



Communio

Trial of Dynamic Warning Messages on Electronic Gaming Machines

Final Report

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1. Executive Summary

This is the final report for the trial of dynamic warning messages on Electronic Gaming Machines (EGMs). This project was commissioned by the Australian Government Department of Social Services (previously the Australian Department of Families, Housing, Community Services and Indigenous Affairs).

Project aim

Dynamic warning messages are a harm minimisation strategy aimed at preventing or reducing gambling-related problems and promoting responsible gambling behaviours. When delivered correctly, they have the potential to enhance player knowledge and assist individuals to make better informed choices about their gambling.

The aim of the trial of dynamic warning messages on EGMs was to inform broader problem gambling policy. The focus of the trial was to identify best approaches for display of message content, frequency, duration and positioning. Cost of play was originally within project scope but removed after technical limitations were identified. The project included the design, implementation and evaluation of an eight month trial of dynamic warnings on EGMs in five gaming venues (intervention sites) and five control sites in Queensland.

Research methods

An eight month trial of dynamic warnings on EGMs occurred from 2 April 2013 to 1 October 2013. The messages appeared every 15 minutes for a period of 15 seconds for all venues except one which displayed messages once every hour for a period of 10 seconds. Messages were displayed either in the middle of the screen or the top or bottom of the screen depending on the technical configuration of the EGM.

This research is a mixed methodology of qualitative and quantitative approaches. The main components were:

- Development and implementation of dynamic warnings on EGMs in five gaming venues in south-east Queensland.
- Survey of 667 gamblers, across varying degrees of gambling severity as measured by the Problem Gambling Severity Index¹ (PGSI), over four separate periods in the five implementation venues to identify:
 - Messages that were freely recalled
 - Perceptions of messages
 - Gambling attitudes and behaviours
 - Demographic details
- Small cohort of participants (n = 17) to enrol in a longitudinal study over the study period.
- Observational data from intervention and control venues to provide context to the research.
- High level environmental data to identify further contextual information over the research period.
- Venue EGM data – turnover and stroke rate previous 12 month period and during the research period, to identify trends.

¹ J. Ferris & H. Wynne, *The Canadian problem gambling index: Final report*, Submitted for the Canadian Centre on Substance Abuse, 2001.

Summary of findings

Message Content

The three messages most commonly freely recalled were: 'Have you spent more than you can afford?', 'Set your limit. Play within it' and 'Do you need a break? Gamble responsibly.'

The most impactful message based on reported influence and accurate recall was: 'Have you spent more than you can afford?' Other impactful messages were: 'Only spend what you can afford to lose', 'Set your limit. Play within it' and 'A winner knows when to stop gambling'. The messages that were not particularly impactful were: 'Do you need a break? Gamble responsibly' and 'Are you playing longer than planned?' Concepts and phrases related to 'spend', 'affordability' and 'limits' appeared to have a greater impact on players and were recalled more accurately than messages related to time. Messages which were split into two distinct parts appeared to be less likely to be recalled in their entirety, suggesting that a single phrase may more effectively communicate a concept.

Three of the top four most impactful messages were informative messages, demonstrating that these are a valid and useful way to communicate with players. Self-appraisal messages appeared to have a greater impact on players' thoughts, reflecting more informed player base who were actively considering their gambling behaviour to inform their decisions about ongoing gambling. These messages also facilitated immediate behavioural change for some players that may reflect responsible gambling through reduced gambling intensity.

From these findings, although self-appraisal messages appear to have a greater impact on players' thoughts, it can be considered that a mix of self-appraisal and informative messages could assist in facilitating behavioural change amongst EGM players.

The introduction of dynamic warning messages did not have a noticeable impact on intervention venues in terms of turnover and EGM use in comparison to control venues. While a minority of the respondents reported that the messages were annoying or frustrating, the messages generally did not change their enjoyment of playing EGMs.

The longitudinal findings suggest that the players' EGM behaviour does not greatly vary over time. However, any differences would have to be quite large in order to be detected due to the relatively small sample size.

Positioning

Players recall seeing messages in the middle of the screen significantly more often than they recall seeing messages at the top or bottom of the screen, across all gambling risk groups.

The usefulness of messages in the middle of the screen was particularly apparent amongst those who are at low risk for developing gambling problems. Problem gamblers were more likely to consider messages (as seen in the middle of the screen) to be useless, although they were less likely to report that the messages were frustrating or annoying.

Regardless of message type, location or level of problem gambling, most players reported that the messages did not change their gambling behaviour in terms of thoughts, most wanted to keep playing.

Discussion and future consideration

The technical limitations of the QCOM machines (the gaming communication protocol in Queensland) utilised in this trial restricted the flexibility of message design which is a critical aspect of effective warning messages. Incorporating requirements for dynamic responsible gambling messages into future QCOM protocols would facilitate future trials and implementation of effective dynamic responsible gambling messages. The ability to modify the manner in which messages are displayed and presented to players would potentially make future messages more impactful than those trialled in the current project.

Importantly, the trial found positive impacts from the messages, however, a longer trial period may have resulted in more noticeable behavioural changes observed over time. If dynamic warning messages were to be implemented in venues in the future, it would be useful to incorporate evaluative components to monitor the impact of these messages over time.

Acknowledgement

This trial was successful largely as a result of cooperative and positive collaboration between all the stakeholders involved including Queensland Government, Queensland Hotels Association, ALH Group, Clubs QLD, Maxgaming, Odyssey, Australian Casino Association / Echo Entertainment Group, venue management and subject matter expert support from Dr Sally Gainsbury.

2. Purpose of the Research

Aim

The aim of the trial of dynamic warning messages was to identify best approach for delivery in terms of, message content, frequency, duration, and positioning.

The project aim was to design, implement and evaluate an eight month trial of dynamic warnings and 'cost of play' messages on EGMs in five gaming venues (intervention sites) and five control venues in Queensland. A decision was made after commencement of the project not to trial 'cost of play' messages due to technical limitations. In addition, there were constraints on the technical configuration of the EGMs. This minimised the ability to investigate the impact of design options such as font size, spacing and colour.

Research questions

The final research questions were:

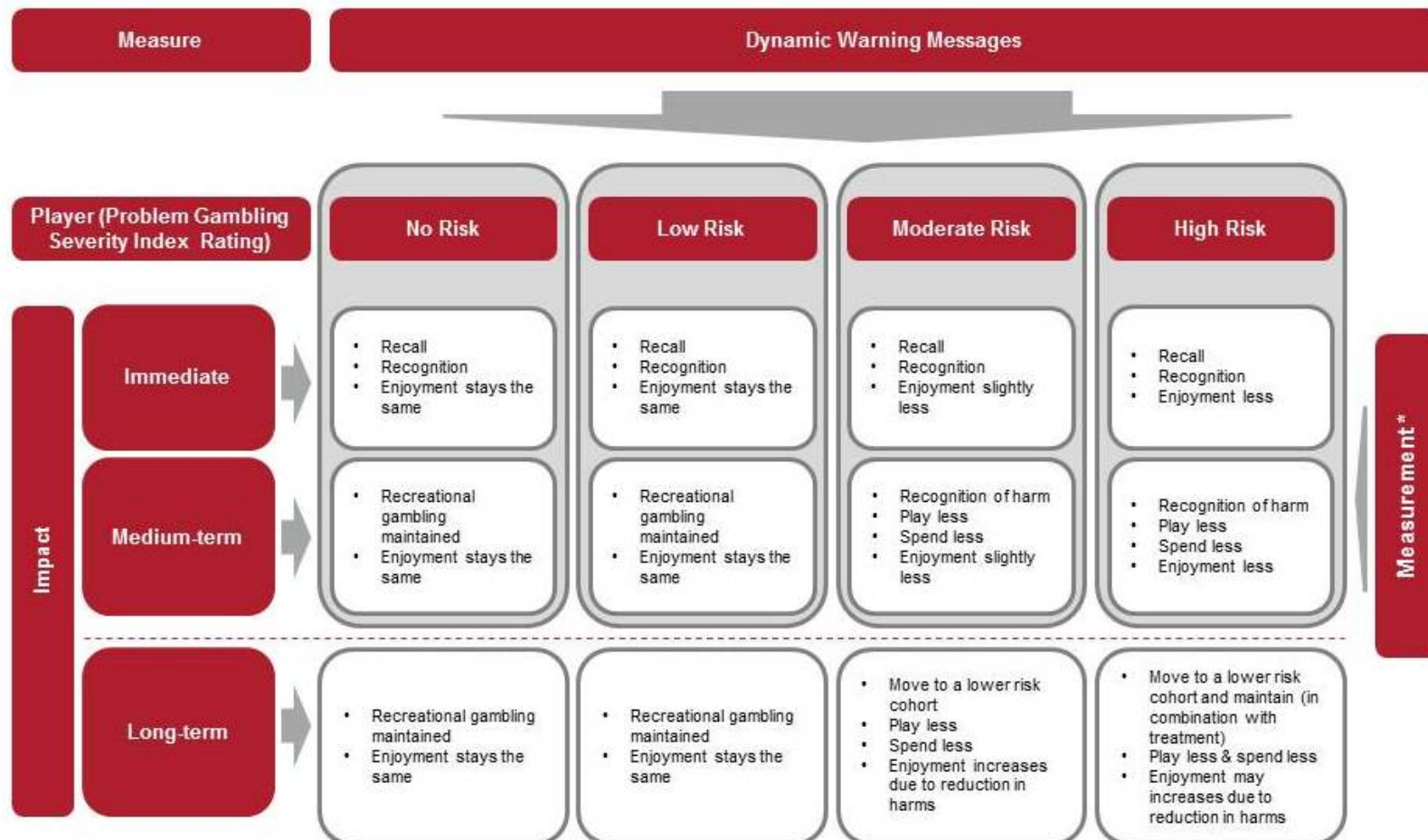
- What is an effective suite of simple dynamic warning messages that will communicate relevant and accurate information to EGM users about odds and statistics, risks of gambling and self-monitoring behaviour?
- How can these messages be delivered in a manner that will encourage responsible gambling behaviours and what is the most effective format for delivery including positioning, frequency and duration?
- What are the overall findings, what messages were most effective for different types of gamblers (recognised, recalled and affected intended change)?

A Program Logic for the dynamic warning project was developed early in the project. This is outlined on the following page.

Dynamic Warning Messages Program Logic

Dynamic Warning Messages are being tested on 'live' electronic gaming machines to assess the impact of those messages on players within a venue. The research project seeks to understand the immediate and medium-term impact of the messages in regards to harm minimisation on different players rated on the Problem Gambling Severity Index (PGSI).

Dynamic Warning Messages Program Logic



*Scope of research – to understand the immediate and medium-term impacts of dynamic warning messages on players. Impacts will be assessed through player self-reporting, venue and EGM data, and non-obtrusive observational data.

3. Message Selection and Themes

Approach

A rigorous process was used to identify and select the messages to be used in this project. An extensive literature review was undertaken as the first step to identify the range of different responsible gambling messages that have been used internationally and to seek evidence of best practice. These included messages from other sources including messages from non-gambling public health campaigns in Australia and internationally, and recommendations from stakeholders and experts in the gambling field. This resulted in the compilation of a list of 40 messages that were considered for use in the trial. To comply with the functionality of machines used in the trial all messages were less than or equal to 40 characters.

The potential messages were analysed using Linguistic Inquiry and Word Count (LIWC) software. This identified the strength of emotions in the messages. Messages that had a negative or punitive tone were removed. The messages were then assessed to ensure consistency with the Queensland Government's policy and regulatory requirements. The main intention was to ensure that the proposed messages contained no elements of stigmatisation.

The messages were grouped into themes of self-appraisal and informative messages. The defining characteristic of self-appraisal messages is that they include a question to prompt players to consider the messages with regard to their own current situation. Informative messages may provide similar content, but are phrased as a statement. Key stakeholders including representatives from the Queensland Government, industry groups and leading academic researchers were consulted and asked to provide feedback on the messages. This was done iteratively until the list was reduced to 20 messages.

Five focus groups were conducted to test the messages with people who play EGMs. The focus group participants were assessed as to their level of gambling risk using the Problem Gambling Severity Index (PGSI). One focus group comprised people who were assessed as low risk gamblers. Two focus groups comprised people assessed as medium risk gamblers, and another two group comprised people who were assessed as problem gamblers.

A report from the facilitator of the focus groups outlined the responses of participants in each group to each message. Based on the results of the focus groups eight messages were chosen that represented a range of themes that were identified as potentially useful by participants. Four informative and four self-appraisal messages were selected to be included in the trial that would enable further testing of the optimal message content.

Final list of messages

The final list of messages (including theme) that were used in the trial was:

Message A (Self-Appraisal): Have you spent more than you can afford?

Message B (Self-Appraisal): Is money all you are losing?

Message C (Informative): Set your limit. Play within it.

Message D (Informative): Only spend what you can afford to lose.

Message E (Self-Appraisal): Do you need a break? Gamble responsibly.

Message F (Self-Appraisal): Are you playing longer than planned?

Message G (Informative): A winner knows when to stop gambling.

Message H (Informative): You are responsible for your gambling.

4. Venue and Machine Profiles

Ten venues that were either pubs (classified in this report as hotels) or clubs participated in the trial. Five of these were intervention venues where the survey data was collected and five were control venues. Control venues were included to enable venue-level data to be compared with the intervention venues to control for high-level extraneous factors that may impact EGM play (e.g. extreme weather, economic or political events). This report refers to the venues by the labels included below.

For the purpose of this project, the classification of small, medium or large club/hotel is based on the number of EGMs at the venue. It was considered that Large is greater than 100; medium is between 80-100; small is less than 80. Gatton and Warwick RSL Club are in regional areas, with the remaining venues all in the Brisbane metropolitan area.

Surveys with participants were conducted at the intervention sites. No surveys were conducted at control sites. Observational and turnover data were collected from all sites, although less observational data was collected from control as compared to intervention sites. Tables 1 and 2 below show each site and their classification in the report.

Table 1 - The five intervention sites

Site	Report Name
Kedron Wavell Services Club	Large Club 1
Gatton RSL Services Club	Small Club Regional
Oxford 152	Small Hotel 1
Edinburgh Castle Hotel	Small Hotel 2
The Gap Tavern	Small Hotel 3

Table 2 - The five control sites

Site	Report Name
Aspley Australian Football and Sporting Club	Large Club 2
Warwick RSL Memorial Club	Medium Club Regional
Petrie Hotel	Small Hotel 4
Albany Creek Tavern	Small Hotel 5
Holland Park Hotel	Small Hotel 6

Significance of type of EGM

QCOM is the communications protocol specification for EGMs in the state of Queensland. The QCOM protocol has direct implication on how the messages were delivered. The technical configuration of EGMs means that messages on QCOM 1.6 machines were displayed as a pop-up message in the middle of the screen, then moved to top/bottom when reels were spinning. Messages on QCOM 1.5 machines appeared at the bottom or top of the screen, depending on the individual machine manufacturer and game type. As QCOM 1.6 was the more recent protocol, these machines were also newer and may have other more recently designed features and games than QCOM 1.5 machines.

Table 3 includes information on the number of EGMs at the venue, the number and percentage of EGMs that were QCOM 1.5 and QCOM 1.6. Understanding the proportion of QCOM 1.5 versus QCOM 1.6 EGMs at the different sites is important as this determined how the messages were displayed.

One of the research questions was to identify the impact of messages displayed in these different positions.

Venue and Machine Profiles, continued

Table 3 illustrates that almost two-thirds of EGMs involved in the study were at Large Club 1.

Intervention venues:

N = 443 (total EGMs); n = 174 (QCOM 1.5); n = 269 (QCOM 1.6)

Control venues:

N = 375 (total EGMs) ; n = 133 (QCOM 1.5); n = 242 (QCOM 1.6)

Table 3 - Proportion of QCOM 1.5 and QCOM 1.6 EGMs

Intervention Venue	QCOM 1.5	QCOM 1.6	Total EGMs at each Venue
Large Club 1	39%	79%	63%
Small Club Regional	14%	6%	9%
Small Hotel 1	15%	6%	10%
Small Hotel 2	16%	5%	9%
Small Hotel 3	16%	4%	9%
Total	100%	100%	100%
Control Venue	QCOM 1.5	QCOM 1.6	Total EGMs at each Venue
Large Club 2	33%	44%	40%
Medium Club Regional	20%	27%	25%
Small Hotel 4	20%	6%	11%
Small Hotel 5	11%	12%	12%
Small Hotel 6	16%	10%	12%
Total	100%	100%	100%

Note: Figures may not add up to 100% due to rounding

The following table summarises the number and percentage of QCOM 1.5 and QCOM 1.6 EGMs at the intervention and control sites.

Table 4 - Percentage of QCOM 1.5 and QCOM 1.6 EGMs at Intervention and Control Venues

	Intervention Venues	Control Venues
QCOM 1.5 EGMs	174 (39%)	133 (35%)
QCOM 1.6 EGMs	269 (61%)	242 (65%)
Total	443 (100%)	375 (100%)

Venue and Machine Profiles, continued

Figures 1 and 2 shows the proportion of EGMs at each venue that display top/bottom messages (QCOM 1.5) and middle messages (QCOM 1.6). Figure 1 shows that three-quarters of EGMs at Large Club 1 were QCOM 1.6. All other intervention venues had a majority of QCOM 1.5 EGMs.

The ratio of QCOM 1.5 EGMs to QCOM 1.6 EGMs differed at control venues. Figure 2 illustrates that four out of the five control venues had a majority of QCOM 1.6 EGMs.

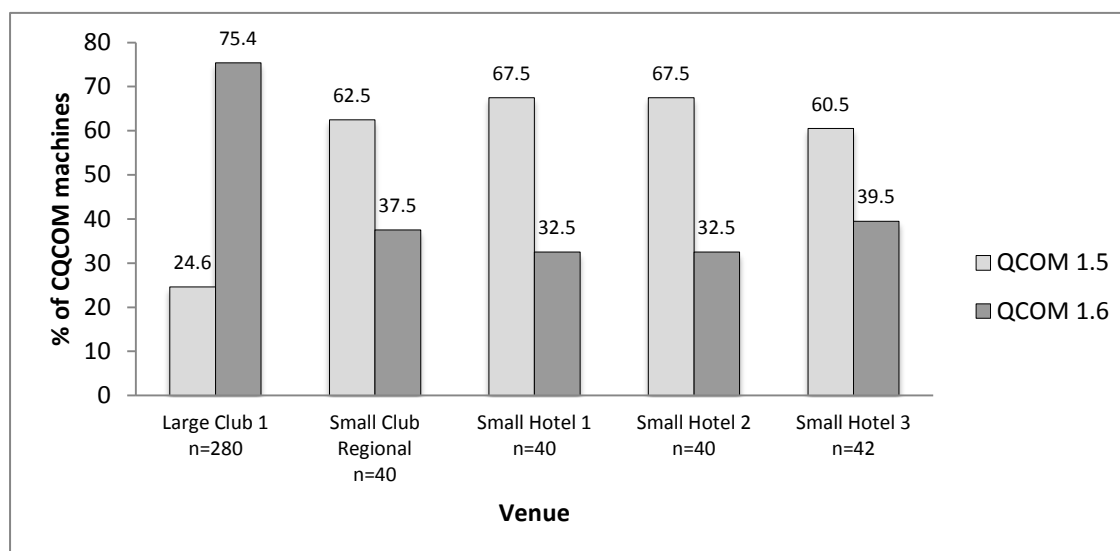


Figure 1 - Percentage of QCOM 1.5 and 1.6 EGMs per Intervention venue

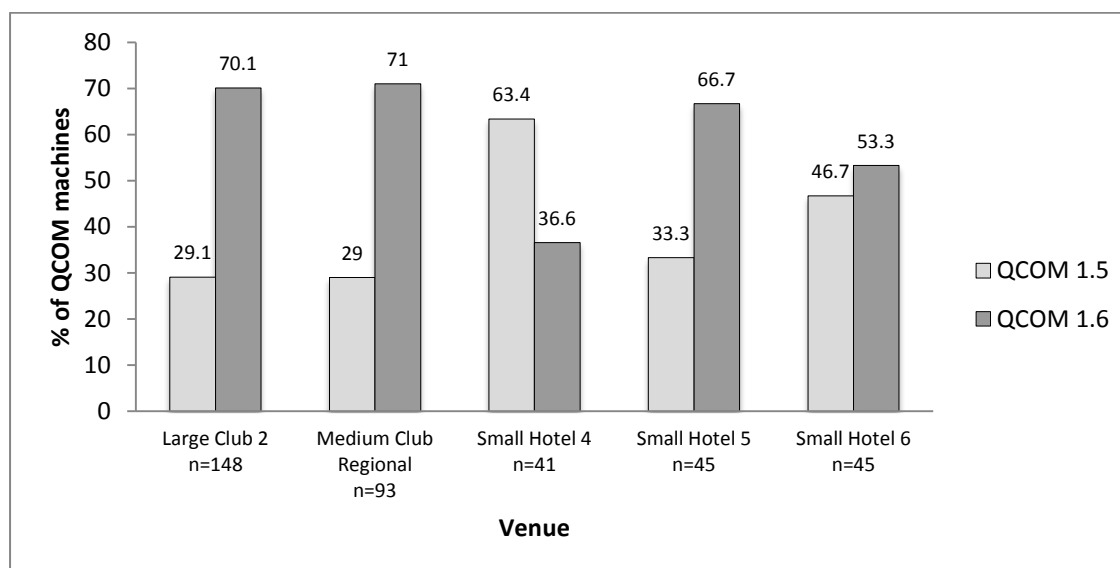


Figure 2 - Percentage of QCOM 1.5 and 1.6 EGMs per Control venue

5. Research Methodology

Ethics approval was granted from Bond University prior to commencement of the project.

Message presentation

Eight different messages were tested in the trial and are presented in Table 5 below. The messages were initially displayed on every EGM from 1 March 2013 so that players were accustomed to the messages. From 2 April 2013 each intervention venue commenced surveying players up until 1 October 2013 when all messages were removed from the EGMs.

The frequency of display of messages was not consistent across intervention sites. The messages appeared every 15 minutes for a period of 15 seconds for all venues at the commencement of the project. The messages were removed from the EGMs from the Large Club 1 at the request of the venue for one week and resumed again on 2 April 2013 with a different frequency. At Large Club 1 the frequency of messages was changed to a display of once every hour for a period of 10 seconds from 2 April 2013 until they ceased from all venues on 1 October 2013.

All messages were displayed in the middle of the screen or the top/bottom of the screen, depending on the machine on which they appeared.

Table 5 - The eight messages used in this trial

Label	Message	Theme
A	Have you spent more than you can afford?	Self-Appraisal
B	Is money all you are losing?	Self-Appraisal
C	Set your limit. Play within it.	Informative
D	Only spend what you can afford to lose.	Informative
E	Do you need a break? Gamble responsibly.	Self-Appraisal
F	Are you playing longer than planned?	Self-Appraisal
G	A winner knows when to stop gambling.	Informative
H	You are responsible for your gambling.	Informative

The messages were divided into two groups and rotated on a weekly basis, and displayed on all machines in a venue at the same time. All EGMs in the intervention venues received the first group of four messages (message A, B, C and D); and remained in place for one week. Each Tuesday at 10am the messages were rotated and the second group of messages (message E, F, G and H) were displayed. This sequence continued for the duration of the trial. The rotation of messages was considered when analysing the data.

Research Methodology, continued

Conducting the surveys

A team of 11 research assistants (RAs) was engaged for the duration of the project to conduct the surveys. They received training from Dr Gainsbury and were provided with documented instructions on their role and how to collect surveys.

Each RA collected data from across the intervention venues to reduce the potential risk of individual differences in data collection at each venue. Participants in the trial only completed the survey once. Survey research has generally found that face-to-face interviews are the preferable way to administer gambling research surveys, including measures of problem gambling, as this fosters better rapport and subsequently elicit more candid and honest responses.² Face-to-face surveys also increase recruitment rates of somewhat hard-to-reach populations, including young people.³

RAs submitted a report at the conclusion of each shift which documented the number of surveys completed and any incidents or notable events that occurred. The project team provided regular oversight of the RAs to ensure that the quality of the data collection was of a consistently high standard, and to maintain open communication with staff at each venue. Stakeholder engagement was an important factor in the success of this project.

The survey used to collect data (included in Appendix A) this includes the 'Problem Gambling Severity Index' (PGSI) questionnaire which is an instrument to assess gambling risk levels. The PGSI has good psychometric properties and is widely used in Australian and international research, enabling comparison of the current results with other research and prevalence studies.⁴ The PGSI was included in the analysis of results to examine the impact of messages on people at various levels of gambling risk.

Table 6 lists the total surveys completed during the project. The methodology required a greater number of surveys to be completed in Period 1 than in other periods in order to recruit respondents for the longitudinal study. Period 1 commenced one month after the messages had been implemented.

Table 6 - Total surveys completed during project

Data Period 2013	Anticipated Survey Numbers	Actual Survey Numbers
Month 2 of trial April (Data Period 1)	300	269
Month 4 of trial - June (Data Period 2)	100	150
Month 6 of trial - August (Data Period 3)	100	129
Month 8 of trial - October (Data Period 4)	100	119
Total	600	667

² R.J. Williams & R.A. Volberg, 'Impact of survey description, Administration Method, and exclusionary criteria on population prevalence rates of problem gambling', *International Gambling Studies*, 9 (2), 2009, pp. 101-117.

³ R.J. Williams, R.A. Volber, & R.M.G Stevens, '*The population prevalence of problem gambling: Methodological influences, standardized rates, jurisdictional differences and worldwide trends*', Report prepared for the Ontario Problem Gambling Research Centre & The Ontario Ministry of Health & Long Term Care, 2012.

⁴ A.C. Jackson, H. Wynne, N.A. Dowling, J.E. Tomnay, & S.A. Thomas, 'Using the CPGI to determine problem gambling prevalence in Australia: Measurement issues', *International Journal of Mental Health and Addiction*, 8(4), 2010, pp. 570-582.

Research Methodology, continued

Terminology

The survey data collection tool in this project used the words ‘poker machine’ and ‘pokies’ as colloquial terms for EGMs amongst players. Some parts of this report will refer to the specific question asked in the survey tool which used these colloquial terms.

Assessing recall

Recall was tested in two ways. Firstly, respondents were asked whether they had seen a message on EGMs. Those who stated that they had seen messages at the top, bottom, or middle of the screen were deemed to have recalled the existence of the messages of interest.

If respondents reported having seen a message, they were asked to freely recall the message content to test for accuracy of free recall.

Recalled messages were coded independently by two members of the research team to assess accuracy. Accuracy was determined by whether the content freely recalled could be clearly identified as matching one of the messages. Where a message did not accurately match one of the eight messages but reflected content that reflected the general responsible gambling message themes (e.g., gambling excessively, needing to appropriately manage gambling), it was coded as a general self-appraisal or general informative message, as appropriate. The two members of the research team agreed on the vast majority of their ratings. Any inconsistencies were resolved via discussion until agreement was reached.

Assessing impact

All respondents were shown the list of messages and asked which were most influential or had the biggest impact for them. The respondents were then asked to report on how the messages they recalled influenced their thoughts and play. These were unprompted responses, the respondents gave a free response and the RA then coded into themes of responses as represented in the questionnaire (Appendix A). Further in-depth data about their response was not collected.

Assessing effectiveness and overall impact

Respondents were asked to identify the messages they perceived had the greatest impact, and then assess the affect the messages had on their enjoyment when playing. Respondents were then asked about the overall impact of the messages. Respondents were able to choose from the following: useful/beneficial; neutral; useless; frustrating/annoying. More than one response was allowed.

Research Methodology, continued

Shift times

As evenings are the time when venues are most busy, RAs focused on this period to recruit participants.

- A little more than one-third (32.2%) of surveys were undertaken on a Friday and half of these occurred from 7-10pm.
- The next most common day was Saturday, which accounted for just over a quarter of surveys completed on this day (26.5%). Once again the evening period was the most popular, accounting for more than half of surveys completed on Saturdays.
- More than 40% of the entire sample was collected during the evening period, 7pm-10pm.

The table below is a representation of the total number of surveys completed for each shift time slot and day of the week over all periods combined (N = 667).

Table 7 - Total number of shifts completed overall

	10AM-1PM	1PM-4PM	4PM-7PM	7PM – 10PM	Total
SUN	12	7	1	1	21
MON	0	16	2	0	18
TUE	0	12	11	3	26
WED	3	18	44	45	110
THUR	3	13	56	28	100
FRI	2	34	72	107	215
SAT	1	30	52	94	177
TOTAL:	21	130	238	278	667

Longitudinal study

In addition to the surveys conducted at each intervention site, a longitudinal study was completed with a smaller number of participants. The longitudinal study aimed to address the research objective to assess the short-term self-reported behavioural change of players' behaviour.

All respondents who were regular players at the intervention venues were invited to participate in the longitudinal study.

Respondents for the longitudinal study were selected during Period 1. They consented to participate in follow-up surveys at months 3, 5 and 7 of the trial. Twenty-three respondents initially consented to participate in the longitudinal study. Due to some attrition, a total of 17 participants completed the longitudinal study over the seven months, which was consistent with expectations.

Research Methodology, continued

Other data

Additional data was collected to provide supporting information about noticeable changes in patrons gambling behaviour at intervention and control venues. This included:

- Observational data from the intervention sites and control sites. During the recruitment shifts, RAs made note of comments heard, and noticeable responses by patrons related to the messages on the screen. As the RAs stood at a sufficient distance from EGMs to avoid disturbing players, the messages were not always observable, making it difficult to record players' reactions. A smaller amount of observational data was collected from the control venues to determine if there were any noticeable differences in gambling behaviour compared to the intervention venues. The observational data did not indicate any fundamental differences in gambling patterns between the control and intervention venues. Furthermore, players in the intervention venues did not make any noticeable behavioural responses to messages.
- Each venue provided data collected at an aggregate level to identify whether there were any trends in gambling behaviour over the period of the project that differed between control and intervention venues. The data provided included total turnover and stroke rate. Total turnover refers to the total gambling expenditure, minus any wins paid to players. Stroke data indicates how many times players push the buttons on EGMs; it is a general indicator of the speed of play on EGMs, but does not differentiate between times when the machines are idle.
- A spreadsheet was maintained over the period of the project to record major environmental influences that may have impacted play.
- Loyalty card data was only available from two of the five intervention venues and two of the control venues during the trial period and the loyalty card program was voluntary for patrons. Therefore loyalty card data was not collected in this study as the information would have provided an incomplete profile of gambling behaviour.

Data cleaning

The data collected from the intervention sites was interrogated through a rigorous data cleaning process to identify inaccurate, incomplete or unreasonable data. Data which was inaccurate or lacked any integrity was excluded from the data sample or calculated assumptions were made. Five incomplete surveys collected in period one were excluded from the results.

Data analysis

The data was analysed with the aid of the statistical software package tool IBM SPSS Statistics. There were a number of rigorous tests applied to test for statistical significance, as well as regression analysis to estimate the relationships between variables. Due to the nature of the data, encompassing mainly categorical data, the main form of testing utilised was Chi-Square Tests for Independence and Chi-Square Goodness-of-Fit Tests.

Triangulation techniques were also used to strengthen the validity and reliability of the research data reported. Environmental data and observational data were included in the analysis to provide a complete picture of the data.

Please note: Figures in the following tables and/or charts may not add up to 100% due to rounding.

6. Demographics

The survey was completed by 667 respondents across the five intervention venues. Just over one-third (n = 229, 34.3%) of the respondents were recruited from Large Club 1, while the remaining respondents were recruited from one of the four smaller venues: Small Hotel 1 (n = 134, 20.1%), Small Hotel 2 (n = 153, 22.9%), Small Hotel 3 (n = 118, 17.7%) and Small Club Regional (n = 33, 4.9%). The demographics of respondents recruited from each venue are displayed in Table 8 below (see Appendix B for aggregated data charts.)

Table 8 - Demographic comparisons between venues (%)

Demographic	Large Club 1	Small Club Regional	Small Hotel 1	Small Hotel 2	Small Hotel 3	Total Sample
Gender						
Male	49.3	57.6	85.8	82.4	88.1	71.5
Female	50.7	42.4	14.2	17.6	11.9	28.5
Age						
18-25	7.0	9.1	25.4	40.8	41.0	24.5
26-30	3.9	0.0	18.7	10.5	12.8	9.8
31-39	7.5	12.1	10.4	9.2	11.1	9.3
40-49	13.2	6.1	14.2	19.7	9.4	13.9
50-59	21.9	3.0	14.2	9.2	15.4	15.4
60-69	18.4	36.4	8.2	7.9	6.8	12.8
70-79	16.2	27.3	6.0	2.0	2.6	9.0
80-89	10.5	6.1	3.0	0.7	0.9	4.8
90+	1.3	0.0	0.0	0.0	0.0	0.5
Speak another language at home						
Yes	17.9	24.2	13.4	11.8	17.8	15.9
PGSI category						
Non-problem	44.5	36.4	33.6	24.8	33.9	35.5
Low risk	34.5	30.3	32.8	30.7	34.7	33.1
Moderate risk	17.0	18.2	25.4	33.3	22.9	23.5
Problem	3.9	15.2	8.2	11.1	8.5	7.8

Discussion of demographic data – comparison with Queensland Household Gambling Survey⁵

Comparisons based on gender split indicate that samples obtained from Large Club 1 and Small Club Regional comprised of significantly fewer males than did the samples obtained from the other venues. Age differences were less clear; however, a large sample was recruited in the over 40 demographic from Large Club 1 and Small Club Regional. No significant difference was found amongst those who spoke a language other than English at home. There were some differences based on PGSI levels, with significantly more problem gamblers recruited from Small Hotel 2 and Small Club Regional than Large Club 1.

The gender divide of this sample differs from EGM players in the general Queensland population as reported in the *Queensland Household Gambling Survey 2011-2012 (QHGS)*. More males than females were included in the current study (see appendix figure B2), although there was no significant gender difference in the proportion of adults that play EGMs in the Queensland population according to the QHGS. Young people were highly represented in the current study, with 43.6% of the sample younger than 40 years of age. This is similar to EGM players in Queensland, in which the 13-34 year age bracket has the highest participation rate for this activity, and in particular young males have significantly higher rates of EGM participation than other adults in Queensland.

⁵ Office of Liquor and Gaming Regulation, *Gaming Statistics*, Queensland Government, 2013, retrieved from the [QLD Office of Liquor and Gaming Regulation website](#).

Demographics, continued

The QHGS does not ask about language spoken at home. However, it did find significantly higher rates of EGM play amongst Queenslanders born inside Australia (33%) as compared to those born overseas (24%). The sample included in this study appears to include some cultural diversity, based on language spoken at home. It was a requirement of participation that all participants could read, speak and understand English.

Player behaviour

Table 9 on the following page outlines the typical gambling behaviour as reported by the respondents in the sample by venue (see Appendix B for aggregated data charts.) As can be seen, there are no major differences between the venues in terms of the gambling behaviour of their players, with the exception of where they play the pokies, which was consistent with expectations.

Most respondents reported playing EGMs either 1-2 times per week or 2-3 times per month, mostly played between 15 minutes and one hour, or between one hour and two hours and were fairly even split on whether or not they take a break during play.

Most respondents reported switching machines at least sometimes and will often run their credits down to zero, taking cash out a little more than half the time. Most bet 25 lines and varied in terms of the amount bet per line. The respondents mostly played 1c machines (62%), although this was a lower proportion than the 72% of EGM players surveyed in the QHGS who played 1c machines.

Most respondents reported EGM played in clubs with quite a few playing in hotels and some in casinos. Most played in one or 2-3 venues and would often play alone or with friends, while playing relatively rarely with family or spouses/partners.

Around three quarters of the respondents in the sample reported they did not set a time limit, but about half would set a dollar limit. Many would break their self-imposed time limits at least sometimes, while fewer would break money limits. Less than a quarter of the respondents reported they had a strategy to limit the amount of time spent playing.

Three-quarters of respondents (75.1%) reported setting a monetary budget prior to playing pokies, and the vast majority (91.2%) reported at least sometimes adhering to these limits, with more than half (58.5%) of respondents had a strategy that they used to limit the amount of money they spent playing pokes. In contrast, less than one-quarter (24.2%) of respondents ever set a limit on the amount of time they intended to play pokies, and over half of these respondents reported at least sometimes keeping to these limits (58.6%) although only one-quarter (25.4%) used a strategy to adhere to these limits.

Approximately three-quarters of respondents had seen responsible gambling signs in the venues. Of those who had seen the signs, more than half thought they were not effective and up to 90% thought they were no more than 'somewhat' effective.

This was consistent with previous studies on responsible gambling signs for EGM venues, which suggests that the mandated static signs are not recalled by gamblers and have minimal impact on gamblers' thoughts and behaviours.⁶

⁶ Focal Research, 'NS VL Responsible Gaming Features Evaluation: Final report', Nova Scotia, Focal Research Consultants Ltd., 2001.

N. Hing, 'An assessment of member awareness, perceived adequacy and perceived effectiveness of responsible gambling strategies in Sydney clubs', 2003, Retrieved May 16, 2004, from the [NSW Department of Gaming Regulation](#).

Demographics, continued

Table 9 - Gambling behaviour of the sample by venue (%)

Question	Large Club 1	Small Club Regional	Small Hotel 1	Small Hotel 2	Small Hotel 3
In the last 12 mths, where have you played the pokies? (Multiple response)					
Clubs	99.1	97.0	76.1	69.3	73.7
Hotels	20.5	27.3	75.4	69.3	64.4
Casinos	31.9	9.1	30.6	33.3	26.3
Internet	1.7	3.0	3.0	4.6	2.5
Do you typically play at the same venue or at a number of different venues?					
Only one venues	31.0	48.5	40.2	36.6	43.2
2-3 venues	52.0	51.5	37.2	45.1	39.0
4-5 venues	13.5	0.0	11.7	8.5	11.9
6+ venues	3.5	0.0	10.9	9.8	5.9
Who do you typically play the pokies with? (Multiple response)					
Alone	31.0	48.5	50.7	44.4	44.1
Spouse/partner	41.9	18.2	11.2	14.4	11.9
Other family members	16.6	12.2	4.5	7.2	6.8
Friends or co-workers	18.8	21.2	38.8	37.9	40.7
Others or a group	1.3	0.0	0.0	0.9	0.4
Do you ever set a time limit for yourself before you start play?					
Almost always	11.8	9.8	7.5	6.7	6.8
Most of the time	10.0	12.8	8.2	4.7	4.2
Sometimes	10.5	16.0	4.5	8.0	5.1
Never	67.7	61.4	79.9	80.4	83.9
If you set a time limit, how often do you keep to those time limits?					
Almost always	33.0	11.8	31.6	24.1	25.6
Most of the time	21.7	23.5	23.7	13.8	15.4
Sometimes	11.3	29.4	7.9	8.6	7.7
Never	34.0	35.3	36.8	53.4	51.3
Do you use any strategies to limit the amount of time you spend playing?					
Almost always	14.3	10.7	9.8	10.8	10.5
Most of the time	7.9	0.0	4.1	8.6	2.6
Sometimes	6.9	7.2	8.2	7.9	8.8
Never	70.9	82.1	77.9	72.7	78.1
Do you ever set a dollar budget for yourself before you start to play?					
Almost always	51.1	33.3	50.7	52.0	44.1
Most of the time	18.3	24.2	12.7	11.8	15.3
Sometimes	11.8	18.2	8.2	9.9	9.3
Never	18.8	24.2	28.4	26.3	31.4
If yes, how often do you keep to those limits?					
Almost always	47.4	32.0	56.5	51.7	49.4
Most of the time	31.6	28.0	25.0	24.1	23.0
Sometimes	11.2	36.0	13.0	14.7	17.2
Never	9.7	4.0	5.4	9.5	10.3

Continued on next page

S. Monaghan, & A. Blaszczyński, 'Impact of mode of display and message content of responsible gambling signs for Electronic Gaming Machines on regular gamblers' *Journal of Gambling Studies*, 26(1), 2010, pp. 67-88.

S. Monaghan, & A. Blaszczyński, 'Recall of Electronic Gaming Machine signs: A static versus a dynamic mode of presentation', *Journal of Gambling Issues*, 20, 2007, pp. 253-268.

Demographics, continued

Table 9, continued

Question	Large Club 1	Small Club Regional	Small Hotel 1	Small Hotel 2	Small Hotel 3
Do you use any strategies to limit the dollar amount you spend on pokies?					
Almost always	38.5	20.0	27.6	37.1	25.6
Most of the time	19.7	13.3	11.0	10.5	12.0
Sometimes	11.5	16.7	10.2	13.3	9.4
Never	30.3	50.0	51.2	39.2	53.0
Have you seen any signs in this venue that encourage responsible gambling?					
Yes	74.7	87.9	70.1	67.3	75.4
No	25.3	12.1	29.9	32.7	24.6
How effective do you think signs are at encouraging you to gamble responsibly?					
Not at all effective	57.6	58.1	53.6	60.0	66.7
Somewhat effective	30.5	16.1	27.2	17.9	23.4
Effective	9.5	22.6	13.6	16.6	5.4
Very effective	2.4	3.2	5.6	5.5	4.5

7. Findings

Message recall

Of the 667 respondents surveyed, 290 (43.5%) recalled seeing messages on the EGMs either in the middle of the screen and/or at the top/bottom of the screen. Of these, 216 (74.5%) reported seeing messages in the middle of the screen, 64 (22.1%) recalled seeing them at the top and/or bottom of the screen and 10 (3.4%) recalled seeing them at the top and/or bottom as well as the middle of the screen.

One of the limitations of the study was that we could not measure how many of each type of message the respondent had been exposed to; however, we considered this in the analysis of the results.

Location of messages

Players recalled seeing messages in the middle of the screen significantly more often than they recalled seeing messages at the top or bottom of the screen.

The results presented in Figure 4 indicate that, despite the proportion of machines in each venue that can display top/bottom or middle messages (see in Figure 1), approximately 72-82% of respondents recalled seeing messages in the middle of the screen, as compared to 18-27% who recalled messages displayed at the top or bottom of the screen. This effect was found across venues, including those who had less than one-third of machines displaying messages in the middle of the screen.

When statistical analysis was run, considering the proportion of each type of machine in each venue and the proportion of people recruited from each venue that recalled messages in different locations, the difference was significant except for Large Club 1. This was likely due to the greater proportion of machines displaying middle machines (QCOM 1.6) in this venue.

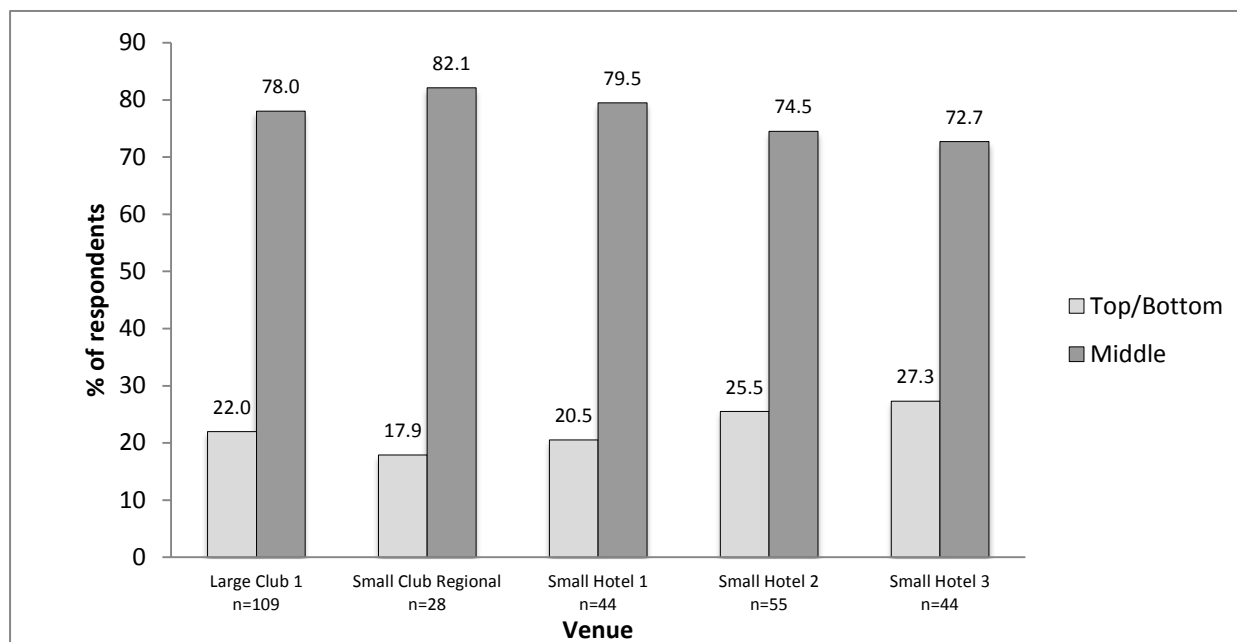


Figure 3 - Percentage of respondents who recalled top/bottom or middle messages per intervention venue

Note: The 10 respondents who reported both top/bottom and middle have been excluded from this analysis.

Findings, continued

Message impact

The messages are listed below for reference:

Message A (Self-Appraisal): Have you spent more than you can afford?

Message B (Self-Appraisal): Is money all you are losing?

Message C (Informative): Set your limit. Play within it.

Message D (Informative): Only spend what you can afford to lose.

Message E (Self-Appraisal): Do you need a break? Gamble responsibly.

Message F (Self-Appraisal): Are you playing longer than planned?

Message G (Informative): A winner knows when to stop gambling.

Message H (Informative): You are responsible for your gambling.

Based on participant's responses, the following messages were assessed as being the most influential:

- Message A: Have you spent more than you can afford?
- Message D: Only spend what you can afford to lose.
- Message H: You are responsible for your gambling.

The following figure illustrates the messages that were selected as first, second and third choice of message with the highest impact.

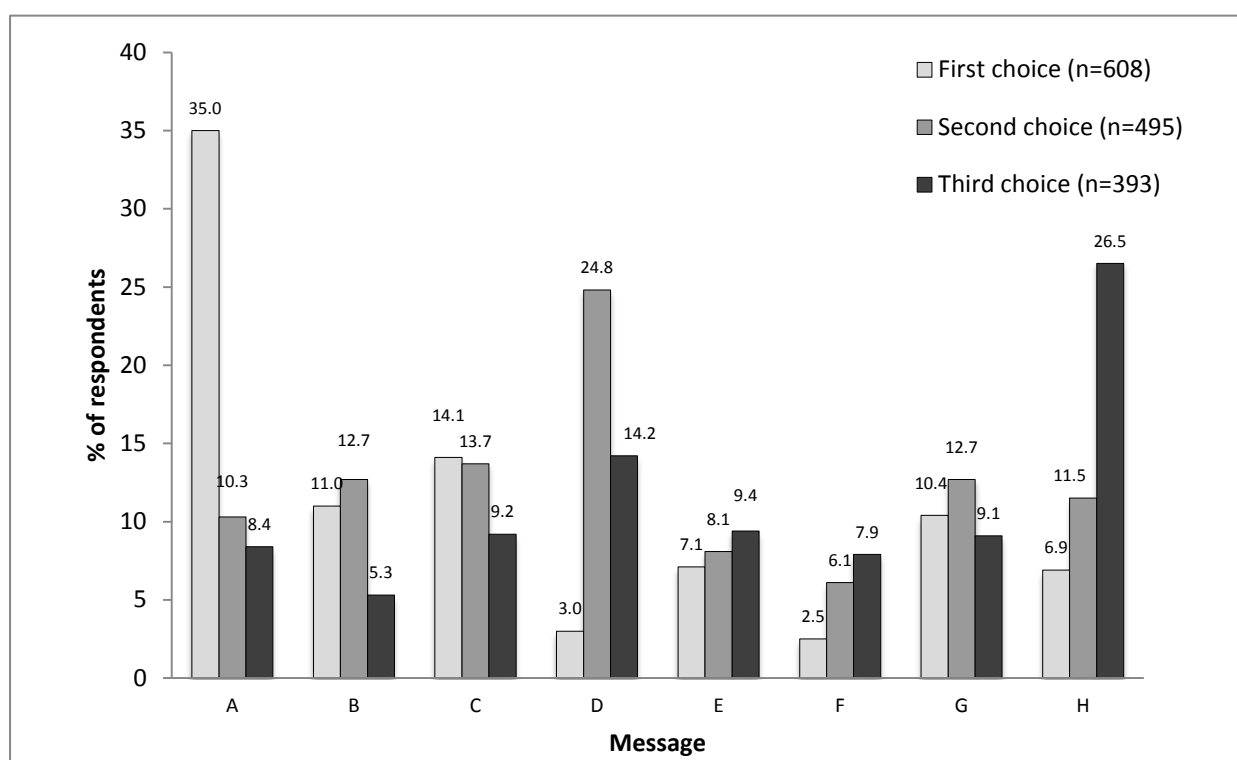


Figure 4 - Which of these statements were the most influential or had the biggest impact for you?

In order to give more weight to the statements that were selected as the first most influential and less to those subsequently selected, the responses were given a weighting (first choice = weight of 3, second choice = weight of 2, third choice = weight of 1). These results are reported in Figure 5.

Findings, continued

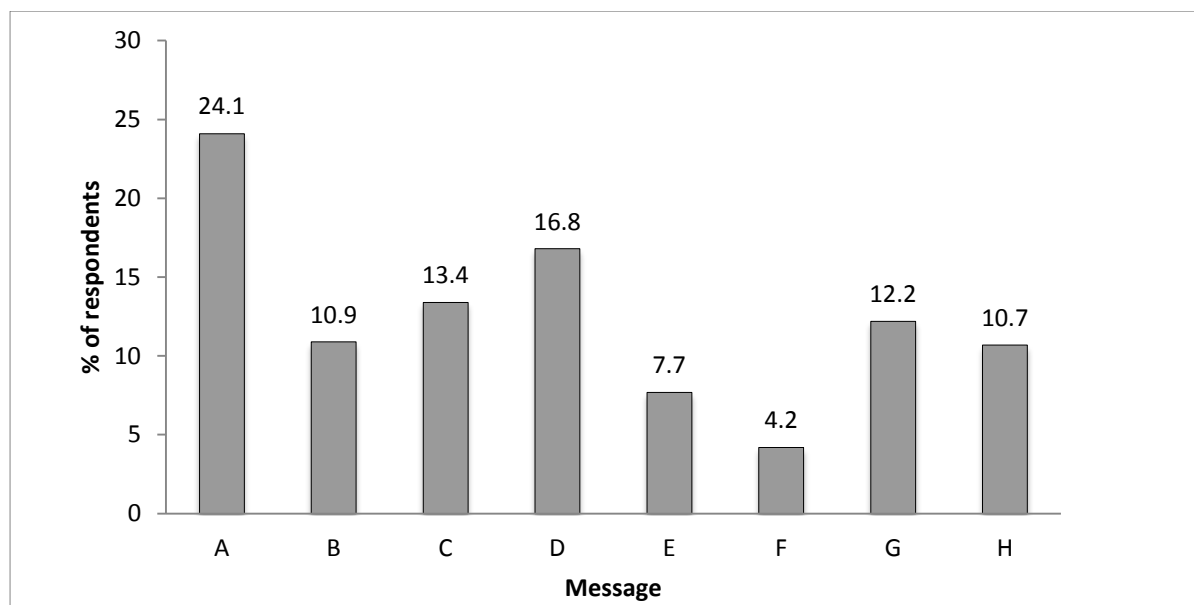


Figure 5 - Weighted impact of the eight messages

Figure 5 above illustrates that message A and D were viewed as particularly impactful, followed by message C and G. Message E and F were not particularly impactful.

It is interesting to contrast these findings with the messages which were most likely to be recalled as shown in Figure 6.

Free recall

Of the respondents that reported having seen a message displayed on EGMs, 164 (56.6%) respondents accurately freely recalled one message, 29 (10%) accurately freely recalled two messages and one respondent accurately freely recalled three messages. The number of respondents that recalled each message is presented in Figure 6.

Findings, continued

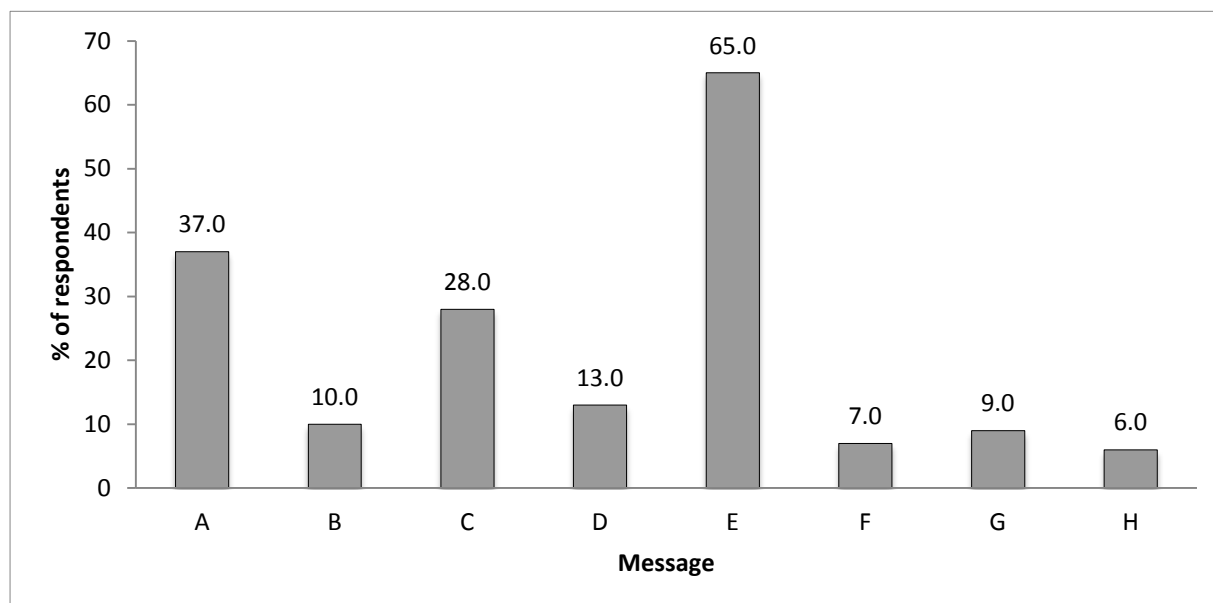


Figure 6 - Most recalled messages

Message A, C and E were the most commonly recalled messages. These results not surprisingly indicate that messages which are accurately recalled have a greater chance of influencing players; and/or that messages which have a greater influence are more likely to be recalled. However, the findings also demonstrate that accurate recall is not necessary for message impact.

The themes of the most commonly recalled messages related to spending more money than is affordable, setting and playing within limits, and taking/needing a break. Notably, the only message including the word 'money' was not well recalled, indicating that words such as 'spend', 'spent', and 'afford' resonate with players to a greater extent.

Self-appraisal messages were recalled more frequently than informative messages, with 136 self-appraisal messages recalled, compared to 71 informative messages. This difference was statistically significant. These results are consistent with previous studies of responsible gambling messages for EGMs, which found self-appraisal messages were recalled significantly more accurately two-weeks following exposure during a single session, as compared to informative messages.⁷

Stated recall by venue

The frequency of message display on machines at Large Club 1 was less than the frequency of message display on EGMs at other venues (Large Club 1 displayed messages for 10 seconds every hour; other intervention venues displayed messages for 15 seconds every 15 minutes.) It is interesting to note when analysing the data for stated recall at different venues that recall at Large Club 1 was slightly lower than at other venues. Other factors need to be considered when interpreting the results, including the different environments of each venue. In terms of determining the impact of frequency of message display on recall and effectiveness, the results are inconclusive.

⁷ Monaghan & Blaszczyński, 2010, loc. cit.

Findings, continued

Effectiveness - message content

Respondents were allowed more than one response to questions relating to message influence on players' thoughts and play. Not everyone provided an answer hence, the following counts per response (n) will not add up to the entire sample size reported.

Informative messages

The informative messages were message C (Set your limit. Play within it), message D (Only spend what you can afford to lose), message G (A winner knows when to stop gambling) and message H (You are responsible for your gambling).

The most commonly reported thoughts in response to informative messages related to:

- wanted to keep playing (n = 19)
- thought about how much money I was spending (n = 12)
- thought about how long I had been playing (n = 9)
- thought about taking a break (n = 5)
- thought about cashing out (n = 2)
- feel annoyed/frustrated (n = 3)

The following behaviours upon seeing an informative message were reported:

- read the message (n = 26)
- immediately push the button to continue (n = 12)
- did not react to the message (n = 11)
- left the message on the screen until the time elapsed (n = 6)
- looked around at other players or machines (n = 5)
- talked to somebody nearby (n = 3)
- cashed out and leave gaming area (n = 2)
- checked their phone (n = 1)

Self-appraisal messages

Self-appraisal messages were message A (Have you spent more than you can afford?), message B (Is money all you are losing), message E (Do you need a break? Gamble responsibly) and message F (Are you playing longer than planned?).

The most commonly reported thoughts regarding self-appraisal messages were similar to that for informative messages, with the most common responses from the 136 respondents who recalled self-appraisal messages being:

- wanted to keep playing (n = 27)
- thought about how much money I was spending (n = 23)
- thought about how long I had been playing (n = 19)
- thought about taking a break (n = 6)
- thought about cashing out (n = 4)
- feel annoyed/frustrated (n = 14)

Findings, continued

The reported behavioural impacts of self-appraisal messages were similar to those reported for informative messages, although a number of behavioural responses were also described.

The reported behavioural impacts were:

- read the message (n = 34)
- played at the same rate (n = 32)
- did not react to the message (n = 24)
- immediately pushed button to continue (n = 13)
- looked around at other players or machines (n = 7)
- left the message on the screen until time elapsed (n = 7)
- played on at a decreased speed (n = 5)
- cashed out and left the gaming area (n = 5)
- talked to somebody nearby (n = 4)
- played on and decrease credit bets (n = 3)
- played on and increase credit bets (n = 1)
- played on and increase their speed of play (n = 1)
- lit a cigarette (n = 1)

Overall message effectiveness

Figures 7 and 8 compare informative and self-appraisal messages in terms of perceived usefulness and enjoyment of these messages.

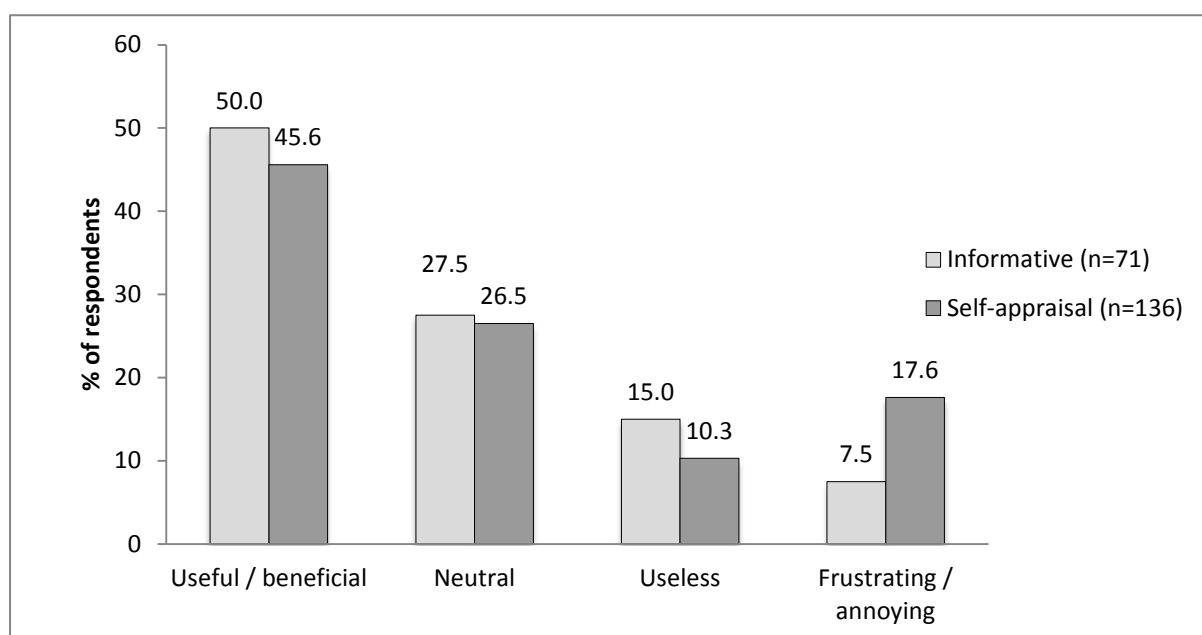


Figure 7 – Perceived usefulness of informative and self-appraisal messages (%)

Findings, continued

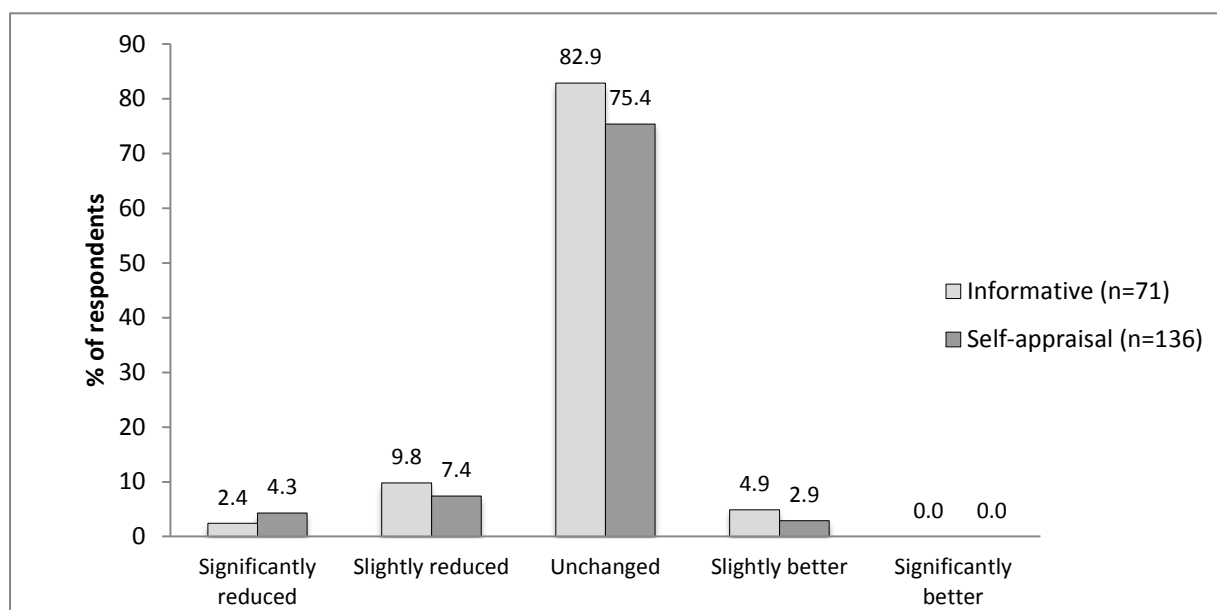


Figure 8 - Impact on enjoyment – effectiveness of informative and self-appraisal messages (%)

There were no significant differences between informative and self-appraisal messages in terms of their reported effectiveness on enjoyment (neither resulted in significant behavioural change). There was also no significant difference between self-appraisal and informative messages in terms of their perceived usefulness overall (both were perceived as useful).

The most commonly reported impact of both informative and self-appraisal messages on participants' thoughts were that they wanted to keep playing. This does not necessarily reflect a lack of impact, as continued play may be an appropriate decision for players who are gambling within appropriate levels, which the majority of gamblers are likely to do. All other reported impacts on thoughts were consistent with the aim of messages, that is, to facilitate responsible gambling. It was noted that although few participants accurately recalled messages that referred to the amount of time spent playing, or reported these messages to be impactful, participants reported reflecting on their time spent gambling. This indicates that these messages may have had a greater impact than participants' were aware of, or reported.

Immediate behavioural changes as a result of seeing the messages were not readily apparent. This is not surprising as behavioural change typically takes place over a period of time and is based on a complex interaction of thoughts, attitudes and intentions.⁸

Self-appraisal messages appeared to have a greater impact on facilitating immediate behavioural change that may reflect responsible gambling. A greater number of players reported playing at a decreased speed, cashing out and leaving the gaming area, and decreasing credits bet. Despite the relatively low number of responsible gambling behaviours reported, the messages did have an impact on participants to some extent.

⁸ S. Monaghan, & A. Blaszczynski, 'Electronic Gaming Machine Warning Messages: Informative versus Self-Evaluation', *Journal of Psychology: Interdisciplinary & Applied*, 144(1), 2010, pp. 83-96

Findings, continued

Effectiveness - message position

The most common reported impact of seeing messages in the middle of the screen on respondents' thoughts (of the 216 respondents who saw messages in the middle of the screen) were:

- wanted to keep playing (n = 98)
- thought about how much money I was spending (n = 53)
- thought about how long I had been playing (n = 43)
- thought about taking a break (n = 18)
- thought about cashing out (n = 14)
- feel annoyed/frustrated (n = 31)

Messages seen in the middle of the screen did not appear to greatly change player behaviour. Respondents reported the following impacts of messages on their behaviour:

- read the message (n =112)
- played at the same rate (n = 98)
- did not react to the message (n = 89)
- immediately pushed button to continue (n = 43)

Approximately 75% of respondents reported that their enjoyment was unchanged, regardless of whether the message appeared in the middle or top/bottom of the screen. There were no significant differences between the messages in terms of their effect on respondents' enjoyment. Although some of the respondents reported that the messages were annoying or frustrating, this did not appear to translate into any change in their enjoyment.

As shown in Figure 9, middle messages were significantly more likely to be seen as useful/beneficial, while top/bottom messages were significantly more likely to be seen as useless. As shown in Figure 10, message perception differed across respondents based on the problem gambling severity levels. The perceived usefulness of the messages in the middle of the screen was reported by a greater proportion of non-problem gamblers than low and moderate risk gamblers and problem gamblers were the least likely to perceive messages as useful or beneficial. Similarly, a greater proportion of problem gamblers reported that the messages were useless, but this group was the least likely to report that the messages were frustrating or annoying.

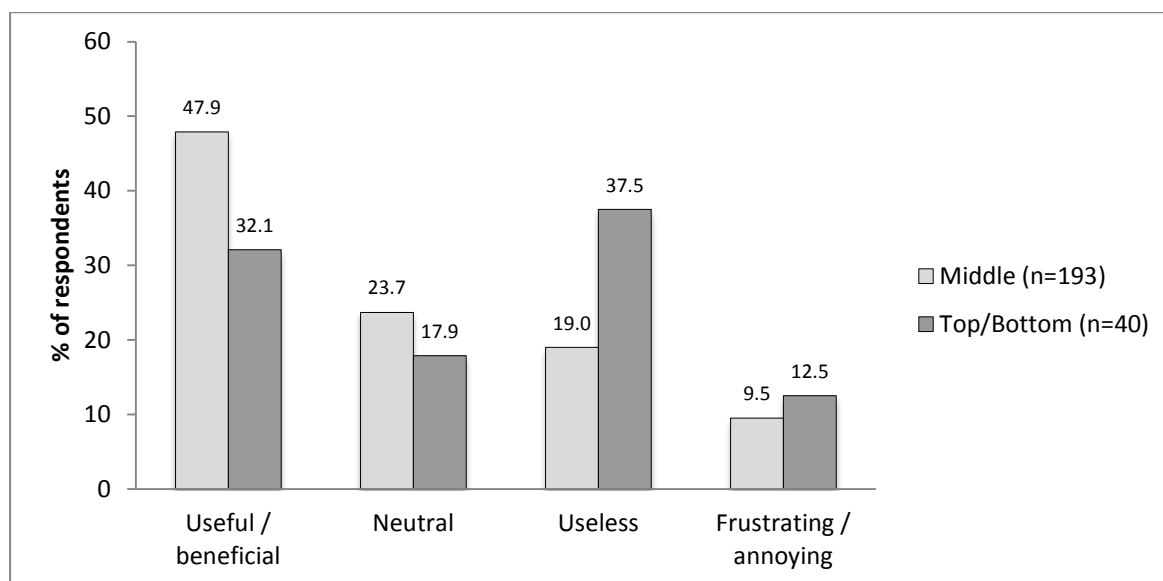


Figure 9 - Perceived usefulness of messages by position (%)

Findings, continued

Figure 10 below shows the breakdown of perceptions of usefulness of messages that were seen in the middle of the screen, by problem gambling level.

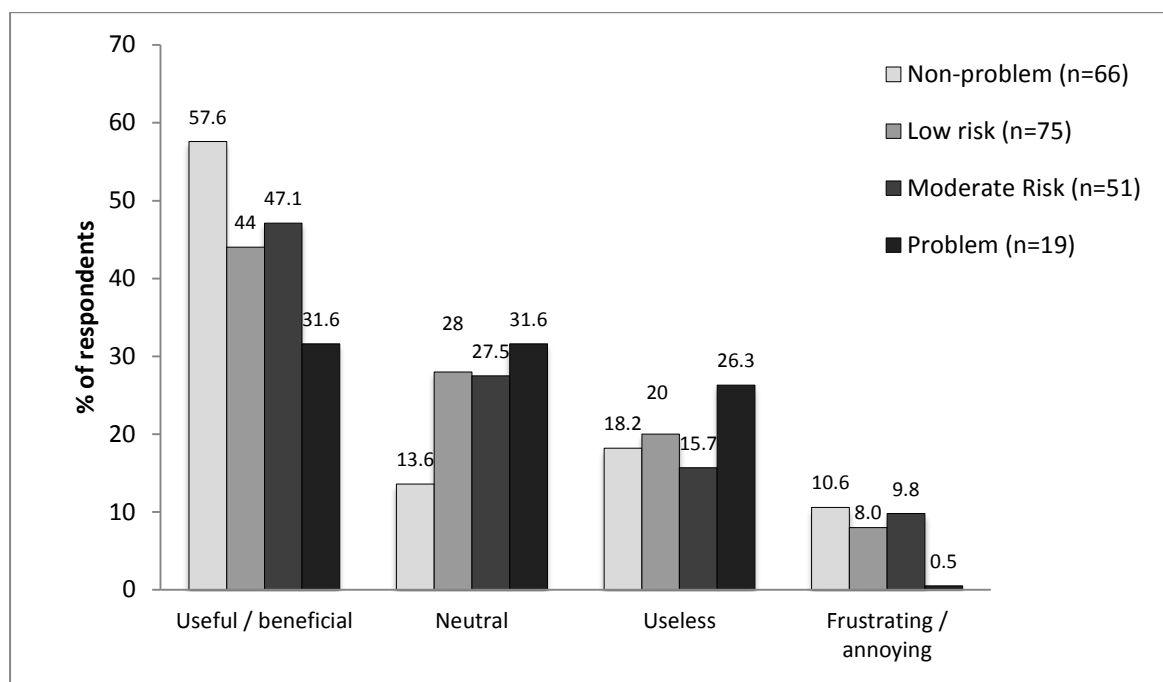


Figure 10 - Perceived usefulness of middle messages by problem gambling level (%)

Respondents appeared to have greater levels of recall for middle messages. The position of the messages appears to have an impact on recall, in that those who were recruited from venues with a greater proportion of QCOM 1.5 machines still recalled a significantly greater proportion of middle messages than top/bottom messages.

Middle messages were also more likely to be perceived as useful or beneficial, while top/bottom messages were more likely to be perceived as useless. However, it is not clear whether participants were referring to the messages being useful for themselves, or for other EGM players.

Findings, continued

Discussion – Message Position

Similar to the reported impacts of informative and self-appraisal messages, both message placements reportedly encouraged participants to be aware of the amount of money and time they were playing, and to consider whether they needed a break or to finish their session. These responses are consistent with the themes of the most commonly recalled messages.

Although both types of messages appeared to have similar impact on participants (some positive, some negative), messages in the middle of the screen were more likely to be considered to be useful compared to those at the top or bottom of the screen.

Both types of messages also had minimal impact on participants' enjoyment of EGM play, although a small proportion reported a reduction in enjoyment. Although middle messages were recalled to a greater extent than top/bottom messages, and thus were arguably more noticeable, these messages were not more likely to be reported as frustrating or annoying by participants.

The usefulness of messages in the middle of the screen was particularly apparent amongst non-problem gamblers. Problem gamblers were more likely to consider messages to be useless, however, appeared much less likely to report that the messages were frustrating or annoying.

In terms of the impact of the messages on respondents from different gambling risk levels, the results were very similar across message types. In terms of thoughts, most wanted to keep playing, along with thinking about how much time and money they had spent on their gambling. Similar patterns were seen in responses for low risk and non-problem gamblers as for moderate risk and problem gamblers. This indicates that messages were impactful across a range of gamblers, which is consistent with the aim of these messages.

Regardless of message type, location or level of problem gambling, most players reported that the messages did not change their gambling behaviour. However, in almost all categories, most participants considered the messages were either useful or held neutral views towards these. Although the messages did not appear to have a major behavioural impact on participants' gambling within the period of this study, the results suggest that some players were thinking about their gambling and making more informed decisions about their play as a consequence of the messages.

Findings, continued

Note for the following tables (10, 11, 12 and 13) 'n' represents the number of respondents. Multiple responses were accepted therefore the number of responses below will not add up to the number of respondents (n). In addition, the reported tables are based from those who saw messages either in the middle of the screen or top/bottom of the screen and the 'n' is reflective of responses with regards to both thoughts and behaviours.

Table 10 - Thoughts and behaviours depending on message type and position for non-problem and low risk gamblers (multiple responses possible)

Non-Problem/ Low risk gamblers (PGSI 0-2)	Informative Middle (n = 40)	Informative Top/Bottom (n = 3)	Self-Appraisal Middle (n = 60)	Self-Appraisal Top/Bottom (n = 18)
Thoughts				
Wanted to keep playing	9	1	10	2
Thought about money spent	6	-	8	1
Thought about time spent	6	-	7	1
Thought about taking a break	4	-	3	-
Thought about cashing out	2	-	1	-
Felt annoyed or frustrated	2	-	3	-
Behaviour				
Read the message	15	1	15	3
Played at the same rate	13	1	14	3
Played on at decreased speed	-	-	3	-
Immediately pushed button to continue	8	1	4	1
Did not react to the message	7	-	12	5
Looked around at other players or machines	4	-	4	1
Left the message on the screen until time elapsed	4	-	3	2
Talked to someone nearby	1	-	2	-
Checked their phone	1	-	-	-
Played on and decreased bets	-	-	1	-
Lit a cigarette	-	-	1	-
Cashed out and left the area	1	-	1	-

Findings, continued

Table 11 - Thoughts and behaviours depending on message type and position for moderate and problem gamblers (multiple responses possible)

Moderate/Problem gamblers (PGSI 3+)	Informative Middle (n = 17)	Informative Top/Bottom (n = 4)	Self-Appraisal Middle (n = 36)	Self-Appraisal Top/Bottom (n = 0)
Thoughts				
Wanted to keep playing	5	2	9	3
Thought about money spent	4	1	12	-
Thought about time spent	1	1	6	3
Thought about taking a break	1	-	2	-
Thought about cashing out	-	-	1	-
Felt annoyed or frustrated	-	1	6	2
Behaviour				
Read the message	5	2	11	2
Played at the same rate	-	1	13	-
Played on at decreased speed	-	-	-	1
Immediately pushed button to continue	2	-	5	-
Did not react to the message	2	2	3	3
Looked around at other players or machines	1	-	1	-
Left the message on the screen until time elapsed	1	1	2	-
Talked to someone nearby	-	1	2	-
Checked their phone	-	-	-	-
Played on and decreased bets	-	-	1	1
Lit a cigarette	-	-	-	-
Cashed out and left the area	1	-	2	1

Findings, continued

Table 12 - Effect of messages on enjoyment and perceived usefulness of messages depending on message type and position for non-problem and low risk gamblers (multiple responses possible)

Non-Problem/ Low risk gamblers (PGSI 0-2)	Informative Middle (n = 23)	Informative Top/Bottom (n = 1)	Self-Appraisal Middle (n = 28)	Self- Appraisal Top/Bottom (n = 8)
Effect of messages on enjoyment				
Significantly reduced	1	1	1	-
Slightly reduced	3	-	3	-
Unchanged	19	1	24	8
Slightly better	-	-	-	-
Significantly better	-	-	-	-
Behaviour				
Useful/beneficial	15	-	14	2
Neutral	13	-	6	4
Useless	1	1	5	1
Frustrating/ annoying	1	-	3	1

Table 13 - Effect of messages on enjoyment and perceived usefulness of messages depending on message type and position for moderate risk and problem gamblers (multiple responses possible)

Moderate/Problem gamblers (PGSI 3+)	Informative Middle (n = 10)	Informative Top/Bottom (n = 4)	Self-Appraisal Middle (n = 21)	Self- Appraisal Top/Bottom (n = 6)
Effect of messages on enjoyment				
Significantly reduced	-	-	2	-
Slightly reduced	-	1	6	1
Unchanged	9	3	12	5
Slightly better	1	-	1	-
Significantly better	-	-	-	-
Behaviour				
Useful/beneficial	2	1	10	2
Neutral	4	1	4	2
Useless	2	1	-	1
Frustrating/ annoying	1	1	6	1

Findings, continued

Longitudinal study

A small longitudinal study was conducted to supplement the cross-sectional findings from the main survey. The purpose of the longitudinal study was to identify substantial changes in players' behaviour and thoughts over the trial period.

Table 14 below shows the number of respondents in the longitudinal study who recalled messages at each point in time, and the location of the recalled messages. Not all respondents saw the messages at these locations; hence the numbers do not add up to the 'n' for each follow-up period. The 'n' for each survey period differs according to the number of respondents who either declined to continue to participate or who could not be contacted. There was one respondent in the initial survey with incomplete information; hence the 'n' for the initial survey is one less than the 'n' for the first follow-up.

Table 14 - Number of respondents who freely recalled on-screen messages in each position at each time point

Message position	Initial survey (n = 22)	First follow up (n = 23)	Second follow up (n = 18)	Third follow up (n = 17)
Middle	9	8	6	6
Top/bottom	3	7	6	4

The table below shows the gambling risk levels of participants in the longitudinal study.

Table 15 - Number of respondents in each PGSI category at each survey time

PGSI	Initial survey (n = 22)	First follow up (n = 23)	Second follow up (n = 18)	Third follow up (n = 17)
Non-problem	3	4	6	3
Low risk	4	6	4	5
Moderate risk	8	4	3	4
Problem	7	9	5	5

The longitudinal sample did not reveal large changes in participants' gambling behaviour or message recall over time. The small sample size did not allow analysis of data for small behavioural changes over time. However, this component demonstrated that dynamic warning messages did not have any noticeable negative unexpected consequences, such as increasing gambling intensity.

Venue data

Turnover data from each venue (Figure 11) suggests that the introduction of dynamic warning messages did not have a noticeable impact on intervention venues, in comparison to control venues. This is not surprising given the numerous extraneous factors which are likely to have a more significant impact on EGM turnover, which as the figure shows, varies throughout the year.

(The exact turnover data is not included in this report as it is commercial-in-confidence. It is also notable that there were no noticeable differences between control and intervention venues. The intent is to compare the turnover between the intervention and control venues during the trial period.)

Venue data

Turnover from Venues

In the figure below, blue and red lines represent intervention and control venues, respectively.

The messages commenced in April, 2013 and were removed in October, 2013.

The y axis represents dollar turnover. The turnover and name of venues are excluded due to commercial-in-confidence reasons.

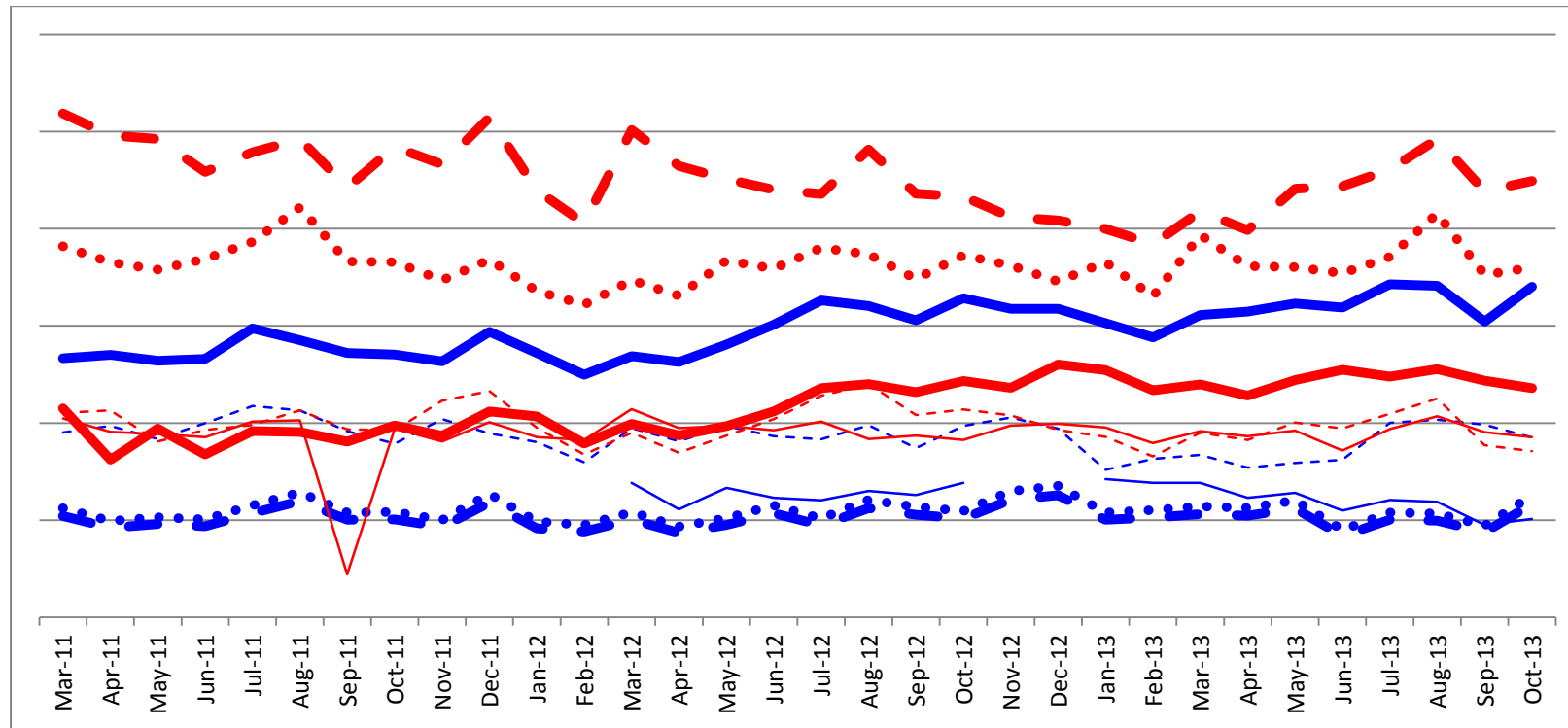


Figure 11 - Comparison of average turnover per machine by venue

8. General Discussion

This was the first live trial of dynamic warning messages in EGM venues that specifically investigated the effectiveness of different message content and position. The results provide a critically important verification and validation of previous research and demonstrate that dynamic warning messages appearing in the middle of an EGM screen during play have a substantially greater impact than messages shown at the top or bottom of screens. The majority of reported impacts were indicative of responsible gambling, including encouraging players to think about their time and money spent. Players generally considered the messages to be useful, and there were no negative unintended consequences observed.

Messages presented in the middle of the screen appear to be recalled to a greater extent than those at the top or bottom of the screen, even amongst players who were surveyed in venues where the majority of machines displayed messages at the top or bottom of the screen. This did not control for the machines that participants played, nor did it control for whether participants played in other venues, but nonetheless, it appears to be a relatively solid conclusion. Furthermore, messages in the middle of the screen were rated as more useful than messages appearing at the top or bottom of the screens.

Self-appraisal messages were recalled to a greater extent than informative messages. However, three of the top four most impactful messages were informative messages, demonstrating that these are a valid and useful way to communicate with players. Self-appraisal and informative messages did not substantially differ other ways. That is, neither were seen as more beneficial than the other, nor were there differences in terms of their effect on enjoyment.

Message A (Have you spent more than you can afford?) appeared to be the most impactful message based on reported influence and accurate recall. The impact of other messages was less clear. Concepts and phrases related to 'spend', 'affordability' and 'limits' appeared to have a greater impact on players and were recalled more accurately than messages related to time. Messages which were split into two distinct parts appeared to be less likely to be recalled in their entirety, suggesting that a single phrase may more effectively communicate a concept. It is also notable that even among participants who did report a decrease in their gambling, the messages appeared to have a slight impact by causing players to take a mini-break in their play. Breaks in play, even short periods, are important to enable gamblers to be aware of the amount of time and money they have spent, check in with their surroundings and be able to more accurately assess their current situation and make an informed decision regarding their ongoing gambling.⁹

Although not all participants could accurately recall the messages, this did not appear necessary for reported message impact. A sub-section of respondents reported that the messages made them think about the amount of time and money they spend on the machines. This is a particularly important finding as it indicates that messages do not have to be accurately recalled, or considered impactful to influence players' thoughts and behaviours. Importantly, no unintended negative consequences were apparent as a result of the messages. Majority substantial proportion of participants considered the message to be useful and as behavioural change is based on a complex interaction between cognitions, attitudes, and intentions, it is possible that further changes may occur over time.

⁹ Monaghan & Blaszczynski, 2010, loc. cit.

M.L. Wohl, S. Gainsbury, M.J. Stewart, & T. Sztainert, 'Facilitating Responsible Gambling: The Relative Effectiveness of Education-Based Animation and Monetary Limit Setting Pop-up Messages Among Electronic Gaming Machine Players', *Journal of Gambling Studies*, 2012, pp. 1-15.

General Discussion, continued

This study demonstrated that the presence of movement or action alone was insufficient to capture attention and facilitate recall, as the top or bottom messages were less likely to be seen compared to the middle messages. Although, middle messages were seen as slightly more annoying or frustrating than top or bottom messages, this difference was not large. These findings are consistent with the literature on the effectiveness of warning messages, including responsible gambling signage.¹⁰

A small number of participants reported behavioural changes consistent with the responsible gambling messages, that is, actions to reduce gambling intensity. As the majority of players were likely not gambling in ways that were causing them significant negative consequences, it would not be expected that major behavioural modifications would occur following exposure to the messages.

These messages were designed to target all gamblers, but particularly those who do not have significant gambling problems, but may need assistance to play within their affordable means and prevent excessive gambling. These changes would like be relatively small, hence are likely to be reflected in cognitive changes as opposed to behavioural change.

Problem and moderate risk gamblers were less likely to find the messages useful. There are many possible reasons for this, but one potential explanation is that problem gamblers feel that messages are insufficient to make a significant impact on their gambling.

The longitudinal findings suggest that the players do not change their EGM behaviour much over time, although any differences would have to be quite large in order to detect them due to a relatively small sample.

Additional data collected during the project, including observational data, stroke and turnover data from venues did not indicate any noticeable change to EGM play resulting from the dynamic warning messages.

Other findings are more difficult to confirm, due to various methodological limitations discussed in the limitations section to follow.

It is difficult to draw firm conclusions about the most effective frequency to deliver EGM messages due to methodological constraints. However, the surveys showed that the majority of EGM players (58.5%) spent less than one hour playing EGMs per session and more than one-in-ten players spend less than 15 minutes playing EGMs. This suggests that messages appearing less frequently than every 15 minutes will not be seen by all EGM players. This is consistent with previous studies of EGM players.¹¹

¹⁰ S. Monaghan, 'Review of pop-up messages on Electronic Gaming Machines as a proposed responsible gambling strategy', *International Journal of Mental Health and Addiction*, 6, 2008, pp. 214-222.

¹¹ A. Blaszczyński, L. Sharpe, & M. Walker, 'The Assessment of the impact of the reconfiguration on electronic gaming machines as harm minimisation strategies for problem gambling', University of Sydney Gambling Research Unit, 2001.

General Discussion, continued

As the Large Club which displayed messages every hour also had a substantially higher proportion of QCOM1.6 machines than the other venues, it is difficult to attribute any differences between venues to the frequency of message display (as opposed to type/location of message display). However, a comparison of the percentage of respondents who recalled the middle messages was similar across venues. This may suggest that the middle messages were more effective in attracting attention, even when there were fewer of these machines in the venue.

As this is the first live trial of dynamic warning messages and there were a number of constraints on the elements that could be manipulated further research is still needed. However, the results of the current study clearly demonstrate that messages should be presented in the middle of the screen as these attract more attention and are subsequently more effective than those displayed on the screen periphery. The use of both self-appraisal and informative messages was supported; it is possible that these appeal to different audiences so a combination should be used. Messages that specifically discuss how much money has been spent in relation to affordability appear to have the greatest impact. Rotating messages with various wording appears to be an effective way to communicate responsible gambling messages. Future research should consider the most appropriate timing of messages, the impact of font size and colour, and the use of graphics.

The external validity of the research refers to the extent to which the results can be applied to a wider population. As the participant's demographic characteristics were similar to EGM players in the general population of Queensland it is likely that the results are relatively representative of this State. Trials such as this will always be subject to some bias, such as the self-selection of respondents who agree to participate. However, the benefit of a live trial is that it has high ecological validity, participants were exposed to messages in a real environment, which increases the authenticity of their responses to the messages and their impact. Although, it must be noted that this study was completed in a small number of venues, mostly located in a metropolitan location within one state. The constraints of the research and nature of the venues and population included should be considered when considering the extent to which the results can be generalised. Replication of this study would provide further insight into the extent to which the findings can be applied to other populations and jurisdictions.

General Discussion, continued

Limitations

This section outlines the main limitations of the research project.

1. The respondents were not asked about which kind of EGM (QCOM 1.5 or 1.6) they regularly played or which other venues they played at, so their responses were analysed based on the venue at which they were recruited. It is possible that respondents were exposed to dynamic warning messages if they visited one of the other intervention venues so the extent to which they were exposed to the different message locations cannot be controlled for.
2. Due to limited functionality of the EGMs QCOM protocol, message delivery, design and functionality could not be manipulated past the capability of the existing QCOM protocol.
3. New participants were recruited throughout the study therefore, the length of time that participants had been exposed to the dynamic warning messages cannot be determined.
4. Initially, the RAs were instructed to read out the entire list of possible impacts to each participant for each type of message. However, it became apparent that this was time consuming and was annoying some of the participants. Instead, for most of these responses, the participants gave their answers without prompting. The RAs coded their answers accordingly, based on a list of responses considered likely or of interest. For example, while 98 respondents said they wanted to keep playing, that does not mean that the remaining respondents did not want to keep playing. It just means that they did not explicitly say this. Thus, we cannot derive percentages, just numbers of people reporting each option.
5. The data comparing frequency/duration of messages was not gathered in a manner that controlled for extraneous variables. The Large Club 1 management requested that the messages be displayed less often than once every 15 minutes for 15 seconds immediately following the commencement of the project. The different message frequency/duration was implemented within three weeks after commencement of the project but at the commencement of survey data collection. Thus, the differences between the venues with different frequency/duration of messages can only be assessed by comparing venues. The different impacts of frequency and duration cannot be determined as these variables were both manipulated. Large Club 1 is also different to the other venues in various important ways, including the size of the venue, the player profile, and the proportion of QCOM 1.5 and 1.6 machines. Any conclusions about frequency/duration could be either due to something other than differing frequency/duration, or differences could be hidden by these other factors. Therefore, results have not been presented for this section as a) they mainly mirror results in other sections, b) there were virtually no differences between the venues, and c) no firm conclusions can be drawn from them.
6. When asked to rate each of the eight messages in terms of how impactful they were, the messages were not presented in randomised orders. Thus, the impactful nature of message A may simply be a primacy effect. The rate of cued message recall based on the presentation of the messages was not recorded.
7. It is possible that extraneous factors had an impact on message recall and influence. The strength of a live trial is that it provides information about the impact of an intervention in a real world environment with real gamblers. However, this type of research is limited by the inability to control or measure all extraneous variables. For example, it is possible that there are fundamental differences between QCOM 1.6 and QCOM 1.5 machines that made QCOM 1.6 machines more likely to be played, increasing player exposure to messages in the middle of the screen. These machines may be preferred by different groups of players, which may also impact on the reported message recall and impact.

General Discussion, continued

8. The current trial followed a series of laboratory and venue-based studies using simulated EGMs to test the impact of dynamic warning messages, which did control for many extraneous variables. Comparisons of laboratory and venue-based studies of the impact of responsible gambling messages suggest that results from studies conducted in venues may underestimate the actual impact of messages due to competing demands on participant's attention during self-report.¹² This limitation can be reduced through an ongoing evaluation program following the implementation of any new responsible gambling initiative.
9. Due to the available time to complete this research, message impact could only be assessed in the short and medium-term. Future research should assess the longer-term impacts of dynamic warning messages on players' gambling behaviour. This is recommended as behavioural change typically occurs over longer time periods than could be measured in this project.
10. The current study demonstrated messages in the middle of the screen can be the most effective way of delivers. However, as QCOM 1.6 EGMs dropped the message to the top/bottom as soon as the reels started spinning, further research should be conducted to test the effectiveness of this approach over messages remaining on the screen for full/or part duration.

¹² S. Gainsbury, & A. Blaszczynski, 'The appropriateness of using laboratories and student participants in gambling research', *Journal of Gambling Studies*, 27(1), 2011, pp. 83-97.

9. Considerations

A number of issues arose during this trial that may be reflected upon for future consideration. This trial was largely successful as a result of the cooperative and positive collaboration between the multiple stakeholders, including the funding body, regulator of the state in which the trial occurred, operators of gambling venues and their peak industry associations, providers of support and infrastructure for gambling venues and the research team. This collaboration was facilitated by close and open communication between stakeholders and the formation of an advisory group, which was regularly consulted and updated throughout the design and implementation of the trial. Any concerns which were raised by stakeholders were responded to quickly with an intention to take positive actions to protect the integrity of the trial, while responding to potential concerns with a flexible and solution focused approach.

The technical capacity of QCOM 1.5 and 1.6 machines limited the extent to which messages could be displayed in various ways. For example, it was not possible to modify the font, colour, spacing or position of messages, which are all important components of effective warning signs. Further, the display mechanism used for the messages was the same channel typically used to communicate error messages to players and venues. This may have had an impact on the impact of messages due to player's preconceived notions of what messages displayed in this manner typically mean. Building in requirements for dynamic responsible gambling messages, which can be modified in numerous ways, into future QCOM protocols would facilitate future trials and implementation of responsible gambling messages, which may be more impactful than those trialled in the current project.

It was not possible to obtain loyalty card data as it was unclear who owned this data and what permission would be needed from players and venues. Subsequently this data could not be obtained from the venues, and for those who did have the data the programs were voluntary for patrons which would provide an incomplete profile of gambling behaviour. For future research loyalty card data could be beneficial, however, it will need to be obtained in the context of the study and be representative of the sample population.

The relatively short timeframe for the trial meant that it was not expected that significant behavioural changes would be observed. Gambling behaviour is driven by a complex interaction of bio-psycho-social and environmental factors, and the addition of a relatively simple responsible gambling messaging system would be expected to have a relatively minimal impact. Importantly, the current trial found positive impacts of the messages. However, a longer trial period may have resulted in more notable behavioural changes observed over time. If dynamic warning messages were to be implemented in venues in the future, it would be highly useful to incorporate evaluative components to monitor the impact of these messages over time.

Appendices

Appendix A - Data Collection Tool

Survey Questions for Participants

Introduction

Hello,

My name is XX and I'm working on a research project conducted by the Australian Government into gambling. This is part of the National Gambling Reform program. I see that you have played the poker machines here/ I was wondering if you play the poker machines here? We want to survey as many different people as we can who play the pokies regularly.

Would I be able to take 10-15 minutes of your time to ask you some questions please? The survey is confidential and we're not asking personal details. When we're finished I have a voucher for you to use here in the coffee shop.

Purpose	This research is funded by the Australian Government (Department of Families, Housing, Community Services and Indigenous Affairs) to conduct research into the display of EGMs.
What you will be asked to do	<p>Participants are asked to take part in a 10-15 minute individual interview where a Research Assistant will ask questions on the topic of the display on EGMs.</p> <p>At the start of the interview, the Research Assistant will ask you to complete a written consent form (attached). The Research Assistant will then ask you some survey questions about the use of EGMs. No identifiable information will be collected.</p>
Selection of Participants	Participants must be regular visitors to this venue and use electronic gambling machines on average at least once per fortnight. You also need to be fluent in, and able to read the English language.
Benefits of the research	Your participation will contribute to a broader understanding of the experiences of people using EGMs. This information will assist the researchers in developing strategies to further explore this area.

Note: EGMs were referred to in this questionnaire as poker machines as well as 'pokies.'

Participant Information and Consent Form

PARTICIPANT INFORMED CONSENT

To participate in the research study please complete this sheet and hand it back to the Research Assistant who gave it to you.

Informed Consent

- I have read and understood the participant information sheet relating to this study. I agree to participate in the project *'an evaluation of dynamic warnings and cost of pay displays on EGMs* and give my consent freely.
- I understand that the project/study will be carried out as described in the information statement, a copy of which I have retained.
- I realise that whether or not I decide to participate is my decision and will not impact on any further contact I have with the venue or Communio.
- I understand that any information I provide will be treated confidentially and is subject to legal privacy laws.
- I realise that I can withdraw from the study at any time and that I do not have to give any reasons for withdrawing.
- I have had all questions answered to my satisfaction.

This research is being conducted by Communio and has been approved by Bond University ethics committee. The research is being conducted in accordance with the National Statement on Ethical Conduct in Human Research. If potential participants have any concerns or complaints about the ethical conduct of the research project they should contact the Senior Research Ethics Officer at Bond University, on (07) 5595 4194 or buhrec@bond.edu.au

For additional information about the project, contact the Project Co-ordinator, Monica Mikhael at monica.mikhael@communio.com.au, or via telephone on (07) 3236 4712.

Signature

.....

Date

.....

I would like to ask you about how you play the poker machines.

Question 1 **How often do you play the pokies on average, including all venues you play at?**

(5 or more times a week; 3 - 4 times a week; 1 – 2 times a week; 2-3 times a month; once a month or less)

Less than once a fortnight: *thank them kindly “unfortunately we only looking for regular players”.*

More than or equal to once a fortnight or 2-3 times per month: *“We can conduct the survey right here. Could you tell me your first name please?”*

(NOTE: This is for courtesy only – name is not to be recorded on this form).

Question 2 **On average, each time you come to play the pokies, about how much time do you actually spend playing in total?**

Ignore the time spent taking a walk around or getting a drink. It’s just the total time on the machines that I’m asking. I’ll refer to this as a “session”.

(1-15 minutes; 15 min- 1 hour; 1-2 hours, 2-3 hours, 4 hours or more)

Question 3 **On average, for each session you play: *SELECT ONE OPTION ONLY PLEASE***

3.1. How many breaks would you have? For example, to get a drink or wander around?

Never (0), Sometimes (1-2), Often (3+)

3.2. How often do you switch machines?

Never (0), Sometimes (1-2), Often (3+)

3.3. How often do you run your credits to zero?

Never (0), Sometimes (1-2), Often (3+)

3.4. How often do you take cash out during a session?

Never (0), Sometimes (1-2), Often (3+)

3.5 How many lines do you bet per spin? (IF MORE THAN ONE OPTION CHOSEN, CAN ASK “WHICH ONE DO YOU PLAY MORE?”)

1, 5, 10, 20, 25, varies between (these are the buttons you can press on the machine)

3.6. How many credits do you bet per line?

(Maximum amount, minimum amount, varies)

3.7. What value poker do you play? (IF MORE THAN ONE OPTION CHOSEN, CAN ASK “WHICH ONE DO YOU PLAY MORE?”)

(1c, 2c, 5c, 10c, \$1, other_____)

Question 4 **4.1. In the past 12 months, where have you played the pokies?**
(You can pick as many as appropriate.)

- Clubs
- Hotels
- Casinos
- Internet

4.2. Do you usually play at the same venue or at a number of different venues?

(Only one venue, 2-3 venues, 4-5 venues, 6+ venues)

Question 5 **On average, who do you play the pokies with? This does not include people you visit the venue with, but do not play the pokies with.**

(alone; with spouse/partner; with other family members; with friends or co-workers; with others or group)

Question 6 ***I would like to ask you about the way you gamble.***

6.1. Do you set a time limit for yourself before you start to play?

(almost always, most of the time, sometimes, never)

6.2. If yes, how often do you keep to those time limits?

(almost always, most of the time, sometimes, never)

6.3. Do you use any strategies to limit the amount of time you spend on playing the pokies?

(almost always, most of the time, sometimes, never)

6.4. If yes, what are they? (free text)

Question 7 **7.1. Do you set a dollar budget for yourself before you start to play?**

(almost always, most of the time, sometimes, never)

7.2. If yes, how often do you keep to those limits?

(almost always, most of the time, sometimes, never)

7.3. Do you use any strategies to limit the dollar amount you spend on playing the pokies?

(almost always, most of the time, sometimes, never)

7.4. If yes, what are they? (free text)

Question 8 **8.1. Have you seen any signs in this venue that encourage responsible gambling?**

(yes, no)

8.2. If yes, what are they? (free text)

Question 9 ***How effective do you think signs in the venue are at encouraging you to gamble responsibly?***

(Not at all effective, somewhat effective, effective, very effective)

Question 10 *I would like to ask you about any messages you have seen on poker machines in this venue.*

10.1. Have you seen any messages displayed on the poker machines during recent gambling sessions?

(yes, no, not sure)

10.2. If 'NO' continue to question 12
If yes, where on the screen did you see them? More than one answer.

(on a sticker on machine / at the top of the screen / in the middle of the screen / at the bottom of the screen / other _____).

Question 11 **Can you list or describe any messages that you have seen during play on machines in recent sessions?**

(list the messages that are freely recalled)

If 'NO' continue to Question 12.

Question 12 **12.0. Did you see these particular messages?**

Show them list of messages.

12.1. Which of these messages were most influential or had the biggest impact for you?

Can you tell me if the messages influenced your thoughts? (Tick, multi answer)

	Middle	'Other'	Recall	MSG 1	MSG 2	MSG 3
think about how long I had been playing						
think about how much money I was spending						
think about cashing out						
think about taking a break						
feel annoyed/frustrated						
wanted to keep playing						

Can you tell me if the messages influenced your play? (Tick, multi answer)

	Middle	'Other'	Recall	MSG 1	MSG 2	MSG 3
Play at same rate following message						
Play on decreased speed of play						
Play on increased speed of play						
Immediately push button to continue						
Read message						
Leave message on screen until time elapsed						
Look around at other players or machines						
Cash out and leave gaming area						
Play on and increases credits bet						
Play on and decreases credits bet						
Change machines						
Insert money into the machine						
Remove loyalty card						
Check phone						
Light a cigarette						
Talk to someone nearby						
Did not react to message						

To what extent did the messages affect your enjoyment when playing? (Tick, multi answer)

	Middle	'Other'	Recall	MSG 1	MSG 2	MSG 3
Significantly reduced						
Slightly reduced						
Unchanged						
Slightly better						
Significantly better						

Is there anything else that the messages made you feel, think or do? (Free text)**Overall, would you say the messages were:** (Tick, multi answer)

	Middle	'Other'	Recall	MSG 1	MSG 2	MSG 3
Useful / beneficial						
Neutral						
Useless						
Frustrating / annoying						

Question 13 Have you got any new ideas or comments about how messages should look in terms of size & colour? (free text)

Question 14 Have you got any new ideas or comments about what part of the gaming screen they should be displayed?
(pop-up, scrolling, static – define if needed)

(top, bottom, middle, left corner, right corner, other _____)

Question 15 **Have you got any ideas or comments about what the messages should say?**

Question 16 **In general, what do you think of having messages on the poker machines?**

Question 17 **Have you got any ideas or comments about how many times or at what intervals the messages should appear?**

Question 18 ***Can you please tell me the following?***

Thinking about the last 12 months...

Have you bet more than you could really afford to lose?

0 Never. **1** Sometimes. **2** Most of the time. **3** Almost always.

Still thinking about the last 12 months, have you needed to gamble with larger amounts of money to get the same feeling of excitement?

0 Never. **1** Sometimes. **2** Most of the time. **3** Almost always.

When you gambled, did you go back another day to try to win back the money you lost?

0 Never. **1** Sometimes. **2** Most of the time. **3** Almost always.

Have you borrowed money or sold anything to get money to gamble?

0 Never. **1** Sometimes. **2** Most of the time. **3** Almost always.

Have you felt that you might have a problem with gambling?

0 Never. **1** Sometimes. **2** Most of the time. **3** Almost always.

Has gambling caused you any health problems, including stress or anxiety?

0 Never. **1** Sometimes. **2** Most of the time. **3** Almost always.

Have people criticized your betting or told you that you had a gambling problem, regardless of whether or not you thought it was true?

0 Never. **1** Sometimes. **2** Most of the time. **3** Almost always.

Has your gambling caused any financial problems for you or your household?

0 Never. **1** Sometimes. **2** Most of the time. **3** Almost always.

Have you felt guilty about the way you gamble or what happens when you gamble?

0 Never. **1** Sometimes. **2** Most of the time. **3** Almost always.

TOTAL SCORE

Total your score. The higher your score, the greater the risk that your gambling is a problem.

Score of 0 = Non-problem gambling.

Score of 1 or 2 = Low level of problems with few or no identified negative consequences.

Score of 3 to 7 = Moderate level of problems leading to some negative consequences.

Score of 8 or more = Problem gambling with negative consequences and a possible loss of control.

Ferris, J., & Wynne, H. (2001). The Canadian problem gambling index: Final report. Submitted for the Canadian Centre on Substance Abuse.

Score: _____

Question 19

To what extent do you strongly or somewhat agree or disagree with the following statements

- | 1 | 2 | 3 | 4 | 5 |
|---|----------|----------------------------|-------|----------------|
| Strongly Disagree | Disagree | Neither Agree Nor Disagree | Agree | Strongly Agree |
| <hr/> | | | | |
| ____ 1. I enjoy my gambling, but sometimes I gamble too much. | | | | |
| ____ 2. Sometimes I think I should cut down on my gambling. | | | | |
| ____ 3. It's a waste of time thinking about my gambling. | | | | |
| ____ 4. I have just recently changed my gambling habits. | | | | |
| ____ 5. Anyone can talk about wanting to do something about gambling, but I am actually doing something about it. | | | | |
| ____ 6. My gambling is a problem sometimes. | | | | |
| ____ 7. There is no need for me to think about changing my gambling. | | | | |
| ____ 8. I am actually changing my gambling habits right now. | | | | |
| ____ 9. Gambling less would be pointless for me. | | | | |

**Question 20
Demographics**

How old are you?

Record age:

**Question 21
Gender**

Male/female

Question 22

22.1. Do you speak another language at home apart from English?

Language

(yes/no)

22.2. If yes, please state. (free text)

**Thank you for
your
participation**

Thank you for your time.

Please take this voucher as a token of our appreciation in talking with me today/tonight. Note that the voucher can only be used in this club/Hotel.

Appendix B - Data Charts

Overview

The following data charts are provided for additional information.

- Figure B1 - Total surveys completed over all periods
- Figure B2 - Gender of all survey participants overall
- Figure B3 - Age range of survey participants overall
- Figure B4 - Total surveys completed by large club versus other venues grouped
- Figure B5 - Total number of respondents per venue by gambling severity
- Figure B6 - Average play of pokies
- Figure B7 - Time spent playing EGMs
- Figure B8 - Average value of machine played
- Figure B9 - Time limits set by self before play
- Figure B10 - Commitment to time limit set by self
- Figure B11 - Strategies to limit time spent playing
- Figure B12 - Dollar budget set by self before play
- Figure B13 - Commitment to dollar budget set by self
- Figure B14 - Strategies to limit the dollar amount spent playing

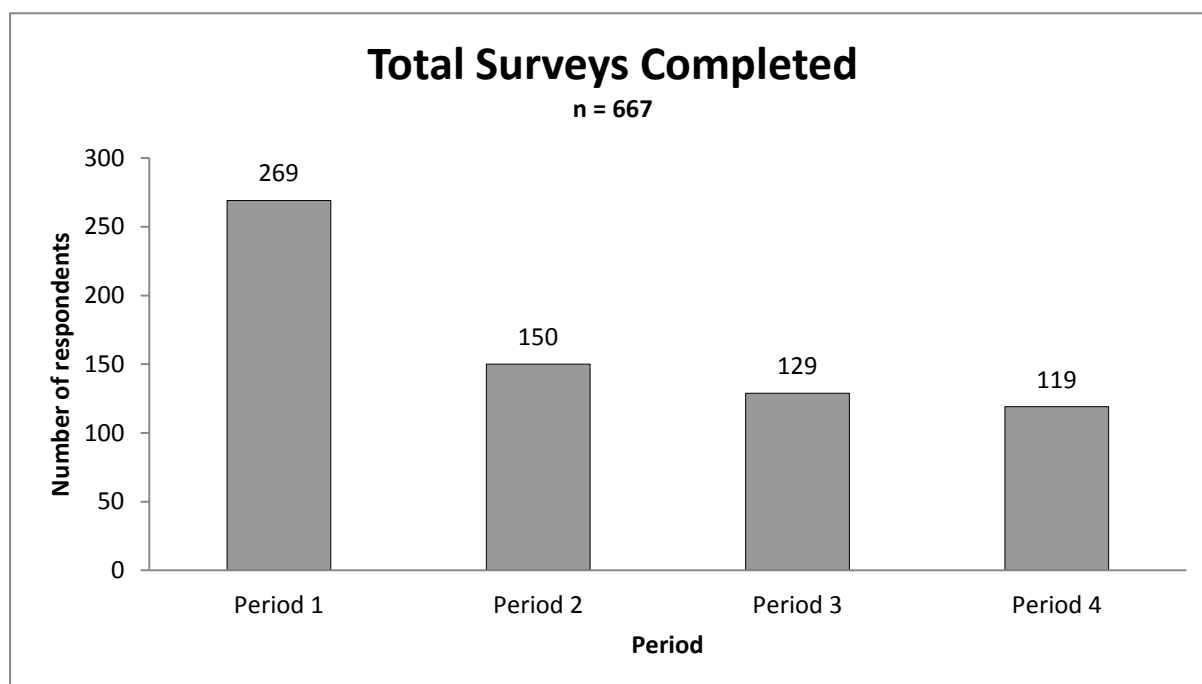


Figure B1 - Total surveys completed over all periods

Appendix B – Data Charts, continued

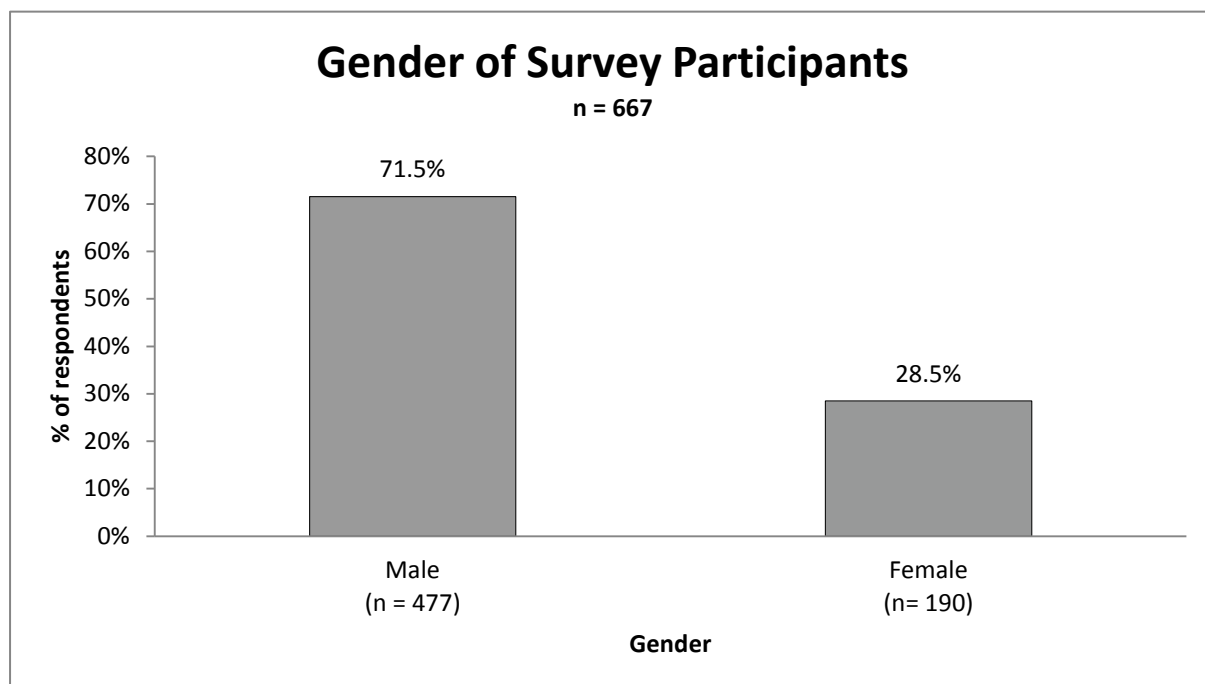


Figure B2 - Gender of all survey participants overall

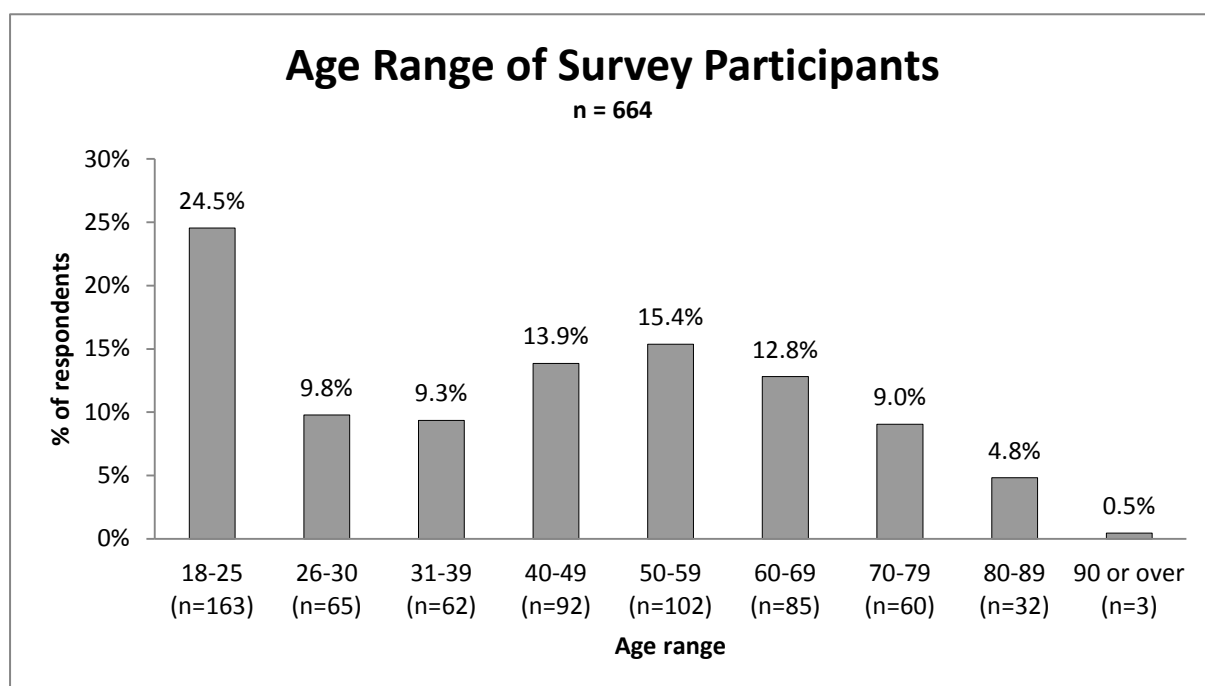


Figure B3 - Age range of survey participants overall

Appendix B – Data Charts, continued

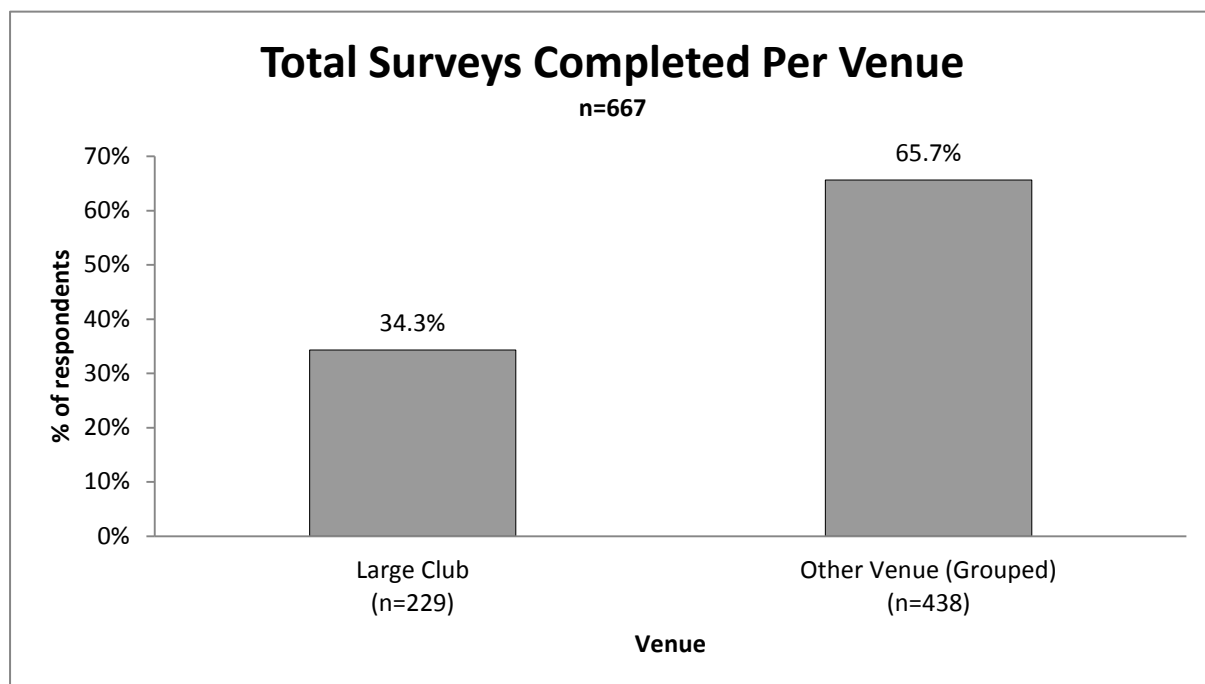


Figure B4 - Total surveys completed by large club versus other venues grouped

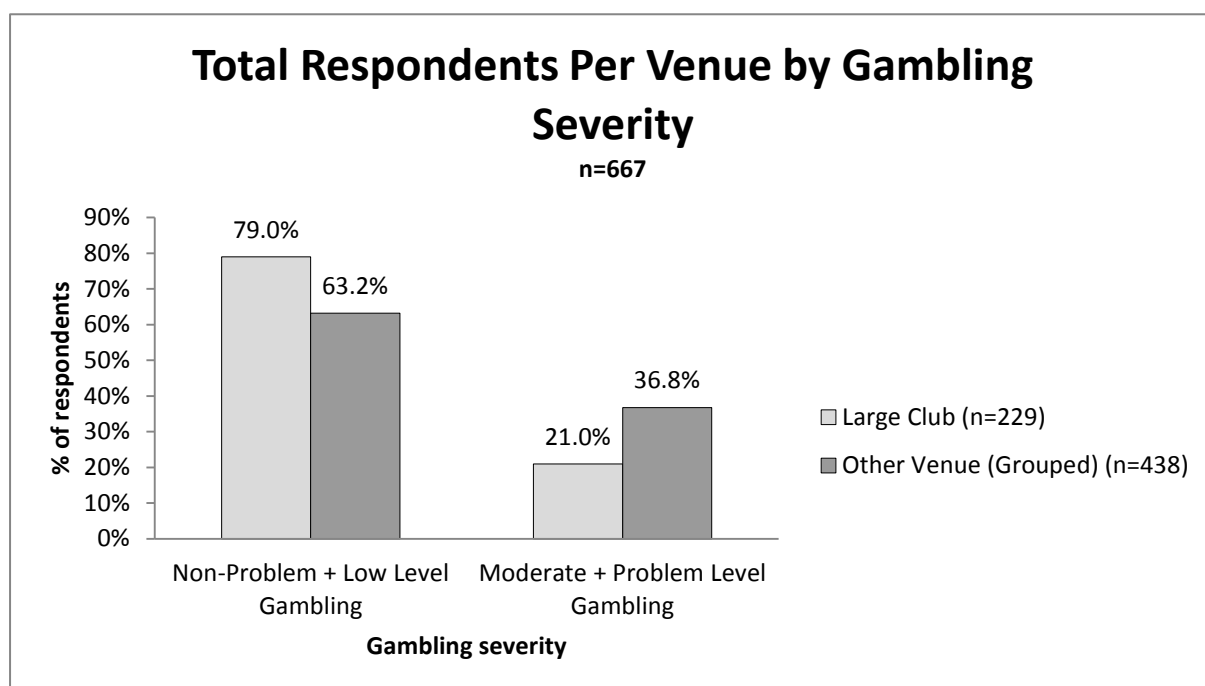


Figure B5 - Total number of respondents per venue by gambling severity

Appendix B – Data Charts, continued

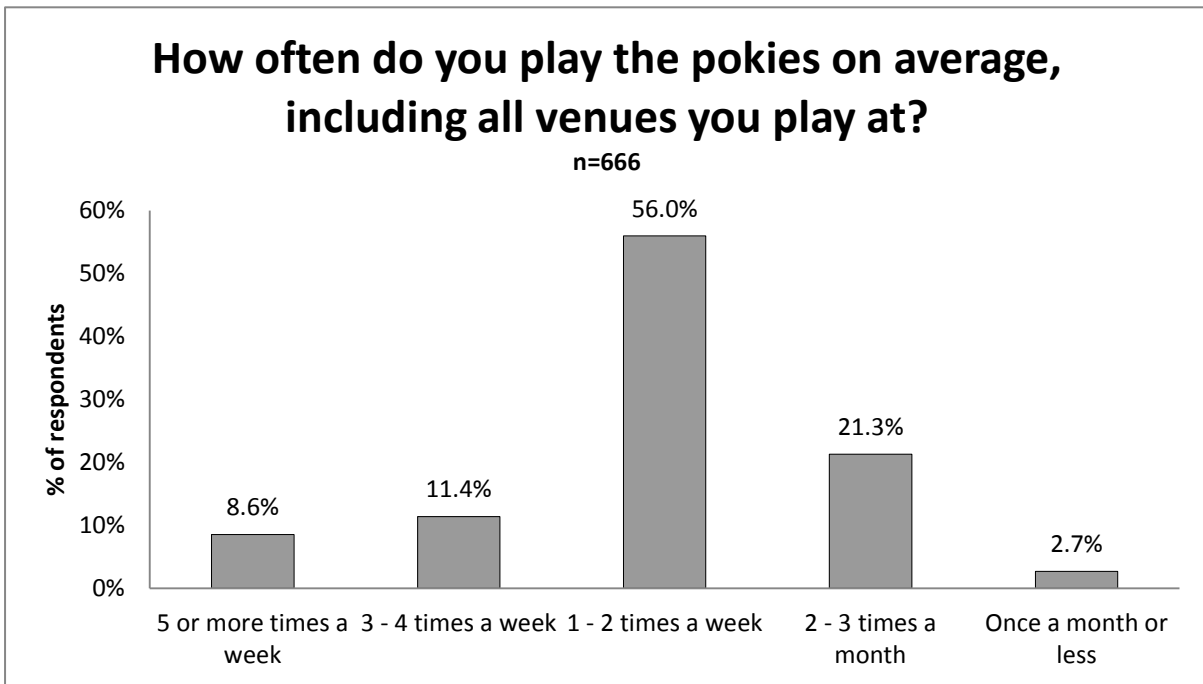


Figure B6 - Average play of pokies

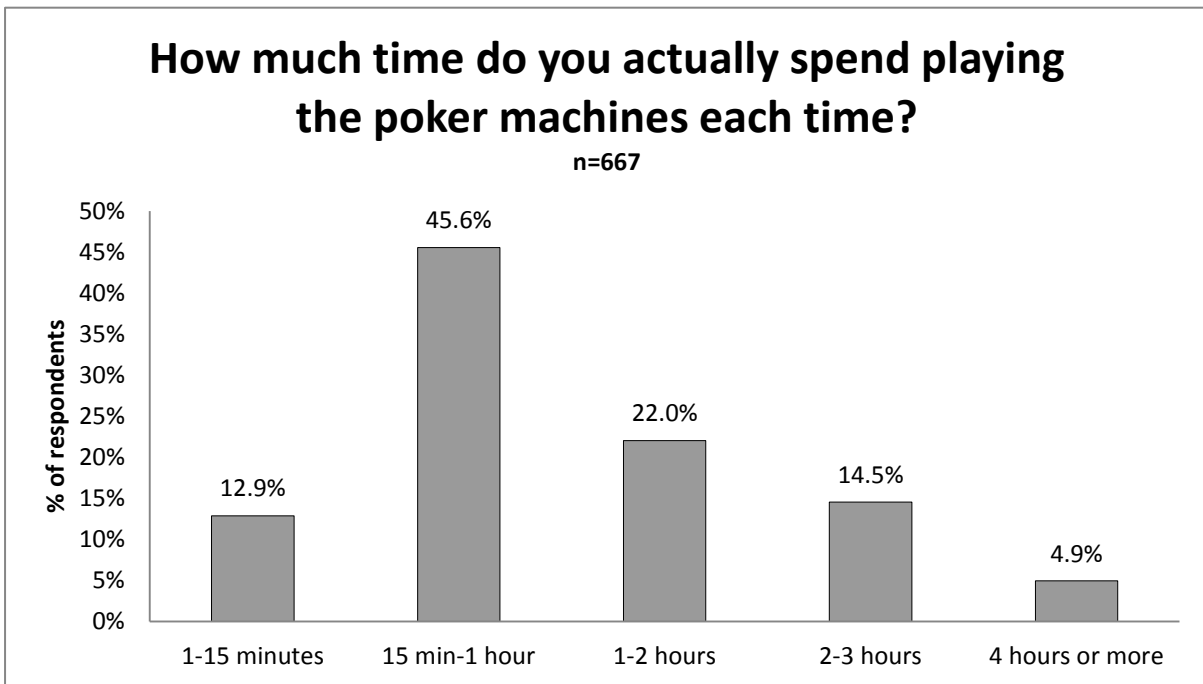


Figure B7 - Time spent playing EGMs

Appendix B – Data Charts, continued

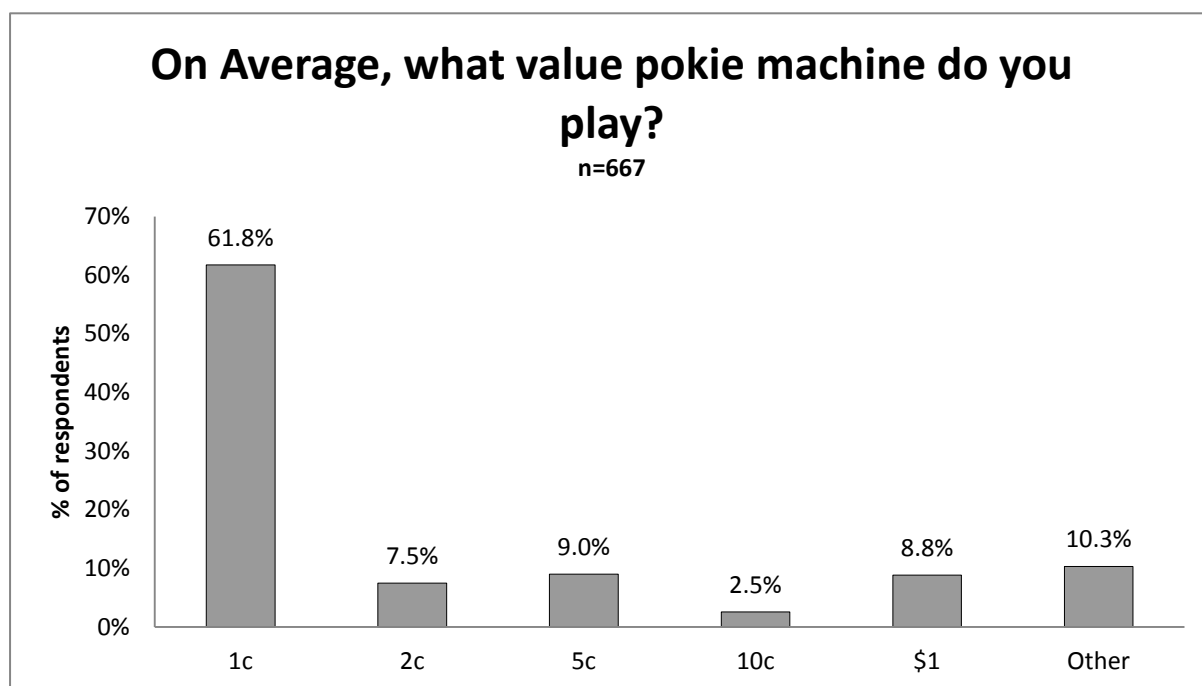


Figure B8 - Average value of machine played

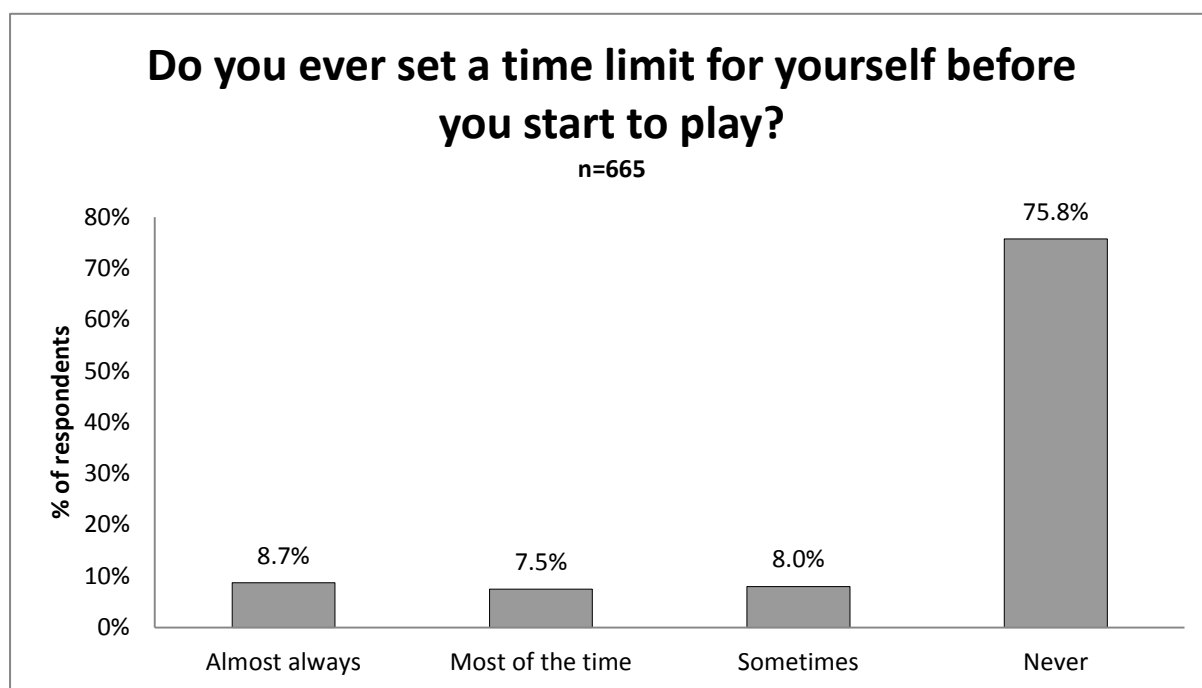


Figure B9 - Time limits set by self before play

Appendix B – Data Charts, continued

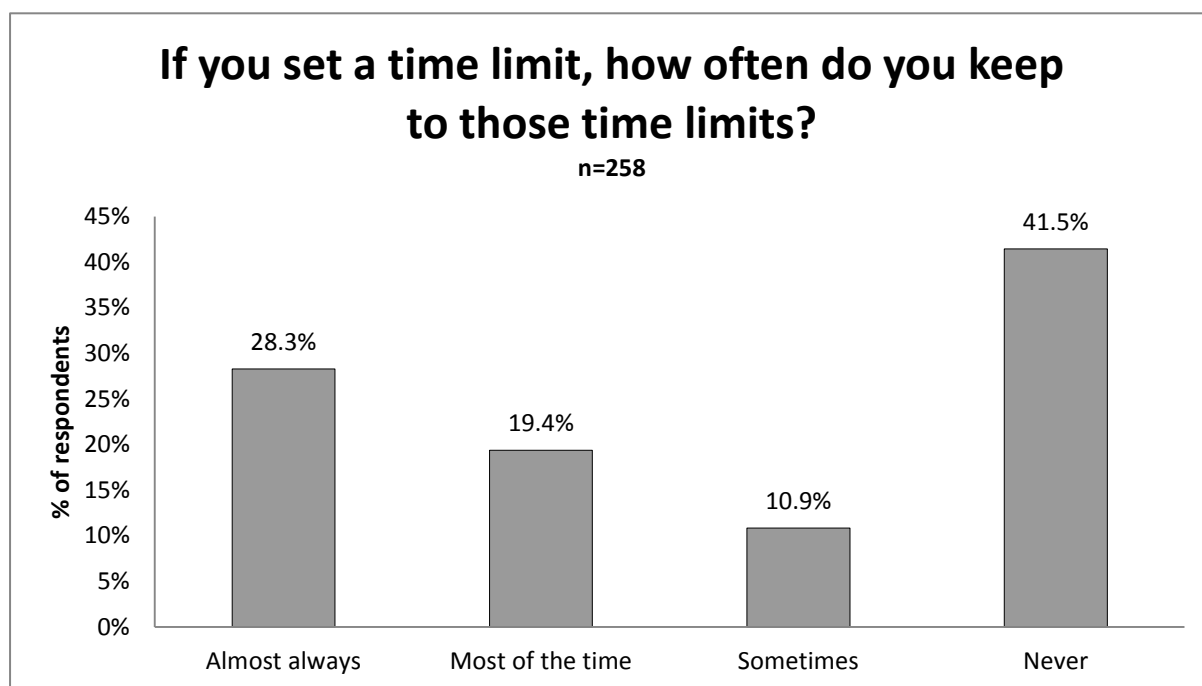


Figure B10 - Commitment to time limit set by self

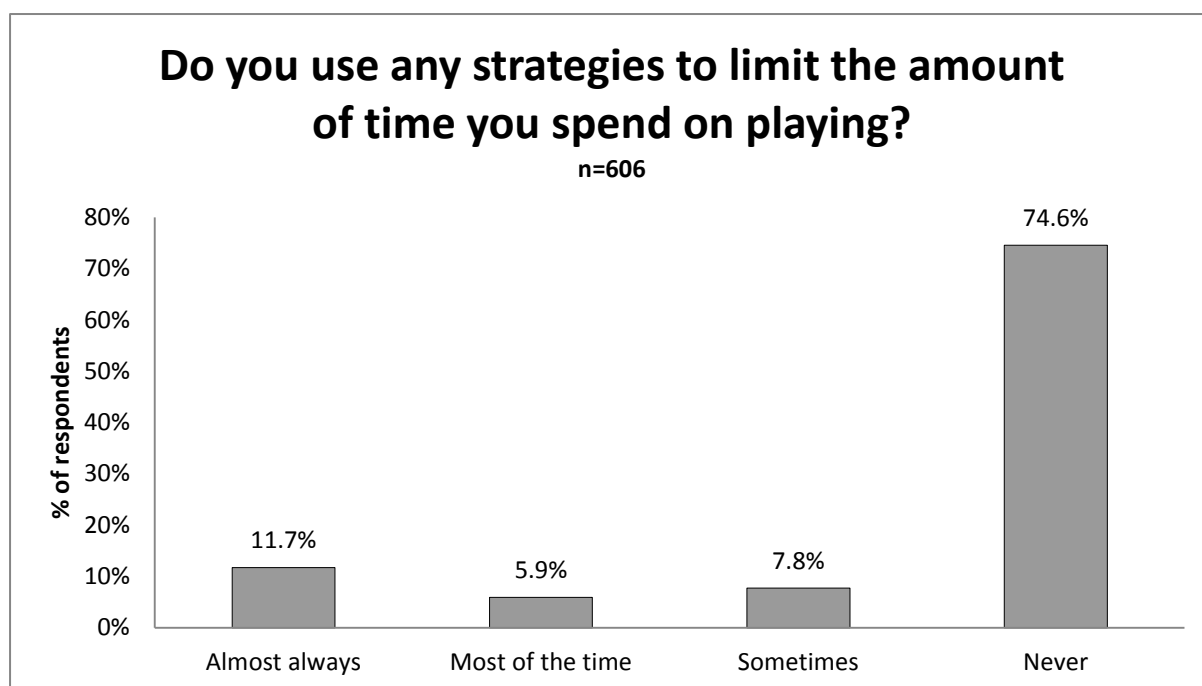


Figure B11 - Strategies to limit time spent playing

Appendix B – Data Charts, continued

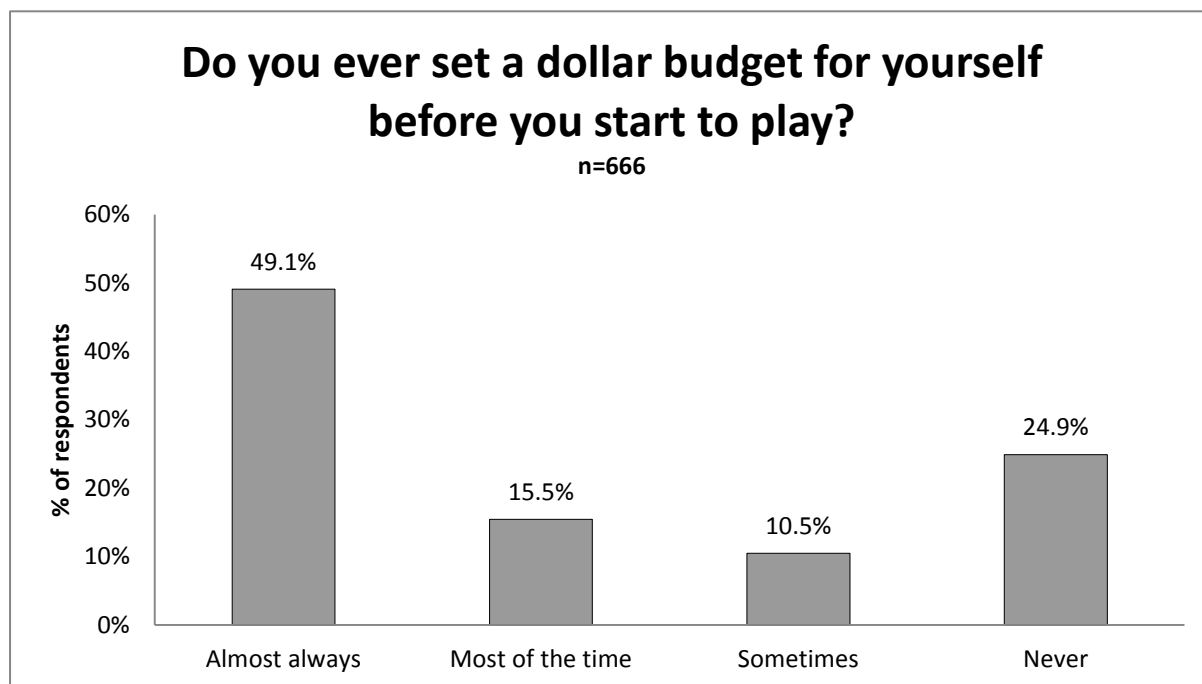


Figure B12 - Dollar budget set by self before play

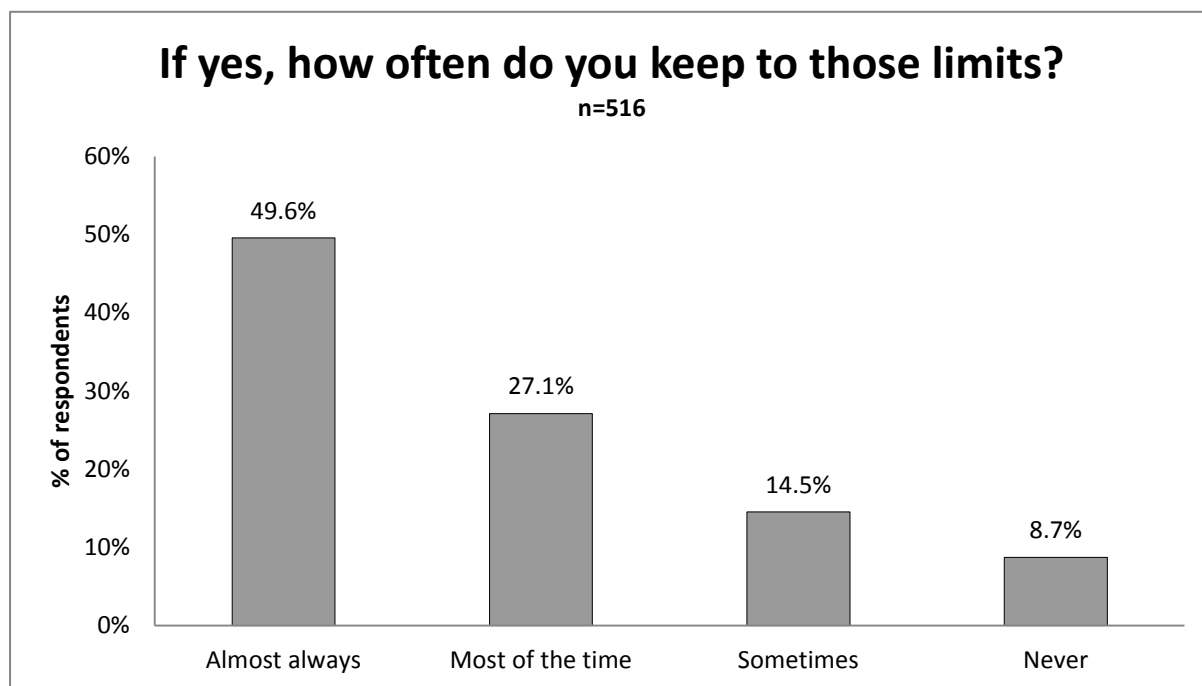


Figure B13 - Commitment to dollar budget set by self

Appendix B – Data Charts, continued

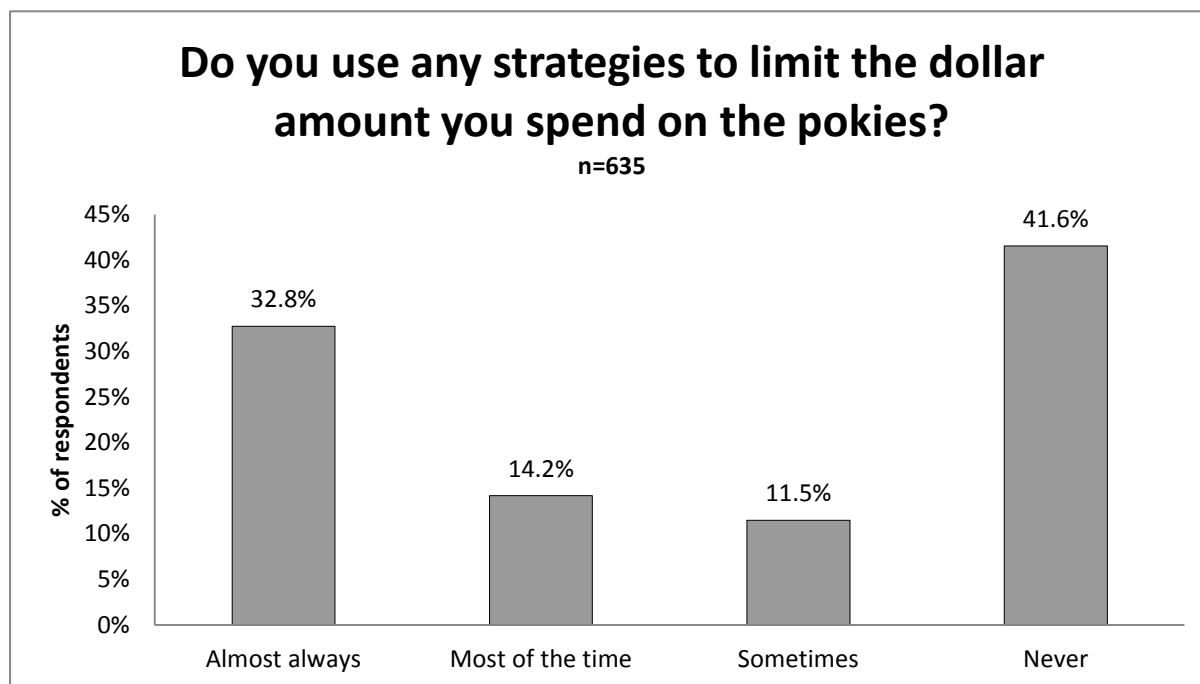


Figure B14 - Strategies to limit the dollar amount spent playing

Appendix C - Reference List

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