The Psychological Causes of Problem Gambling: A Longitudinal Study of At Risk Recreational EGM Players.

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January 2002 - March 2003

Financial Assistance for this project was provided by the New South Wales Government from the Casino Community Benefit Fund. The views expressed in this report are solely those of the authors.

CCBF Funding Classification:
Sub-program B: Rehabilitation
Theme: Socio – Economic Impacts

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Executive Summary

The current study built upon two pilot studies that investigated the psychological predictors of impaired control over gambling. A self-report questionnaire was completed by participants in a Western Sydney gaming venue, providing information about gambling patterns, levels of impaired control and problem gambling, along with reliable and valid psychological measures. Participants were then telephone interviewed a further five times over a 25 week period. The telephone interviews focused on impaired control and gambling harm. Some participants were also contacted for further interviews at the end of the 25 week period.

In total, 360 regular (twice weekly) electronic gaming machine players agreed to take part in the study, but this was number was to reduced to 212 participants in the final data set. The measures included the Scale of Gambling Choices, the South Oaks Gambling Screen, the Depression Anxiety Stress Scale, the NEO-FFI, the Inventory of Socially Supportive Behaviours, the Alcohol Use Disorder Identification Test, the Coping Scale for Adults, and measures of gaming emotion and level of involvement in gambling.

Results indicated that depression was both a predictor of concurrent impaired control over gambling and future impaired control. However, social support was not found to be related to impaired control over gambling. A non-productive coping technique was identified for those participants with low levels of control over their gambling and a more productive 'dealing with the problem' approach is a characteristic of those with greater control over their gambling. Many 'in control' players stated that they employed various strategies to maintain control. These included avoiding gaming venues and setting strict time and monetary limits. The 'out of control' players expressed feelings of self-blame and anger and utilised club self-exclusion policies or friends and family to try and help them control their gambling.

The results also revealed that impulsivity, depression and non-productive coping styles were the only significant predictors of impaired control. These psychological variables were able to explain a significant proportion of the variance between players in impaired control. The data was also utilised to modify the Dickerson and Baron (2000) model of gaming and includes a path leading from

impaired control to gambling related harm. It also includes coping style as a moderator of this relationship.

The implications of these results are discussed in terms of responsible gambling policy and treatment for problem gamblers. In both cases, the role of emotions is emphasised as a key component of gaming that has largely been overlooked. Subsequently, recommendations are made for reframing responsible gambling as consumer protection, whilst maintaining the integrity of the gaming experience and also as a component of the controlled gambling outcome in treatment.

Introduction

This project represents the final study in a series of studies investigating the psychological predictors of harmful gambling. As the final stage of research it was the most rigorous, utilising a longitudinal methodology and in-depth interviews. The principal reason for undertaking this study is the belief that it will make a major contribution to the understanding of the transition of individual players from recreational gaming to harmful gaming.

In the original funding application it was noted that, "The prevalence of problem gambling is directly related to the degree of accessibility of gambling, particularly gaming machines" In Australia 1 in 5 regular players (at least once per week) are 'at risk' of gambling related harmful impacts (Productivity Commission, 1999). Research has shown that regular recreational players are on a continuum with problem players and rapidly cycle into and out of problematic levels, typically without intervention or therapy. Research confirms that the causes of this movement is multi-factorial and the key psychological variables that may be involved have been summarised in a recent position paper: i.e. personality, social support, coping style, emotion, negative mood and their impact on choice/control over expenditure levels of time and money (Dickerson & Baron, 2000). The model presented by Dickerson and Baron was the driver for the pilot studies and also the current research.

The two pilot studies recruited regular players and used reliable standardised measures of psychological variables. These studies were designed to test hypothesised paths (or relationships) in the model between psychological variables and impaired control over gambling. The results from the pilot studies found that not all the hypothesised relationships were significant and problems with both the measurement and structural parts of the model were noted. Hence, the major issue addressed in the current study stems from the shortcomings identified in the model by the previous pilot studies.

The major dependent variable in the pilot studies was the extent to which regular players experience a subjective sense of not being in control of their gambling, unable to limit their expenditure and chasing their losses. This was measured by the Scale of Gambling Choices (SGC), which is a relatively new measure of gambling behaviour. There is now data from over 500 regular egm players on this scale. The mean score was 40 (range16-90) indicating that the typical regular player experiences loss of control during a session of play at least some of the time and the scores of some players show strong similarities with results from a group of problem gamblers attending for treatment (N = 81; the SGC correlates strongly with the South Oaks Gambling Screen or SOGS: $r = 0.80$) As the players recruited play once a week or more often (mean = 2.29 times per week), and for long sessions (mean=134 minutes), even to "sometimes" lose control over expenditure

would put the player at risk of harmful impacts. Therefore, the term "harmful gambling" has been used to describe this central variable and is of more relevance to regular egm players.

In the psychological model of problem gambling, the pathways from emotion, coping style and personality all impinge on harmful gambling and not on level of involvement in gambling. The pathways between involvement and harmful gambling are strongest in the direction of the impaired control driving greater involvement (i.e. spend of time and money). These data are the first opportunity to clarify this relationship. As discussed previously (Dickerson & Baron, 2000), the two variables interact and have been impossible to separate: impaired control has sometime been defined/measured in terms of gambling more, and gambling more often provided an increased 'opportunity' to lose control. The pilot results have indicated that players who play more frequently are at greater risk of impaired control, gambling harmfully, but this pathway is less strong than the way in which impaired control can lead to higher involvement in gambling.

With regard to psychological predictors, increased levels of harmful gambling are shown to be related to increased levels of negative emotions, such as depression, anxiety and stress. In addition players with higher levels of a personality described in terms of impulsivity and/or excitement seeking also report higher levels of harmful gambling.

The manner in which players report coping with a recent distressing or disruptive life event, such as relationship problems or career setback, did relate to harmful gambling. It was found that the 'affective regulation' style of coping was protective. That is, players who used strategies like relaxing themselves, reassuring themselves that things would work out et cetera were less likely to report harmful gambling. This is contrary to the small amount of published literature that reveals that the 'avoidance' style of coping, such as "avoided things that reminded me of the problem", has been associated with greater impaired control/harmful gambling. However, this was for one specific situation, gambling losses (Shepherd & Dickerson, 2001) which was not a feature of either pilot. In the preliminary correlational data of the pilot studies, avoidance coping did significantly and positively relate to harmful gambling but did not achieve significance in the full model. In the current study, this will be clarified by examining prospectively the style of coping (a) associated with stable levels of involvement in gaming and (b) with coping with gaming losses when they exceed budget.

The other main psychological variable, social support also showed a significant positive correlation with harmful gambling but did not feature in the full model. In the original model it was expected that social support would be protective rather than positively related to impaired control over gambling. However, communication with Tony Schellinck in Nova Scotia indicates that in the earlier stages of problem development there is an increase in active social support and that this may fall away as resolution or long-term problems occur. Once again the current study will enable

changes in social support to be studied in relation to changes in harmful levels of gambling in order to clarify the process that may assist resolution of problems.

Alcohol use (measured by the AUDIT) correlated strongly with impaired control in the pilot studies, but failed to enter the full model (after controlling for the effect of other variables). Recent research completed for the CCBF confirms the strong association between harmful levels of alcohol use and problem gambling among regular egm players (Dickerson, Hill, Wodak & Mattick, 2001). The link with impaired control has so far only been shown in relation to a particular session of gaming either in the laboratory or in a venue (Kyngdon & Dickerson, 1999; Baron & Dickerson, 1999).

In summary, the results from the two pilot studies provided new insights into the addictive process that may result in problem gambling. Also, from the perspective of responsible gambling, the finding that impaired control is a common and 'natural' experience of the typical regular egm player challenges recent harm minimisation policies. It questions whether strategies can assist players to stay in control or whether egms themselves can be modified to permit the typical player to make an informed decision to purchase another game within a session lasting over two hours.

Finally, at a practical level the pilot studies have helped develop an appropriate methodology and demonstrate strong support from the gaming industry in assisting with data collection on regular egm players. The current study will employ a methodology refined in the pilot studies for the purpose of assessing the psychological predictors of problem gambling and to develop an understanding of the transition of individual players from recreational gaming to harmful gaming.

Project Objectives

There were four major objectives of the current project:

- To determine if short-term negative emotion predicts greater harmful gambling only in the short term, or does it result in a 'slide' into problem gambling.
- To examine whether active social support initially increases as harmful gambling increases.
- To assess regular players who maintain stable levels of involvement with egm play and in particular their coping strategies for dealing with gambling related losses/debts.
- To determine the combination of psychological variables that predict players who are more likely to experience increased difficulties of control over gambling.

The primary objectives of this study have been achieved. The quantity and quality of data collected also enables other objectives to be attained. Specifically;

- The current research allowed for testing of the model outlined by Dickerson and Baron (2000). The results of this were presented at the 12 International Conference on Gambling and Risk Taking in Vancouver, British Columbia, Canada (May, 2003). Dr. Haw's presentations is attached and shows the final model based on the data from this study. The presentation was favourably received with many renowned gambling researchers offering advice on the re-configuration of the model. This advice was primarily with regard to the inclusion of moderator and mediator variables not considered before and is currently being analysed with a view to publication in a psychology journal.
- The open ended questions regarding coping with gambling loss has provided qualitative data that can assist with the formulation of a specific measure of coping with gambling loss. Shepherd and Dickerson (2001) have identified problems with standard measures of coping and argue that a specific coping measure for gambling losses is needed. This initial data will assist with the formulation of themes and an initial item bank, that will lead to the development of a new scale.

<u>Milestones Achieved</u>

- Ethics approval granted
- Staff appointments (full-time and casual positions)
- Staff training

- Fortnightly (or more frequent if needed) project meetings
- Venue secured for recruitment
- Construction and printing of Initial Interview questionnaire
- Construction and printing of Follow-up questionnaire
- Adaptation of Time-Line Follow Back Interview for regular gamblers
- Order and collection of Coles/Myer vouchers for participant payment
- Recruitment carried out (N=360)
- Stage 1: Weekend Players (equal number sampled from morning, afternoon and evening)
- Stage 2: Mid-week Players (equal number sampled from morning, afternoon and evening)
- Initial interview conducted (N=232, final data set N=212)
- First scheduled payment made to participants
- First follow-up interview conducted (N=190)
- Second follow-up interview conducted (N=182)
- Third follow-up interview conducted (N=177)
- Fourth follow-up interview conducted (N=171)
- Fifth follow-up interview conducted (N=169)
- Order and collection of second instalment of Coles/Myer vouchers for participant payment
- Final payment made to participants
- Timeline Follow-Back interviews conducted on 12 month period prior to initial interview (N=10)
- In-depth interview on emotion and coping variables conducted (N=42)
- Timeline Follow-Back interviews conducted on 5 week period between follow-ups (N=32)
- Initial interview data screened and entered (N=217 x 164 Variables)
- Follow-up data screened and entered (total N=889)
- Initial interview data analysis correlations and descriptives
- Initial interview modelling analysis
- Timeline Follow-Back interview scoring
- In-depth interview transcribing and analysis
- Preparation of final report and papers for publication

Project Design

All participants were recruited from the same licensed club in Western Sydney. A convenient sample of 360 adults were recruited over three session and four days. Players were recruited during the morning (10:00am – 12:00pm, n = 120), afternoon (2:00pm – 4:00pm, n = 120), and evening (6:00pm – 8:00pm, n = 120). Half were recruited during weekdays (Wednesday or Thursday) and half were recruited during weekends.

The longitudinal design of the current study required contact with the same gaming machine players at least 5 times. The first meeting involves the administering of a self-completion questionnaire conducted at the gaming venue. The next three bi-monthly follow-ups are brief and highly structured interviews conducted over the telephone. The final contact is a repeat of the first meeting, however the questionnaire will be completed over the telephone.

There were also several face-to-face in-depth interviews with select players over the course of the study. The selection criteria was dependent upon responses at each stage and the interviews took place at the venue.

This design was chosen to provide data that answers questions regarding the frequency and severity of the transition from recreational to problem gambling and the psychological factors associated with the transition. More specifically, the project was designed to:

- Retest the psychological model of the causes of harmful gambling in regular recreational egm players.
- Test the validity of the model prospectively over a 10 month period.
- Track the natural history of a large group of regular recreational egm players over the 10 month period of the project.
- Study in depth 4 cohorts of players i) those most at risk when recruited ii) those least at risk when recruited iii) volunteers who at any follow up contact show increased risk (criteria detailed below) iv) those volunteers who at any follow-up contact show a significant decrease in harmful gambling or have ceased gambling.

From previous studies completed, the use of $20 vouchers was utilised to ensure recruitment of initial participants. Furthermore, a $30 'Coles' voucher was offered as incentive for the completion of the 4 further telephone interviews.

In detail, the procedure for most participants was:

1. Baseline Measures (self-completion questionnaire in gaming venue)

A 12 page questionnaire was designed containing the baseline measures (see Appendix). The questionnaire begins with some relatively easy questions for participants regarding involvement in gambling (average amount spent per session, frequency and duration of session). It then progresses to items measuring psychological factors starting with the two personality subscales from the NEO, impulsivity and excitement seeking (Costa & McRae, 1996). This is followed by the Depression, Anxiety and Stress scale assessing negative mood in the past week (DASS, Lovibond & Lovibond, 1988) and then the Inventory of Social Support (Barrera, Sandler & Ramsay, 1981). All of these scales have demonstrated very good reliability and validity and are commonly used in psychological research.

The measure of coping style used previously was replaced with the short version of the Coping Orientation to Problems Experienced (COPE)(Carver et al. 1989). This change is based on research experience with regular egm players (Shepherd & Dickerson, 2001 Australian Journal of Psychology, in press). At baseline the measure will be used in its dispositional format, assessing a person's usual style of coping with an uncontrollable loss situation such as bereavement and then at follow-up in the situational form of how the person copes with the specific gambling money loss situation.

The AUDIT is a general measure of alcohol use designed by the World Health Organisation and was supplemented with specific questions regarding alcohol consumption immediately before and during a gaming machine session.

The measure to be utilised for impaired control over gambling/harmful gambling was the Scale of Gambling Choices. This measure was supplemented in the questionnaire with the Victorian Scale of Gambling (VGS).

The questionnaire then ends with some relatively easy questions regarding demographical information (sex, age, household income etc.).

2. Follow-up Measures (telephone interviews, bi-monthly)

Three brief and highly structured telephone interviews, measuring their level of impaired control (SGC) and also their level of gambling related harm (VGS) since last interviewed (generally a two-month time period).

3. Final Reassessment Measure

Repeat of all baseline measures by telephone.

4. Additional in-depth Interviews (location determined by participant)

At the initial recruitment volunteers were advised that they may be selected for one additional face-to-face interview. The objective of this is the collection of a detailed case-history of

a player's gambling experience and any related impacts. The main structure of the interview will be the Time Line Follow Back (TLFB) method.

The TLFB is a behavioural assessment method where individuals retrospectively fill in a calendar indicating the frequency and intensity of target behaviours (Sobell & Sobell, 1992). The use of memory aids is encouraged in order to assist respondents in identifying key dates or events. The goal of the TLFB is to provide a detailed record of the addictive behaviour that can be used to develop a history of the behaviour, assessing any changes over time. It has been used with a variety of populations (Sobell & Sobell, 2000). This methodology has been successfully adapted to assess alcohol consumption, cigarette smoking, prescription drug use and cocaine and heroin use.

The TLFB has also been used to assess gambling behaviour. Tabor et al. (1987) used the TLFB to compare pre-treatment and 6-month post-treatment gambling frequency and rating of gambling intensity of 57 individuals treated for problem gambling. The results demonstrated that the TLFB was adequately sensitive to changes in gambling behaviour and these changes converged with other indices of gambling behaviour. Furthermore, collateral reports were collected for 80% of the patients and these reports were highly correlated with the information provided on the patient's TLFB (r = .82). This work has been replicated with similar validity and reliability outcomes and it can be concluded that the TLFB can be used as an accurate measure of gambling involvement (i.e. frequency and gambling expenditure).

The framework of the TLFB method will also facilitate the interview collection of detailed information about two key themes requiring clarification in the current round of model building, specifically coping and social support.

Difficulties Encountered

The initial recruitment of 360 regular poker machine players proved a more difficult task than first envisaged. Player's seemed uninterested in participating and the incentive (a total of $50.00 in Coles/Myer vouchers for 6 point of contact) seemed inadequate motivation.

After initially agreeing to be contacted by interviewers (N=360) many participants (N=128) either overtly, or passively, withdrew from the study prior to the initial interview. An additional 12 participants completed the initial questionnaire and were sent vouchers though their responses were deemed invalid by interviewers and they were not included in the initial data set. This was mainly due to their mental health status or level of intoxication at the time of the interview. A further 8 participants were excluded due to statistical violations detected during screening. This equates to a drop out rate of 41%.

This elevated drop out rate was not as prominent during the follow-up interviews with a 10.5% (22 participants) drop out rate between the initial interview and the first follow-up interview and

even lower rates for subsequent follow-ups. The drop out rates continued as follows; 4% (8 participants) between first and second follow-up interviews, 2% (5 participants) between the second and third follow-up interviews, 3% (6 participants) between the third and fourth follow-up interviews, and 1% (2 participants) between the fourth and fifth follow-up interviews.

The initial drop-out rate allowed the researchers to 'pay' those participants identified as qualifying for an additional in-depth, face-to-face interview. Initially participants were reluctant to agree to an additional interaction with researchers, though when offered a Coles/Myer voucher as an incentive acquiescence rates increased however the incentive was not great enough to motivate all participants. This resulted in not all participants identified as having the greatest change in impaired control between interviews agreeing to further contact.

Also, the TLFB was more difficult to implement than first thought. Many participants did not find the memory anchors useful and appeared to give vague answers, particularly when discussing their gambling more than a few months ago.

Results

A snapshot of the final sample (*N= 212)* can be gained from examining the descriptive statistics. Summary statistics are provided in Table 1, with full output in Appendix. The average participant was aged between 45 and 49 years old, however the largest age group was the youngest age group, the 18-24 years (n=32). There were slightly more females (n=114) than males (n=98) and the average household income of participants was somewhere between $40,000 and $50,000 though 50% of the sample had a household income of less than $40,000. The overwhelming majority (83%) of participants came from an English speaking background and on average had a senior secondary level of education.

In terms of gambling patterns, the current sample gambled twice a week for about 2-2.5 hours spending on average $83.00 per session, however 65% of the sample spent $50.00 or less per session and 3% spent $300.00 or more. On average, they gambled for 143 minutes per session. The average participant had been gambling for 7 years with 50% of the sample gambling for more than 4 years.

Reliability of Measures

Table 2 provides the coefficient of internal consistency for the measures in the current sample (it is ideal to have this figure greater than .70 for research). The majority of measures had good internal consistency, with the only problematic scale measuring Impulsivity.

Table 1. *Descriptive Statistics for Initial Interview Sample (N=212, males n=98, females n= 114)*

Variable	Mean	Median	Minimum	Maximum
Age	45 – 49	45-49	18-24	80+

Income	$40-50,000.00	$30-40,000.00	$0-10,000.00	$100,000.00
Education	Senior Secondary	Senior Secondary	Primary School	Post Doctorate
Gambling Days	2.4 days per week	2 days per week	1 day per week	6 days per week
Gambling Years	7.3 years	4 years	0 years	41 years
Gambling Time	143 mins per session	120 mins per session	4 mins per session	480 mins per session
Gambling Spend	$83.00 per session	$40.00 per session	$5.00 per session	$2,000.00 per session

Table 2. *Internal consistency coefficients for published measures*

Scale	Reliability
Scale of Gambling Choices	.86
Harm to self (VAGS)	.93
Impulsivity	.48
Excitement Seeking	.75
Depression	.88
Anxiety	.71
Stress	.84
Social Support	.94
Non-productive coping	.71
Dealing with the problem coping	.62
AUDIT (alcohol)	.84

Project Objectives

Several analyses were conducted to meet the study's objectives.

a) Does short-term negative emotion predict greater harmful gambling only in the short term, or does it result in a 'slide' into problem gambling?

As predicted short term negative emotion (depression) was significantly and positively correlated with impaired control over gambling (measured by the Scale of Gambling Choices) when measured concurrently. However, the ability of the depression variable to predict impaired control over gambling in the future was slightly diminished.

As shown in Table 3, a correlation of r = .35 existed between the Scale of Gambling Choices and depression at the initial interview. Each participant's depression score at the initial interview was then correlated with their impaired control over gambling scores for the next 25 weeks. Although higher correlation coefficients were not found over the course of the follow up periods, all follow-up correlation coefficients were significant. In particular, the last three follow-up periods recorded correlation coefficients that are close to the original. Hence, it may be concluded that depression is a predictor of future impaired control of gambling almost as strongly as when measured concurrently with the Scale of Gambling Choices.

Table 3. *Pearson's Correlation Coefficients between Depression and the Scale of Gambling Choices Over 6 Time Periods*

Interview Period	Initial SGC (N = 212)	5 weeks SGC (N = 184)	10 weeks SGC (N = 179)	15 weeks SGC (N =174)	20 weeks SGC (N = 168)	25 weeks SGC (N = 167)
Depression	.35**	.26**	.23**	.30**	.34**	.27**

** $p < .01$

(b) Does active social support initially increase as harmful gambling increases?

Social support was measured by the Inventory of Socially Supportive Behaviours (ISSB) during the initial interview. It was anticipated that those participants with a strong social support network would report lower levels of impaired control over gambling (SGC). That is, a negative correlation would exist between the ISSB and the SGC. However, the ISSB failed to correlate

significantly with the SGC at any time frame (all $r < .18$). This was despite the ISSB showing a large amount of variance between players (Mean = 89.76, SD = 25.17 Min. = 40, Max. = 183).

Although no support for the hypothesis was found there is strong empirical evidence to suggest that social support plays an important role in alleviating personal problems. One reason for the failure of the relationship to be found in the gambling context is the measure itself. The ISSB contains 40 items and a large number of participants commented that the length seemed excessive. This may have caused a response bias for this particular instrument. From the results it can only be concluded that social support did not show any significant relationship with impaired control.

(c) Do regular players who maintain stable levels of involvement with egm play have particular coping strategies for dealing with gambling related losses/debts?

On analysis of the data it was found that those who maintain control over their gambling use significantly less of the type of coping strategies traditionally thought of in the literature as maladaptive than those players who do not maintain control over their gambling. Specifically, those participants who have high levels of control over their gambling activities prefer coping strategies that deal with the problem they are facing, for example develop a plan of action, rather than non-productive coping strategies such as self blame and avoidance.

These results suggest that the way players' deal with life events and stressors is related to the way they deal with their gambling. Further analysis shows a positive relationship between coping that deals with the problem and control over gambling for those who have high levels of control (r=.23, $p < .05$). Conversely for all players in the sample, there was a negative relationship between control over gambling and non-productive coping strategies ($r = .43$, $p < .01$). These findings are reiterated in much of the literature which examines coping and addiction.

On a more qualitative note, many of the player's who maintained control over their gambling spoke of being able to set realistic time and monetary budgets and stick to them. Staying away from gambling venues was also a key theme with these players if they felt that their time/money spend was escalating. At the other end of the control scale, those players who spoke of unsuccessful attempts to stick to time limits and monetary budgets expressed feelings of anger and self-blame. One player described the machines as "evil". Some players handed control of their finances over to responsible others and another made use of self-exclusion policies.

(d) Which combination of psychological variables predict players who are more likely to experience increased difficulties of control over gambling?

The major psychological variables (impulsivity, excitement seeking, depression, social support, non-productive coping, alcohol use) were entered into a multiple regression equation with impaired control over gambling as the dependent variable. Also included were the demographic variables of age and gender, acting as covariates. Results revealed that impulsivity, depression and non-productive coping styles were the only significant predictors of impaired control ($p < .01$). It can be concluded that regular poker machine players who reported higher levels of the impulsive personality trait, higher levels of the negative emotion depression and higher levels of the non-productive coping style were also reporting greater levels of impaired control over their gambling. These psychological variables were able to explain a significant proportion of the variance between players in impaired control (26%).

The Appendix (Dr. John Haw's presentation) also shows revisions made to the Dickerson and Baron (2000) model and the supporting data analysis. It shows the pathway to gambling related harm and the inclusion of gaming emotion (emotion specific to the act of gaming) and gaming behaviour (frequency and duration of play).

Player Interviews

A total of $N = 10$ participants from the original sample completed the TLFB interview for the twelve month period prior to their initial interview. Of these ten participants $n = 5$ were identified as having low control over their gambling and $n = 5$ were identified as having high control over their gambling behaviour (as measured by the *Scale of Gambling Choices*).

An additional $N = 32$ participants completed TLFB interviews for the five week periods between the five follow-up interviews. For the period between the initial interview and the first follow-up interview $N = 8$ ($n = 4$ increase on SGC score; $n = 4$ decrease on SGC score), between the first follow-up and second follow-up interview $N = 5$ ($n = 3$ increase on SGC score; $n = 2$ decrease on SGC score), between the second follow-up and third follow-up interview $N = 8$ ($n = 4$ increase on SGC score; $n = 4$ decrease on SGC score), between the third follow-up and fourth follow-up interview $N = 5$ ($n = 3$ increase on SGC score; $n = 2$ decrease on SGC score), between the fourth follow-up and fifth follow-up interview $N = 6$ ($n = 3$ increase on SGC score; $n = 3$ decrease on SGC score).

Along with specific questions regarding level of involvement in gaming, participants were encouraged to talk about their gaming experiences. In particular, the discourse was directed to the role of social support and coping with losses and problem gambling.

Many of the problem players discussed issues surrounding the emotions felt whilst playing, regret afterward and the strong desire to continue playing:

"Always looking for a win, always thinking gonna be a win, never thinking that there'd be a loss or anything like that".

"At around 3 in the afternoon, the link machine went off. Had a pay of $400 –wasn't me, you know so it was the lady next to me so I was sort of… frustrated to the hilt. It was about $410 and I was down probably at least $120 by this stage and I thought "well that would have been fantastic" and I'm going "oh god!" you know, I was even more just frustrated with meself and I thought…well that's a heap of money you know, but I thought "oh bugger it", so straight to the teller machine, added cash. So back to the machine, another $100 out something like that , hadn't paid rent nothing's paid. You know I just thought "well I'm down here". And I put all that through, another 100 has gone through in the next probably hour, hour and a half which made even worse because that was too quick".

"Getting a bit anxious about things. $40 is not a lot of money, but then again I was down so er, you know what I mean so. And then upped the credits to 40 a line, you know like 40, which is 40 cents a game".

"You feel pumped up. You get pumped up, I don't have another word for it. You want the big win. You finally got the free spins, you've been sitting there for 3 hours. You finally got 'em, and then when it doesn't pay, it's a big…a big let down. You know what I mean, like you think "well when am I gonna get 'em again?". You know like how long is it gonna be? Still I sit there and… I sit there and I…I'm gonna beat this thing – I've got all day".

These responses were is contrast with the controlled players:

"I play them to spend some time. I've worked out a system, where I can get in front. So I make it a kind of business. I'm never excited about the whole thing. If machine that does well for me, I play it. And if I lose $5 on a machine, and it doesn't do a thing – I give it up and try another one. I stick to the system".

"I've got willpower"..

"No, no, see I know that I have days that I will lose 15 or 20 dollars. But it doesn't affect me at all".

"Just fun. I'm never gonna get excited by it".

Also, the use of social support varied between players. Below are the responses of a player who has cycled in and out of problem gambling. This example highlights the importance of social support in controlling gambling.

"I would talk to my husband and I'd tell him "I won't... I'm slipping" and won't go to club and do something else. And we will we'll go and do something different".

The response below is from a problem player who appeared to have a support network. He was partnered, made references to his friends and family but had lied to them about his gambling. Counselling was suggested to him and he acknowledges that intervention earlier would have helped. He also identified alcohol (another variable of this study) as a contributing factor to his problem.

"How do you explain it, you know what I mean and things like that. Explaining to people, that's the main thing, explaining to people why you haven't got the money. You're getting $500 a week, they know it. And you've got no money, you've never got no money. Where's your money? You try to say "Oh, I paid this I paid that". You're lying. You're full-on lying".

"OK, basically...I think counselling is the only way. I basically think counselling is the only way. I obviously haven't got the will power. So obviously it's not there. You know what I mean so, I don't believe in counselling, I think well if you can't do it yourself, then but unfortunately I think that's

the case. I'm not… If I was as bad as I was back then as I am now ….I'd have to. I'd have to. But, but… honestly, last but not least… the cause of this problem is the alcohol. No question about it. No question. You drink heaps of alcohol and all that, and you can't even see the machine hardly, and your hand just keeps hitting the button. You don't even know what's happening up there and, I've gotta say that's 90% the problem I had...before. But now, I've got off spirits I don't touch anything that's rugged. Ever since the day security guards sort of escorted me from the premises, I felt embarrassed. And people know me here. So I'm not going to do that again".

Common English summary of results

Whichever regression models are preferred the results show that it is very common for regular EGM players to experience impairment of their ability to control their session spend and how often they visit the venue to play. Unsurprisingly this impairment of control over gaming is the main cause of harmful impacts arising from gambling. The erosion of self-control arises from the player's current number of hours spent gaming per week, the strength of the emotion they experience during play, made worse by any mild depressed or negative mood they 'bring' with them to the venue and by a more impulsive personality.

In other words, the idea that the harmful impacts of gambling arise in a few mentally disordered or pathological gamblers is utterly false. It seems that if one plays a gaming machine for 4 hours or more per week, making 13 purchases of a game per minute, find the process emotionally stimulating and an escape from the frustrations of everyday life, then impaired control over the duration of the session is a natural and expected human response. Even those players who do not report impaired control describe a variety of ways in which they actively take steps to ensure that they stay in control of how much they spend and how often they visit the venue. Most regular players of EGMs find that the process of play requires personal planned efforts to stay within a preferred budget but none-the-less nearly half such players fail to maintain control at least some of the time.

Implications

1. For responsible gambling policy: the crucial readjustment is that the issue needs to be considered not in terms of some individual difference(s) inherent in some players but that loss of control is the common and expected outcome of the regular interaction between human beings and contemporary forms of continuous gambling.

A fundamental re-examination of the foundations of responsible gambling in the light of this reframing permits important conclusions to be drawn with significant implications for policy goals and strategies.

Current responsible gambling strategies set out to:

1. detect, exclude, protect problem gamblers from further exposure to gambling
2. educate the community raising awareness of the harmful impacts of gambling and encouraging gamblers to make responsible decisions about their gambling, and
3. remove the 'addictive' components of poker machines.

There is general expert agreement that 1 cannot be achieved by operators and in the light of the current findings it is apparent that 2 and 3 above are misdirected and unlikely to succeed e.g. both seem to make impossible demands, either the player learns not to enjoy play or that the enjoyable, emotionally stimulating component of the machine somehow be removed.

2. For treatment for problem gamblers: current psychological models on which the most commonly used treatment intervention with problem gamblers, cognitive-behaviour therapy, emphasise changing the way the gambler thinks about their gambling e.g. adopting realistic expectations about winning and losing. This cognitive focus is not supported by the factors shown in our research to be driving the impairment of self-control i.e. gaming emotion and prior negative moods.

Recommendations/Actions

1. The reframing of responsible gambling as consumer protection:

Although nowhere clearly articulated responsible gambling has its origins in public health policy relating to alcohol consumption. Both legally and morally the provider of alcohol bears some responsibility for some of the harms that arise from excessive alcohol consumption. The goals of responsible alcohol policy programmes have been to provide an environment that promotes the safe, healthy consumption of alcohol and prevents whenever possible excessive and potentially harmful levels of drinking.

The three main types of responsible gambling strategies listed above show a similar concern, to protect the individual from excessive or harmful levels of gambling consumption. However the new data indicate an important difference between alcohol and gambling that needs to be reflected in policy formulation.

In relation to alcohol, provided that the ordinary regular drinker is over 18years of age and is consuming alcohol in safe healthy quantities, perhaps in a licensed premise, the question of responsibility for harmful impacts does not arise.

In contrast in relation to regular gaming machine play (and probably all other continuous forms of gambling) the ordinary regular player may be consuming/using the gaming product in just the way in which the manufacturer, the venue operator and the regulatory body intended, and yet very likely be placed at immediate risk of harmful impacts because of the loss of control that at times is an integral part of his/her pleasurable gaming experience.

In brief the risk of the harmful impacts,

- for alcohol arise from *excess*
- for gambling/gaming arise from *regular usage*.

In developing responsible gambling policy this distinction needs to be born in mind: the goal of preventing excess, as in alcohol, can only be achieved by ensuring that the ordinary regular player's normal enjoyment *and* loss of control does not result in excessive expenditure of time and money i.e. it is regular players who need to be the focus of harm prevention strategies.

As pointed out above the current strategy aimed at changing the machine **or** the player to not lose control is ill conceived and derived from the alcohol context. A more appropriate aim from a consumer protection perspective is to maintain the integrity of the gaming experience – it is clearly enjoyable and what the consumer wants – and yet to prevent the enjoyed loss of control resulting in excessive, and potentially harmful expenditure.

Policy driven by the principle of safeguarding the right of gamblers to make rational decisions about expenditure limits:

As argued previously (Dickerson, 2003) this could guide the future responsible provision of continuous forms of gambling by requiring that the purchase point be removed from the loss of control process inherent in the gambling sequence itself:

- *to a point in* time *prior to the commencement of the session, and*
- *to a* place *away from the gaming room floor.*

This argument reaffirms that rather than pre-commitment being just one of many possible consumer protection options (as listed by the Productivity Commission, 1999) it should be considered **the** protective measure preferred by regulatory bodies. Given the nature of the impaired control reported by regular players (includes difficulties in limiting the number of sessions per week as well as session length/spend) a player's decision to limit time and/or money expenditure to a particular amount would have to hold for a specified period with the minimum perhaps being for the next week i.e. a cooling off period.

In the context of the current trend toward cashless gambling/gaming there is now both the knowledge base and the technology to enable governments to develop a consumer protection environment that balances the individual freedom of the player with the opportunity for the community to prevent problem gambling and underage gambling 'at a stroke'. In contrast to the present burgeoning bureaucracy associated with responsible gambling a regulated consumer protection approach could be derived from the one principle of defending the ability of all gamblers to make rational, controlled choices (and could be applied to all new gambling products as they emerge) and could be fully automated and web based. At the same time providing for very effective methods for assisting existing problem players.

2. Reappraisal of cognitive-behaviour techniques: if strong emotional responses to the gaming process make a significant contribution to the erosion of self-control then this challenges the assumption that problem gamblers may be able to return to a controlled level of gaming/gambling, a typical treatment objective. Perhaps this is only possible if the player does not respond emotionally to the gaming i.e. no longer enjoys it so much? Certainly it is recommended that controlled gambling as a preferred treatment outcome be reappraised and carefully evaluated, as it may be harder to achieve than controlled drinking.

In addition therapy techniques themselves need to be re-examined to ensure that components are included that address the importance of gaming emotion and prior negative mood.

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Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	98	46.2	46.2	46.2
	Female	114	53.8	53.8	100.0
	Total	212	100.0	100.0	

Age Bracket

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-24	32	15.1	15.1	15.1
	25-29	13	6.1	6.1	21.2
	30-34	13	6.1	6.1	27.4
	35-39	12	5.7	5.7	33.0
	40-44	22	10.4	10.4	43.4
	45-49	24	11.3	11.3	54.7
	50-54	20	9.4	9.4	64.2
	55-59	20	9.4	9.4	73.6
	60-64	19	9.0	9.0	82.5
	65-69	15	7.1	7.1	89.6
	70-74	12	5.7	5.7	95.3
	75-79	8	3.8	3.8	99.1
	80+	2	.9	.9	100.0
	Total	212	100.0	100.0	

Income Bracket

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	$0-10,000	17	8.0	8.3	8.3
	$10,001-20,000	32	15.1	15.7	24.0
	$20,001-30,000	30	14.2	14.7	38.7
	$30,001-40,000	25	11.8	12.3	51.0
	40,001-50,000	25	11.8	12.3	63.2
	$50,001-60,000	16	7.5	7.8	71.1
	$60,001-70,000	18	8.5	8.8	79.9
	$70,001-80,000	9	4.2	4.4	84.3
	$80,001-90,000	8	3.8	3.9	88.2
	$90,001-100,000	4	1.9	2.0	90.2
	$100,001+	20	9.4	9.8	100.0
	Total	204	96.2	100.0	
Missing	System	8	3.8		
Total		212	100.0		

Education Level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Primary School	14	6.6	6.6	6.6
	Junior Sec/School Cert	73	34.4	34.6	41.2
	Senior Sec/HSC,VCE	68	32.1	32.2	73.5
	Trade/TAFE Cert	38	17.9	18.0	91.5
	Uni Degree	16	7.5	7.6	99.1
	Post Doctorate	2	.9	.9	100.0
	Total	211	99.5	100.0	
Missing	System	1	.5		
Total		212	100.0		

Language Background

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Non-English Speaking Background	176	83.0	83.8	83.8
	English Speaking Background	34	16.0	16.2	100.0
	Total	210	99.1	100.0	
Missing	System	2	.9		
Total		212	100.0		

Statistics

		Gambling History Days	Gambling History Years	Gambling History Minutes	Gambling History Dollars
N	Valid	212	212	212	212
	Missing	0	0	0	0
Mean		2.439	7.37	143.13	83.1486
Median		2.000	4.00	120.00	40.0000
Mode		2.0	2	120	20.00[a]
Std. Deviation		.9432	8.009	94.023	162.81780
Minimum		1.0	0	4	5.00
Maximum		6.0	41	480	2000.00

a. Multiple modes exist. The smallest value is shown

Participant No. _____ Researchers Name: _____

Participant Name: _____ Contact Phone No.: _____

Date/Date(s) Contacted: _____

What is your gender?	**Male**	☐		
	Female	☐		
What is your age bracket?	**18 – 24**	☐	**25-29**	☐
	30 – 34	☐	**35-39**	☐
	40-44	☐	**45-49**	☐
	50-54	☐	**55-59**	☐
	60-64	☐	**65-69**	☐
	70-74	☐	**75-79**	☐
	80 +	☐		
What is your household	**$0 – 10,000**	☐	**$10,001 – 20,000**	☐
income bracket?	**$20,001 – 30,000**	☐	**$30,001 – 40,000**	☐
	$40, 001 – 50,000	☐	**$50,0001 – 60,000**	☐
	$60,001 – 70,000	☐	**$70,001 – 80,000**	☐
	$80,0001 – 90,000	☐	**$90,001 – 100,000**	☐
	$100,001+	☐		

What is the highest level	**Primary School**	☐
of education you completed?	**Junior Secondary (School Certificate)**	☐
	Senior Secondary (HSC, VCE etc)	☐
	Trade/TAFE Cert	☐
	University Degree	☐
	Post Doctorate	☐
Do you come from a non- English	**No**	☐
Speaking background?	**Yes (which one)** _____	☐

The first group of questions relate to your history and pattern of gambling. Each refers to a different time period for example, a day, a week, or the last 6 months. So please think about each item carefully.

1. On average, how many **days per week** have you played poker machines in the last **6 month**s? **2.** How many **years** have you played the poker machines at this level? **4.** On average, how **long** would you play the poker machines on any given playing **day**?	**5.** On average, how much money, "out of pocket" (ie. not including wins) would you spend playing the poker machines on any given **playing day**?

_____(days per week)

_____(years)

_____(minutes)

$_____

6. Next there are 16 items which may be used to describe yourself. Please listen to each item carefully and indicate the answer that best describes you. Remember there is no right or wrong answer and no time limit. I am happy to repeat any of the items for you.

The answers you have to choose from are:
I **Strongly Disagree** with the statement.
I **Disagree** with the statement.
Neutral the statement is about equally true or false for me, I cannot decide, or I am **Neutral** on the statement
I **Agree** with the statement
I **Strongly Agree** with the statement

Here are the items, are you ready?

1) I often crave excitement. (Do you strongly disagree, disagree, are you neutral…etc)	SD	D	N	A	SA
2) I rarely overindulge in anything.	SD	D	N	A	SA
3) I would not enjoy vacationing in Las Vegas.	SD	D	N	A	SA
4) I have trouble resisting my cravings.	SD	D	N	A	SA
5) I have sometimes done things for 'kicks' or 'thrills'.	SD	D	N	A	SA
6) I have little difficulty resisting temptation.	SD	D	N	A	SA
7) I tend to avoid movies that are shocking or scary.	SD	D	N	A	SA
8) When I am having my favourite foods, I tend to each too much.	SD	D	N	A	SA
9) I like to be where the action is.	SD	D	N	A	SA
*10)*I seldom give in to my impulses.	SD	D	N	A	SA
*11)*I love the excitement of roller coasters.	SD	D	N	A	SA
*12)*I sometimes eat myself sick.	SD	D	N	A	SA
*13)*I'm attracted to bright colours and flashy styles.	SD	D	N	A	SA
*14)*Sometimes I do things on impulse that I later regret.	SD	D	N	A	SA
*15)*I like being part of a crowd at sporting events.	SD	D	N	A	SA
*16)*I am always able to keep my feelings under control.	SD	D	N	A	SA

7. Please listen to each following statements and indicate how often the statement applied to you over the **past *6* month**s. There are no right or wrong answers and don't spend too much time on any statement.

The answers you have to choose from are:

Does not apply to me at all	(Researcher: Code as 0)
Applies to me to some degree, or some of the time	(Researcher: Code as 1)
Applies to me to a considerable degree, or a good part of the time	(Researcher: Code as 2)
Applies to me very much, or most of the time	(Researcher: Code as 3)

Remember, we are interested in the last **6 month**s only in this section, that would make it since __(month)__ this/last year;	
1) I have found it hard to wind down.	0 1 2 3
2) I was aware of a dryness of my mouth.	0 1 2 3
3) I couldn't seem to experience any positive feeling at all.	0 1 2 3
4) I experienced breathing difficulty (eg, excessively rapid breathing, breathlessness in the absence of physical exertion).	0 1 2 3
5) I found it difficult to work up the initiative to do things.	0 1 2 3
6) I tended to over-react to situations.	0 1 2 3
7) I experienced trembling (eg, in the hands).	0 1 2 3
8) I felt that I was using a lot of nervous energy.	0 1 2 3
9) I was worried about situations in which I might panic and make a fool of myself.	0 1 2 3
*10)*I felt that I had nothing to look forward to.	0 1 2 3
*11)*I found myself getting agitated.	0 1 2 3
*12)*I found it difficult to relax.	0 1 2 3
*13)*I felt down-hearted and blue.	0 1 2 3
*14)*I was intolerant of anything that kept me from getting on with what I was doing.	0 1 2 3
*15)*I felt close to panic.	0 1 2 3
*16)*I was unable to become enthusiastic about anything.	0 1 2 3
*17)*I felt I wasn't worth much as a person.	0 1 2 3
*18)*I felt that I was rather touchy.	0 1 2 3
*19)*I was aware of the action of my heart in the absence of physical exertion (eg. sense of heart rate increase, heart missing a beat).	0 1 2 3
*20)*I felt scared without any good reason.	0 1 2 3
*21)*I felt that life was meaningless.	0 1 2 3

10. **The next items relate to the actions of significant others in your life, for example your friends, family, or colleagues. Please indicate how often, in the past** 6 months**, each of the following happened to you.**

The answers you have to choose from are:

Not at all	(Researcher: Code as 1)
Once or twice	(Researcher: Code as 2)
About once a week	(Researcher: Code as 3)
Several times a week	(Researcher: Code as 4)
About every day	(Researcher: Code as 5)

Remember, we are still only talking about the **past 6 months**.

In the past 6 months a significant other…….

1) Gave you some information on how to do something.	1 2 3 4 5
2) Helped you understand why you didn't do something well.	1 2 3 4 5
3) Suggested some action you should take.	1 2 3 4 5
4) Gave you feedback on how you were doing without saying it was good or bad.	1 2 3 4 5
5) Made it clear what was expected of you.	1 2 3 4 5
6) Gave you some information to help you understand a situation you were in.	1 2 3 4 5
7) Checked back with you to see if you followed the advice you were given.	1 2 3 4 5
8) Taught you how to do something.	1 2 3 4 5
9) Told you who you should see for assistance.	1 2 3 4 5
*10)*Told you what to expect in a situation that was about to happen.	1 2 3 4 5
*11)*Said things that made your situation clearer and easier to understand.	1 2 3 4 5
*12)*Assisted you in setting a goal for yourself.	1 2 3 4 5
*13)*Told you what he/she did in a situation that was similar to yours.	1 2 3 4 5
*14)*Told you that she/he feels very close to you.	1 2 3 4 5
*15)*Let you know that he/she will always be around if you need assistance.	1 2 3 4 5
*16)*Told you that you are OK just the way you are.	1 2 3 4 5

(continued over page)

Rating Scale
1 =Not at all **2** = Once or twice **3** = About once a week
4 = Several times a week **5** = About every day

*17)*Expressed interest and concern in your well - being.	1 2 3 4 5
*18)*Comforted you by showing you some physical affection.	
*19)*Told you that she/he would keep the things that you talk about private.	1 2 3 4 5
*20)*Expressed esteem or respect for a competency or personal quality of yours.	1 2 3 4 5
	1 2 3 4 5
*21)*Was right there with you (physically) in a stressful situation.	1 2 3 4 5
*22)*Listened to you talk about your private feelings.	1 2 3 4 5
*23)*Agreed that what you wanted to do was right.	1 2 3 4 5
*24)*Let you know that you did something well.	
*25)*Did some activity together to help you get your mind off of things.	1 2 3 4 5
	1 2 3 4 5
*26)*Talked with you about some interests of yours.	1 2 3 4 5
*27)*Joked and kidded to try to cheer you up.	1 2 3 4 5
*28)*Gave you over $25.	1 2 3 4 5
*29)*Loaned you over $25.	1 2 3 4 5
*30)*Provided you with a place to stay.	
*31)*Loaned or gave you something (a physical object other than money) that you needed.	1 2 3 4 5
	1 2 3 4 5
*32)*Provided you with some transportation.	1 2 3 4 5
*33)*Pitched in to help you do something that needed to get done.	1 2 3 4 5
*34)*Looked after a family member when you were away.	
*35)*Provided you with a place where you could get away for a while.	1 2 3 4 5
*36)*Watched after your possessions when you were away (pets, plants, home, apartment etc.).	1 2 3 4 5
	1 2 3 4 5
*37)*Went with you to someone who could take action.	1 2 3 4 5
*38)*Gave you under $25.00	1 2 3 4 5
*39)*Told you how he/she felt in a situation that was similar to yours.	1 2 3 4 5
*40)*Loaned you under $25.00.	1 2 3 4 5

10. People have a number of concerns or worries, such as work, studies, family, friends, the world and the like. I am going to read you a list of ways in which people cope with a wide variety of concerns or problems.

The answers you have to choose from are:

This doesn't apply or I don't do it	(Researcher: Code as 1)
Used very little	(Researcher: Code as 2)
Used sometimes	(Researcher: Code as 3)
Used often	(Researcher: Code as 4)
Used a great deal	(Researcher: Code as 5)

Please indicate how often you use these particular strategies when coping with worries in general.	
1) Play sport.	1 2 3 4 5
2) Talk to others and give each other support.	1 2 3 4 5
3) Put effort into my work.	1 2 3 4 5
4) Pray for help and guidance so that everything will be all right.	1 2 3 4 5
5) I get sick; for example, headache, stomach ache.	1 2 3 4 5
6) Work on my self image.	1 2 3 4 5
7) Look on the bright side of things and think of all that's good.	1 2 3 4 5
8) Develop a plan of action.	1 2 3 4 5
9) Try to be funny.	1 2 3 4 5
*10)*Find a way to let of steam; for example, cry, scream, drink, take drugs, gamble.	1 2 3 4 5
*11)*Improve my relationship with others.	1 2 3 4 5
*12)*Go to meetings which look at the problem.	1 2 3 4 5
*13)*Daydream about how things will turn out well.	1 2 3 4 5
*14)*Blame myself.	1 2 3 4 5
*15)*Don't let others know how I am feeling.	1 2 3 4 5
*16)*Consciously 'block-out' the problem.	1 2 3 4 5
*17)*Ask a professional person for help.	1 2 3 4 5
*18)*Worry about what will happen to me.	1 2 3 4 5
*19)*Make time for leisure activities.	
	_____
These next 2 questions refers only to coping with worries which may arise from playing the pokies.	_____
	_____
*20)*What strategies or things you do you do to cope with large losses on the poker machines?	_____
	_____
*21)*What things do you do if you feel that your poker machine play is getting out of hand?	_____
	_____

11.The next set of questions refer to your alcohol consumption. Listen carefully to each question and answer how often the particular event occurred in the **last 6 months.**

The answers you have to choose from are:

Never (Researcher: Code as 0)

Monthly or less (Researcher: Code as 1)

2 to 4 times a month	(Researcher: Code as 2)
2 to 3 times a week	(Researcher: Code as 3)
4 or more times a week	(Researcher: Code as 4)

To the best of your recollection, in the **last 6 months…**	
1) How often did you have a drink containing alcohol?	0 1 2 3 4
2) How often did you have six or more drinks on one occasion?	0 1 2 3 4
3) How often during the last 6 months have you found that you were not able to stop drinking once you had started?	0 1 2 3 4
4) How often during the last 6 months have you failed to do what was normally expected from you because of drinking?	0 1 2 3 4
5) How often during the last 6 months have you needed a drink in the morning to get yourself going after a heavy drinking session?	0 1 2 3 4
6) How often in the last 6 months have you had a feeling of guilt or remorse after drinking?	0 1 2 3 4
7) How often during the last 6 months have you been unable to remember what happened the night before because of you had been drinking?	0 1 2 3 4
8) Have you or someone else been injured as a result of your drinking?	0 1 2 3 4
9) Has a relative, a friend, a doctor or other health worker been concerned about your drinking or suggested you cut down?	0 1 2 3 4
*10)*How many * standard drinks do you have on a typical day when you are drinking? (read below to participant)	_____(number of drinks)
*11)*How many * standard drinks do you have during a typical session of gaming machine play?	_____(number of drinks)
❖ A standard drink is a "middy" or "twist top" of beer, a small glass of wine, sherry or port, a nip of spirits. A "schooner", "stubby" or "can" of beer contains about 2 standard drinks. Light beer is about ½ the strength of normal beer.	

12. The next items are in reference to your gambling on the ***poker machines only***. Please indicate how often each of the following statements have applied to you in the **past 6 month**s.

The answers you have to choose from are as follows:

Never	(Researcher: Code 1)
Rarely	(Researcher: Code 2)
Sometimes	(Researcher: Code 3)
Often	(Researcher: Code 4)
Always	(Researcher: Code 5)

1) I have been able to stop playing the pokies before I spent all my spare cash.	1 2 3 4 5
2) I have been able to stop easily after a few games.	1 2 3 4 5
3) I've been able to stop playing the pokies before I got into debt.	1 2 3 4 5
4) I've been able to stop playing before the club, hotel or casino closed.	1 2 3 4 5
5) When I've wanted to I've been able to cut down or play less.	1 2 3 4 5
6) I've been able to resist the urge to start playing the pokies.	1 2 3 4 5
7) I've been able to play less often when I've wanted to.	1 2 3 4 5
8) When I've wanted to I could stop playing for a week or more.	1 2 3 4 5
9) In the last 6 months I've tried to play the pokies less often.	1 2 3 4 5
*10)*In the last 6 months I've tried to spend less on my pokie playing.	1 2 3 4 5
*11)*In the last 6 months I've tried to stop playing for a period of time.	1 2 3 4 5
*12)*In the last 6 months I've tried to resist the opportunity to start playing.	1 2 3 4 5
*13)*In the last 6 months I've tried to limit the amount I gamble on the pokies.	1 2 3 4 5
*14)*I've tried to stop playing once I had reached self-imposed limits.	1 2 3 4 5
*15)*When I have been near a club, hotel, or casino, I have found it difficult	1 2 3 4 5
to resist playing the poker machines.	1 2 3 4 5
*16)*I have found it difficult to limit how much I gamble on the pokies.	1 2 3 4 5
*17)*Even for a single day I've found it difficult to resist playing the pokies.	1 2 3 4 5
*18)*Once I've started playing I have an irresistible urge to continue.	1 2 3 4 5

13. The next items are also in reference ***to poker machine play only***. Once again we want to know how often each of the following statements have applied to you in the **past 6 month**s.

The answers you have to choose from are as follows:

Never	(Researcher: Code 1)
Rarely	(Researcher: Code 2)
Sometimes	(Researcher: Code 3)
Often	(Researcher: Code 4)
Always	(Researcher: Code 5)
Can't Say	(Researcher: Code 6)
Doesn't Apply to Me	(Researcher: Code 7)

1)Has playing the poker machines been a good hobby for you?	1	2	3	4	5	6	7
2)In the last 6 months when you've played the pokies, has it been fun?	1	2	3	4	5	6	7
3)Have you played the pokies with skill?	1	2	3	4	5	6	7
4)In the last 6 months, when you've played have you felt that you are on a slippery slope and that you can't get back up again?	1	2	3	4	5	6	7
5)Has your need to play the pokies been too strong to control?	1	2	3	4	5	6	7
6)Has playing been more important than anything else you might do?	1	2	3	4	5	6	7
7)Have you felt that after losing you must return as soon as possible to win back any losses?	1	2	3	4	5	6	7
8)Has the thought of playing the pokies been constantly in your mind.	1	2	3	4	5	6	7
9)Have you lied to yourself about your playing?	1	2	3	4	5	6	7
10)Have you played the pokies in order to escape from worry or trouble?	1	2	3	4	5	6	7
11)Have you felt bad or guilty about your playing?	1	2	3	4	5	6	7
*12)*Have you thought you shouldn't play or should play less?	1	2	3	4	5	6	7
*13)*How often has anyone close to you complained about your poker machine play in the last 6 months?	1	2	3	4	5	6	7
*14)*How often in the last 6 months have you lied to others to conceal the extent of your involvement in pokie play?	1	2	3	4	5	6	7
*15)*How often have you hidden signs of your pokie playing from your spouse, partner, children, or other important people in your life?	1	2	3	4	5	6	7
*16)*How often have you spent more money on playing the pokies than you can afford?	1	2	3	4	5	6	7
*17)*How often has your pokie playing made it harder to make money last from one payday to the next?	1	2	3	4	5	6	7
*18)*How often have you had to borrow money to play with?	1	2	3	4	5	6	7

Still referring to your gambling activities over the last 6 months….				
In the past 6 months……				
*19a)*Have you and your partner put off doing things together?		Yes	No	
If participant answers yes to above				
*19b)*Was this made worse by your pokie playing?	Yes 1	Partly 2	No 3	N/A 4
*20a)*Have you and your partner criticised one another?		Yes	No	
If participant answers yes to above				
*20b)*Was this made worse by your pokie playing?	Yes 1	Partly 2	No 3	N/A 4
*21a)*Has your partner had difficulties trusting you?		Yes	No	
If participant answers yes to above				
*21b)*Was this made worse by your pokie playing?	Yes 1	Partly 2	No 3	N/A 4

13. The next questions require you to think of the situation where you have placed a bet on a poker machine and are waiting for the result. Please listen to each statement and indicate how you usually feel while the reels are still spinning and you are waiting for the result.

The choices are;
Not at all (Researcher: Code as 1)
Somewhat (Researcher: Code as 2)
Moderately so (Researcher: Code as 3)
Very Much so (Researcher: Code as 4)

1) I feel calm.	1 2 3 4
2) I feel tense.	1 2 3 4
3) I feel at ease.	1 2 3 4
4) I feel over-excited.	1 2 3 4

For the purpose of contacting you for the follow-up interviews we need to find a day and time that best suits you.

The next follow-up interview will be in _____ weeks from now which will make it the beg/mid/end of _____. There will be a total of five follow-up interviews at approximately 6 week intervals. These follow-up interviews are much shorter than this initial interview and will take only a few minutes.

Best Day and Time to contact you:_____

If you are not available at that time and we are asked by the person who answers the phone to identify ourselves, we will say our name and that we are from the University of Western Sydney. To protect your privacy we will not leave a message. If asked the purpose of our call we will state that we wish to know if you would like to participate in a research project into the money people spend on leisure activities. We will leave a phone number on which you can call us back. If we don't hear from you we will call again at the same time the following day.

Also, we need and address to post you your $20.00 gift voucher. A post office box, work or friend's address is fine if you would rather not give us your home address. The address you provide us will not be recorded on your questionnaire but on a separate list which will be used for mailing vouchers only. This practice is in accordance with the ethical guidelines for research by which we are bound. You can also collect the voucher from the Psychology building of the University at Milperra if that suits you better. You will receive another $30.00 voucher on the completion of your last follow-up interview. In total, you will receive $50.00 in vouchers for participating in the entire 6 interviews.

Do you have any questions?

THANK YOU FOR PARTICIPATING IN THIS STUDY.