

Disability and Community Services

An Exploratory Investigation of Online Gambling Amongst University Students in Tasmania

Gambling Support Program

Department of Health and Human Services

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This project was conducted by Corina Ly, a researcher with the Gambling Support Program (GSP) and overseen by Gavin Miller, coordinator of the program. The GSP is located within the Disability and Community Services of the Department of Health and Human Services. The program is responsible for gambling-related community education, social policy, research, harm minimisation, the Tasmanian Health and Wellbeing Fund, and The Charitable Organisations Grants Program. An integrated gambling network operates in Tasmania to promote and address social issues and concerns relating to gambling.

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EXECUTIVE SUMMARY

Aims of Research

Previous research suggests that there is a high participation rate of online gambling amongst university students and that they may be vulnerable to online gambling problems. The primary aim of this exploratory study was to investigate online gambling amongst students at the University of Tasmania with a focus on observing indications of problem gambling. This study was conducted for the purpose of guiding future policy decisions around online gambling, particularly as there is currently little information available about the situation.

Methodology

A self-selected sample of 148 students who had gambled online within the last three months completed an online survey about online gambling and potential correlates including demographics, education variables, venue gambling behaviour, drinking and smoking, preference of gambling forms, and measures of problem online gambling. Problem gambling was measured with the Canadian Problem Gambling Index (CPGI), an established measure of gambling severity. Gambling frequency and gambling session duration were also taken as secondary indicators of problem gambling.

Results

Demographics

- **Gender:** 108 males (73%) and 40 females (27%).
- **Age:** Mean = 24.98 years, SD = 7.6, Range: 18-59 years.
- **Ethnicity:** European origin (80.6%), Asian origin (17.4%), Other (2%).
- **Country of Birth:** Australia (75.5%), Malaysia (8.2%), China (4.8%), Other (11.5%).
- **English first spoken language:** 83% of the sample.
- **Marital status:** Married (10.3%), De facto (10.3%), Relationship (21.2%), Single (54.8%), Divorced/separated (3.4%).
- **Work status:** Full-time (13.6%), Part-time (17.7%), Casual (27.2%), Not working while studying (41.5%).

- **Gross income:** Less than \$10,000 (37.2%), 10,000 - 19,999 (31.8%), 20,000 - 29,000 (11.5%), 30,000 - 39,999 (5.4%), 40,000 - 49,999 (4.7%), 50,000 or more (10.3%).

Education Variables

- **Campus:** Hobart (66.2%), Launceston (31.1%), Cradle Coast (2.7%).
- **Student type:** Local (74.8%), Distance education/interstate (4.1%), International (20.4%), Exchange (one student).
- **Highest level of completed education:** High school/secondary education (63.2%), TAFE (6.9%), Undergraduate degree (22.2%), Postgraduate degree (7.6%).

Descriptive Data

Online Gambling Variables

- **Severity of online gambling:** 10.8% scored in the problem gambling range and 15.5% scored in the moderate-risk problem gambling range.
- **Frequency of online gambling sessions:** At least once a week (38.5%), At least once a fortnight (19.6%), At least once a month (14.2%), At least once in the past three months (27%).
- **Duration of online gambling sessions:** 40% gambled for more than one hour in most sessions.
- **Frequency played with money:** Every session (10.1%), Most sessions (4.7%), Some sessions (18.2%).
- **Age first gambled online:** Mean 21.77 years, SD 7.08
- **Favourite online game/activity:** Poker (35%) and Sports Wagering (28%) were the most popular games/activities.
- **Online gambling sites:** Use mainly Australian sites (49.7%), Use International sites (24.1%), Use both sites equally (12.4%), Not sure (13.8%).
- **Motivations for gambling (participants could select multiple ones):** Enjoyment (64.2%), Boredom (30.4%), Money (49.3%), Prizes (5.4%), Feeling of Rush (16.2%), All of the Above (8.8%).

Venue Gambling Variables

- **Frequency of venue gambling sessions:** At least once in the last 3 months (29.1%), At least once a fortnight (4.1%), At least once a week (8.8%).
- **Severity of venue gambling:** Out of the 80 venue gamblers, 17.9% were in the problem gambling range and 19.1% were in the moderate-risk problem gambling range.
- **Age first gambled at a venue:** Mean 18.56 years, SD 3.49
- **Favourite venue gambling activity/game:** Poker (23%) and Pokies (20%) were the most popular.

Preference of Online or Venue Gambling

- **Preference for online gambling:** 28% (Convenience was most common reason)
- **Preference for Venue gambling:** 56% (Social atmosphere was most common reason).
- **No preference:** 16%

Smoking and Drinking

- **Frequency of smoking:** Never or rarely smoked (69.6%), Everyday (14.9%)
- **Frequency of drinking:** Social occasions (58.8%), At least 3 days a week (23.6%)

Analyses of Problem Gambling

Individual Correlations

- **Online gambling severity** positively correlated with venue gambling severity, venue gambling frequency, ethnicity, and frequency played with money.
- **Online gambling frequency** positively correlated with smoking frequency and venue gambling frequency.
- **Online gambling session duration** positively correlated with drinking frequency, smoking frequency, frequency played with money, venue gambling severity, and venue gambling frequency.

Predictors of Problem Gambling

For entire sample

- **Predictors of online gambling severity:** Venue gambling severity, frequency played with money, and ethnicity.
- **Predictors of online gambling frequency:** Frequency of smoking
- **Predictors of online gambling session duration:** Frequency of smoking, frequency of drinking, and venue gambling severity.

For regular gamblers (gambled online at least once a fortnight)

- **Predictors of online gambling severity:** Venue gambling severity, frequency played with money, student type
- **Predictors of online gambling frequency:** Frequency of drinking
- **Predictors of online gambling session duration:** None.

- **Gender differences:** Males had higher mean scores in online gambling severity and online gambling frequency than females.

Summary

- The number of university students in Tasmania who are participating in online gambling is at least more than double the estimate made in 2008 (SEIS, 2008).
- Approximately a quarter of this sample was defined as problem gamblers or at moderate-risk of having gambling problems.
- Over half of the sample were venue gamblers and venue gambling severity is the strongest predictor of online gambling severity. Being both a regular online and venue gambler appears to be a risk factor.
- The majority of individuals who gamble both online and at venues prefer venue gambling; with the main reason being that the social atmosphere is important. Most individuals who prefer online gambling report that convenience is the main reason for this preference.
- The majority of students in the sample are playing with free credits; however, playing with money positively predicted gambling severity.
- The majority are playing skills-based games, such as Poker and Sports Wagering

- More males are participating in online gambling but there is a gender difference in online gambling problems only amongst regular gamblers.
- Being of Asian heritage positively predicts online gambling severity.

Recommendations

The following recommendations are made for future government policy:

1. Increase community education around online gambling.

Community education about venue gambling already exists and it is important that the community are also made aware about the risks of online gambling. With regards to students, community educators should have the specific aims of increasing awareness that students are an at-risk group and more generally, to inform individuals of the purpose and risks of online gambling free credit trials.

2. Incorporating education about online gambling in programs for adolescents

Education about the risks of online gambling should be considered with existing programs about other risk-taking behaviours, such as drinking and smoking, and traditional gambling. Online gambling is arguably more important to include in such programs as adolescents are able to access online gambling programs. Having said that, educators need to be aware of not inadvertently promoting online gambling products.

3. Raising awareness amongst university services, including international student services.

Depending on the results of future research (i.e. random-sample prevalence studies of university students) providing added evidence of online gambling problems, it is important that university services are made aware of the issue. Further, if online gambling problems appear to be particularly prevalent among international students, such services should also be informed.

4. Monitor participation of online gambling

A balanced approach to the online gambling issue will require ongoing monitoring of online gambling participation. Currently, there is no evidence that there is a high rate of problem online gambling in the community; however, if problem gambling rates do increase to a point of concern, it will be extremely difficult to

control. The challenge will be balancing not overreacting to the situation with being reasonably vigilant.

5. Screen for online gambling problems

Consider screening for online gambling problems at gambling service providers. This can take the form of a single question or item when assessing problem gamblers. Currently, there is a low base rate of online gambling participation but beginning to routinely screen for this will give indications of the rate at which participation/problems rates are increasing or not increasing.

The following recommendations are made for future research:

- An updated prevalence study needs to be conducted amongst university students and the general population. The next SEIS is due to be undertaken in 2012.
- Careful definition of 'an online gambler'. The results of this study suggest that it is important to distinguish between recreational gamblers and regular online gamblers. Many previous studies have utilised the criteria of 'having gambled online at least once in the previous 12 months', which may misleadingly inflate participation rates. It is important to have participants specify the frequency with which they gamble. The same principle applies to the type of gambling being played as well. Online lotteries, for example, have been showed to be a particularly low-risk game (as with land-based lottery gambling) and as such, the findings related to lottery gamblers may have different implications. This is not to understate the risks associated with lottery players, however, it would be useful to collect this information in future studies.
- Include specific measures on the amount of time spent gambling in addition to the amount of money spent when gambling online.

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BACKGROUND

Online Gambling

What is Online Gambling?

Online gambling refers to any form of gambling undertaken on the internet, including wagering (e.g. racing, sports betting), gaming (e.g. poker, casino games and virtual electronic gaming machines) and lotteries/keno (Productivity Commission, 2010). The term *interactive gambling*, which is sometimes used interchangeably with online gambling, is a wider term which incorporates any form of gambling accessed via interactive mediums (e.g. mobiles, digital television). The current study focuses specifically on online gambling.

How Many People Participate in Online Gambling?

According to the Productivity Commission (PC; 2010) report, most survey studies (AC Nielson, 2007; Allen Consulting Group, 2003; Queensland Government, 2009) have found that 0.1 to 1 per cent of Australians engage in online gaming. The Allen Consulting Group (2009), in their review of online gambling in Australia, reported that prevalence rates ranged from 0.2 to 2.7 per cent (depending on state or territory) of the Australian adult population. Closer to home, the Social and Economic Impact Study (SEIS; 2008) concluded that under 2 per cent of Tasmanian adults gamble online.

International research has generally produced similar results. Prevalence rates in North America (American Gaming Association, 2006) Canada (Wood & Williams, 2009), and the UK (Wardle et al., 2007) are reported to be comparable to Australia with higher rates in Europe (Wood & Williams, 2009).

While these figures are low compared to participation rates of traditional venue gambling, the last decade has witness a rapid increase of online gambling participation (Griffiths, 2001; Ialomiteanu & Adlaf, 2001; PC, 2010). Poker and Sports Wagering appear to be the most popular forms of online gambling both in Australia (PC, 2010)

and overseas (Derevensky & Gupta, 2007; Goff & Garrahan, 2005; Wood & Williams, 2009).

Problem Online Gambling

The prevalence of current online gambling problems is unknown. The research on problem online gambling is currently limited, although studies suggest that the prevalence of problem gambling is considerably higher amongst online gamblers compared with non-online gamblers (PC, 2010; Wood & Williams, 2009). This is quite possibly because problem gamblers are more likely to be attracted to online gambling than recreational gamblers, especially as problem gamblers are more likely to participate in a range of different gambling types in general (SEIS, 2008). This means that problem online gamblers may have a pre-existing gambling problem prior to gambling online and as such, there is currently no research to suggest that online gambling *cause* problem gambling (Derevensky & Gupta, 2007).

The more likely possibility is that online gambling helps *facilitate* gambling problems, particularly in individuals who are already vulnerable to gambling problems. Amongst the speculated risks unique to online gambling include its 24-hour access, convenience, anonymity, social isolation, and drinking and substance use while gambling (Griffiths, Parke & Wood, 2006). Other concerns include potential underage access and inadequate consumer protection. Some research (e.g. Griffiths, 2003; Wood & Williams, 2009) suggests that individuals may prefer online gambling to venue-based gambling because of its associated convenience, comfort, ease and rate of play, and potential for higher wins.

Online Gambling Amongst University Students

Studies suggest that certain groups are more likely to be attracted to online gambling. In terms of gender, there is research to suggest that online gambling in Australia is more frequently used by males (more than double, according to the Australian Internet and Technology Report, 2009; Wood & William, 2009), particularly amongst the educated and those in professional occupations. Studies

have indicated that female participation rates in both venue and online gambling are rising (Corney & Davis, 2010) and it has been speculated that women may be particularly attracted to online gambling because of its associated safety and convenience, especially if they have many life responsibilities (e.g. women with young children). However, these findings are mostly preliminary and it appears that online gambling is currently a male-dominated activity.

Tertiary students have been identified as an at-risk group (Wood, Griffiths, & Parke, 2007). Many students have increased freedom at this age, are frequent internet users and fall into the age group (18-24 years) where problem gambling peaks (Gernstein et al; 1999; PC, 2010). A large Canadian prevalence survey of online gambling in Canada and various other countries, reported that student status and education level were significant predictors of online gambling (Wood & Williams, 2009), although prevalence studies of online gambling amongst students are limited. The majority have been international and have utilised self-selected samples. Petry and Weinstock (2007), for example, administered SOGS and General Health Questionnaires to individuals who were randomly approached at an American university. Out of 1356 student participants, 23% reported ever gambling on the internet, 6.3% gambled online weekly and about third of these online gamblers (who had ever gambled online) were classified as probable pathological gamblers. Five years earlier, Ladd and Petry (2002) distributed surveys to 389 self-selected patients from university medical clinics. The authors reported that 3.6% gambled online weekly and online gamblers had higher SOGS mean scores than non-online gamblers.

In the United Kingdom, Griffiths and his colleagues conducted a couple of exploratory studies on online gambling amongst students. In 2007, Wood et al. examined online poker amongst 422 self-selected participants (mean age 21 years, $SD=3.4$, 362 males) who completed an online survey. Online poker was found to be played at least twice weekly by a third of participants, 18% were found to be problem gamblers, and 30% had sub-problem gambling problems (according to DSM-IV criteria). Similarly, Griffiths and Barnes (2008) surveyed a sample of 473 students that included non-gamblers, venue gamblers as well as internet gamblers. Amongst 105 internet gamblers, 20 were classified as problem gamblers (according to SOGS

scores), 89 were male and 16 were female. Chi-square analyses showed that males were significantly more likely to be both internet gamblers and problem gamblers, and that internet gamblers were more likely to be problem gamblers than non-internet gamblers. It should be noted that an online gambler was defined as anybody who had ever gambled on the internet and that the lottery was the most popular form of gambling. Most recently, Matthews, Farnsworth and Griffiths (2009) using a similar methodology with 127 online gamblers, reported that 19% were found to be problem gamblers and a further 18% defined as potential problem gamblers, according to SOGS scores.

Aims of the Current Study

The primary aim of the current study was to explore online gambling amongst university students in Tasmania. This is the first published study (to the author's knowledge) to investigate online gambling amongst university students in Australia. A range of variables potentially related to online gambling, including demographics, education variables, smoking and drinking frequency, and venue gambling participation and problems, were investigated. Most importantly, particularly for the purpose of guiding future policy decisions, there was a focus on observing indications of problem levels of online gambling.

METHODOLOGY

Participants

Two hundred and two individuals completed the survey, with 54 of them found ineligible because they did not gamble online. The final sample comprised of 148 University of Tasmania (UTAS) students who had participated in online gambling at least once in the three months prior to survey completion. 66.2% were based at the Hobart (Sandy Bay) campus, 31.1% at Launceston and 2.7% at Cradle Coast.

Eligible participants comprised of 108 males (73%) and 40 females (27%). Age ($M = 24.98$, $SD = 7.61$) ranged from 18-59 years. Regarding ethnicity, 80.6% of the sample identified as having a European origin, 17.4% of an Asian origin and the remaining 2% identified being in the 'Other' category. 75.5% were born in Australia, 8.2% were born in Malaysia, 4.8% were born in China and the remaining participants were born in various other countries. English was the first spoken language for 83% of the sample and 22.3% could speak another language other than English. Regarding marital status, 10.3% identified being married, 10.3% de facto, 21.2% in a (non-married) relationship, 54.8% single and 3.4% divorced/separated.

74.8% were local students, 4.1% were distance education (interstate) students, 20.4% international students and one student was on exchange. Regarding highest level of completed education, 63.2% had completed high school/secondary education, 6.9% TAFE, 22.2% undergraduate studies, and 7.6% a postgraduate degree.

Along with their studies, 13.6% were working full-time, 17.7% part-time, 27.2% casual and 41.5% were unemployed. 37.2% were earning a gross income of less than \$10,000, 31.8% between 10,000 and 19,999, 11.5% between 20,000 and 29,000, 5.4% between 30,000 and 39,999, 4.7% between 40,000 and 49,999 and 10.3% were earning 50,000 or more.

Measures

An online gambling survey (see Appendix A) was developed by the primary researcher to explore online gambling variables (including games played, history, frequency, session duration, severity, motivations, frequency play with money), venue gambling variable, preference of online or venue gambling, and potential correlates including demographics, smoking and drinking behaviour. Choice of questions were guided by the literature and the purpose of informing government policy regarding potential online gambling problems, including any relationships to venue gambling.

Problem Gambling

The Canadian Problem Gambling Index (CPGI; Ferris & Wynne, 2001) was the primary scale used to measure level of problem gambling. The CPGI is a 9-item index that measures gambling severity on a four-point Likert scale (0 = Never to 3 = Almost always). An example of an item is 'Have you bet more than you could afford to lose?' Total scores range from 0 to 27. Interpretation of total scores are categorised into the following risk levels:

Non-problem gambling: 0

Low-risk gambling: 1-2

Moderate-risk gambling: 3-7

Problem gambling 8-27

The CPGI has been shown to have good psychometric properties (Ferris & Wynne, 2001).

Frequency and duration of sessions were also taken as secondary indicators of problem gambling

Procedure

The study procedure was similar to that used by Wood et al., (2007). A bulk email (see Appendix B) was sent to all students at the three campuses of the University of Tasmania, inviting them to participate in the study if they had gambled online in the previous three months.

Participants completed and submitted the survey online, which was accessed via a link in the email. The link took participants directly to an information sheet (see Appendix D). Participants were required to acknowledge reading the information sheet, as well as being over 18 years of age, prior to completing the survey.

The survey was designed using Survey Monkey, a commonly-used online survey tool, which was also used to collect and collate the data. The data was transferred to a Statistical Package of Social Sciences (SPSS) file in order to be analysed.

Surveys were completed over a five-week period from early September to early October 2010. A follow-up bulk email (see Appendix C) was sent out half way through the recruitment period to remind students to participate if they were eligible.

Five dollar store vouchers were provided as incentives for participation. Participants provided contact details at the end of the survey, which were deleted once store vouchers were posted by the researcher.

RESULTS

The results of this study are presented in two main sections.

The first is the **Descriptive Data** section. It presents basic descriptive data, such as frequencies, averages etc on the main study variables. The variables are presented thematically, under four headings: *Online Gambling, Venue Gambling, Preference of Online or Venue Gambling, and Smoking and Drinking.*

The second section shows the results of the **Analyses of Problem Gambling.**

This is where the relationships between the main variables and problem gambling are analysed.

I. DESCRIPTIVE DATA

This section presents descriptive data. The data is presented in either graph, table or text format, depending on the type of data being presented.

Online Gambling Variables

Figure 1. Severity of Online Gambling (CPGI) Amongst Online Gamblers.

Figure 1 shows that just over 25% of online gamblers were either in the problem gambling or moderate-risk problem gambling range.

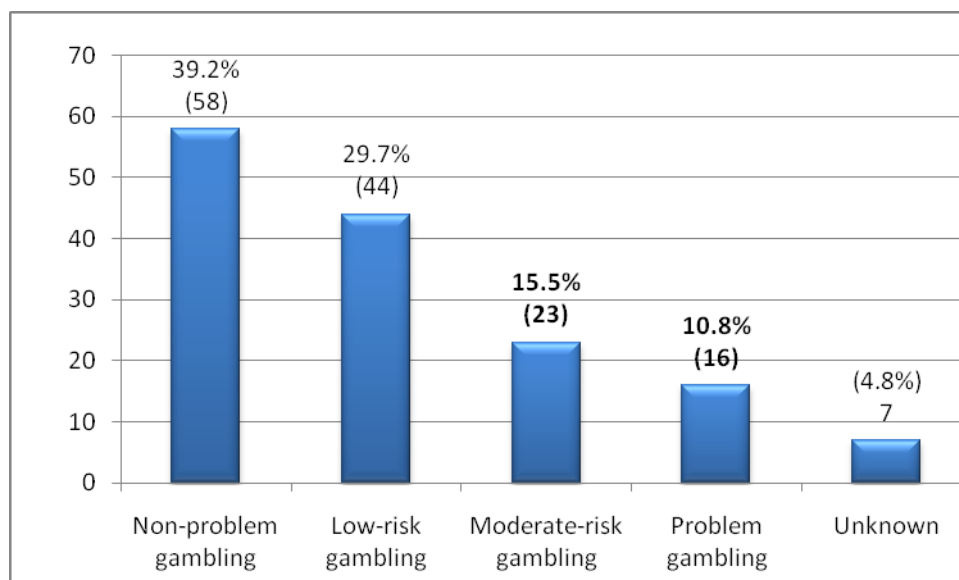


Table 1: Duration of Most Online Gambling Sessions

Table 1 shows that approximately 40% of the sample gambled for more than one hour in most sessions.

Session Duration	Number of Participants
Less than one hour	88 (59.5%)
1-2 hours	35 (23.6%)
2 -3 hours	14 (9.5%)
3 hours or longer	10 (6.8%)
Unknown	1 (0.7%)

Table 2: Frequency of Online Gambling Sessions

Table 2 shows that almost 60% of the sample are considered to be regular online gamblers (at least once a fortnight).

Frequency	Number of Participants
At least once a week	57 (38.5%)
At least once a fortnight	29 (19.6%)
At least once a month	21 (14.2%)
At least once in past three months	40 (27%)
Unknown	1 (0.7%)

Table 3: Frequency Played with Money when Gambling Online

Table 3 shows that almost 15% of the sample gambled with money in most sessions or more. The remaining participants gambled mostly on free credit trials.

Frequency	Number of Participants
Never	35 (23.6%)
Occasional session	64 (43.2%)
Some sessions	27 (18.2%)
Most sessions	7 (4.7%)
Every session	15 (10.1%)

Age First Gambled Online

Mean: 21.77 years

Standard Deviation: 7.08

Figure 2: Favourite Online Game/Activity

As can be seen in Figure 2, Poker and Sports Wagering were reported to be the favourite games (approximately half of the sample selected either of these as their favourite game/activity).

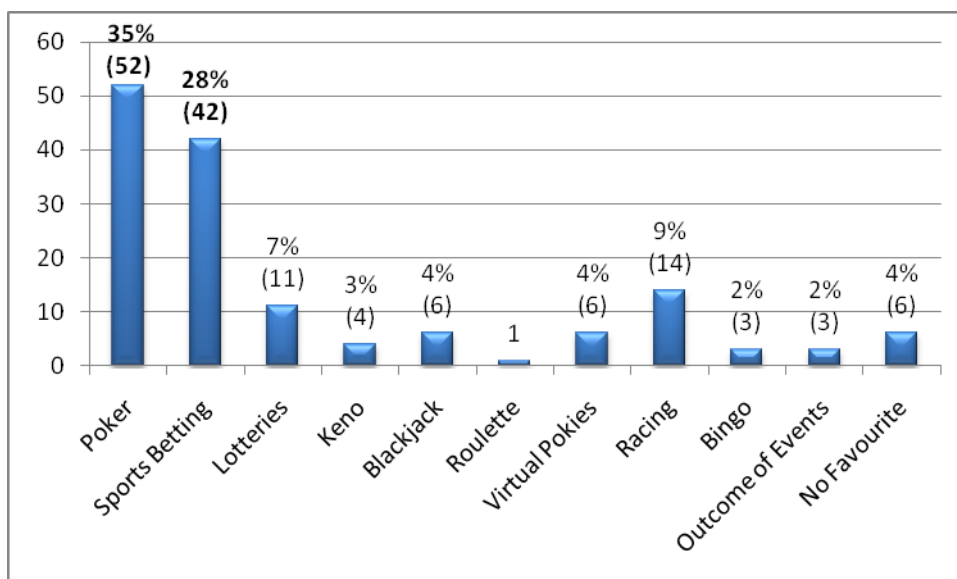


Table 4: Online Gambling Sites Used for Majority of Gambling Sessions

Table 4¹ shows that approximately half of the sample reported primarily using Australian sites and a quarter were using international sites.

Sites	Number of Participants
Australian sites	72 (49.7%)
International sites	35 (24.1%)
Both sites	18 (12.4%)
Not sure	20 (13.8%)

Table 5: Motivations for Online Gambling (participants could select multiple motivations as applicable).

Table 5 shows that enjoyment and money were the most common motivations, followed by boredom.

¹ Number of participants add to a total of 145 as three participants did not respond to this question.

Motivation	Number of Participants
Enjoyment	95 (64.2%)
Boredom	45 (30.4%)
Money	73 (49.3%)
Prizes	8 (5.4%)
Rush	24 (16.2%)
All of the above	13 (8.8%)

Venue Gambling Variables

Table 6: Frequency of Venue Gambling Sessions

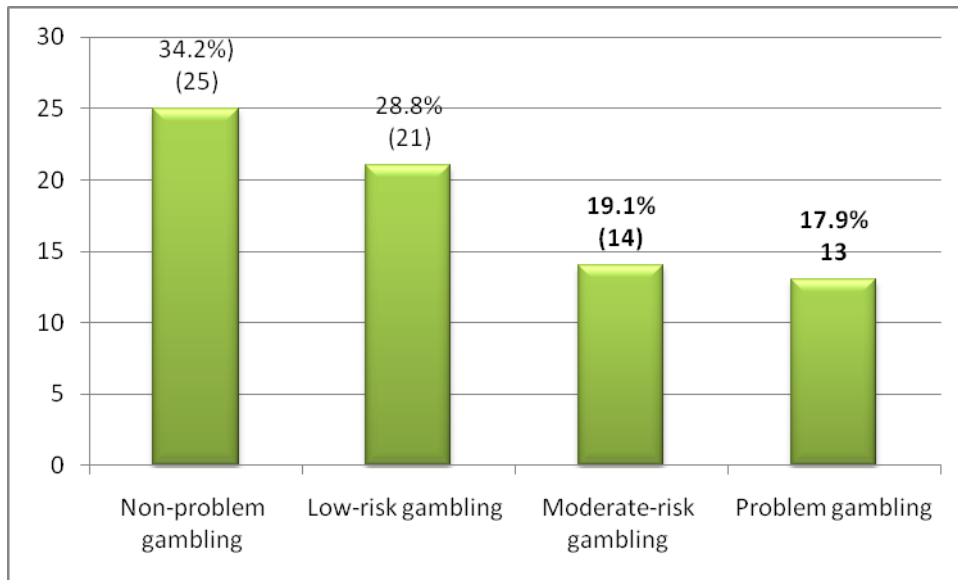
Table 6 shows that 54.2% entire sample gambled at a venue at least once in the last three months.

Motivation	Number of Participants
Never	14 (9.5%)
Once or twice a year	47 (31.8%)
At least once in the last 3 months	43 (29.1%)
At least once a month	18 (12.2%)
At least once a fortnight	6 (4.1%)
At least once a week	13 (8.8%)
Unknown	7 (4.7%)

The below data applies to the 80 participants who gambled BOTH online and at venues in the last three months.

Figure 3: Venue Gambling Severity Score (CPGI)

Figure 3² shows that 37% of the participants who gambled both online AND at venues were either in the problem gambling range or moderate-risk problem gambling range for venue gambling.



Age First Gambled at a Venue

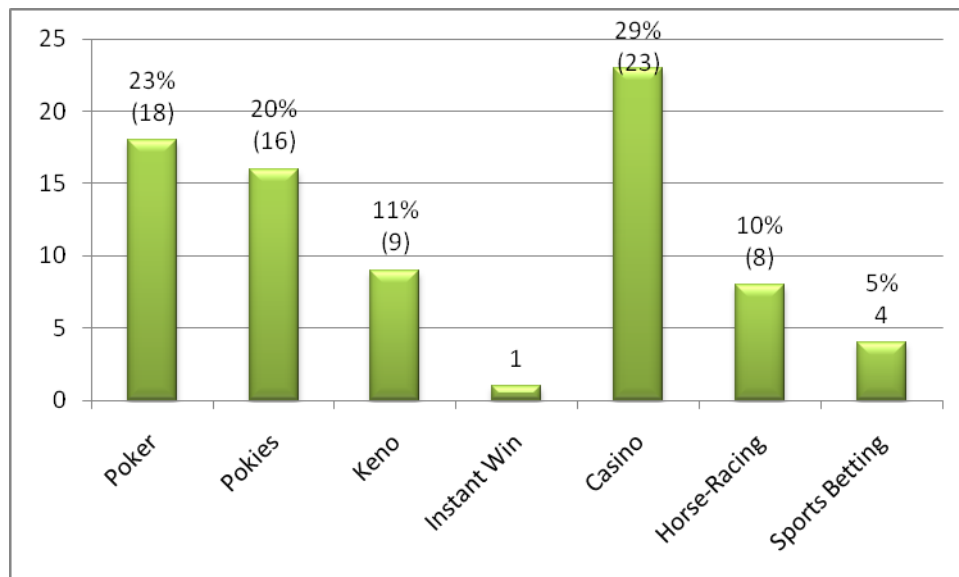
Mean: 18.56

Standard Deviation: 3.49

² Number of participants add to a total of 73 as seven participants did not respond to this question.

Figure 4: Favourite Venue Gambling Game/Activity

Figure 4³ shows that Casino games followed by Poker and Pokies (electronic gaming machines) were the most popular venue games.



Preference of Online or Venue Gambling

Table 7: Preference of Online or Venue Gambling

Table 7 shows that over half of the participants preferred venue gambling, with most reporting the social atmosphere (being around people) at venues to be the main reason for this preference. Twenty-eight per cent preferred online gambling, with most reporting convenience to be the main reason.

³ Number of participants add to a total of 79 as one participant did not respond to this question.

Note: Question was asked in an open-format.

Preference	Number of Participants	Reason
Online Gambling	22 (28%)	64% (n = 14) reported that convenience was main reason 18% (n = 4) better control of money 2 participants reported that it was less intimidating
Venue Gambling	45 (56%)	71% (n = 32) reported that the social atmosphere was the main reason 3 participants reported drinking the main reason
No preference	13 (16%)	N/A

Smoking and Drinking

Smoking Frequency

As can be seen below, almost 70% never or rarely smoked and almost 15% smoked everyday.

Never or rarely – 103 (69.6%)

Social occasions – 16 (10.8)

At least 3 days a week – 7 (4.7%)

Everyday – 22 (14.9%)

Drinking Frequency

As can be seen below, almost 60% drink on social occasions and almost a quarter of the sample drink at least three days a week.

Never or rarely – 23 (15.5%)
Social occasions – 87 (58.8%)
At least 3 days a week – 35 (23.6%)
Everyday – 3 (2%)

2. ANALYSES OF PROBLEM GAMBLING

This section reports the results of the analyses of problem gambling.

As mentioned in the methodology, the CPGI (measure of gambling severity) was the main measure used to quantify level of problem gambling. Gambling frequency and gambling session duration were taken as secondary indicators.

Correlations

Table 8 presents the correlations between the three indicators of problem gambling and the main study variables. This table allows one to observe the strength and significance of the individual relationships between two variables.

The figures in blue shaded boxes were the correlations shown to be **statistically significant**. A statistically significant result means that **the result can be attributed to more than chance**. The number is an arbitrary indicator of the **strength** of the correlation (0 = no relationship – 10 = perfect relationship).

Table 8: Pearson's Correlations of Variables with Online Gambling Severity, Frequency and Session Duration.

VARIABLES	MEASURES OF PROBLEM ONLINE GAMBLING		
	Online gambling severity (CPGI)	Online gambling frequency	Online gambling session duration
Gender	-.07	-.16	.05
Age	-.03	-.06	-.03
Ethnicity	.33***	.16	.06
Drinking Frequency	.02	.14	.26**
Smoking Frequency	.08	.23**	.28**
Age first gambled online	-.03	-.04	-.06
Frequency played with money	.34***	.14	.26**
Venue gambling severity (CPGI)	.77***	.17	.28**
Venue gambling frequency	.35***	.35***	.30***
Online gambling severity (CPGI)		.23**	.39***
Online gambling frequency			.23**

Note. *** $p < .001$, ** $p < .01$, * $p < .05$

As can be seen in Table 8, online gambling severity positively correlated with ethnicity, student status, frequency played with money, venue gambling severity and

venue gambling frequency. Venue gambling severity shared the strongest correlation with online gambling severity.

Online gambling frequency positively correlated with smoking frequency and venue gambling frequency.

Online gambling session duration positively correlated with drinking frequency, smoking frequency, frequency played with money, venue gambling severity, and venue gambling frequency.

Predictors of Problem Gambling

A standard multiple regression (MR) was undertaken to identify which variables predicted problem gambling. MR provides more information than the simple correlations shown above in two main ways:

1. MR identifies which variables *predict* problem gambling while simple correlations only show basic relationships (as scores for one variable change, scores for the other variable change as well).
2. MR allows one to investigate multiple relationships *simultaneously*. This means that the effects of other important variables are also taken into account so that one can see the relative influence of the predicting variables in question. It is therefore possible that two variables can share a simple correlation but are not predictive of each other.

Table 9 presents the MR results for demographics and frequency of drinking and smoking predicting problem online gambling severity, frequency and duration. Table 10 presents the results for venue gambling severity and venue gambling frequency predicting online gambling severity, frequency and duration. These results have been presented in two separate tables for statistical reasons as not all online gamblers participated in venue gambling.

Again, a **statistically significant** result indicates that the **results can be attributed to more than chance**. The number indicates the **size** of the

contributions that the predicting variables make to the problem gambling variable in question.

Tables 9 and 10 show that:

- Venue gambling severity, ethnicity, and frequency played with money predicted online gambling severity.
- Smoking frequency predicted online gambling frequency.
- Smoking frequency, drinking frequency, and venue gambling severity predicted online gambling session duration.

Table 9: Regression Analyses Results for Predictors of Online Problem Gambling for All Online Gamblers (entire sample).

PREDICTOR	MEASURES OF PROBLEM ONLINE GAMBLING		
	Online gambling severity (CPGI)	Online gambling frequency	Online gambling session duration
Gender	-.00	-.10	.12
Age	.05	-.32	-.09
Ethnicity	.35***	.17	.09
Student Type	.02	.14	.02
Age first gambled online	-.16	.29	-.01
Frequency played with money	.43***	.07	.17
Smoking Frequency	-.03	.21*	.26**
Drinking Frequency	-.10	.14	.21*

Note. *** $p < .001$, ** $p < .01$, * $p < .05$

Table 10: Regression Analyses Results for Venue Gambling Severity and Venue Gambling Frequency as Predictors of Online Problem Gambling.

PREDICTOR	MEASURES OF PROBLEM ONLINE GAMBLING		
	Online gambling severity (CPGI)	Online gambling frequency	Online gambling session duration
Venue gambling severity (CPGI)	.81***	.15	.26*
Venue gambling frequency	-.12	.10	.08

Note. *** $p < .001$, ** $p < .01$, * $p < .05$

REGULAR GAMBLERS

MR analyses was also performed separately for regular online gamblers ($n = 87$). A regular online gambler was defined as somebody **who gambled online at least once a fortnight**.

Table 11 shows that amongst the regular gamblers:

- Student type (local, international student), frequency played with money, and venue gambling severity positively predicted online gambling severity.
- Drinking frequency predicted online gambling frequency.
- None of the variables predicted online gambling session duration.

Table 11: Regression Analyses Results for Predictors of Online Problem Gambling for Regular Gamblers (n = 87).

PREDICTOR	MEASURES OF PROBLEM ONLINE GAMBLING		
	Online gambling severity (CPGI)	Online gambling frequency	Online gambling session duration
Gender	.08	-.33	.02
Age	.13	-.10	-.15
Student Type	.41**	-.21	.24
Age first gambled online	-.15	.69 (as)	.35
Frequency played with money	.39*	-.41 (as)	-.12
Venue gambling severity (CPGI)	.37*	.08	.14
Venue gambling frequency	-.25	-.05	-.02
Smoking Frequency	-.05	.25	.43
Drinking Frequency	.15	.46*	.35

Note. *** $p < .001$, ** $p < .01$, * $p < .05$, as = almost significant ($p < .10$)

GENDER

To determine if there were differences between males and females in problem online gambling score as well as venue gambling, scores, t-tests were conducted.

T-tests determine whether there are meaningful differences between average scores for two groups.

Table 12 shows that when looking at the entire sample, there were no statistically significant differences between males and females in their scores. However, as can be seen in Table 13, there were significant gender differences in online gambling severity and frequency amongst the **regular online gamblers**, with males have higher average scores than females. The effect size (last column) shows the **size** of these differences.

Table 12: Independent Samples T-Test Results of Gender for All Online Gamblers.

Outcome Variable	Mean Difference (SD)	Males vs Females t statistic	Effect Size <i>d</i>
Online Gambling CPGI	.59	.78	ns
Online Gambling Frequency	.45	1.96	ns
Online Gambling Session Duration	-.09	-.54	ns
Frequency Play with Money	.37	1.69	ns
Venue Gambling CPGI	.84	-.21	ns

Note. *** $p < .001$, ** $p < .01$, * $p < .05$

Table 13: Independent Samples T-Test Results of Gender for Regular Online Gamblers.

Outcome Variable	Mean Difference (SD)	Males vs Females t statistic (df= 14)	Effect Size <i>d</i>
Online Gambling CPGI	1.49	3.02**	0.58 ($r = 0.28$)
Online Gambling Frequency	.26	2.72**	0.62 ($r = 0.30$)
Online Gambling Session Duration	.17	.92	ns
Frequency Play with Money	.32	1.20	ns
Venue Gambling CPGI	1.17	.61	ns

Note. *** $p < .001$, ** $p < .01$, * $p < .05$

DISCUSSION

The aim of this study was to obtain information about online gambling amongst university students with a focus on observing indications of problem online gambling. The variables that emerged as important contributors to problem gambling are discussed below.

Online Gambling Problems and Participation

This study raises concerns that online gambling may be a growing but hidden problem amongst university students. Almost 11% of the sample was classified as problem gamblers and a further 15.5% at moderate-risk for gambling problems. Collectively, this suggests that approximately a quarter of this sample have potential gambling problems. While it should be kept in mind that this was not a prevalence study, this finding is consistent with previous research (Griffiths & Barnes, 2008; Matthews et al., 2009; Petry & Weinstock, 2007; Wood et al., 2007), which also utilised self-selected samples, that suggests that a concerning percentage of online gamblers have gambling problems.

In 2008, the SEIS reported that students made up 1.8% of the online gamblers in Tasmania. This figure would suggest that there are less than 65 student online gamblers in Tasmania (the SEIS reported that less than 3600 adults gamble online). Given that the sample size of online gamblers in the current study ($N = 148$) was more than double the SEIS estimate, a prevalence figure of 1.8% is not supported by these findings. It is possible that students were not representative in the SEIS sample as many students do not have phone landlines, which was the primary way in which researchers recruited participants. This finding is also not surprising given that online gambling participation has likely increased over the last two years and there is no specific reason to suspect that Tasmanian prevalence figures would differ from other western populations.

Relationship between Venue Gambling and Online Gambling

Previous researchers have suggested that regular gamblers are more likely to try a range of different gambling products than non-regular gamblers (SEIS, 2008). In the

current study, over half of the sample of online gamblers were also venue gamblers and 37% of these people scored in the problem gambling or moderate-risk range for venue gambling. Venue gambling severity was also found to be the strongest predictor of online gambling severity.

These results make it difficult to ascertain whether participation in online gambling *causes* gambling problems. So while there is no direct evidence that this is the case, it is likely that online gambling would help *facilitate* gambling problems, regardless of whether or not venue gambling problems precede the onset of online gambling participation/problems. In particular, the nature of online gambling affords the individual the convenience to continue gambling if issues start to arise that prevent them from gambling at venues (e.g. family members finding out, being able to gamble during working/studying hours). Also, it appears that if an individual is regularly participating in *both* online and venue gambling, this may a risk factor for developing gambling problems.

Frequency Played with Money

There was a positive relationship between the frequency with which online gamblers played with money and online gambling severity for both the entire sample (including non-regular/recreational gamblers) and the regular gambler sample. In other words, the more often online gamblers were playing with money, the more likely they were to score in the problem gambling range.

It should be noted that the majority of the entire sample (two thirds) was not playing with money (free credits etc) for most of their sessions. This suggests that many of these online gamblers were not currently experiencing problems and that the nature of their playing is recreational. However, this issue is of concern due to gaming sites offering an increasing number of free credit gambling trials for the purpose of enticing individuals to eventually play with money. Many of these 'free' trials have better winning odds than games that involve money. Individuals may begin playing for free credits or other non-monetary incentives, and it is when they reach the point of playing with money that may be identified as an indicator of future problems.

Ethnicity and Student Type

Ethnicity was found to be a significant predictor of online gambling severity in the entire sample. Student type was also found to be a predictor of online gambling severity amongst the regular gamblers. However, as there was a strong positive correlation between ethnicity and student status (many of the international students had an Asian origin), it is likely that student status emerging as a predictor is a function of ethnic background. Approximately 80% of the sample had a European background and 17.4% had an Asian background. These findings are consistent with research finding a strong relationship between Asian heritage and gambling participation and problem gambling (e.g. Alegria et al., 2009). Ethnicity has also been found to be a significant predictor of gambling problems specifically in university students (Clarke et al., 2006). This relationship is often attributed to the fact that gambling is deeply ingrained in many Asian cultures and as such, may put individuals at a higher risk of gambling problems.

Gender and Gambling Activity/Game

As expected, males made up the majority of the sample (three quarters). Further, it was found that these males had higher rates of participation in online gambling, and that there were significant gender differences for online gambling severity and frequency scores *amongst regular gamblers*. When looking at these scores for the whole sample (with recreational gamblers), no gender differences were found. In other words, problem gambling scores for males, on average, are higher than females but only when gambling becomes a regular habit. As such, young males are at highest risk of problems for online gambling (as is the case for venue gambling).

Young males are also more likely to be attracted to Poker and Sports Wagering and other gambling forms involving skill (PC, 2010). Consistent with previous studies (Wood et al., 2007), Poker and Sports Wagering were the two most common online games/activities played. Researchers suggest that the popularity of these games relates to their perceived financial value (no casino house edge), that they involve an element of skill (and thus better winning odds), and opportunities for gamblers to compete with each other (Griffiths et al., 2006). Online poker in particular is

regarded to be more socially acceptable with one of the proposed influencing factors being the rise of celebrity-poker (Griffiths et al., 2006).

These findings further reinforce the idea that online gamblers present with a profile different from the more 'typical' gamblers attracted to electronic gaming machines. This suggests that the motivations for gambling would differ across the 'types'. For example, students may be motivated more by winning money (most popular motivation endorsed by participants in current study), particularly if they believe that they possess the skills necessary to acquire such wins. Another implication could be that the amount of money that is lost in online gambling may not be as consequential as in traditional venue gambling. Instead, we may be dealing with a separate issue of the amount of *time* spent on online gambling. This is important to note for the purpose of accurately measuring and defining problem online gambling.

Drinking and Smoking

Despite previous findings that smoking and drinking are highly correlated with venue problem gambling (PC, 2010), the current results do not provide direct evidence that they are related with online gambling problems. Interestingly, frequency of drinking and smoking did not positively correlate with online gambling *severity*, however, they did predict online gambling frequency and session duration. Specifically, frequency of drinking positively correlated with duration of online gambling sessions and frequency of smoking correlated with both frequency and duration of online gambling. Additionally, smoking frequency positively predicted frequency in the whole sample but only drinking frequency positively predicted online gambling frequency amongst regular gamblers. This is consistent with findings of the SEIS (2008) that regular gamblers were more likely to be heavy drinkers than non-regular gamblers, however, "moderate risk and problem gamblers were no more likely to be heavy drinkers than other regular gamblers" (p.xv).

Limitations of Study

The main limitation of this study was that it utilised a self-selected sample, meaning that the degree to which the results can be generalised to other university students is unclear. There is also the important question of the degree to which the results

are applicable to the wider population, or more specifically to other members of the young adult population and/or to educated employed individuals.

Researchers speculate that university students are particularly vulnerable because they possess many of the proposed risk factors for high participation in online gambling, including education, youth, familiarity with online products, and that they have the greatest exposure and freedom to gamble online (e.g. between study sessions etc). If this view is taken, it would suggest that these results could apply to individuals who possess these same risk factors, for example, male professionals, who have also been identified as an at-risk group (Wood & Williams, 2009).

Summary and Recommendations

From the findings of the current study, the following conclusions were drawn:

- The number of university students in Tasmania who are participating in online gambling is at least more than double the estimate made in 2008 (SEIS, 2008).
- Approximately a quarter of this sample was defined as problem gamblers or at moderate-risk of having gambling problems.
- Over half of the sample were venue gamblers and venue gambling severity is the strongest predictor of online gambling severity. Being both a regular online and venue gambler appears to be a risk factor.
- The majority of individuals who gamble both online and at venues prefer venue gambling; with the main reason being that the social atmosphere is important. Most individuals who prefer online gambling report that convenience is the main reason for this preference.
- The majority of students in the sample are playing with free credits; however, playing with money positively predicted gambling severity.
- The majority are playing skills-based games, such as Poker and Sports Wagering
- More males are participating in online gambling but there is a gender difference in online gambling problems only amongst regular gamblers.
- Being of Asian heritage positively predicts online gambling severity.

The following recommendations are made for future government policy:

5. Increase community education around online gambling.

Community education about venue gambling already exists and it is important that the community are also made aware about the risks of online gambling. With regards to students, community educators should have the specific aims of increasing awareness that students are an at-risk group and more generally, to inform individuals of the purpose and risks of online gambling free credit trials.

6. Incorporating education about online gambling in programs for adolescents

Education about the risks of online gambling should be considered with existing programs about other risk-taking behaviours, such as drinking and smoking, and traditional gambling. Online gambling is arguably more important to include in such programs as adolescents are able to access online gambling programs. Having said that, educators need to be aware of not inadvertently promoting online gambling products.

7. Raising awareness amongst university services, including international student services.

Depending on the results of future research (i.e. random-sample prevalence studies of university students) providing added evidence of online gambling problems, it is important that university services are made aware of the issue. Further, if online gambling problems appear to be particularly prevalent among international students, such services should also be informed.

8. Monitor participation of online gambling

A balanced approach to the online gambling issue will require ongoing monitoring of online gambling participation. Currently, there is no evidence that there is a high rate of problem online gambling in the community; however, if problem gambling rates do increase to a point of concern, it will be extremely difficult to control. The challenge will be balancing not overreacting to the situation with being reasonably vigilant.

5. Screen for online gambling problems

Consider screening for online gambling problems at gambling service providers. This can take the form of a single question or item when assessing problem gamblers. Currently, there is a low base rate of online gambling participation but

beginning to routinely screen for this will give indications of the rate at which participation/problems rates are increasing or not increasing.

The following recommendations are made for future research:

- An updated prevalence study needs to be conducted amongst university students and the general population. The next SEIS is due to be undertaken in 2012.
- Careful definition of 'an online gambler'. The results of this study suggest that it is important to distinguish between recreational gamblers and regular online gamblers. Many previous studies have utilised the criteria of 'having gambled online at least once in the previous 12 months', which may misleadingly inflate participation rates. It is important to have participants specify the frequency with which they gamble. The same principle applies to the type of gambling being played as well. Online lotteries, for example, have been showed to be a particularly low-risk game (as with land-based lottery gambling) and as such, the findings related to lottery gamblers may have different implications. This is not to understate the risks associated with lottery players, however, it would be useful to collect this information in future studies.
- Include specific measures on the amount of time spent gambling in addition to the amount of money spent when gambling online.

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APPENDIX A - ONLINE GAMBLING SURVEY

Please read all instructions carefully when completing the survey. Please answer all questions honestly. Do not spend too long on a question – if you are unsure about your answer, choose the one that is closest to your response.

You can return to a previous page at any time by clicking on the 'Prev' tab at the bottom of the page.

Please tick below before proceeding:

I acknowledge that I have read the information sheet for this study and am comfortable to proceed with completing the questionnaire.

I acknowledge that I am 18 years or older.

DEMOGRAPHICS

This section contains some quick questions about yourself. Please tick/answer where appropriate.

Which UTAS campus are you based at?

Sandy Bay

Launceston

Cradle Coast

What is your gender?

MALE

FEMALE

What is your age (in years)?

_____ years

What is your postcode?

What is your ethnic background?

1. European origin
2. Asian origin
3. African origin
4. Other (please specify) _____

In which country were you born? _____

What is your annual income BEFORE tax?

1. Less than \$10,000
2. \$10,000 - \$19,999
3. \$20,000 - \$29,999
4. \$30,000 - \$39,999
5. \$40,000 - \$49,999
6. \$50,000 - \$59,999
7. \$60,000 - \$69,999
8. \$70,000 - \$79,999
9. \$80,000 - \$89,999
10. \$90,000 - \$99,999
11. \$100,000 - \$149,999
12. \$150,000 or more

**Which family member(s) gamble REGULARLY (online and/or at venue)?
'Regular' refers to AT LEAST ONCE A FORTNIGHT.**

1. Mother
2. Father
3. Sibling
4. Grandparent
5. No family members

Do you currently live with anybody who gambles REGULARLY (online and/or at venues)? 'Regular' refers to AT LEAST ONCE A FORTNIGHT.

YES NO

How often do you smoke cigarettes?

Never or rarely
Only on social occasions
At least THREE days a week
Everyday

How often do you drink alcohol?

Never or rarely
Only on social occasions
At least THREE days a week
Everyday

ONLINE GAMBLING

This section is about online gambling.
Please note that the following questions are about ONLINE gambling ONLY. Please answer as appropriate.

What type of game/activity(s) do you play ONLINE? Please tick as many as applicable.

1. Poker
2. Blackjack
3. Baccarat
4. Roulette
5. Virtual pokies
6. Racing
7. Sports betting
8. Bingo
9. Outcome of events
10. Lotteries
11. Keno
12. Other (please indicate) _____

Which is your favourite online gambling game or activity?

How old were you when you first gambled ONLINE? Please specify age in years.

_____ years

How often do you gamble online?

1. At least once a week
2. At least once a fortnight
3. At least once a month
4. At least once in the last three months

If you gamble online AT LEAST ONCE A FORTNIGHT, approximately how long have you been gambling online at least once a fortnight? Please specify in years and/or months.

_____ years and/or _____ months

Which gambling websites do you use most often?

1. Australian sites
2. International sites
3. Both equally
4. Not sure

What is/are your main reason(s) for gambling online? Please tick as many as apply to you.

1. I enjoy it

2. To relieve boredom
3. To win money
4. It gives me a 'rush'
5. All of the above
6. Other (please specify) _____

How frequently do you pay money (e.g. credit card, direct deposit, cash etc) to gamble online?

- Never
- The occasional session
- Some sessions
- Most sessions
- Every session

Thinking about THE LAST THREE MONTHS for ONLINE gambling ONLY, please indicate how often the question applies to you by ticking the appropriate response:

1. How often have you bet or gambled online more than you could really afford to lose?

- Never
- Sometimes
- Most of the time
- Almost always

2. How often have you needed to gamble online with larger amounts of money to get the same feeling of excitement?

- Never
- Sometimes
- Most of the time
- Almost always

3. When you gambled online, how often have you gambled another day to try to win back the money you lost?

- Never
- Sometimes
- Most of the time
- Almost always

4. How often have you borrowed money or sold anything to get money to gamble online?

- Never
- Sometimes
- Most of the time
- Almost always

5. How often have you felt that you might have a problem with online gambling?

- Never
- Sometimes
- Most of the time
- Almost always

6. How often has online gambling caused you any health problems, including stress or anxiety?

- Never
- Sometimes
- Most of the time
- Almost always

7. How often have people criticised your betting or told you that you had an online gambling problem, regardless of whether or not you thought it was true?

- Never
- Sometimes
- Most of the time
- Almost always

8. How often has your online gambling caused any financial problems for you or your household?

Never Sometimes Most of the time Almost always

9. How often have you felt guilty about the way you gamble or what happens when you gamble online?

Never Sometimes Most of the time Almost always

GAMBLING AT VENUES

This section contains questions about gambling at venues (e.g. casino, hotels, clubs etc). Please answer even if you do not currently gamble at venues.

How often do you currently gamble at venues?

1. Never
2. Once or twice a year
3. At least once in the last three months
4. At least once a month
5. At least once a fortnight
6. At least once a week

**What type(s) of gambling activities/games do you play at VENUES?
Please tick as many as applicable.**

1. Pokies
2. Poker
3. Casino table games
4. Horse race betting
5. Sports betting
6. Betting exchanges
7. Bingo
8. Private card games
9. Lotteries
10. Keno
11. Instant win games
12. Other (please specify) _____

How old were you when you first gambled at a VENUE?

_____ years

Thinking about THE LAST THREE MONTHS for VENUE gambling ONLY, please indicate how often the question applies to you by ticking the appropriate response:

1. How often have you bet more than you could really afford to lose?

Never Sometimes Most of the time Almost always

2. How often have you needed to gamble with larger amounts of money to get the same feeling of excitement?

Never Sometimes Most of the time Almost always

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

Never Sometimes Most of the time Almost always

4. How often have you borrowed money or sold anything to get money to gamble?

Never Sometimes Most of the time Almost always

5. How often have you felt that you might have a problem with gambling?

Never Sometimes Most of the time Almost always

6. How often has gambling caused you any health problems, including stress or anxiety?

Never Sometimes Most of the time Almost always

7. How often have people criticised your betting or told you that you had a gambling problem, regardless of whether or not you thought it was true?

Never Sometimes Most of the time Almost always

8. How often has your gambling caused any financial problems for you or your household?

Never Sometimes Most of the time Almost always

9. How often have you felt guilty about the way you gamble or what happens when you gamble?

Never Sometimes Most of the time Almost always

Online Gambling or Venue Gambling?

Do you prefer to gamble more often online or at venues?

1. Online
2. Venue
3. No preference

Please specify the reason for your preference (e.g. its more fun, its more convenient etc).

Your contact details

That was the last question!

Before you click SUBMIT, please type your email address below so that I can contact you to post you your store voucher. Your details will be kept STRICTLY CONFIDENTIAL and will not be used for any other purpose.

If you have any questions or complaints about the conduct of this study you can contact the Executive Officer of the HREC (Tasmania) Network on (03) 6226 7479 or email human.ethics@utas.edu.au. Quote H11248.

Your time and participation is much appreciated.

Thank you

My email address is:

APPENDIX B – INITIAL EMAIL

Subject: Do you participate in online gambling?

The Department of Health and Human Services in Tasmania are conducting a research project on online gambling with a view to conducting research and harm minimisation with the overall aim of promoting and addressing social concerns relating to gambling. This project has received ethics approval from the Tasmania Social Sciences HRECS Ethics Committee (Phone: 6226 7479; Project no: HI 1248). Please note that researchers have not been provided with your personal details. If you wish to participate please click on the following link.

https://www.surveymonkey.com/s.aspx?sm=oT6hFY2fEmtqwz0jLUqQyg_3d_3d

APPENDIX C – FOLLOW UP EMAIL

This is a reminder email following an initial invitation to you.

Thank you to everybody who completed the online gambling survey. If you are eligible to participate (i.e if you have **GAMBLED ONLINE AT LEAST ONCE IN THE LAST THREE MONTHS**) and have not completed the survey, please consider doing so by clicking on the link below.

The Department of Health and Human Services in Tasmania are conducting a research project on online gambling with a view to conducting research and harm minimisation with the overall aim of promoting and addressing social concerns relating to gambling. This project has received ethics approval from the Tasmania Social Sciences HRECS Ethics Committee (Phone: 6226 7479; Project no: H11248). Please note that researchers have not been provided with your personal details. If you wish to participate please click on the following link.

https://www.surveymonkey.com/s.aspx?sm=oT6hFY2fEmtqwz0jLUqOyg_3d_3d

APPENDIX D – INFORMATION SHEET (introduction to the survey)

Hi, my name is Corina Ly and I am a researcher at the Gambling Support Program (GSP), Department of Health and Human Services. At the GSP, we are responsible for community education, social policy, research, and harm minimisation with the overall aim of promoting and addressing social concerns relating to gambling.

The GSP are currently conducting a research project investigating online gambling. We are seeking individuals to complete a 10-15 minute survey that will be completed and submitted online. The survey asks questions about online gambling characteristics, venue gambling characteristics as well as some demographics questions.

All data will be treated with the strictest confidence and your name will not be linked to any published data.

ARE YOU ELIGIBLE?

You are eligible to participate if you have participated in ANY form of online gambling IN THE LAST THREE MONTHS.

You do not have to be a 'regular' gambler. Examples of gambling online may include poker, pokies, racing and sports betting and others. If you are eligible to complete our survey, this would be very much appreciated as the larger our sample is, the more valuable our results will be. As our way of saying thank you, **YOU WILL RECEIVE A \$5 COLES/MYER VOUCHER FOR COMPLETING THE SURVEY.**

If you ARE ELIGIBLE, please click 'Next' to proceed.

If you are NOT eligible, please click on the 'Exit' button in the top right hand corner of the page.

Thank you.

THIS PAGE GIVES YOU INFORMATION ABOUT THE STUDY. PLEASE READ AND THEN CLICK 'NEXT' AT THE BOTTOM OF THE PAGE TO COMPLETE THE SURVEY.

'What is the purpose of this study?'

The purpose of this study is to conduct an exploratory investigation of online gambling amongst university students, including online gambling characteristics such as frequency and games played, conventional gambling habits, and participant demographics. There is currently very little knowledge about online gambling and our overall aim is to increase our understanding of it.

'Why have I been invited to participate in this study?'

You are eligible to participate in this study if you participated in any form of online gambling in the last three months and are 18 years or over.

'What does this study involve?'

The 10-15 minute survey is about online gambling. It includes a demographics section, an online gambling section and an offline (venue) gambling section. Questions will ask about gambling characteristics such as motivations, frequency and

games played. The survey will be completed and submitted online.

You will not be required to complete a consent form. Completing the survey will be considered as implied consent.

It is important that you understand that your involvement in this study is voluntary. While we would be pleased to have you participate, we respect your right to decline. If you decide to discontinue participation at any time, you may do so without providing an explanation. You do not have to answer any questions that you do not wish to. All information will be treated in a confidential manner, and your name will not be used in any publication arising out of the research. All of the research will be kept in a locked cabinet in the office of the Gambling Support Program. After five years, all electronic data will be deleted and any hard copies of the data will be shredded.

Are there any possible benefits from participation in this study?

You will receive a \$5 store voucher as our way of saying thank-you for participating. Further, your participation will be contributing to new research that will advance research on online gambling which is currently limited in its knowledge base. In light of this, there is little information about the potential risks associated with online gambling, particularly with regards to the nature of this form of gambling, as discussed above. Benefits are therefore seen as having a preventative focus, especially as there is strong foundation for speculating on the potential hazards of online gambling.

Are there any possible risks from participation in this study?

There are no specific risks associated with the study. In the unlikely event that you do suffer distress as a result of completing the survey, you will be able to access a counsellor of your choice at Anglicare (1800 243 232) or Relationships Australia (1300 364 277) free of charge. If you do not wish to see a counsellor at either of these services, we recommend that you seek a referral from your GP or psychologist of choice.

What if I have questions about this research?

If you would like to discuss any aspect of this study please feel free to contact me Corina Ly on ph (03) 6233 2790.

This study has been approved by the Tasmanian Social Science Human Research Ethics Committee. If you have concerns or complaints about the conduct of this study should contact the Executive Officer of the HREC (Tasmania) Network on (03) 6226 7479 or email human.ethics@utas.edu.au. The Executive Officer is the person nominated to receive complaints from research participants. You will need to quote HI1248.

Thank you