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SYDNEY

Understanding Electronic Gaming Machine Players

Insights from a Large EGM Venue in Western Sydney

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Table of Contents

Table of Contents	1
List of Tables	2
List of Figures	2
Executive Summary	3
Aim and Methodology	3
Participant Characteristics	3
Control Strategies	3
Technology Literacy	3
Attitudes Towards Account-Based Systems	3
Focus Group Discussion	4
Behavioural Account Data	4
Predictors of Higher Risk Gambling	5
Discussion	5
Recommendations to reduce gambling harms including implementation of an account-based systems	6
Introduction	7
Method	8
Respondents	8
Procedure	8
Survey	8
Measures	9
Baseline Survey	9
Analyses	10
Results	11
Demographics	11
Electronic Gaming Machine Play Behaviour	13
Types of Venue and Frequency of Playing	13
Membership in Venues	13
Other Gambling Activities	14
Gambling Satisfaction	15
Gambling Control Strategies	16
Budgeting Strategies	16
Account-Based Systems	18
Perceived Usage of Account-Based Systems	20
Factors influencing Intent-to-Use Account-based Systems	20
Problem Gambling and Account-Based System Perception	22
Technology Literacy	24
Aggregate Score and Limitations	24
Technology Literacy per age category and language at home	25
Technology Literacy and Perceived Ease-of-use of Account Based Systems	25
Technology Literacy and Intent to use Account Based Systems	25
Qualitative Analysis	26
Qualitative Survey Responses regarding Account-based Systems	26
Focus Group Discussion	26
Summary of consumer focus group findings	27
Summary of consumer focus group findings from staff	33
Behavioural Data Analysis	34
Methods	34
Limitations	34
Assessing the Representativeness of the Survey Sample	34
Behavioural Markers and Account-based Systems	36
Behavioural Markers and Intent-to-use Account-based Systems	36
Behavioural Markers and Perceived Usefulness of Account-based Systems	37
Behavioural Markers and Financial Wellbeing	39
EGM sessions per time of Day	40
Predictors of Higher Risk Gambling	43
Survey Data Predictors for Higher Risk Gambling	43
Behavioural Data Predictors for Higher Risk Gambling	43
Discussion and Recommendations	45
EGM Play Behaviour	45
Attitudes and Perception Towards Account-based Systems	46
Recommendations to reduce gambling harms including implementation of an account-based systems	47

List of Tables

Table 1a. Demographic Characteristics (n=151)	11
Table 2. Frequency of EGM play in any venue and number of venues visited	13
Table 3. Number of venue membership	14
Table 4. Number of participants per specific gambling activity in the last 30 days	14
Table 5. Frequency of respondents per frequency of keeping to the budget categorised by Gambling Satisfaction	16
Table 6. Number of participants per budgeting strategy	17
Table 7. Perceptions and attitudes towards account-based systems	18
Table 8. Intent-to-use account-based systems per membership tier levels	21
Table 9. Demographic Characteristics	27
Table 10. Mean EGM play parameters (SD) per member in the last 6-months categorised by their intent-to-use account-based systems	37
Table 11. Mean EGM play parameters (SD) per member in the last 6-months categorised by their perceived usefulness of account-based systems	38
Table 12. Definition of the derived behavioural data variables	44

List of Figures

Figure 1. Frequency of respondents per type of venue most often visited	13
Figure 2. Number of respondents based on their frequency of linking their loyalty card to their pokies play.	14
Figure 3. Percentage of respondents per betting satisfaction category	15
Figure 4. Frequency of respondents per frequency of keeping to the budget	16
Figure 5. Percentage of respondents per perceived advantages of account-based system categorised per feature of the system.....	19
Figure 6. Percentage of respondents per likelihood to use account-based	20
Figure 7. Frequency of respondents based on their perceived percentage of EGM players who will use account-based systems.	20
Figure 8. Percentage of respondents per likelihood to use account-based systems categorised by different scenarios.....	21
Figure 9. Frequency of respondents per perceived usefulness of account-based systems and classified according to the Problem Gambling Severity Index scoring.	22
Figure 10. Frequency of respondents per intent-to-use account-based systems and classified according to the Problem Gambling Severity Index scoring.	23
Figure 11. Percentage of respondents based on their level of technology literacy.....	24
Figure 12. Aggregate score for technology literacy	24
Figure 13. Sankey diagram displaying the proportion of customers from each quartile of the past 6-month gambling composite variable who went to complete the survey (Complete), start it but not finish it (Incomplete), and not start it (Not started). Values on the left indicate percentage that completed the survey.	35
Figure 14. Comparison of the total turnover, win and net per member in the last 6 months categorised by their intent-to-use account-based systems.	36
Figure 15. Comparison of the total number of games played per member in the last 6 months categorised by their intent-to-use account-based systems.	36
Figure 16. Comparison of the total turnover, win and net per member in the last 6 months categorised by their perceived usefulness of account-based systems.	37
Figure 17. Comparison of the total turnover, win and net per member in the last 6 months categorised by their perceived usefulness of account-based systems.	38
Figure 18. Comparison of the total turnover, win and net per member in the last 6 months categorised by their financial wellbeing classification.	39
Figure 19. Comparison of the total turnover, win and net per member in the last 6 months categorised by their intent-to-use account-based systems.	39
Figure 20. Number of sessions in the past-6 months per time of day.....	40
Figure 21. Comparison of the number of games played per member on different time frames categorised by PGSI risk level classification.	40
Figure 22. Comparison of total spend per member on different time frames categorised by PGSI risk level classification.....	41
Figure 23. Comparison of net outcome per member on different time frames categorised by PGSI risk level classification.....	42
Figure 24. Impact of different demographic and survey data variables on higher gambling risk behaviours. Legend: Coefficient of Logistic Regression, * p <0.05	43
Figure 25. Impact of different demographic and derived behavioural variables on higher gambling risk behaviours.....	44

Executive Summary

Aim and Methodology

- The aim of the study was to understand electronic gaming machine (EGM) customers including their gambling behaviour, control strategies, and knowledge and perception of account-based systems (i.e., systems that permit customers to create an account linked with their identity and transfer money directly from their bank account) with the end objective of informing policies and practices to reduce gambling-related harm.
- This study utilised a survey (n=204), focus groups with members (n=12) and staff (n=6) and collected deidentified account data for all venue members who had played EGMs in the last 30 days which was linked to their survey responses. Strict governance and adherence to privacy protocols were ensured during data collection and analysis and the venue had no involvement in or constraints on data collection, analysis or reporting.

Participant Characteristics

- Survey respondents were 204 electronic gaming machine players who have played in the past 30-days prior to the survey with the venue.
- Respondents had a mean age of 50.24 years, were predominantly female (55%) and working full time (62%). More than two-fifths (45%) were 'getting by' financially with more than half of the participants reporting their income to be stable (57%) and predictable (57%).
- Around 70% of respondents were either satisfied or very satisfied with their life.
- Respondents were characterised by frequently visiting clubs (83%) for at least 1 to 5 days per month (57%) and around 1 to 3 different venues (73%).
- More than one-third (38%) were members of 2 to 3 EGM venues with half (50%) of the respondents linking their loyalty card when playing EGMs.
- Around two-thirds (65%) of respondents were either dissatisfied or not so satisfied with their overall gambling experience, not limited to EGM play.
- Besides pokies, the most common gambling activity were lottery (33%) and keno (22%).

Control Strategies

- In terms of play management strategies, most respondents set informal spending limits (14%), limit how much money to take to the venue (10%) and play in certain ways such as using low denomination (10%).
- Formal budgeting strategies such as setting deposit limits were only utilised by 4% of the respondents.
- Most (92%) of the respondents set a budget for their EGM play. Of these, more than two-fifths (43%) keep to the budget 'always' or 'almost always'.
- Respondents who were 'very satisfied' or 'satisfied' with their gambling tend to stick to their budget.

Technology Literacy

- Most participants found smartphones easy to use (74%) and used mobile banking frequently (74%). However, around half (48%) have not used digital wallets.
- Younger respondents had greater comfort with technology across the three categories: mobile banking, smartphone use, and mobile wallets. There were no significant differences in technology literacy aggregate score across the different membership tier levels.
- Technology literacy aggregate scores did not significantly vary across gambling risk levels, financial well-being classification, and language spoken at home.

Attitudes Towards Account-Based Systems

- There was ambiguity in terms of perceived ease of use of a hypothetical account-based systems among the respondents (easy to use 32%; neutral 33%; difficult to use 34%).

- Half of the respondents perceived that account-based systems were not useful (50%) and would not improve their pokies play (52%).
- More than half (59%) were unlikely to use the system if implemented in a voluntary capacity.
- Respondents perceived account-based systems as advantageous in terms of tracking gambling spend (51%), setting spending (50%) and time limit (37%), and locking gambling accounts temporarily (45%).
- Half (49%) perceived not being able to use cash to play as a disadvantage. The ability to link personal details (49%) and to transfer funds (43%) were also perceived as disadvantages, although one-third held neutral views towards these features.
- Intention to use account-based systems did not vary across age cohorts, gender, financial well-being and language spoken at home.
- Those who perceived account-based systems as easy-to-use and those who intend to use it had higher technology literacy scores.
- Those classified as experiencing gambling problems were more likely to perceive an account-based system as useful. For those who perceived account-based systems as useful, 8 out of 10 (81%) engage in either moderate-risk gambling or problematic gambling.
- Two-fifths of respondents (41%) who were likely to use account-based systems engage in problematic gambling followed by one-third (33%) who engage in moderate-risk gambling. However, this difference was not statistically significant.

Focus Group Discussion

- Most participants reported that they would not use the system if it were voluntary due to concerns or simply due to the ease of continuing to play with cash.
- Participants saw value in account-based systems for themselves and others including the ability to access activity statements to track their spend, to make it easier to access and transfer funds. Participants also saw benefits in terms of setting limits, although this was mainly seen as relevant for those who had difficulty controlling their spend, as well as venues identifying and assisting customers who might be experiencing gambling problems.
- Perceived barriers to account-based gambling included the potential for overspending due to easy access to funds, a low perceived trade-off of using the system when considering the costs (i.e., the perceived inconvenience of signing up for the system when gambling at low frequencies and need to share personal information), privacy concerns (e.g., potential data breaches, the potential for the venue to access more information than the customer would like, and the data potentially being used by the government for monitoring purposes), and a preference for using cash.
- There were some contradictory responses amongst the focus group participants regarding account-based systems and their perceived ease in facilitating play. Some participants highlighted how account-based systems could be easier to use when considering their current need to withdraw cash prior to play whereas other participants outlined the steps required to set up an account-based system as a barrier and that using electronic funds may lead to spending more than is affordable.
- The tangibility of cash and cash contributing to the experience of gambling, coupled with cash overcoming any privacy concerns associated with account-based systems contributed to participants' preference for using cash.
- Venue staff demonstrated favourable attitudes towards account-based systems including assisting customers to be aware of their gambling spend, setting a limit, enhancing self-exclusion, identifying risk gambling and reducing money laundering.

Behavioural Account Data

- This is the first Australian study to link EGM account data with survey data to enable in-depth analysis of gambling behaviour.
- Members were aged between 18 to 98, with balanced sex distribution (approximately 50% males and 50% females).
- When individuals who completed the survey were compared to those who did not, few notable differences were observed, suggesting that the survey sample is a good representative of the venue players cohort.

Higher total games played, spend, mean net loss and turnover from 12AM to 2AM and 2AM to 6AM was observed among those engaging in moderate-to-high risk gambling as compared to lower risk members.

- Gambling risk level increases as the level of financial wellbeing or combined household income decreases. Those that were 'just coping' financially have the highest mean number of games played and time on device.
- Visiting more EGM venues was associated with higher gambling risk levels.
- EGM patrons with lower net outcomes and less variation in their gambling turnover were more likely to engage in higher risk gambling.
- Intention to use and perceived usefulness of account-based systems were not significantly correlated with objective gambling account data including total number of games played, total turnover, total win, and net win/loss.
- Mean turnover, win and net loss in the last 6 months were higher but not significantly statistically different in members with higher perceived usefulness and intent to use account-based systems.

Predictors of Higher Risk Gambling

- Combined household annual income and financial wellbeing had statistically significant negative relationship with gambling risk levels, suggesting that gambling risk levels decreases as the annual income and financial wellbeing increases.
- The number of EGM venues visited had a significant positive relationship with gambling risk levels, suggesting that visiting more EGM venues was associated with higher gambling risk levels.
- Past 6-month net outcome (win/loss) had statistically significant negative relationship with gambling risk levels, indicating that increasing net outcome (net win) significantly decreases gambling risk levels.
- Greater variability in turnover was significantly associated with lower gambling risk levels.
- Other demographic, survey, and behavioural parameters such as play at unsociable hours (12AM to 6AM), betting frequency, highest number of bets on a single day, and highest turnover on a single day did not show statistically significant effects on the risk of gambling, noting that the test was potentially underpowered due to the small survey sample. However, it is important to note that venue members who completed the survey were broadly representative of those who did not based on their EGM engagement.

Discussion

- Implementation of a voluntary account-based system would unlikely be effective as few customers would engage with this due a preference for status quo and effort needed to complete registration.
- Ambiguity was seen among the EGM customers regarding an account-based system which would allow cashless gambling in addition to the ability to track their gambling spend and set limits on their play. Given the lack of familiarity with the system this is to be expected.
- More involved EGM players, including those with moderate and severe gambling problems, indicated greater likelihood to use the system and perceived benefits. This shows the potential benefits are realised by the target audience of individuals potentially at risk of experiencing gambling harms and that communicating about the benefits would enhance uptake among regular patrons.
- The most notable barriers to using account-based gambling were the requirement to link EGM spend with identity documents and bank accounts. The concerns related to fear of a privacy breach and banks having greater visibility of gambling activity. Customers also indicated a preference to use cash to assist in controlling their gambling.
- People experiencing financial difficulties and with lowest net outcomes were at highest risk of engaging in problematic gambling. Individuals classified as at moderate or high risk for problematic gambling spent more after midnight and in early morning hours than lower-risk EGM customers. This demonstrates systemic issues with the availability of EGM gambling which are unlikely to be addressed through an account-based system.

Recommendations to reduce gambling harms including implementation of an account-based systems

- Account-based gambling would assist in reducing gambling harm if implemented in a mandatory manner with the inclusion of appropriate harm-minimisation tools including the ability for customers to set binding limits, increased friction on spending money (e.g., delays and messages), mandatory pushed activity statements, the ability to take an immediate temporary time-out, breaks in play customised to individual behaviour, and the development and implementation of an automated risk monitoring system which would trigger various levels of intervention.
- Communicating clearly what the requirements are to sign up and how to use the system as well as providing practical support could encourage account-based system uptake.
- The results demonstrate the need for clear communication from a credible source to emphasise the benefits of various features of account-based gambling for consumers and to reduce concerns with communication as well as systemic efforts to target those which are based on misinformation or actual potential disadvantages for customers.
- Privacy concerns need to be addressed by minimising information stored and which stakeholders (including venues, government organisations, and financial institutions) have access to what details.
- A tangible token such as a physical card could help overcome a potential barrier to the uptake of an account-based system and ongoing use among those who prefer not to rely on smartphones. Access to the system via kiosks would reduce technological inequity.
- Besides current harm minimisation strategies implemented in the venue, recommended actions include communication and structural changes to encourage EGM patrons to take regular breaks in play to ensure that they are making informed and considered decisions about their gambling spend. Introducing and providing members with regular statements of their gambling spend with clear summaries of net outcomes and encouraging them to make formal or informal budgets for their spend would assist people to focus on what is affordable for them.

Introduction

Australians spend more money per person gambling than people from any other country, around twice the average per capita expenditure of Western countries. Electronic gaming machines (EGMs, or 'pokies') make up more than half of gambling spend in Australia (\$153 of \$226 billion), despite not being one of the most popular gambling activities. In a national representative survey of Australian adult in 2017, 6% of monthly EGM players were classified as experiencing gambling problems, with a further 17.2% classified as experiencing moderate harms.¹

Problem gambling is recognized as a public health issue, yet there are few evidence-based programs to prevent gambling harms or assist individuals to gamble in affordable ways. Understanding differences between consumer groups in terms of risky gambling will aid development of safer gambling interventions. Research demonstrates that tailored health promotion messages are more effective than universal ones as they are perceived to be relevant and motivate behavioural change.²

Account-based systems incorporating cashless payment methods are being trialed and considered within Australia.^{3,4} Account-based systems offer opportunities for harm-minimisation as they can be incorporate features such as real-time, tailored messaging and interventions based on behavioural risk indicators, deposit limits, activity summaries, and links to self-exclusion systems.⁵ Account-based payment systems have further advantages related to anti-money laundering efforts.

Potential negative consequences of account-based gambling systems include consumers being less aware of their spending due to the lower psychological salience of cashless transaction, and consumers being able to 'top-up' their funds instantaneously to continue gambling facilitating excessive spend.⁴ There is very limited knowledge regarding consumers' attitudes towards account-based payment technologies, and their likelihood to adopt the technology and use the harm-minimisation features, or the systems if implemented in a voluntary capacity.⁶

The objective of the proposed research is to understand the characteristics of EGM customers who are at-risk of or experiencing gambling harms. The specific research aims are to:

1. Examine the characteristics of venue members including personal, attitudes, and behaviours
2. Identify any behavioural markers of risky gambling which may indicate vulnerability; and
3. Investigate customer perceptions of and attitudes towards account-based gambling and what motivators may encourage uptake and engagement.

The research outcomes intend to enhance the ability of EGM venues to identify individuals who are at-risk of experiencing gambling harms, facilitate the provision of appropriately tailored interventions to encourage lower risk gambling and inform efforts to enhance relevant customer engagement with voluntary harm minimisation resources.

¹ Armstrong, A., & Carroll, M. (2017). *Gambling activity in Australia*. Melbourne: Australian Gambling Research Centre, Australian Institute of Family Studies.

² Gainsbury, S.M., Abarbanel, B.L.L., Philander, K.S. *et al.* Strategies to customize responsible gambling messages: a review and focus group study. *BMC Public Health* **18**, 1381 (2018). <https://doi.org/10.1186/s12889-018-6281-0>

³ Parker, G. (2020, July 23). Crown Perth to trial EFTPOS transactions to buy chips at the gaming table. 6PR. [https://www.6pr.com.au/exclusive-crown-perth-to-trial-eftpos\[1\]transactions-to-buy-chips-at-the-gaming-table/](https://www.6pr.com.au/exclusive-crown-perth-to-trial-eftpos[1]transactions-to-buy-chips-at-the-gaming-table/)

⁴ Sieroty, C. (2020, June 4). Coronavirus pandemic pushes Nevada regulators to consider cashless gaming. [https://gamblingcompliance.com/premium-content/insights_analysis/coronavirus-pandemic-pushes\[1\]nevada-regulators-consider-cashless](https://gamblingcompliance.com/premium-content/insights_analysis/coronavirus-pandemic-pushes[1]nevada-regulators-consider-cashless)

⁵ Gainsbury, S. M., & Blaszczynski, A. (2020). Digital gambling payment methods: harm minimization policy considerations. *Gaming Law Review*, *24*(7), 466-472. <https://doi.org/10.1089/blr.2020.0015>

⁶ Swanton TB, Tsang S, Collard SB, Garbarino E, Gainsbury SM. Cashless gambling: Qualitative analysis of consumer perspectives regarding the harm minimization potential of digital payment systems for electronic gaming machines. *Psychol Addict Behav*. 2023 Sep 28. doi: 10.1037/adb0000962.

Method

Respondents

The precinct welcomes millions of visitors annually across its businesses which include eight restaurants, a hotel, theatre, bowling, and several fitness and professional athletic facilities. At the time of this research, the venue has thousands of members and has committed to supporting efforts in reducing gambling harms and enhancing wellbeing within its community. The venue aims to be an industry leader and to demonstrate the value of diversification away from a reliance on EGM revenue. They aim to provide gaming in a responsible, transparent, regulated, and sustainable manner and to ensure that this is a socially acceptable activity by taking appropriate actions to reduce gambling harm in the community. The business model is based on the 'less from more' principle and focus on EGMs being a fun and responsible activity rather than the sole reason to be at the venue.

Western Sydney has a high concentration of EGMs, a disproportionate EGM spend, and a socially and ethnically diverse population (49.8% of people born overseas, 54.1% households speak a non-English language, includes low socio-economic-ranked districts based on Census data). As such, this is an appropriate region to examine EGM players to understand differences between subgroups which will enable progress towards the development of relevant gambling harm-minimisation.

The study utilised a survey to obtain information regarding gambling behaviours, problem gambling risk levels, and knowledge and perception regarding account-based systems. Behavioural account data from June 2023 to March 2024 was then collected for all precinct members who satisfied the inclusion criteria, regardless of whether they were recruited for the survey or not.

Procedure

Survey

Recruitment and survey data collection were conducted from December to February 2023. Recruitment was primarily conducted via email or SMS sent by the venue. The email or SMS contained a link, which redirected respondents to a survey hosted in Qualtrics. Posters and flyers with QR codes containing the Qualtrics link, as well as paper version of the survey were also available in the venue gaming floor. The survey was available in five languages: English, Arabic, Simplified Chinese, Punjabi and Hindi. Embedded in the survey was information to participants regarding the details of the study. Consenting respondents completed a brief survey. Participants with authentic and completed responses were offered a gelato voucher redeemable from the venue food court as a form of incentive.

For the email and SMS recruitment, notices were sent out to registered members who played EGMs at the venue in the past 30 days, followed by a reminder notice after one week. Members who self-excluded were not included in the survey recruitment. On the initial recruitment conducted in December 2023, 1,127 emails and 2,648 SMSs were successfully delivered, with an email open rate of 60%, which is above the venue's average.⁷ For the second recruitment conducted in January 2024, additional SMS and emails were sent, with an email open rate of 49%. There were overlaps between the first and second recruitment in terms of participants, however those who have completed the survey were excluded in the second recruitment. Of those who received the invitation email or SMS, 1,328 opened the survey (33.4% open rate).

268 responses were recorded: 215 from the link sent via email/SMS, 2 from the paper survey and 51 from the QR code link. On initial cleaning, 30 responses were removed due to ineligibility

⁷ Data obtained from the venue summary report.

and/or failure to start the survey. An additional 34 responses were removed due to failure of one or more attention check items.

The final sample consisted of 204 respondents for the baseline survey. 133 respondents fully completed (100%) the survey. The remaining 71 respondents have varying completion rates ranging from 17% to 95% hence sample sizes were adjusted per section of the analysis.

All respondents provided informed implied consent, and the study material and procedure were approved by the University of Sydney Human Ethics Research Committee (HREC Protocol No. 2023/771). Strict governance and adherence to privacy protocols were ensured during data collection and analysis. The funding bodies and venue had no ability to access any data collection and were not involved in the research design, analysis or reporting of results. The study design, sampling plan, variables and materials to be used were pre-registered on Open Science Framework (<https://osf.io/pr35d>) to increase transparency and reduce bias.

Measures

Baseline Survey

Demographics

Demographic variables measured included age, gender, education level, employment status, household income, language at home, marital status, and number of children.

Gambling Behaviour

Items measuring multiple aspects of gambling behaviour were administered. These included items specific to EGM play; frequency of play, types of venue, types of venue, and expenditure on EGM play. In addition, these included items specific to control strategies, strategies for budget setting and frequency of budget setting.

Account-Based Systems

Participants were given a brief overview of account-based systems, including information on how this can be accessed and used, as well as potential functions that could help manage play.

*“There is consideration of allowing people to fund their pokies play directly from their bank account or debit card (not credit cards). This would **require customers to download an app onto their mobile phone, create an account, and provide identify documents.***

*You could then **transfer funds from your bank or debit cards into a digital wallet to play pokies.** You would use the app or a physical card to put money onto pokies and take money off again.*

When you want to withdraw your money, it would go back to your bank account.

***This account-based system is intended to make it easier for people, venues, and regulators to manage pokies play.** The system would also have functions to help you manage your play like:*

- *Set a limit on how much you want to spend on pokies per day*
- *Set a time limit on how long you want to play pokies per day*
- *Access an activity statement to easily track your wins, losses, and net outcomes*
- *Take a temporary time-out*
- *Request personal support to self-exclude”*

Following this, items measuring knowledge, attitudes and perceptions regarding account-based systems were administered. These included items specific to attitudes towards account-based systems such as perceived usefulness and intent. In addition, these include items regarding

perceived advantages and disadvantages of account-based systems, as well as potential factors that could increase intent to use account-based systems.

Problem Gambling

Problem gambling was measured using a validated 9-item measure of problem gambling severity. Responses on the Problem Gambling Severity Index (PGSI)⁸ were scored as 'Never' = 0, 'Sometimes' = 1, 'Most of the time' = 2, and 'Almost always' = 3. Scores can range from 0 to 27 and are classified into four risk levels – 'non-problem gambling' (score = 0), 'low-risk gambling' (score = 1-2), 'moderate-risk gambling' (score = 3-7), and 'problem gambling' (score = 8 above).

Betting Satisfaction

Betting satisfaction was measured using a 0 to 10 scale (from totally dissatisfied to totally satisfied) based on the HILDA Life Satisfaction Scale.⁹ Scores were put into four groups – 'very satisfied' (score = 9-10), 'satisfied' (score = 7-8), 'not so satisfied' (score = 4-6), and 'dissatisfied' (score = 0-3).

Technology Literacy

Items measuring technology literacy including ability to use smartphones and digital wallets were included.

Analyses

Baseline results of the survey components were summarised using frequency tables, graphs, and charts. A range of statistical approaches were used to analyse the data in the technical report. The methods used and the type of data they applied to are listed below.

1. Pearson's Chi-squared test was used to test differences in the frequency of respondents that endorsed categorical or ordinal variables with exclusive options (e.g., PGSI).
2. Cochran's Q tests were used to test differences in the frequency of respondents endorsing related binary variables (e.g., past use of deposit limits).
3. Regression analyses were used to test differences in continuous variables (e.g., age)

Given the small sample size of the survey, the hypothesis testing may be underpowered. Therefore, the results should be interpreted with caution.

⁸ Ferris, J., & Wynne, H. J. (2001). *The Canadian Problem Gambling Index final report Ottawa*. ON: Canadian Centre on Substance Abuse

⁹ Ambrey, C. L., & Fleming, C. M. (2014). Life satisfaction in Australia: Evidence from ten years of the HILDA survey. *Social Indicators Research*, 115(2), 691-714.

Results

Respondents were 268 electronic gaming machine players who gambled on EGMs at the venue in the past 30 days prior to the survey. This relatively low number of respondents limits the extent to which the analysis can be applied to the broader population of EGM patrons. However, analyses of customer accounts were conducted and demonstrated that those who participated in the survey did not significantly differ from non-participants in terms of demographics or gambling behaviours based.

Demographics

The following analysis included only the 151 respondents who completed the demographics section. As shown in Table 1, respondents were aged between 19 to 82, predominantly females (56%). Almost two-fifths were married (39.7%) and almost two-thirds had no children (62%). Respondents mostly had an educational level equivalent to year 12 or greater (88.1%), working full-time (62%), and had a combined annual household income of greater than \$65,000 (55.5%). Almost two-thirds of respondents speak only English at home (62%).

Table 1a. Demographic Characteristics (n=151)

	Summary
Age, mean (SD)	50.24 (14.13) <i>Min=19, Max=82</i>
Sex	
Female	84 (55.6%)
Male	63 (41.7%)
Others	4 (2.6%)
Highest Level of Education	
Master's degree	14 (9.3%)
Graduate diploma or graduate certificate	12 (7.9%)
Bachelor's degree	35 (23.2%)
Advanced diploma/diploma	19 (12.6%)
Certificate III/IV	25 (16.6%)
Year 12	28 (18.5%)
Year 11 or below (includes Certificate I/II/n)	18 (11.9%)
Employment Status	
Employed full time	93 (61.6%)
Employed part time or casual	17 (11.3%)
Full- time student	1 (0.7%)
Not currently employed	7 (4.6%)
Principally engaged in domestic duties	6 (4.0%)
Retired	27 (17.9%)
Marital Status	
Married	60 (39.7%)
Never married	38 (25.2%)
De facto/living with partner	24 (15.9%)
Divorced or separated	23 (15.2%)
Widowed	6 (4.0%)
Language other than English at home?	
No	93 (61.6%)
Yes	58 (38.4%)
Number of Children	
1-2	39 (25.8%)
3-4	15 (9.9%)
5 or more	3 (2.0%)
None	94 (62.3%)

Table 1b. Demographic Characteristics (n=151)

Combined Annual Household Income	
Prefer not to say	15 (9.9%)
Nil income	1 (0.7%)
\$1 - \$7,799	1 (0.7%)
\$7,800 - \$15,599	2 (1.3%)
\$15,600 - \$20,799	5 (3.3%)
\$20,800 - \$25,999	8 (5.3%)
\$26,000 - \$33,799	5 (3.3%)
\$33,800 - \$41,599	5 (3.3%)
\$41,600 - \$51,999	9 (6.0%)
\$52,000 - \$64,999	16 (10.6%)
\$65,000 - \$77,999	7 (4.6%)
\$78,000 - \$90,999	12 (7.9%)
\$91,000 - \$103,999	8 (5.3%)
\$104,000 - \$155,999	21 (13.9%)
\$156,000 - \$181,999	8 (5.3%)
\$182,000 or more	28 (18.5%)

Total sample: N = 151

Electronic Gaming Machine Play Behaviour

The following analysis included only the 204 respondents who completed the section regarding gambling behaviour.

Types of Venue and Frequency of Playing

As seen in Figure 1, 8 out of 10 respondents frequently visited clubs (83%), followed by hotels or pubs (11%), noting that multiple responses were permitted. On a typical month, more than half (57%) of the respondents play pokies one to five days in any venue per month, while around a quarter (24%) play 10 or more days per month (Table 2). Around three-quarters (73%) of respondents visit 1 to 3 venues (Table 2).

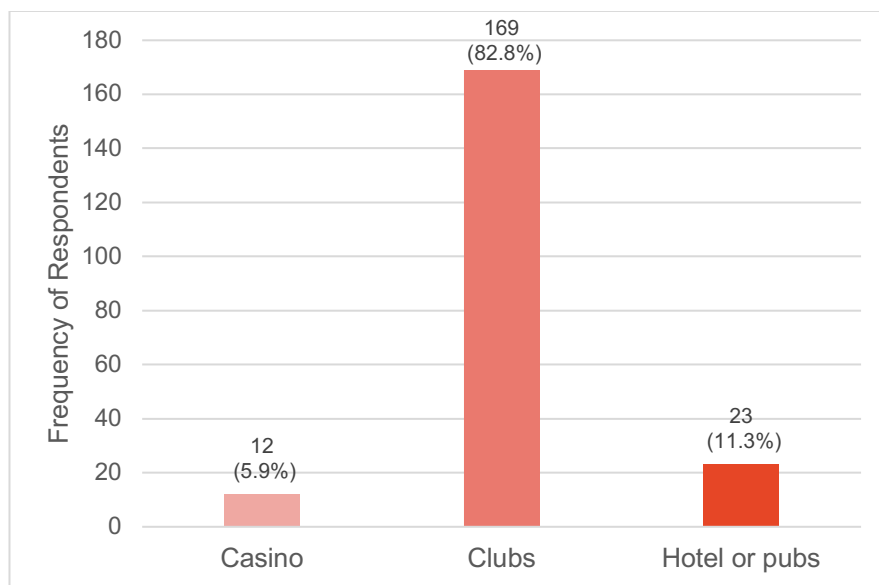


Figure 1. Frequency of respondents per type of venue most often visited.

Table 2. Frequency of EGM play in any venue and number of venues visited

Summary	
How many days in a typical month do you play pokies in any venue?	
Less than one day	18 (8.8%)
1-5	117 (57.4%)
6-9	22 (10.8%)
10-19	34 (16.7%)
20+	13 (6.4%)
How many different venues do you visit to play pokies?	
0	12 (5.9%)
1-3	147 (72.8%)
4-6	35 (17.3%)
7-9	3 (1.5%)
10+	5 (2.5%)

Total sample: N = 204

Membership in Venues

As seen in Table 3, more than one-third of the respondents (38%) were members of two to three EGM venues, while more than a quarter (28%) were members of four to six EGM venues. During pokies play, more than three-quarter of the respondents (77%) 'always' and 'almost always' link their loyalty card while playing pokies (Figure 2).

Table 3. Number of venue membership

	Summary
How many pokies venue are you a member of?	
0	14 (6.9%)
1	40 (19.8%)
2-3	78 (38.6%)
4-6	56 (27.6%)
7-9	12 (5.9%)
10+	3 (1.5%)

Total sample: N = 202

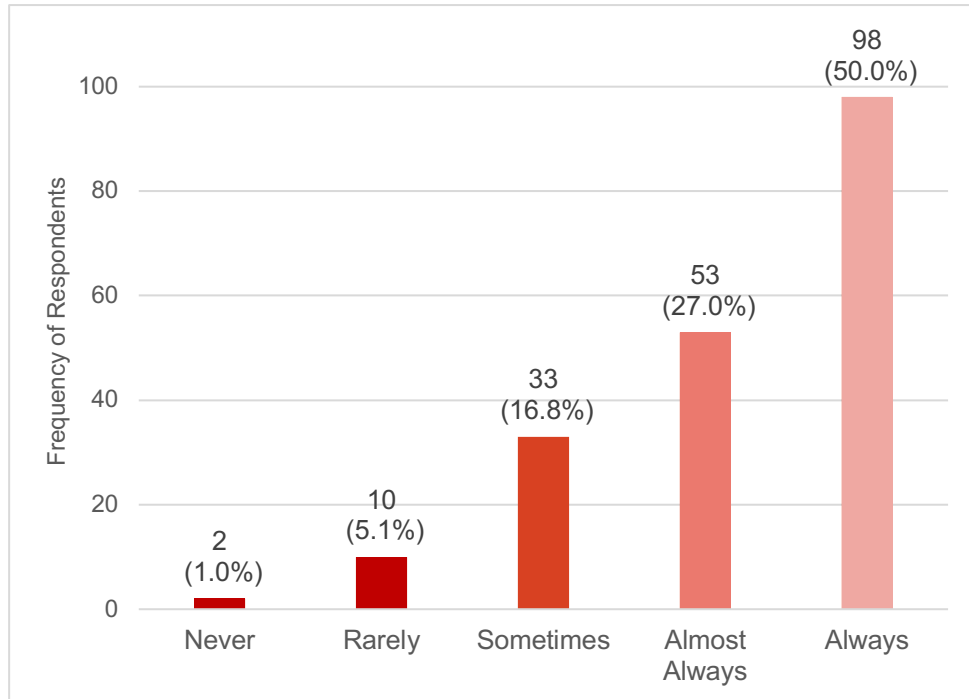


Figure 2. Number of respondents based on their frequency of linking their loyalty card to their pokies play.

Other Gambling Activities

Aggregating across all activity types besides EGMs, 204 respondents had gambled a median of 1 gambling activity (min = 1, max = 6) in the past 30 days.

Not all activities were gambled on with the same participation rates (Table 4). Specifically, respondents were more likely to gamble on lottery as compared to other forms, noting though that 8% of respondents did not participate in other gambling activities besides EGM.

Table 4. Number of participants per specific gambling activity in the last 30 days

	Number of participants	Percent of Responses
Lottery	125	33.3
Keno	81	21.6
Instant scratch tickets	35	9.3
Online Wagering	29	7.7
Online gambling other than wagering	21	5.6
Casino table games	19	5.1
Bingo	14	3.7
On-course/off-course/retail venue-based wagering	7	1.9
Private betting for real money	2	0.5
Others	11	2.9
None	31	8.3
Total	344	100.00

*Total Individuals who answered: 204

Gambling Satisfaction

The following analysis included only the 199 respondents who completed the betting satisfaction section.

As seen in Figure 3, around two-thirds (65%) were either dissatisfied (33%) or not so satisfied (32%) with their gambling, noting that the question asked about their overall gambling and not limited to EGM.

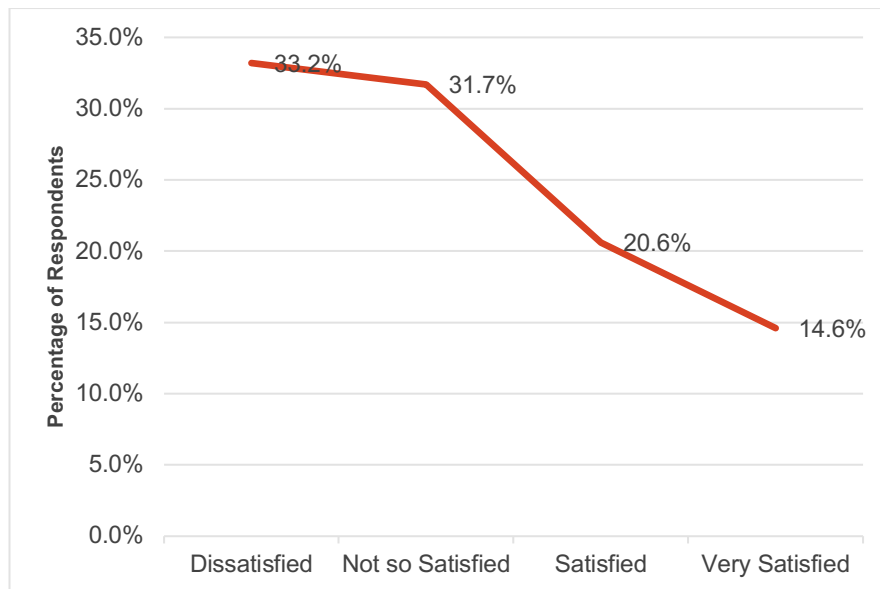


Figure 3. Percentage of respondents per betting satisfaction category.

Gambling Control Strategies

The following analysis included only the 201 respondents who completed the section regarding control strategies.

As seen in Figure 4, 16 respondents (8%) do not set a budget when gambling. Out of the 185 who do set a budget, more than two-fifths (43%) keep to the budget 'always' or 'almost always'.

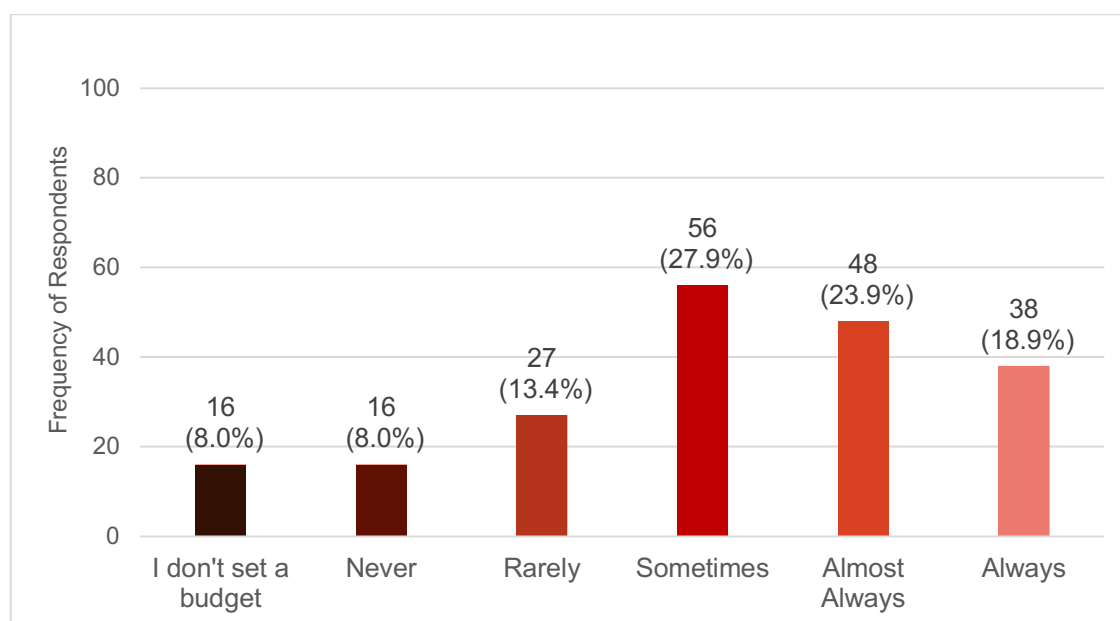


Figure 4. Frequency of respondents per frequency of keeping to the budget

As seen in Table 5, more than two-thirds of respondents (69%) who were 'very satisfied' with their gambling 'always' or 'almost always' stick to their budget. While almost two-fifths (38%) of respondents that were 'dissatisfied' with their gambling 'rarely' or 'never' stick to their budget. Of note, 17.2% of those who reported being 'very satisfied' with their gambling stated that they do not set a budget.

Table 5. Frequency of respondents per frequency of keeping to the budget categorised by Gambling Satisfaction

	Dissatisfied (N=66)	Not so Satisfied (N=63)	Satisfied (N=41)	Very Satisfied (N=29)	Total (N=199)
Always	8 (12.1%)	11 (17.5%)	5 (12.2%)	14 (48.3%)	38 (19.1%)
Almost always	9 (13.6%)	14 (22.2%)	19 (46.3%)	6 (20.7%)	48 (24.1%)
Sometimes	20 (30.3%)	24 (38.1%)	10 (24.4%)	2 (6.9%)	56 (28.1%)
Rarely	17 (25.8%)	8 (12.7%)	1 (2.4%)	1 (3.4%)	27 (13.6%)
Never	8 (12.1%)	4 (6.3%)	2 (4.9%)	1 (3.4%)	15 (7.5%)
I don't set a budget	4 (6.1%)	2 (3.2%)	4 (9.8%)	5 (17.2%)	15 (7.5%)

Total sample: N = 199

Budgeting Strategies

The following analysis included only the 204 respondents who completed the section regarding budgeting strategies.

All participants were asked about their play management strategies (Table 6); most frequent responses include deciding in advance how much to spend (14%), limiting how much money to take to the venue (10%) and playing in a certain way such as using low denomination (10%); noting that most control strategies utilised by the respondents were considered as informal

budgeting strategies. Formal budgeting strategies such as setting deposit limits were only utilised by 4% of the respondents.

Table 6. Number of participants per budgeting strategy

	Number of participants	Percent of Responses (n = 680)	Percentage of Participants (n = 204)
Decide in advance how much I want to spend	92	13.5	45.10
Limit how much money I take to the venue	71	10.4	34.80
Play in a certain way (e.g., choose low denomination)	70	10.3	34.31
Willpower	56	8.2	27.45
Have a set point I stop gambling	55	8.1	26.96
Remind myself I don't expect to win	55	8.1	26.96
Have a set time limit	41	6.0	20.10
Limit the number of gambling venues I visit	32	4.7	15.69
Look at my personal bank/credit card statement	30	4.4	14.71
Take breaks when I am playing	29	4.3	14.22
Do not bring debit/credit card to venue	28	4.1	13.73
Gamble only at set time periods	27	4.0	13.24
Set deposit limit	27	4.0	13.24
Avoid alcohol	26	3.8	12.75
Social support (e.g., come to venue with friends)	20	2.9	9.80
Block my bank account from being used in gambling venue	5	0.7	2.45
Others	3	0.4	1.47
None	13	1.9	6.37
Total	680	100.00	333.33

**Total Individuals who answered: 204*

Account-Based Systems

The following analysis included only the 194 respondents who completed the section regarding account-based systems.

As seen in Table 7, there was ambiguity in terms of the perceived ease of use of account-based systems among the respondents, with roughly one-third of participants seeing these as difficult, easy, or undecided. Half of the respondents perceived that account-based systems were not useful (50%), with one-quarter seeing these as useful. Half disagreed that it would improve their pokies play (52%), while two-fifths agreed.

Table 7. Perceptions and attitudes towards account-based systems

	Summary
How easy or difficult do you think it would be to use account-based system?	
Difficult	67 (34.5%)
Neutral	65 (33.5%)
Easy	62 (32.0%)
How useful do you think it would be for you to use an account-based system?	
Not Useful	97 (50.0%)
Neutral	48 (24.7%)
Useful	49 (25.3%)
Do you agree or disagree that an account-based system would improve your ability to manage your pokies play?	
Disagree	98 (51.6%)
Neutral	50 (26.3%)
Agree	42 (22.1%)

Total sample: N = 194

As seen in Figure 5, respondents perceived account-based systems as advantageous in terms of tracking gambling spend (51%), setting spending limits (50%) and time limit (37%), and locking gambling accounts temporarily (45%). However, almost half of the respondents (49%) perceived not being able to use cash to play as a disadvantage. In addition, the ability to link personal details (49%) and to transfer funds (43%) were more likely to be perceived as disadvantages than advantages by the respondents. It is important to note that for all features there was a substantial proportion of respondents who were unsure whether these would be advantages or disadvantages, and for each feature, there was variance in that some respondents saw these as advantages, while others saw them as disadvantages.

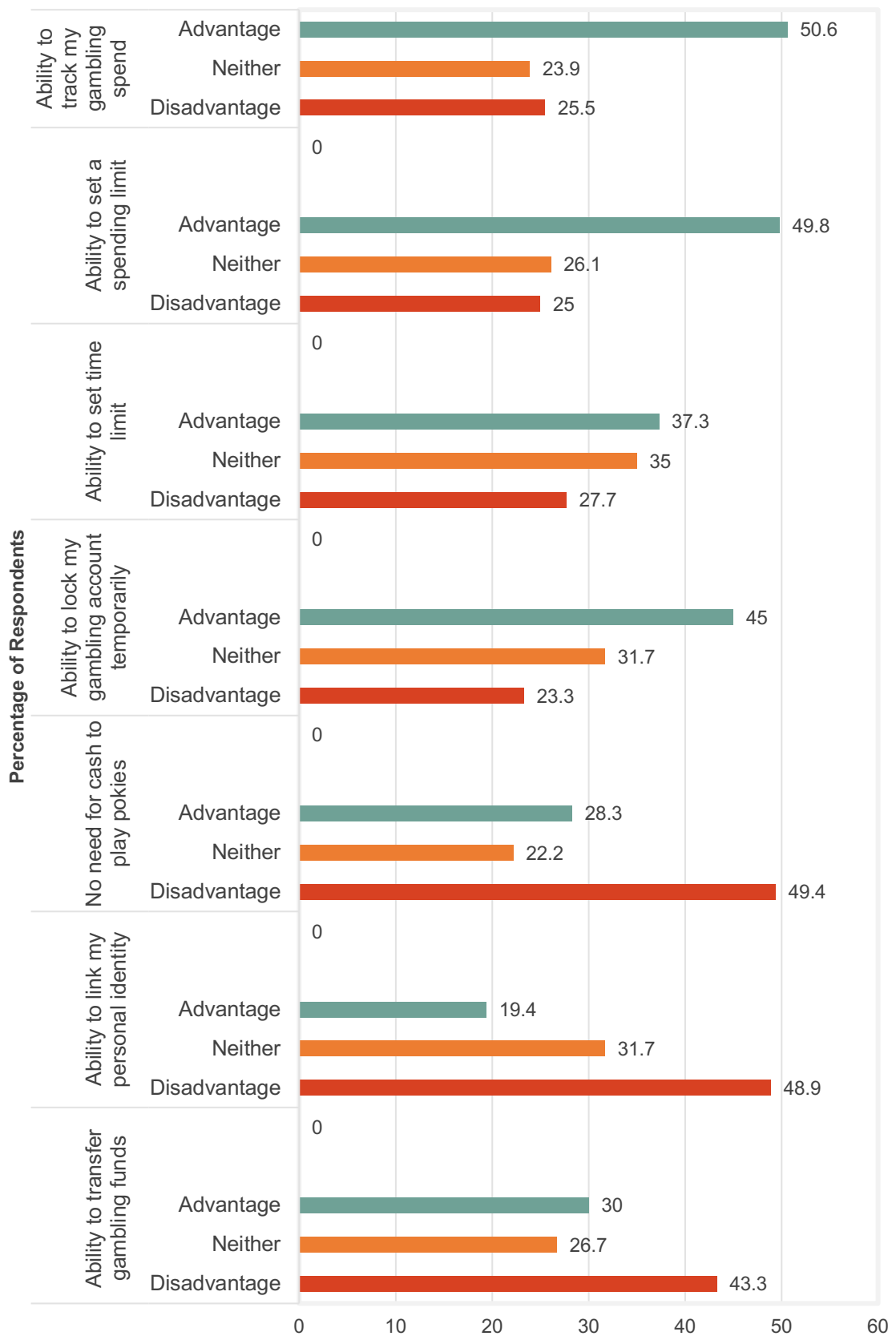


Figure 5. Percentage of respondents per perceived advantages of account-based system categorised per feature of the system.

More than half of respondents (59%) were unlikely to use account-based systems and just under one-quarter were likely to use these if available (Figure 6).

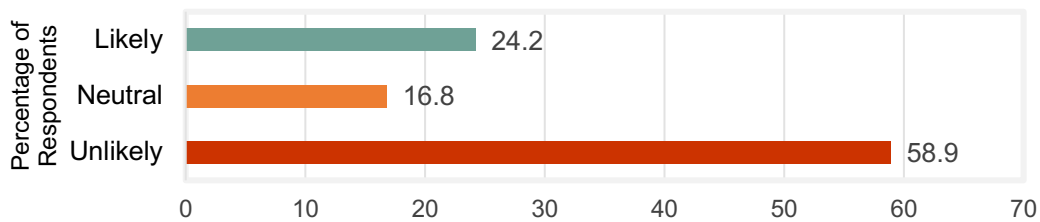


Figure 6. Percentage of respondents per likelihood to use account-based system if it becomes available

Perceived Usage of Account-Based Systems

Looking at respondents' perception of proportion of EGM players who will use account-based system, there was an apparent bi-modal distribution; 36 respondents (19%) perceived that around 40% to 50% will use account-based system followed by 35 respondents (18%) who perceived that 10% or less will use account-based systems, with a tendency for respondents to perceive lower voluntary uptake among EGM patrons. (Figure 7)

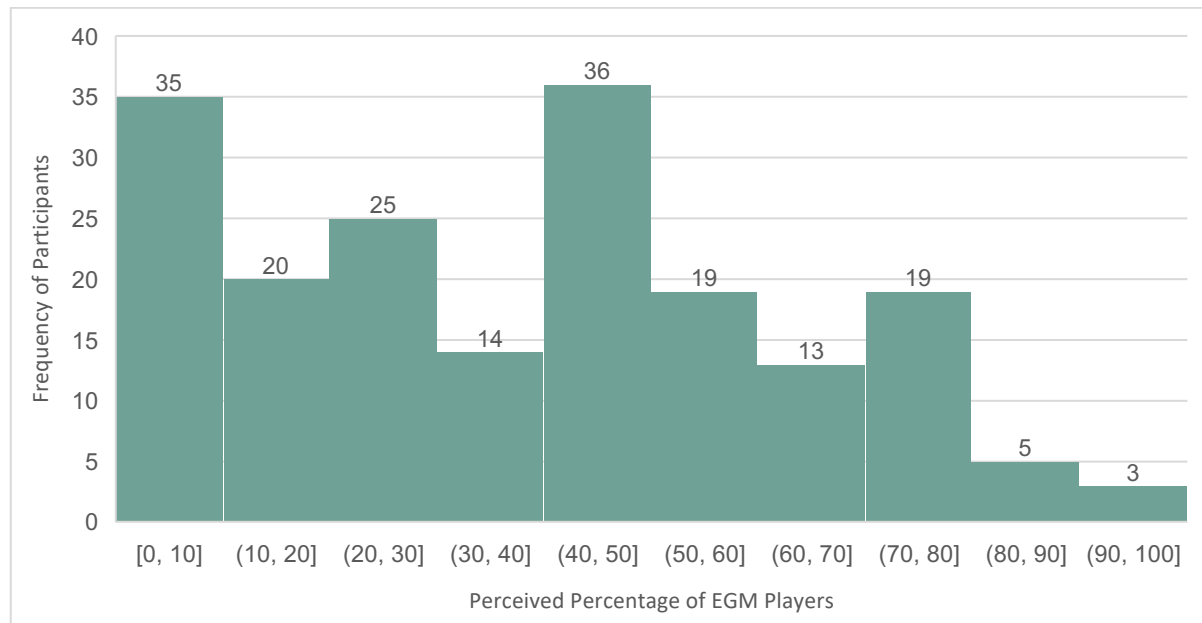


Figure 7. Frequency of respondents based on their perceived percentage of EGM players who will use account-based systems.

Factors influencing Intent-to-Use Account-based Systems

There were no significant differences between intent-to-use account-based systems across the different gender and age categories.

The venue has a membership tier-level system based on spend within the venue. 'Tier 1' and 'Tier 2' were considered as lower-tier levels and 'Tier 3' to 'Tier 5' were considered as higher tier-levels. As seen in Table 8, around a quarter of respondents (27%) who were likely to use account-based systems were 'Tier 2' members while one-third (34%) were 'Tier 1' members. For those who were unlikely to use the system, around two-fifths (40%) belonged to the upper tier-levels (Tier 3 to 5). However, no significant difference was observed across the tier levels, noting that the low number of participants means caution is required in interpreting results.

Table 8. Intent-to-use account-based systems per membership tier levels

	Likely (N=46)	Neutral (N=32)	Unlikely (N=112)	Total (N=190)
Tier 1	15 (34.1%)	13 (43.3%)	24 (21.8%)	52 (28.3%)
Tier 2	12 (27.3%)	10 (33.3%)	42 (38.2%)	64 (34.8%)
Tier 3	4 (9.1%)	1 (3.3%)	20 (18.2%)	25 (13.6%)
Tier 4	7 (15.9%)	4 (13.3%)	15 (13.6%)	26 (14.1%)
Tier 5	6 (13.6%)	2 (6.7%)	9 (8.2%)	17 (9.2%)

As seen in Figure 8, more than a third of respondents were likely to use account-based systems if they received membership points for signing up (39%) or if they only receive points while using the system (34%). While almost half (46%) of respondents were likely to use it if they receive additional membership points while using the system.

Almost a third of respondents were likely to use account-based systems if it becomes required to play at the venue (31%) and if it becomes required to stay at their status level (33%).

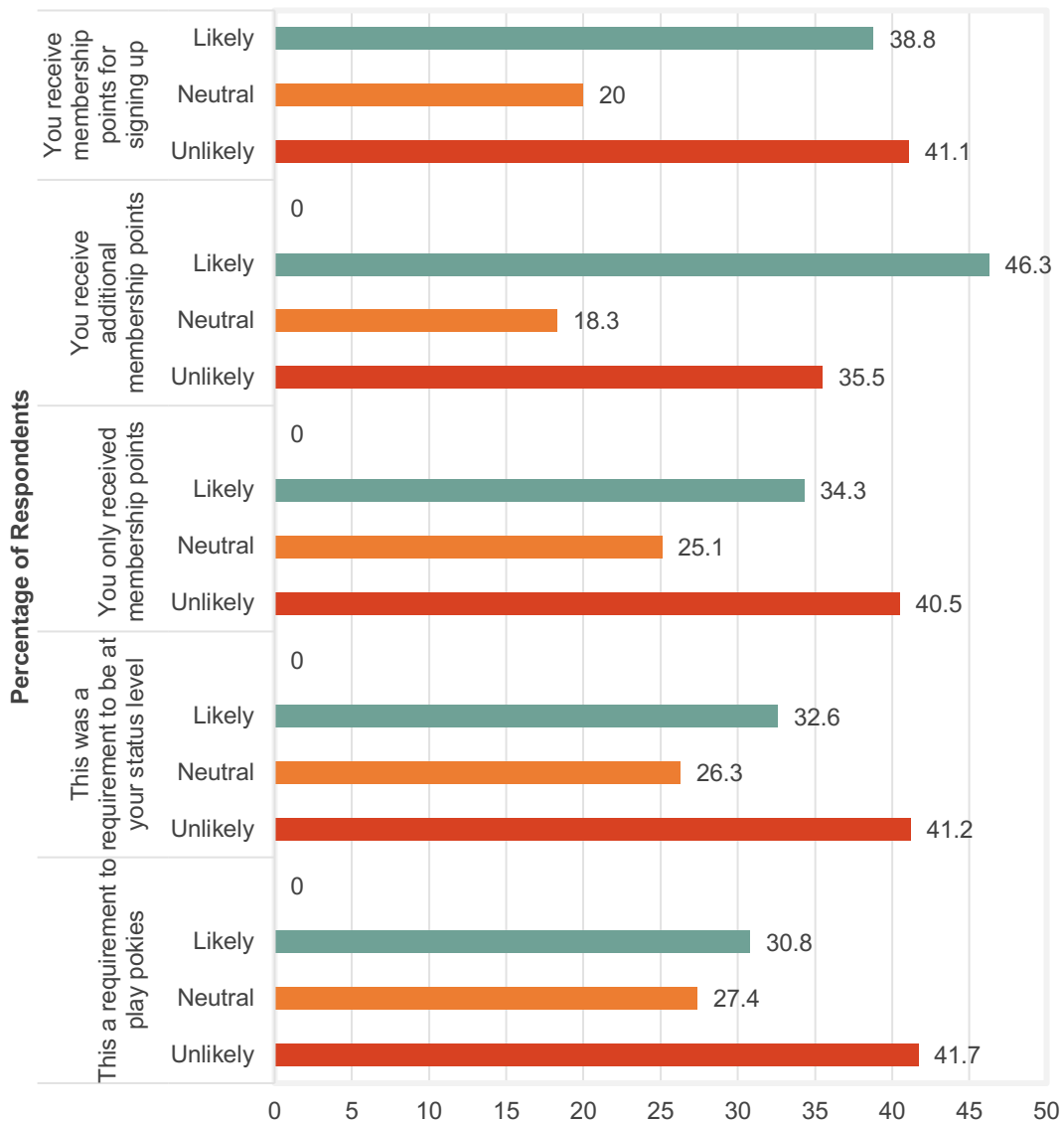


Figure 8. Percentage of respondents per likelihood to use account-based systems categorised by different scenarios

Problem Gambling and Account-Based System Perception

The following analysis included only the 194 respondents who completed both the Problem Gambling Severity Index and account-based system questions.

In general, those classified as experiencing gambling problems were more likely to see the system as useful. Most respondents perceived account-based systems as not useful, wherein around two-thirds of these respondents (66%) engage in either moderate-risk gambling or problematic gambling. For those who perceived account-based systems as useful, 8 out of 10 (81%) engage in either moderate-risk gambling or problematic gambling (Figure 9). The differences between categories were statistically significant.

In terms of improving ability to manage EGM play, no statistically significant differences were observed between risk levels noting though that respondents were predominantly engaging in either moderate-risk gambling or problematic gambling regardless of their perception regarding account-based systems.

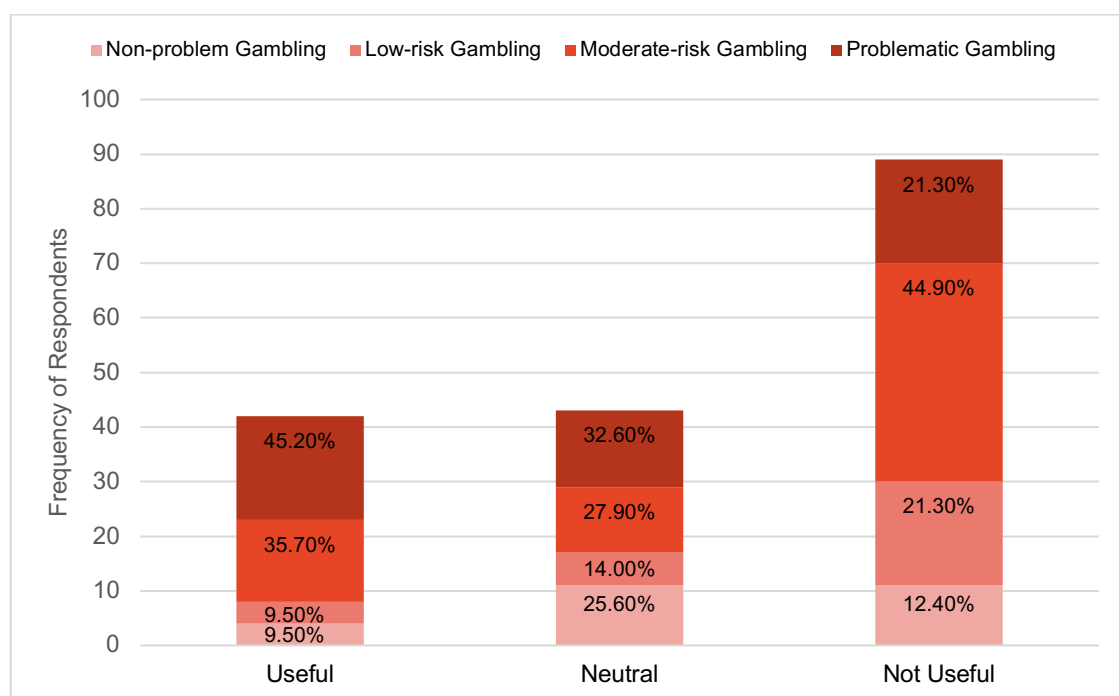


Figure 9. Frequency of respondents per perceived usefulness of account-based systems and classified according to the Problem Gambling Severity Index scoring.

In terms of intent to use account-based systems if available, two-fifths of respondents (41%) who were likely to use account-based systems engage in problematic gambling followed by one-third (33%) who engage in moderate-risk gambling (Figure 10). However, there was no statistically significant difference across the intent-to-use responses with regards to gambling risk levels.

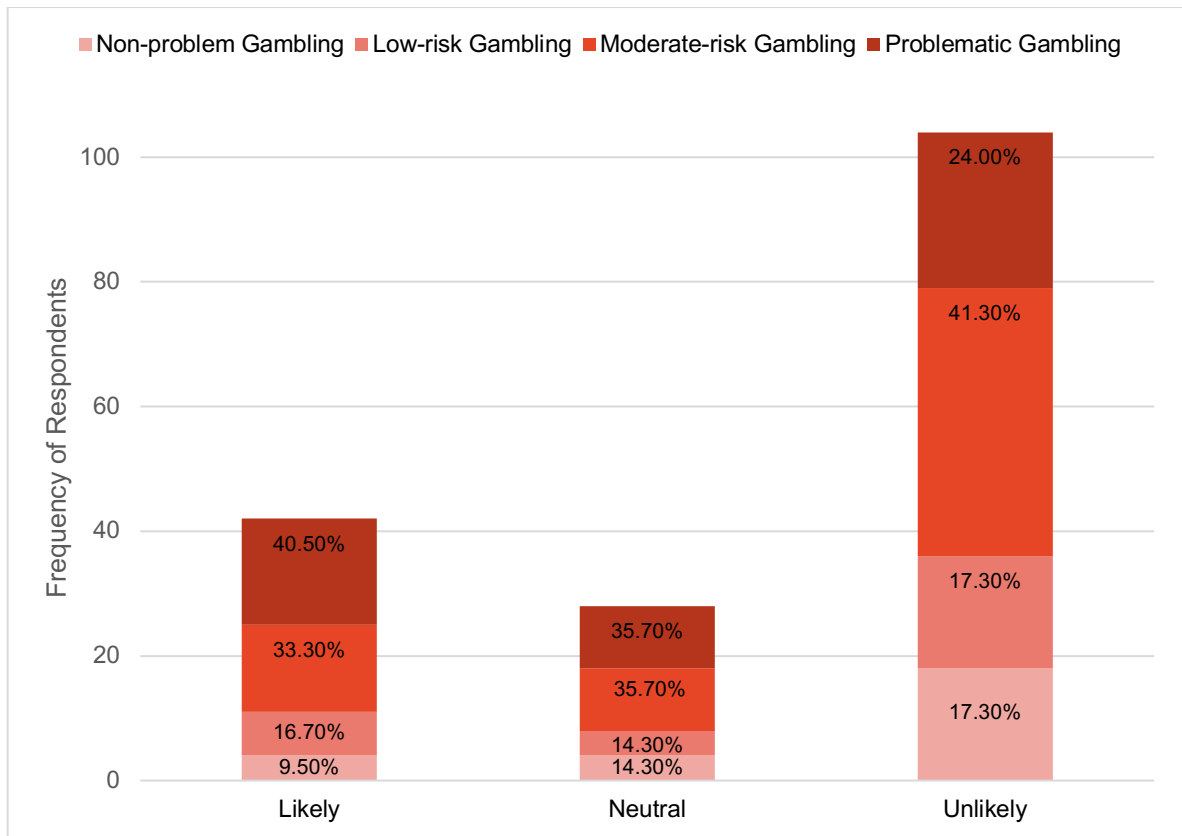


Figure 10. Frequency of respondents per intent-to-use account-based systems and classified according to the Problem Gambling Severity Index scoring.

Technology Literacy

The following analysis included only the 151 respondents who completed the technology literacy section. We note that we did not use a validated scale for technology literacy but examined behaviours likely to be relevant to use of account-based systems.

As seen in Figure 11, 8 out of 10 respondents (82%) found that smartphones as easy to use, with only 3.3% reporting difficulties. Similarly, around three-quarters of respondents (74%) always use mobile banking applications. However, around half of the respondents (48%) have not used a digital wallet.

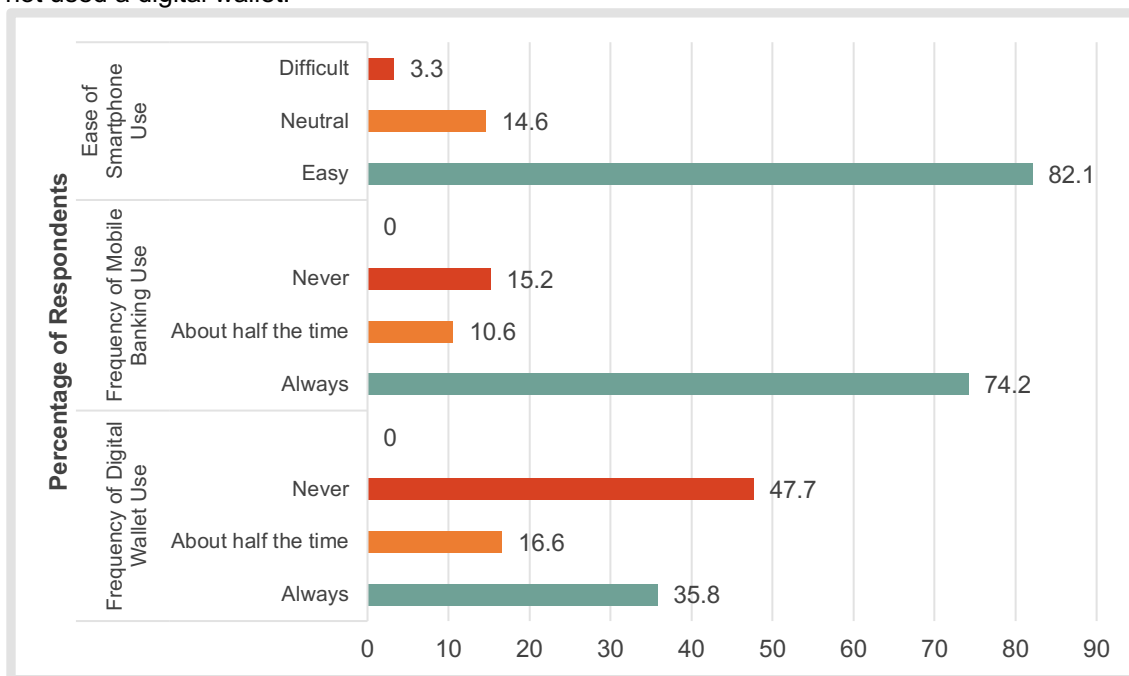


Figure 11. Percentage of respondents based on their level of technology literacy.

Aggregate Score and Limitations

The reliability test of the three items revealed a low Cronbach's alpha of 0.1464 indicating poor internal consistency across the three questions, suggesting that these items do not consistently measure the same concept of technology literacy. Despite the low reliability test of the three items, an aggregate score was determined using the responses from the survey, with 3 being the lowest score and 15 as the highest. This was done for ease of interpretation and to compare scores across different categories. However, it is important to note that the results should be interpreted with caution.

Midpoint was set at the median score of 9. Mean aggregate scores amongst the participants were calculated. Scores above the midpoint suggest higher technology literacy. As seen in Figure 12, mean aggregate technology literacy scores were above midpoint at 11.3, suggesting overall higher technology literacy.

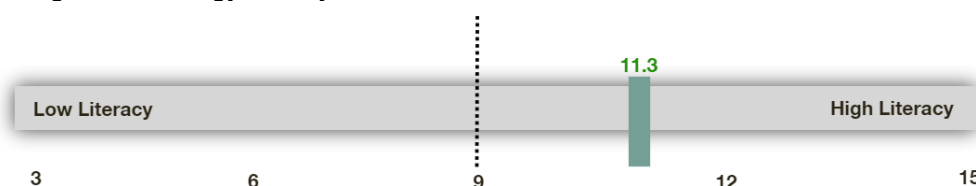


Figure 12. Aggregate score for technology literacy¹⁰

¹⁰ A composite score was determined using the responses from the survey, with 3 being the lowest score and 15 as the highest. Midpoint was set at the median score of 9.

Technology Literacy per age category and language at home

When categorised per age group, younger respondents generally have higher aggregate technology literacy scores, with the highest score of 12.5 for the 18 to 30 and 31 to 40 age group. Respondents aged 71+ had a lower aggregate technology literacy score of 8.4. Additionally, no significant differences in aggregate technology literacy scores were observed between those who only speak English at home versus those who uses other languages.

Technology Literacy and Perceived Ease-of-use of Account Based Systems

In terms of perceptions regarding account-based systems, those who perceived account-based systems as easy to use have significantly higher aggregate technology literacy scores (12.5) as compared to those who deemed account-based systems as difficult to use.

Technology Literacy and Intent to use Account Based Systems

Similarly, those who intend to use account-based systems have significantly higher aggregate technology literacy scores (12.7) as compared to those who do not intend to use the system.

Qualitative Analysis

Qualitative Survey Responses regarding Account-based Systems

An optional open-ended question was featured in the survey to gain insight into why and how individuals perceive account-based systems and how it should be offered by the venue. In response to the question “Do you have any comments regarding whether or how the venue offer an account-based system?”; mixed responses were observed.

Amongst responses including positive aspects of account-based systems, respondents perceived it as a tool that could help individuals to control spending and limit gambling losses. One participant mentioned that it *“would be very helpful for problem gamblers to have more control over their addiction”*.

In terms of disadvantageous aspects of account-based systems, the following themes were noted.

- Participants were concerned about privacy and security including the potential for a data breach.
- Participants expressed their concern about their gambling being tracked and monitored.
- Participants were concerned about the potential loss of autonomy due to the account-based system for example: *“I just feel it is another way of controlling the population”*. Some mentioned that they still prefer having an option: *“Card system for people who want to use it. Cash if you want to use it”*.
- Some participants were hesitant to use account-based system because they perceive cash as integral aspect of the gambling experience. For example: *“there’s something very psychologically powerful about feeding in cash”*.
- There were perceptions that account-based systems may increase the risk of overspending with one participant mentioning that *“I don’t want access to my bank account which would give me access to even more money”*.
- Some perceived that the new technology would be difficult to use, especially for elderly people.

Focus Group Discussion

The aim of the focus group discussion was to obtain a deeper understanding of the perception, and attitudes towards account-based systems, and to gather information regarding potential barriers and motivators to account-based systems use as informed by the survey.

Method

Recruitment was conducted via email. Recruitment notices were sent to 45 participants from the initial survey, which signed up for participation for further studies. Of the 45 participants, 14 participants expressed their interest in participating in the focus group discussions. All 14 participants met the inclusion criteria: played EGMs at the venue in the last 30 days.

Out of the 14, 12 participants participated in the focus group discussion. The focus groups were conducted in March 2024. A total of seven 90-minute sessions were conducted: 4 for lower-tier level members and 3 for higher-tier level members. Participants were reimbursed with \$115 groceries vouchers.

Focus group discussions with managers and frontline staff members were also conducted. Recruitment was done via the venue through convenience sampling. 2 sessions were conducted: 1 with managers and 1 with frontline staff members. No reimbursements were given.

All respondents provided informed consent, and the focus group discussion guide and procedure were approved by the University of Sydney Human Research Ethics Committee (HREC Protocol No. 2023/667).

At the start of the discussion, participants were given a brief overview of account-based systems, including information on how this can be accessed and used, as well as potential functions that could help manage play. Content analysis was done to determine themes and quotations from the focus group discussion transcriptions.

Demographic Characteristics

12 participants participated in the focus group discussions but only 11 responded to the pre-discussion online survey conducted. As shown in Table 9, Participants were typically English speaking, female, employed full time, with a mean age of 55 years. Five out of 11 participants had a combine annual income above \$155,999.

Table 9. Demographic Characteristics

	Summary
Age, mean (SD)	55.00 (10.13)
Age Category	
31-40	1 (9.1%)
41-50	3 (27.3%)
51-60	3 (27.3%)
61-70	4 (36.4%)
Sex	
Female	9 (81.8%)
Male	2 (18.2%)
Highest Level of Education	
Advanced diploma/diploma	2 (18.2%)
Bachelor's degree	2 (18.2%)
Certificate III/IV	1 (9.1%)
Graduate diploma or graduate certificate	2 (18.2%)
Year 11 or below (includes Certificate I/II/n)	3 (27.3%)
Year 12	1 (9.1%)
Employment Status	
Employed full time	5 (45.5%)
Not currently employed	2 (18.2%)
Retired	4 (36.4%)
Language other than English at home?	
No	7 (63.6%)
Yes	4 (36.4%)
Combined Annual Household Income	
\$15,600 - \$41,599	3 (27.3%)
\$41,600 - \$90,999	2 (18.2%)
\$91,000 - \$155,999	1 (9.1%)
above \$155,999	5 (45.5%)
Total sample: N = 11	

As the primary group of interests were the consumers, the demographic characteristics of the managers and frontline staff members were not collected.

Summary of consumer focus group findings

The following section outlines common themes arising from the focus group discussions. Quotes from participants are separated into lower and higher venue membership tier levels. Four participants were within the lower tiers and seven participants were within the higher tiers during the time of the focus groups.

Account-based system acceptability of use

When discussing the uptake of an account-based system, if the system was readily available to consumers and optional, five out of 11 participants reported that they would not use the system. Four participants suggested that they would use the system, and two were ambiguous towards using account-based systems.

a. Likely to use the system:

Two participants were open to using the system if it were optional, with one higher tier level participant responding that they would prefer an account-based system as it could make the process of acquiring their credit consistent across the different venues if all venues used such a system: *"If this is voluntary, I would say person like myself, I actually prefer that way...because of the different system they use by different club. Sometimes I do forget to take my money out of the... credit machine, because I will just simply take my card and go, not realising that doesn't wipe that credit and put it into my account. So, if ever I would prefer that is consistent throughout, so that I don't have to remember which club I need to do that which club."*

Two other participants indicated that they would only use the system if it was mandatory. One lower tier level member stated, *"If it wasn't an option where you could use cash, and you had to do this account thing, then I'll probably do it, but otherwise I'll just continue the way I'm going."*

b. Unlikely to use the system:

Out of the five participants who suggested that they will not use the system, three participants indicated that they would stop playing the pokies at the venue or any club where account-based systems were mandatory. Four participants suggested not wanting to use the system as it would contain personal details that they did not want an operator or another party to have potential access to. One of these participants indicated having their details stolen and another observed incorrect customer information being presented during promotions, leading to their lowered confidence in sharing their personal information. One of the five participants reported using a similar system previously and outlined the inconvenience of the additional steps required to set up and use the system in deterring them from wanting to use an account-based system.

Higher tier level responses:

"I wouldn't use it. And I don't like the fact that it's gonna have all your personal details and all the rest of it ... I've had my account hacked and had money stolen from my account."

"If (venue) did kind of bring it in. I'd most probably go there to play poker. That's about it ... My interest in playing would stop because I wouldn't be interested in that at all ... The computer is putting out the wrong names and membership number in the promos ... if they can't get that right, what's the chance they're gonna ... keep your details private. "

"I reckon, if it started rolling out at venues if (venue) was the first one to roll that out to, I probably wouldn't go there ... Just the fact that you've always got to have preset money on the card you've got to walk up to. You gotta have the money set on the card. You've gotta involve another device such as your mobile phone. To me, I just wanna get in there, play and then leave. I'm not there all day, every day to be able to do something like that. I just wanna get in for a little bit, have my cash there with me, and then just use it and then leave."

Lower tier level responses:

"I wouldn't be going. I can tell you that right now. I wouldn't be going. I'd stop. I'd go somewhere where that system is not in operation, and if it becomes mandatory everywhere, I would stop going ... That's private information that people shouldn't be able to access on there unless you allow them to access it. That's my opinion on it."

Additionally, a higher tier level participant indicated the importance of having choice in the uptake of the account-based system: *"Love the place, love the people, but just don't like not having the choice."*

c. Ambiguity towards using account-based systems:

Two participants did not explicitly state whether they are likely to use the system. One participant indicated a desire for more information regarding what the system can provide, and

the other participant saw some benefits but also understood that some features such as activity statements can already be gained using the current systems at the venue.

Higher tier level responses:

"Probably need to understand it a little bit more to make an informed decision."

Lower tier level responses:

"I'll be more than happy to see how much I spend on the pokies and how long I stay there. It'll be nice ... I get the impression that members can request their ... activity statement."

Advantages of account-based systems

Some of the commonly identified themes related to the perceived advantages of using account-based systems include the following: the ability to easily access activity statements, ease of accessing and transferring funds, and the benefits of setting limits to control gambling spend.

a. Easier access to activity statements:

Two participants commented on the potential for account-based systems to provide easier access to activity statements through the new system, without the need to request a statement from the cashier.

Higher tier level responses:

"I think that I probably would use it [activity statements] more often than currently now. And [if] I need the statement [now], I have to ask for statement at the counter."

Lower tier level responses:

"I'll be eager to seek confirmations whether those activities statements, where there's stuff on the pokies. So, the overall expenses or activities at the clubs are spending. Sometimes I'll be surprised when you look back. Oh ... I spent that much money on Thai food."

b. Ease of accessing and transferring funds:

Three participants identified the simplicity of transferring money to their account as a potential benefit of using the system. These participants highlighted the benefit of not needing to bring cash to the venue and easily transferring their winning back into their bank accounts. One participant highlighted the additional steps they are currently required to take to gamble, which can be overcome with an account-based system. The participant outlined that they need to get cash out prior to attending the venue by driving to an ATM, and if they have winnings, they need to approach a cashier to access their funds. One of the other three participants, whilst highlighting the ease of potentially using a cashless system, also indicated ambivalence as they discussed their preference for using cash.

Higher tier level responses:

"You just open up your wallet and put the money in. You don't have to download no apps. You don't have to press anything ... But if it's attached to your bank account is as simple as transferring money from your bank account into your (venue) gambling account, then that's not going to be hard either. Whereas with cash and you run out of cash you physically have to get up and go to the ATM. And some people just may not want to do that."

"It would also benefit me ... I don't really need to make sure that I go to the bank to withdraw some cash first before I go to the club. So, this system will actually facilitate that process that I don't have to go to a physical location or deviate from my route to be able to get access cash ... If I have a major win, for example, I would have to go to the cashier and tell them, I now would like to draw that amount of money and transfer it to my bank or ask for a bank check or something like that."

Lower tier level responses:

"I can see that there are benefits, that money goes straight into your bank account and with someone that may gamble quite a lot, if they do happen to have a big win, at least that money is going back into their bank account."

c. Setting limits using the account-based system:

The benefit of setting limits on spending was discussed by two participants. One participant highlighted how limit setting could potentially change how they bet. This participant suggested that they might gamble in smaller denominations to ensure that they could gamble for the same duration following a pre-defined limit on their account. Another participant discussed the value of limit-setting to stop overspending in people experiencing gambling problems.

Higher tier level responses:

"If I know my limit, I'll probably [be] betting not \$2.50 or ... \$5 each bet. I probably ... play less, maybe \$1 and I can stay the same amount of time, maybe stay couple of hours more. So, I actually think better for controlling gambling issue. If the system comes in kicking most people probably save more money."

Lower tier level responses:

"I think this is a fantastic idea, and I think having a set limit, even like per month, like you can only spend \$200 a month and after that money you can no longer do anything ... But I think having strict limits on people that do have gambling addictions, I think could be a real a benefit."

Disadvantages of account-based systems

Identified themes related to perceived disadvantages of using account-based systems include the following: overspending, low perceived-trade off, privacy concerns, additional steps with transferring funds, and preferences for using cash.

a. Overspending:

Two participants discussed the potential for overspending with an account-based system compared to when using cash. A higher tier level participant discussed the potential for overspending if someone does not have a limit and can access to a large amount of funds on their card: *"... I do give myself a budget ... Usually I'm walking out with either a bit more or [\$]0. I know what I'm in for, whereas the other way you've got to walk in with a thousand dollars cash just to have it on there, and then you may use it."*

A lower tier level participant responded *"I think it will be easy to put more money through than if you're actually putting in the cash..."*

b. Low perceived trade-off:

Two lower-tier level participant responses implied that their perceived benefits of using an account-based system did not outweigh the perceived costs. These participants considered factors such as their low frequency of gambling, the effort required to sign up to use the system, and the sharing of personal information as costs of using the systems.

"As I won't be betting over more than \$500 a year at the top ... I don't feel comfortable to give away my privacy any further."

"I just think for somebody like myself. I'm not gonna go to the extreme and go and join up with a card and put my bank details and all that sort of stuff when I don't do it very often."

c. Privacy concerns:

Three participants were concerned with privacy issues due to data breaches that have occurred in recent years with major telecommunication brands. These concerns were regarding potential

access of personal information by criminals. Two participants expressed concerns regarding data use by the government for monitoring purposes.

Two participants expressed their level of discomfort regarding the venue having access to personal details such as their bank account when linked with their gambling account. Another participant outlined that the venue or anyone else should not have access to such personal details.

When discussing concerns regards who has access to their player data, two participants mentioned concerns regarding the government using their data for the government's benefit. Another participant shared their experience of having their information hacked and their money stolen in the past. This participant expressed wanting to share minimal information with companies.

Lower tier level responses:

"As in the past, big companies have been scammed. So that's a big issue for me."

"The more you put on the Internet, the more potential there is for people to hack your stuff. And I've been hacked by the Optus breach. I really don't want any more of my stuff being hacked."

Higher tier level responses:

"I've had my account hacked and had money stolen from my account. The fact that this is going to be linked to my bank account. I don't like that for that reason; security reasons. I'd prefer just to get the cash out and be able to put the cash in ... they'd have my access to my bank details. I think about where I give my details, where I use my card, and so forth. I try not to use ATMs because there's a lot of scammers on them."

"But I'm not sure that this account-based system will help people, provide any other benefit other than to the government, or to the club or to the gaming agency. That a person may have a gambling problem ... To me, it's more invasive in the sense that the data gathered can be used in many different ways to identify who you are, what you do, how much you have...how much you [are] contributing to the gaming industry. So, I would say there's just a couple of benefit[s], but in terms of data privacy-wise, it's probably the worrisome bit of it."

d. Additional steps involved in transferring funds:

In contrast with participants who indicated the convenience of using account-based systems due to not needing cash withdrawals, one higher tier level participant identified the additional steps required to set up and use an account to play the pokies as an inconvenience.

"You just open up your wallet and put the money in. You don't have to download no apps. You don't have to press anything. Make sure there's funds in there ... You don't want to have money that you've got to transfer, or you got to go to cashier and say, put that on the card."

e. Preferences for using cash:

Four participants preferred using cash for various reasons such as the tangibility of cash, cash contributing to the experience of gambling, security reasons, and the opportunity for interacting with staff when taking cash out.

Higher tier level responses:

"I find it's part of the experience. But I'm a bit old school with certain things ... You're sort of putting something in that's tangible, taking something out tangible. Whether it's a ticket or cash is still better than just not seeing anything going in and out."

"I think having that tangible cash to put in and take out, and even though it's a ticket now, I think that's still part of the fun, the excitement. I mean, sometimes we'll go to the

cashier just to talk to the cashiers, because again, you know the team, you know, the staff members, or most of the time it's the ticket machines to take the cash out."

Lower tier level responses:

"I'd like to take money out, cash, and have my money with me, and when you get when you get a payout. You go and get the money cash, not going backwards and forwards with transfers, because we know what's happened with the banks and the outages and all that. And I don't really trust all that Internet stuff."

Incentives for account-based system uptake

Some participants discussed possible incentives to encourage their uptake of an account-based system, including food or beverage vouchers, membership points, and gifts. Whilst others were opposed to the idea of incentives to increase uptake.

Higher tier level responses:

Higher tier level members were resistant to the idea of potential incentives to encourage using the system. Examples from two participants who were displeased with the idea of incentives are below:

"If they were saying we'll give you something if you use the system that's similar to click bait."

"Even if they dangle the carrot there, and said, Hey, check this out. This is what we'll do for you. I'd just change where I go, which would be really disappointing."

Another participant indicated that they would be enticed to at least view the details of the incentives, although they noted an annoyance towards potential incentivisation for using the system:

"I think that if they decided to add things like extra points, extra gifts. You know you'll look at [it], and you'll go oh wow. But then another part of me will go. Well, that's really annoying, because I'll feel like the people who don't want to use it are being penalised."

Lower tier level responses:

Two participants suggested dining vouchers and membership points as potential incentives. One participant stated the following:

"Points as point system thing probably would be a good thing ... maybe getting a voucher to go to my favourite restaurant there would be something, maybe to eat there would probably be something that I more go for"

Desired information on the system and format of delivery

Participants who were receptive towards receiving information indicated the desire for easy-to-understand communication from the venue, which will highlight how member privacy will be protected. Examples of responses to what information participants would like and how they would like the information delivered are presented below.

Higher tier level response:

"Probably online ... like video, short video. Talking [in] person. I don't know how they're gonna happen. But who's gonna talk to us like in venue or not sure ... But probably video is easy understand. Some people can't read like English. But video probably is more helpful."

Lower tier level response:

"Pamphlet would be good or online information, easily readable and understand."

"I think people would need information, like to see how it actually works ... for people to have it explained to them quite clearly that all their information is kept safe, and no one's privy to that sort of information. I think that probably needs to be clearly stated...Probably [in] an email."

Some participants from the **higher tier levels** indicated that they would engage with information presented on the system despite being opposed to the idea of signing up to an account-based system.

Summary of consumer focus group findings from staff

Six staff members participated in focus groups, who were responsible gambling managers, gaming floor managers, and gaming floor staff. Both senior and junior staff members were intermixed across two focus groups. The following outcomes should be interpreted with caution as the presence of seniority may have influenced the responses. Quotes from participants have been omitted to protect their privacy.

Perspectives towards account-based systems

a. Advantages:

Staff members demonstrated favourable attitudes towards using account-based systems within the venue and indicated their awareness for the system potentially being rolled out at the venue. Identified benefits included customer awareness for how much money they are transferring into the account, the ability to set a limit, prevent possible money laundering, easier access to self-exclusion, and the ability to easily identify risky patterns of gambling.

b. Disadvantages:

Staff did not discuss many potential disadvantages. One staff suggested that customers being unfamiliar with the new system could be a possible disadvantage. Another staff member suggested the potential for different customer groups to respond differently. They outlined that older customers who are unfamiliar with technologically might need extra assistance to use the new system.

c. Incentives to encourage uptake of the system:

When discussing potential methods to increase the uptake of voluntary uptake of the account-based system, the staff responded the need to explain the benefits and details of the system clearly. Using rewards to encourage the uptake of the system was also identified.

Behavioural Data Analysis

Methods

Account data from June 2023 to March 2024 was collected for all venue members who satisfied the inclusion criteria, regardless of whether they were recruited for the survey or not, noting that some members were not recruited in the survey as they did not provide their contact information to the venue. The collected behavioural account data was merged with the demographic data from the venue and the survey data. Additional variables were manually derived using the available data.

For this report, behavioural account data from the past 6 months were used. For survey participants, the reference date for the analysis was set to the survey completion date. For non-survey participants who received a recruitment email or SMS, the reference data was set to their survey recruitment date (i.e., first recruitment on 13 December 2023 and second recruitment on 16 January 2024). For those who were not recruited for the survey, the reference date was set to the first recruitment date (13 December 2023).

Baseline results of the behaviour data components were summarised using frequency tables, graphs, and charts. A range of statistical approaches were used to analyse the data in the technical report. The methods used and the type of data they applied to are listed below.

1. Pearson's Chi-squared test was used to test differences in the frequency of respondents that endorsed categorical or ordinal variables with exclusive options (e.g., PGSI).

Limitations

The following analysis incorporated both survey data. Given the small sample size of the survey, the hypothesis testing may be underpowered. Therefore, the results should be interpreted with caution.

Assessing the Representativeness of the Survey Sample

Composite scores were generated using 23 account variables that summarised customers' gambling over the past 6 months. Customers were then divided into quartiles based on these scores, with the top quartile representing the most involved customers and the bottom quartile the least involved (Figure 13). The proportion of customers from each quartile that completed the survey was similar. This indicates that customers who took part in the survey are similar to, or representative of, the wider venue customer base.

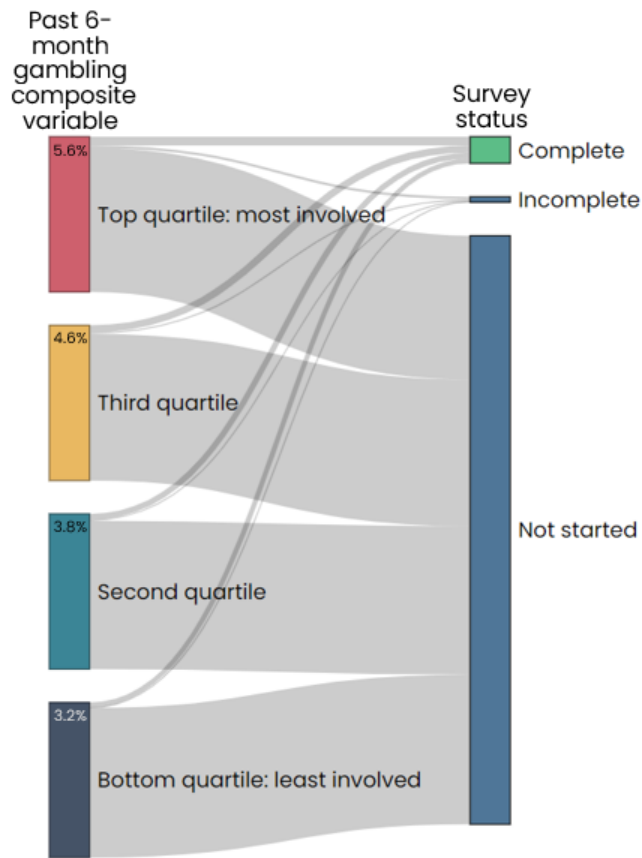


Figure 13. Sankey diagram displaying the proportion of customers from each quartile of the past 6-month gambling composite variable who went to complete the survey (Complete), start it but not finish it (Incomplete), and not start it (Not started). Values on the left indicate percentage that completed the survey.

Behavioural Markers and Account-based Systems

Behavioural Markers and Intent-to-use Account-based Systems

In terms of intent to use account-based systems, no significant differences were observed across the different account parameters (total number of games played, total turnover, total win, and net win/loss) as see in Figure 14 and 15.

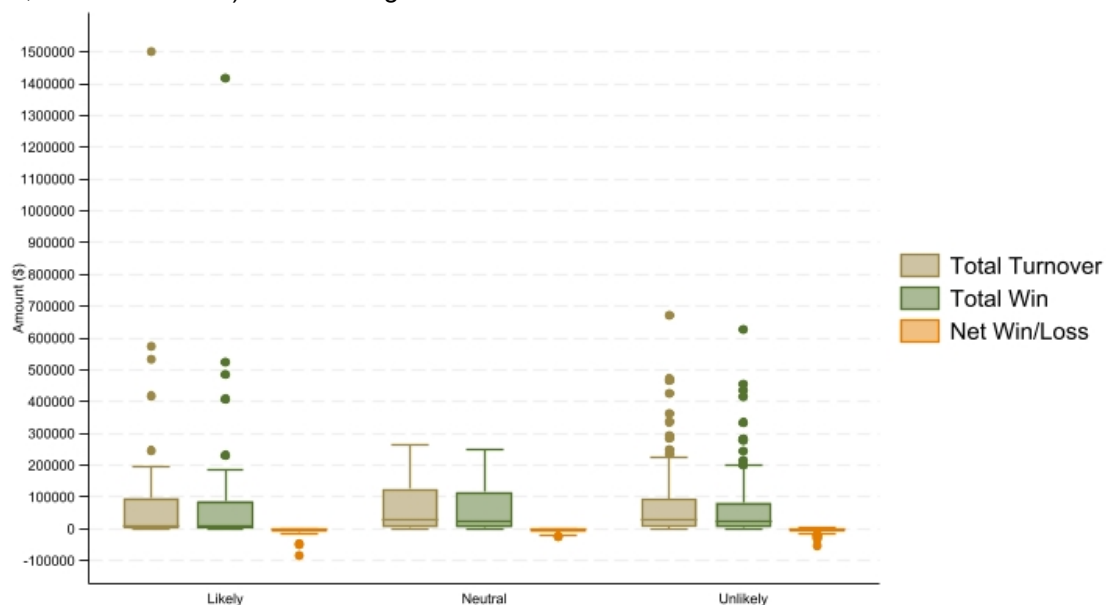


Figure 14. Comparison of the total turnover, win and net per member in the last 6 months categorised by their intent-to-use account-based systems.

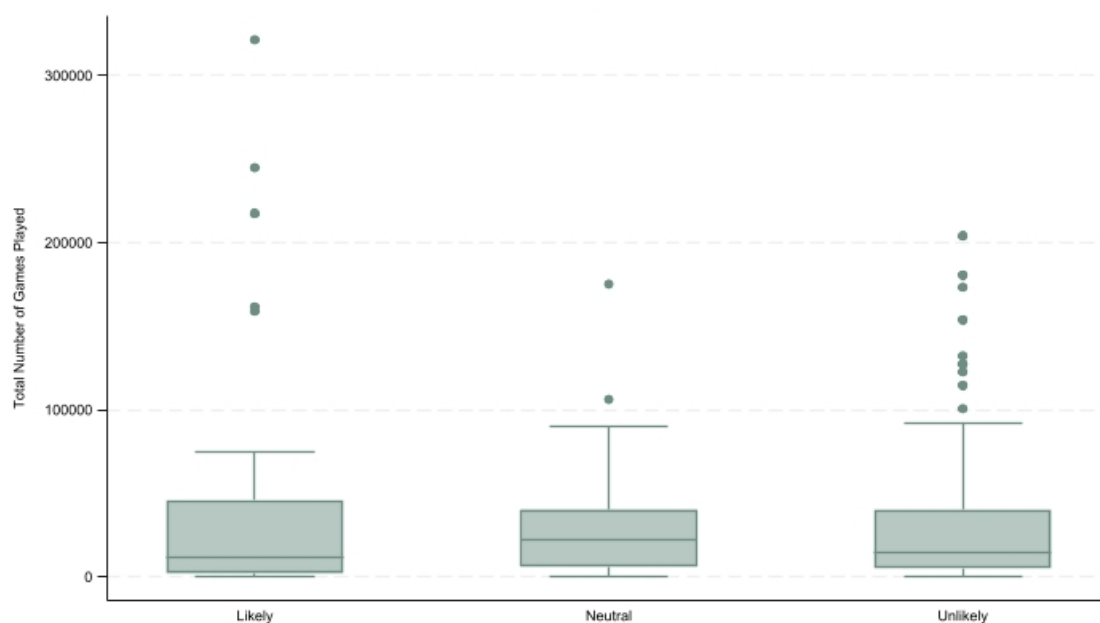


Figure 15. Comparison of the total number of games played per member in the last 6 months categorised by their intent-to-use account-based systems.

The mean turnover, win, net loss, number of games played, and EGM play intensity in the last 6 months were relatively higher in members who intend to use account-based systems (Table 10). Total number of sessions was higher in those who were unlikely to use account-based systems; however, these differences were not statistically significant across groups.

Table 10. Mean EGM play parameters (SD) per member in the last 6-months categorised by their intent-to-use account-based systems

	Unlikely (N=128)	Neutral (N=39)	Likely (N=57)	Total (N=224)
Turnover	70797.30 (111763.22)	49068.63 (74129.24)	84880.74 (225819.60)	70597.91 (144876.26)
Total Win	64344.16 (105038.67)	44685.29 (68696.80)	77227.29 (212511.36)	64199.70 (136156.18)
Net/Loss	-5175.01 (7688.58)	-4090.19 (6689.99)	-6096.95 (14170.66)	-5220.74 (9598.98)
Number of Sessions	248.32 (471.76)	134.13 (189.27)	221.91 (386.76)	221.72 (414.93)
Number of Games Played	31825.97 (40963.24)	32591.93 (39320.17)	37566.18 (67872.31)	33383.84 (48757.86)
Time on Device	2870.23 (3931.23)	2047.79 (2757.05)	2933.42 (5401.12)	2743.11 (4186.36)
EGM Play Intensity*	1249.56 (966.13)	1304.01 (970.95)	1125.28 (1066.45)	1225.88 (989.80)

Total sample: N = 224, *Total number of games divided by active playing days

Behavioural Markers and Perceived Usefulness of Account-based Systems

In terms of perceived usefulness of account-based systems, no significant differences were observed across the different account parameters (total number of games played, total turnover, total win, and net win/loss) as seen in Figure 16 and 17.

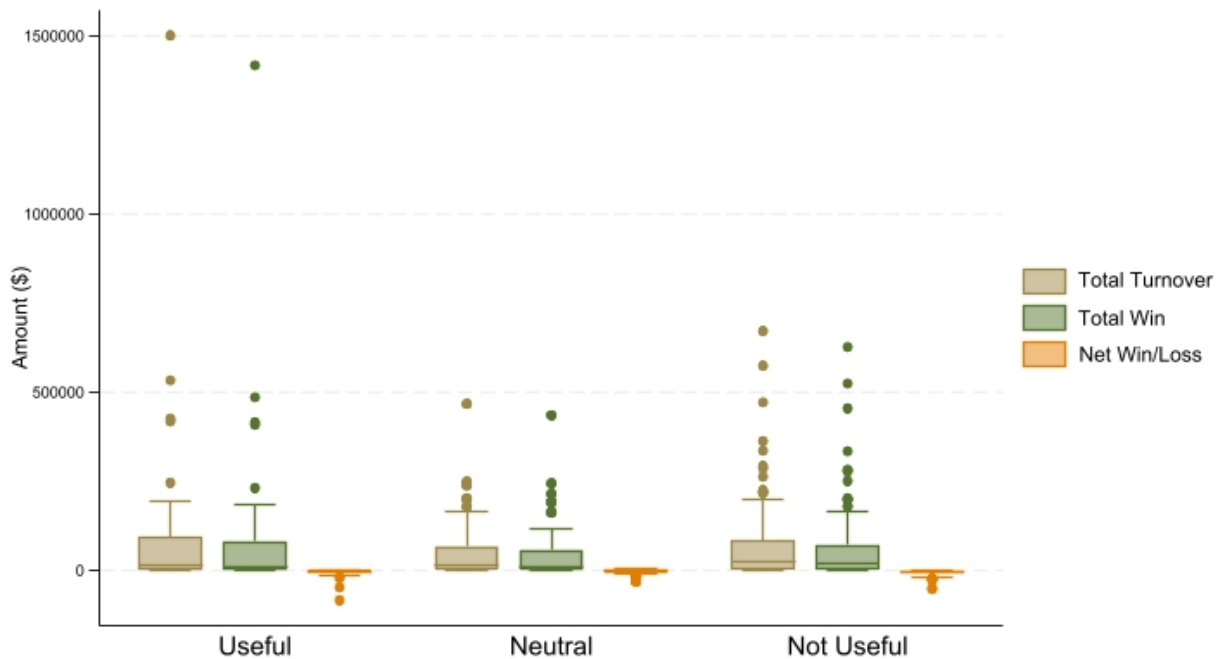


Figure 16. Comparison of the total turnover, win and net per member in the last 6 months categorised by their perceived usefulness of account-based systems.

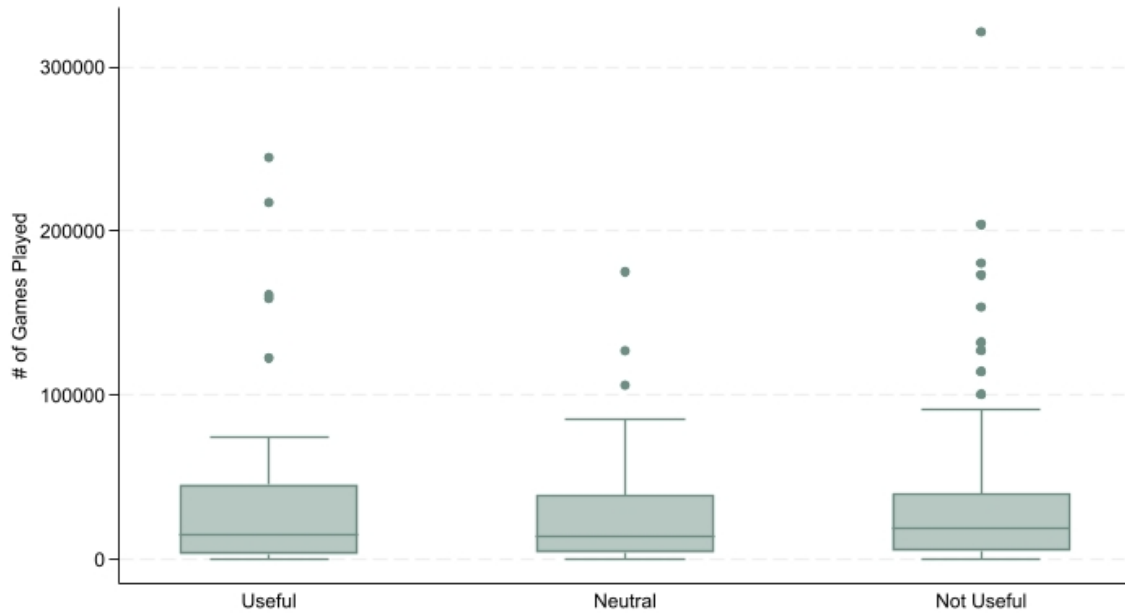


Figure 17. Comparison of the total turnover, win and net per member in the last 6 months categorised by their perceived usefulness of account-based systems.

The mean turnover, win, net loss, and number of games played in the last 6 months were relatively higher in members who perceived account-based systems as useful (Table 11). Number of sessions, time on device, and EGM play intensity were higher on those who perceived account-based systems as not useful; however, these differences were not statistically significant across groups.

Table 11. Mean EGM play parameters (SD) per member in the last 6-months categorised by their perceived usefulness of account-based systems

	Not Useful (N=109)	Neutral (N=58)	Useful (N=61)	Total (N=228)
Turnover	71636.07 (117966.73)	53160.60 (85533.85)	84425.47 (213562.35)	70357.89 (143675.70)
Total Win	65035.96 (109781.18)	48333.78 (80507.15)	77007.32 (201791.69)	63990.02 (135029.96)
Net/Loss	-5569.46 (8900.79)	-3740.40 (6208.67)	-5968.96 (12670.60)	-5211.06 (9517.10)
Number of Sessions	238.21 (438.48)	194.10 (422.47)	232.85 (375.71)	225.56 (417.07)
Number of Games Played	35068.30 (50619.45)	27342.82 (36259.77)	35725.55 (53960.39)	33366.74 (48384.43)
Time on Device	2958.29 (4356.40)	2217.77 (3087.74)	2934.62 (4749.41)	2763.58 (4181.83)
EGM Play Intensity*	1315.29 (1044.15)	1189.16 (816.57)	1074.54 (1020.49)	1221.53 (987.91)

Total sample: N = 228, *Total number of games divided by active playing days

Behavioural Markers and Financial Wellbeing

In terms of financial wellbeing, there were no significant differences across the different account data parameters (number of games played, turnover, total win, and net loss/win) in the past 6 months (Figure 18 and Figure 19).

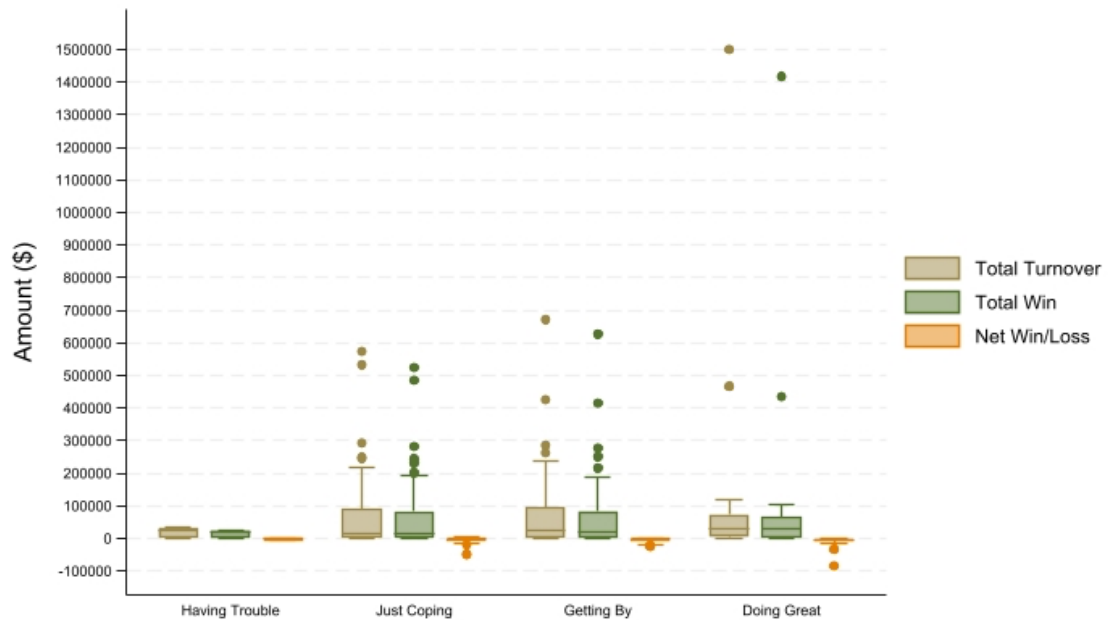


Figure 18. Comparison of the total turnover, win and net per member in the last 6 months categorised by their financial wellbeing classification.

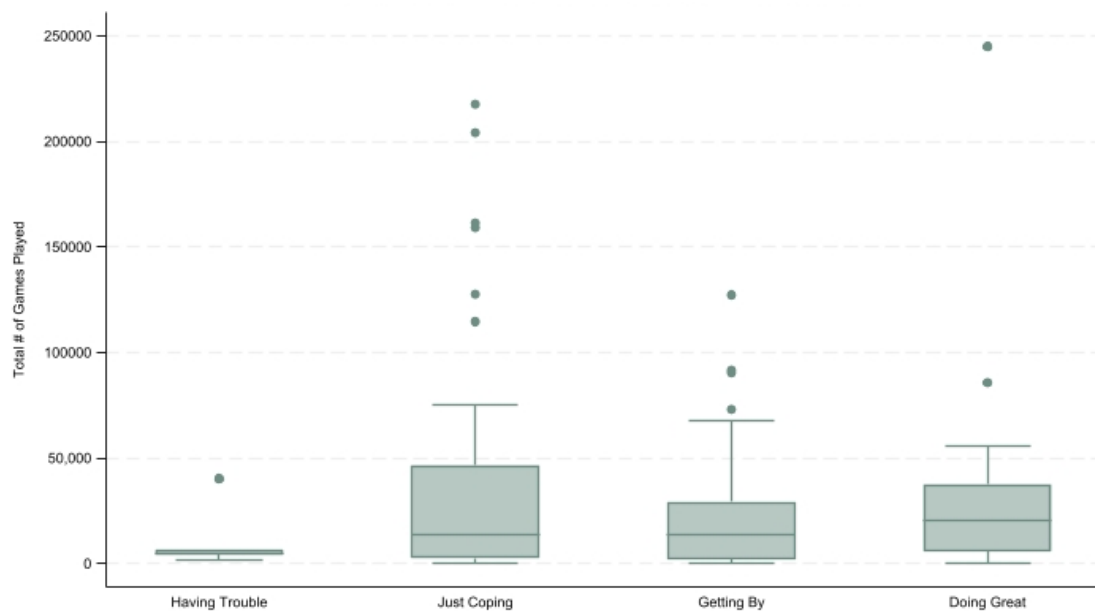


Figure 19. Comparison of the total turnover, win and net per member in the last 6 months categorised by their intent-to-use account-based systems.

EGM sessions per time of Day

As seen in Figure 20, the frequency of EGM play sessions peak between 6PM to 12AM, followed by a gradual decline from 12AM to 5AM, noting that no transactions occur between 6AM to 10AM due to venue closure.

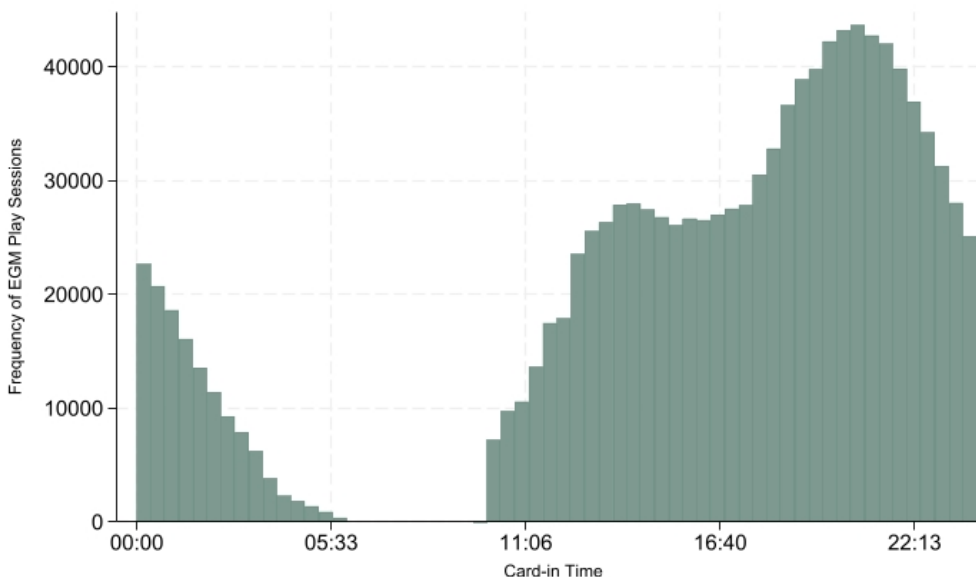


Figure 20. Number of sessions in the past-6 months per time of day

In the succeeding analysis, the frequency of EGM play sessions was classified into different time frames: 12AM to 2AM, 2AM to 6AM, 10AM to 12PM, 12PM to 6PM, and 6PM to 12AM.

As seen in Figure 21, the number of games played from 6PM to 12AM were relatively higher for members engaging in higher gambling risk levels (moderate-risk and problematic gambling). Similarly, the number of games played from 12AM to 2AM and 2AM to 6AM were higher for those engaging in higher gambling risk levels compared to those engaging in lower risk levels. However, these differences were not statistically significant.

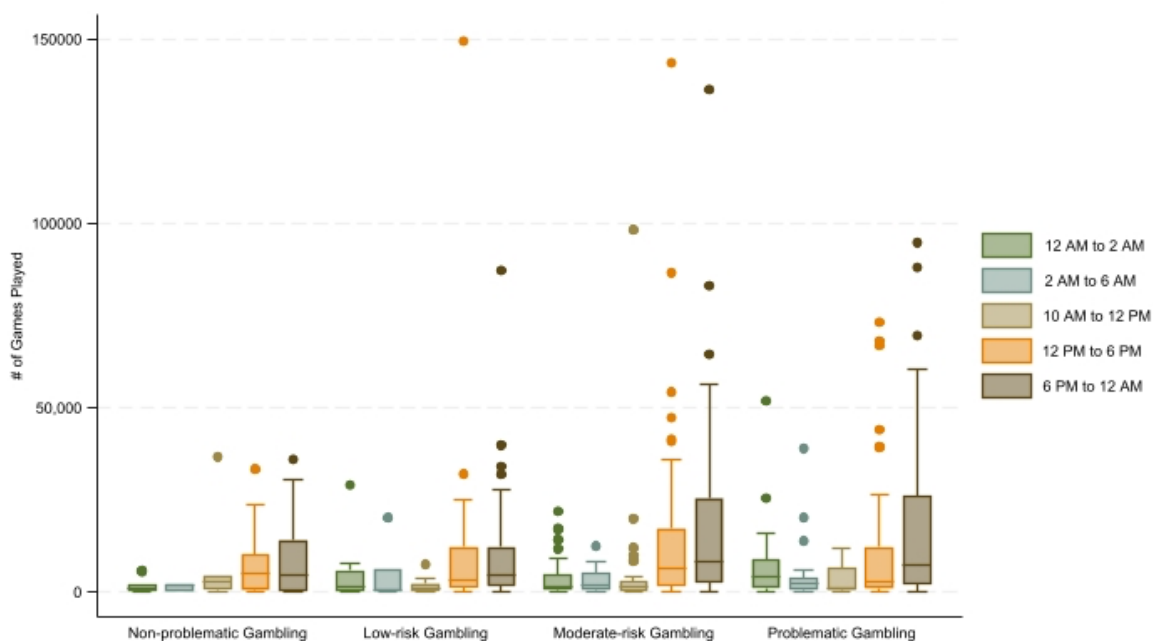


Figure 21. Comparison of the number of games played per member on different time frames categorised by PGSI risk level classification.

As seen in Figure 22, total turnover was also relatively higher from 6PM to 12AM, particularly for members engaging in higher gambling risk levels (moderate risk and problematic gambling). Similarly, higher total turnover from 12AM to 2AM and 2AM to 6AM was observed among those engaging in moderate-to-high risk gambling compared to those engaging in lower risk gambling. Mean total turnover in the past-6 months per member were two-to-fourfold higher at 6PM to 12AM, relative to the other time frames, noting a higher mean total turnover for members engaging in moderate-risk and problematic gambling. However, the differences in mean between the different groups were not statistically significant.

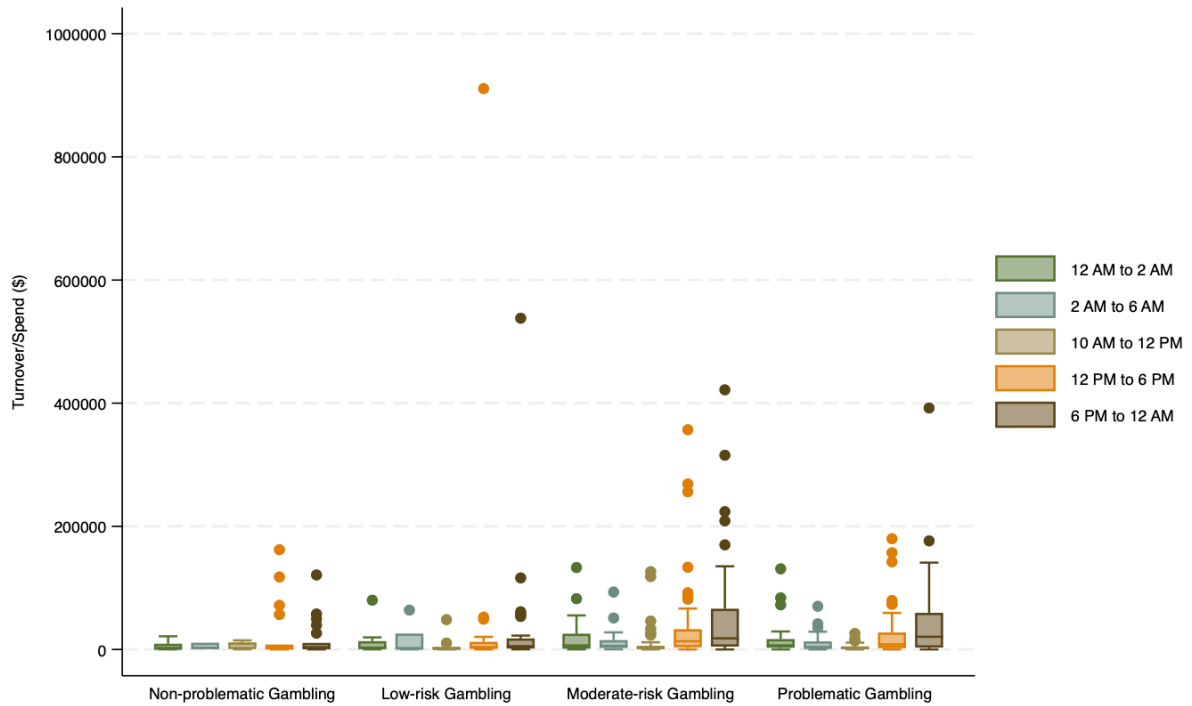


Figure 22. Comparison of total spend per member on different time frames categorised by PGSI risk level classification.

In terms of net win/loss, the range of net win/loss from 6PM to 12AM was more varied, particularly for members engaging in higher risk level gambling (Figure 23). The mean net loss per member in the last 6 months were relatively higher for those playing from 12PM to 12AM across all gambling risk levels. Mean net loss was also higher from 12AM to 2AM and 2AM to 6AM among those engaging in higher risk gambling compared to those engaging in lower risk gambling. However, these differences were not statistically significant.

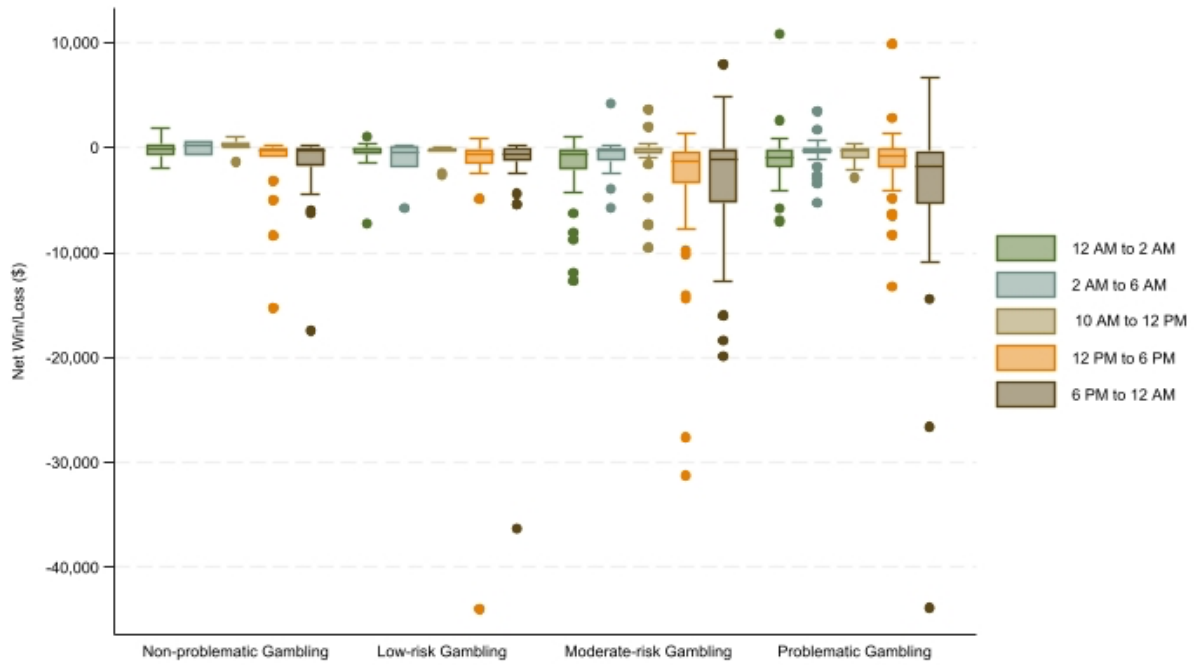


Figure 23. Comparison of net outcome per member on different time frames categorised by PGSI risk level classification.

Predictors of Higher Risk Gambling

Survey Data Predictors for Higher Risk Gambling

Predictor analysis was conducted to determine survey parameters that were associated with higher risk gambling risk behaviours (PGSI score 3 or higher, moderate to high-risk level classification). Demographic data, EGM play parameters (i.e., number of venue membership, number of venues visited, life and gambling satisfaction score, and financial wellbeing scores from the survey were included in the analysis.

As seen in Figure 24, combined annual household income had statistically significant negative relationship with gambling risk levels, suggesting that as the combined annual income increases, the gambling risk levels decreases significantly.

Similarly, financial wellbeing had a statistically significant negative relationship with gambling risk levels, suggesting that gambling risk level decreases as the level of financial wellbeing increases.

The number of EGM venues visited had a significant positive relationship with gambling risk levels, suggesting that visiting more EGM venues was associated with higher gambling risk levels.

Other demographic and survey parameters were not significantly associated with gambling risk levels, noting that the test was potentially underpowered due to the small survey sample size.

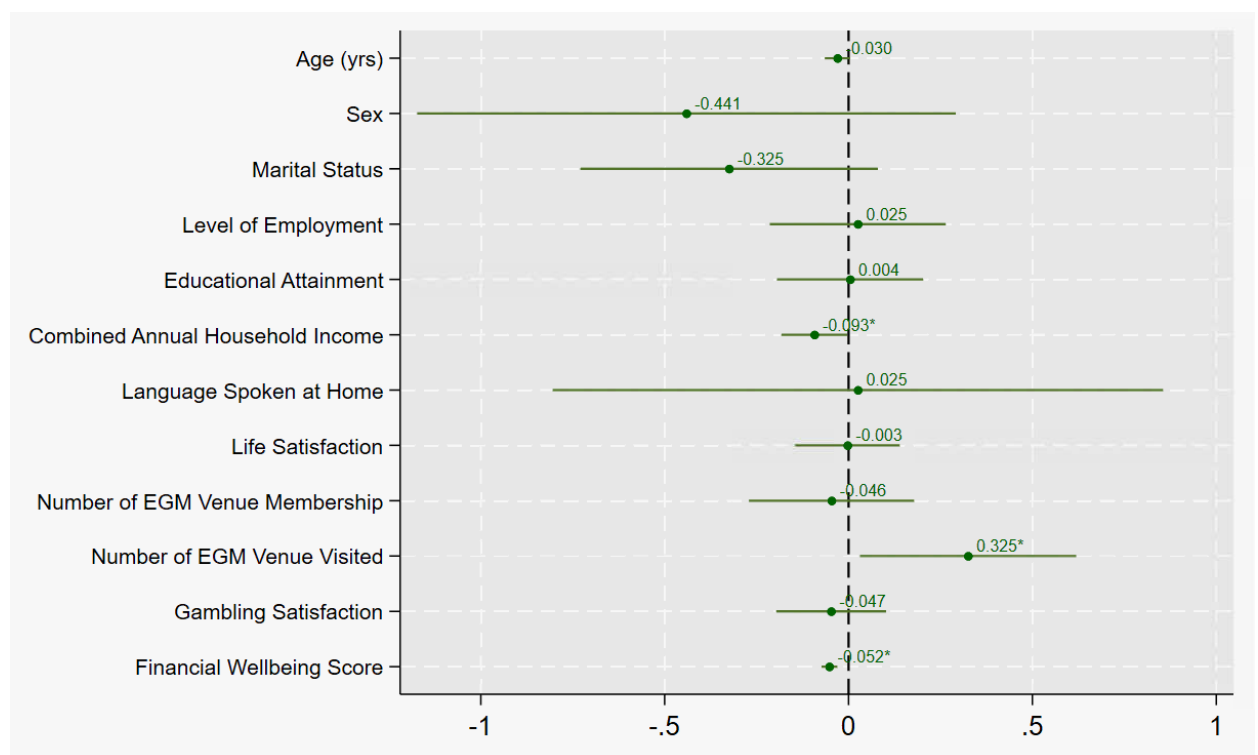


Figure 24. Impact of different demographic and survey data variables on higher gambling risk behaviours. **Legend:** Coefficient of Logistic Regression, * p < 0.05

Behavioural Data Predictors for Higher Risk Gambling

Predictor analysis was conducted to determine behavioural parameters that were associated with higher gambling risk behaviours (PGSI score 3 or higher, moderate to high-risk level classification). Demographic data and derived parameters based on the account data were included in the analysis. The definitions of the derived parameters are detailed in Table 12.

Table 12. Definition of the derived behavioural data variables

Derived Behavioural Data Variables	Definition
Past 6-month mean turnover	Mean turnover per member in the past 6 months
Past 6-month variability in turnover	Standard deviation in mean turnover in the past 6 months
Past 6-month net outcome	Total winnings minus the total spend in the past 6 months
Past 6-month number of games	Total number of games played in the past 6 months
Past 6-month playing frequency	Total number of active playing games in the past 6 months
Past 6-month largest single day spend	Highest turnover on a single day in the past 6 months
Past 6-month largest number of plays on a single day	Highest number of games played on a single day in the past 6 months
Past 6-month total number of games played from 12-6am	Total number of games played from 12 to 6am in the past 6 months
Past 6-month percentage of games played from 12-6am	Percentage of games played from 12 to 6am in the past 6 months
Past 6-month EGM play intensity	Total number of games divided by active playing days
Percentage of annual income spent in the past 30 days	Percentage of annual income spent on gambling in the past 30 days
Percentage of annual income spent in the last 6 months	Percentage of annual income spent on gambling in the past 6 months

As seen in Figure 25, past 6-month net outcome had a statistically significant negative relationship with gambling risk levels, indicating that increasing the net outcome (net win) decreases gambling risk levels; noting that the effect is small for individual units but potentially large over more substantial changes in net outcome.

Variability in turnover also had a significant negative relationship with gambling risk levels, indicating that greater variability in turnover was associated with lower gambling risk levels.

In contrast, other demographic and behavioural variables included in the analysis did not show statistically significant effects on the risk of gambling, noting that the test was potentially underpowered due to the small survey sample size.

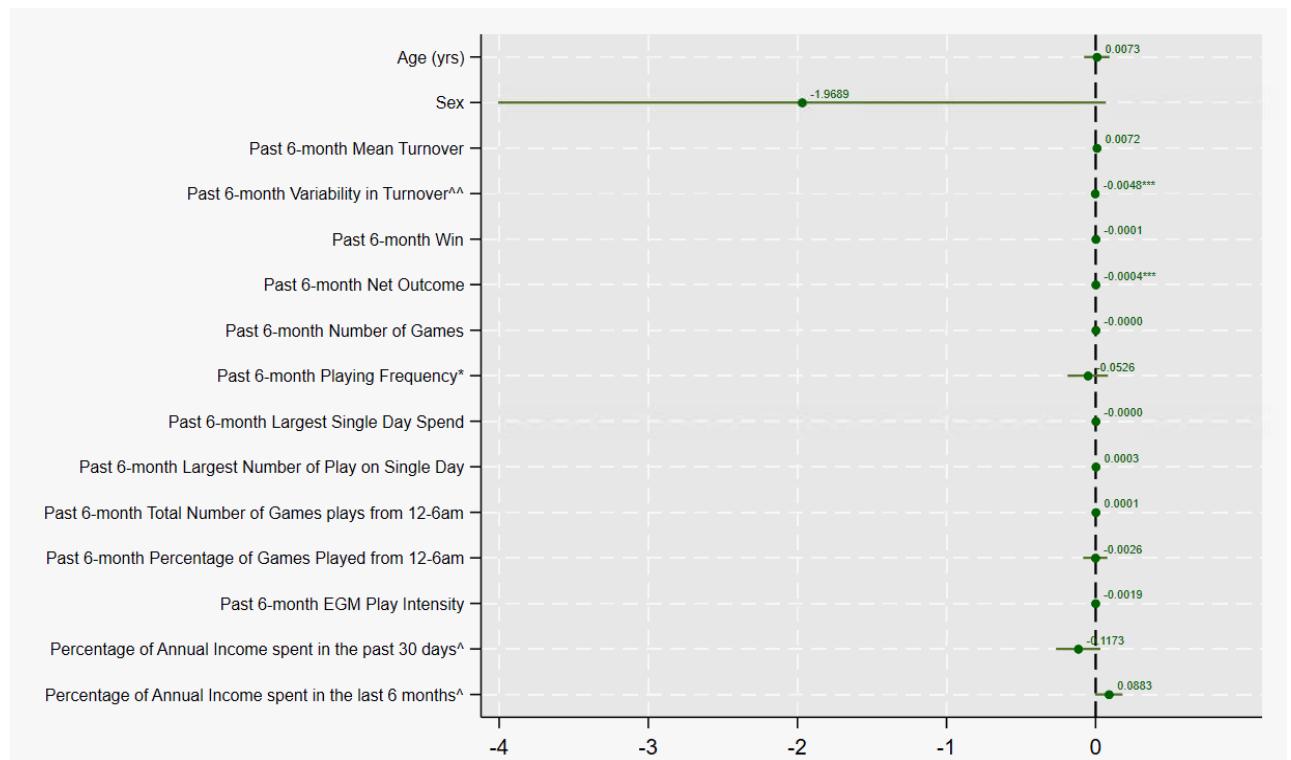


Figure 25. Impact of different demographic and derived behavioural variables on higher gambling risk behaviours. **Legend:** Coefficient of Logistic Regression, *** p < 0.05, * Frequency = total number of active gaming days, ** Intensity = total number of games divided by number of playing days, ^ Percentage of annual income spent in EGM Play, ^^ Variability is measured using the standard deviation in mean turnover

Discussion and Recommendations

The objective of the research was to enhance the ability of EGM venues in identifying individuals who are at-risk of experiencing gambling harms. It aimed to understand venue members' gambling behaviours and investigate customer attitudes towards potential harm minimisation resources and tools, such as account-based systems (i.e., a digital gaming wallet).

The survey results and focus group discussions should not be considered representative of the broader venue customer base and the small sample size limited the analyses which could be conducted. Nonetheless, our analysis showed that the venue members who completed the survey were broadly representative of those members who did not based on their EGM engagement.

EGM Play Behaviour

Similar to national results, people experiencing gambling problems were more likely to report poor financial wellbeing, which was consistent with the likelihood of gambling problems being related to lower income levels.^{11,12} Self-reported life satisfaction was lower among those with gambling problems than those with moderate or low problems, however, was the lowest among those without gambling problems indicating that there are likely other causal factors related to this.

Behavioural account data also revealed that individuals engaging in higher-risk gambling exhibited higher turnover and greater net losses, with past 6-month net outcome having a negative effect on gambling risk. Previous research has found additional behavioural markers useful to detect risky gambling.¹³ It is likely that the small sample size of survey participants limited the extent to which this study could identify clear risk markers. Problem gambling status was significantly associated with greater visitation to a range of venues, indicating that gambling spend is actually higher than what is measured by the venue. Respondents with more gambling problems were less satisfied with their gambling, indicating that most are aware of their problems and the negative impact of gambling on their lives.

These findings indicated potential areas of improvement in the current harm minimisation strategies implemented at the venue

- Targeted campaigns to encourage EGM play as a limited part of a balanced number of entertainment activities and to take regular breaks in EGM play to assist people to make rational decisions unimpacted by recent wins and losses. This could be enhanced by the provision of additional casual entertainment activities and options provided by the venue, regular encouragements to take breaks in play, and systems to support these such as promotions of free/discounted food and beverage or other relevant incentives at certain times or as time limited offers based on accumulation of points (i.e., to create a break in EGM sessions). Prohibiting smoking in EGM rooms and creating a smoking area away from the EGM floor would be an effective way to encourage regular breaks in play.
- The introduction of tools and resources to enhance consumer awareness and ability to track their gambling spend is recommended, such as activity statements with clear summaries of key information including spend and net outcomes. These should be automatically sent to members in a similar manner to the activity statements now mandated by the National Consumer Protection Framework¹⁴ for online wagering.

¹¹ Browne M, Rockloff M, Hing N, Russell A, Boyle CM and Rawat V (2019) *NSW Gambling Survey 2019*, Central Queensland University. Commissioned by the NSW Responsible Gambling Fund.

¹² Armstrong, Andrew R & Carroll, Megan & Australian Gambling Research Centre & Australian Institute of Family Studies, issuing body. (2017). *Gambling activity in Australia : findings from wave 15 of the Household, Income and Labour Dynamics in Australia (HILDA) Survey* Retrieved June 28, 2024, from <http://nla.gov.au/nla.obj-571994111>

¹³ Delfabbro, P., Parke, J., Catania, M. *et al.* Behavioural Markers of Harm and Their Potential in Identifying Product Risk in Online Gambling. *Int J Ment Health Addiction* (2023). <https://doi.org/10.1007/s11469-023-01060-8>

¹⁴ Department of Social Services. (2022, December 13). Activity statements. Australian Government. <https://www.dss.gov.au/communities-and-vulnerable-people-programs-services-gambling-information-for-online-wagering-providers/activity-statements>

- Implementing systems and encouraging customers to set spend limits so they can predetermine how much they are comfortable losing on EGMs per week.
- Enhanced training for gambling floor staff and support from management could enhance the ability of gaming room staff to regularly converse with customers and increase their level of comfort interacting with at risk customers. This could help build rapport with all customers, including those at-risk of experiencing harms and detect and record risk indicator.
- Efforts are needed to education all EGM customers about behaviours that reduce the risk of gambling problems such as setting a limit, taking regular breaks and for these to be encouraged for all to reduce the stigma of staff only talking to at-risk customers about these.
- A tracking system be implemented to automatically identify behavioural makers of risky gambling and flag these for action. Accounts could be reviewed by trained staff who can have conversations with members to assess for any potential gambling harms, ideally at early stages such that strategies could be implemented to limit play before problems become severe. High risk customers could be identified with more restrictions put in place such as recommendations for self-exclusion from all EGM venues and referral for treatment.

Attitudes and Perception Towards Account-based Systems

Most participants indicated that they would not voluntarily adopt an account-based system although one-quarter of those surveyed indicated that they would be likely to do so. However, there was ambiguity about intent to use, with 17% indicating that they did not have a firm view at this stage. Behavioural data suggest that the intention to use account-based systems is higher among those with higher turnover and greater net loss and those at greater risk of experiencing gambling problems were more likely to indicate that they would voluntarily use the system. This indicates that the system is likely to be used among the target audience including those who may have greater needs for assistance in managing their gambling.

In terms of usefulness, half of those surveyed reported they did not see the use of the system. Again, this differed between participants and those with greater levels of gambling problems were much more likely to see the value and benefits of the system. This is an important finding as it indicates the audience who would most likely benefit from an account-based gambling system understand even at the initial description the potential advantages in terms of reducing their risk of gambling harms.

There was ambiguity regarding the perceived ease of use of account-based systems, with customers relatively evenly divided between the response options, including one-third responding that they were unsure. Unsurprisingly, those with lower technology literacy were more likely to report greater concerns with difficulty of using the system. Most of the surveyed venue consumers were considered high technology literacy, with the majority using smartphones and accessing mobile banking, reducing potential barriers in account-based systems rollout. For some, account-based gambling would make it easier for them to play EGMs as they would not have to access cash. Technological literacy is a barrier which can be overcome with training and support from staff and efforts to make technology more user-friendly. System design can influence ease of use and options may include having a physical card and using kiosks rather than mobile apps.

Hesitation was seen in terms of the perceived positive impact of account-based systems on EGM play with only one-fifth of respondents agreeing with this. This is to be expected as participants have had no ability to engage with the system or understand how it would work in practice, as reflected by one-quarter of respondents indicating neutrality in their perception. Nonetheless, participants indicated that the ability to track their own gambling spend, set limits for their spend and time and temporarily lock accounts would be beneficial.

The barriers perceived by the venue members included a preference for cash, which included concerns that electronic funds would increase their spend as well as a resistance to change. The most notable barrier to use was concerns around privacy of any data shared which would

be required to set up an account. This was anticipated following recent mainstream and widely discussed hacks and security breaches experienced by major companies, damaging public trust in data security. Additionally, consumers were concerned that banks would have greater visibility of their gambling which may negatively impact their ability to apply for credit. There are both legitimate concerns which would need to be addressed by the NSW Government in any anticipated roll-out of account-based gambling. However, these issues are not insurmountable if the benefits for individuals and the community are adequately conveyed (similar to campaigns encouraging COVID-19 public health measures) in addition to communicating the steps taken to protect personal privacy. Technological solutions such as systems which can verify without storing personal details and regulatory reforms are changing quickly which likely impact system design.

Communication with patrons and venue staff is likely to be the most successful way to encourage uptake of the system particularly around the proposed benefits to individuals and the community and addressing concerns. The research suggests that mandated use is necessary to result in sufficient uptake for the system to work. Caution would be needed in incentivizing uptake of an account-based system to avoid any encouragement of gambling or perception that customers who play EGMs were being offered benefits not available to other venue customers.

Recommendations to reduce gambling harms including implementation of an account-based systems

- Account-based gambling would assist in reducing gambling harm if implemented in a mandatory manner with the inclusion of appropriate harm-minimisation tools including the ability for customers to set binding limits, increased friction on spending money (e.g., delays and messages), mandatory pushed activity statements, the ability to take an immediate temporary time-out, breaks in play customised to individual behaviour, and the development and implementation of an automated risk monitoring system which would trigger various levels of intervention.
- Communicating clearly what the requirements are to sign up and how to use the system as well as providing practical support could encourage account-based system uptake.
- The results demonstrate the need for clear communication from a credible source to emphasise the benefits of various features of account-based gambling for consumers and to reduce concerns with communication as well as systemic efforts to target those which are based on misinformation or actual potential disadvantages for customers.
- Privacy concerns need to be addressed by minimising information stored and which stakeholders (including venues, government organisations, and financial institutions) have access to what details.
- A tangible token such as a physical card could help overcome a potential barrier to the uptake of an account-based system and ongoing use among those who prefer not to rely on smartphones. Access to the system via kiosks would reduce technological inequity.
- Promoting the advantages to using account-based systems for individuals and the community will be important to enhance positive perception and enhance perceived relevance for customers.
- Incentives such as food vouchers and membership points are not recommended to promote an account-based system as these could be perceived as encouraging gambling and to disadvantage non-gaming customers.