also rely more heavily on EGMs to meet social, recreational and/or psychological health needs. Greater reliance on EGMs to relieve negative emotional states may be of some concern given that stress, anxiety, depression and loneliness were also identified as the most common factors contributing to diminished control over EGM use by those who acknowledged experiencing reduced control.

The profile of older moderate risk/problem gamblers is similar to the profile of older problem gamblers outlined in Wiebe (2002). They are typically characterised by spending more time and money gambling than other older gamblers and being motivated to gamble by the possibility of winning money, of being entertained, and of escaping stress and depression. These motivational characteristics are consistent with psychological studies comparing problem and non-problem gamblers more generally, such as Ladouceur et al. (1997) and Clarke (2004). Moderate risk/problem gamblers were also more likely to report gambling on EGMs to relieve pain that they suffer, an observation that may correspond to Neufeld's (1999:4) finding that older problem gamblers commonly suffer from chronic pain.

Additional characteristics of older moderate risk/problem gamblers were identified in the present study. Younger age, male gender and single marital status were associated with increased propensity to experience problems with gambling. While the relationship between problem gambling risk status and disability fell just short of statistical significance, the other evidence presented here concerning older EGM users' vulnerability to reduced control over their EGM gambling, suggests that disability, along with these other variables, needs to be considered in future studies of older people and problem gambling.

Older people who regularly gamble on EGMs may also be more vulnerable than their younger counterparts to negative impacts on their financial wellbeing. More than one in four of the older people surveyed (27%) reported drawing, at least in part, on their savings to fund their EGM gambling. Compared with younger segments of the population, older people are more commonly retired and thus have more limited opportunities to replenish savings once they are used. It is thus conceivable that long-term regular EGM use may gradually whittle away older people's financial security. The protection of savings for investment purposes is also becoming increasingly important for older people's financial wellbeing in the context of a growing social policy emphasis in countries such as Australia on self-funding retirement. The extent to which the findings of the present study suggest it is common for regular EGM players aged 60 and over to draw on their savings to fund their gambling, raises some cause for concern in this context. As in other countries that have experienced equivalent gambling industry deregulation in recent years, this is the first generation of older people to have had such ready access to EGMs. Accordingly, the impact they have on older people's financial wellbeing arguably needs to be monitored carefully.

The impact of venue promotions on the gambling behaviour of older people in the study suggests a further area for policy attention. While most older people surveyed did not feel that venue promotions impacted on their EGM play and saw themselves using these to their own benefit, a significant number who had participated in venue promotions reported spending more time playing EGMs than they would have done without the promotion and/or spending more money on EGMs in the context of a promotion. Moderate risk/problem gamblers were significantly more likely than other older people in the study to report an increase in their expenditure of time and/or money on EGMs in the context of a venue promotion, suggesting that promotions may exacerbate difficulties with gambling control already experienced by this group. The perception that venue promotions impact negatively on some older people's gambling behaviour was shared by a number of gambling support services consulted as part of the study. Two strategies suggested by these organisations for minimising potential harm to older gamblers have been put forward by Blaszczynski (2002:6) previously, and are compelling in light of the vulnerabilities of some older gamblers suggested by the findings of the present study. These strategies are: prohibiting special promotions on pension payment days; and prohibiting undue inducements and complementarities (such as free gaming tokens and play bonuses), either to enter gaming venues or during play aimed at prolonging sessions.

The analysis presented here has offered unique insights into the gambling motivations, attitudes and behaviours of older people who regularly use EGMs in a local context. The research has also identified some of the ways in which the age-related circumstances of older people may increase their vulnerability to negative impacts of this mode and context of gambling. It is hoped that these insights will be valuable in the further development of consumer protection and harm minimisation policies and in the design of future research on older people and problem gambling.

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