UNIVERSITY of TASMANIA

FACULTY OF HEALTH
Centre for Rural Health

Occurrence and Correlates of Gambling Behaviour among International UTAS Students

A report commissioned by the Department of Health and Human Services, Tasmania

Centre for Rural Health, University of Tasmania

January 2018

The views expressed in this report are the authors' and do not necessarily reflect those of the Department of Health and Human Services, Tasmania.

Acknowledgements

This research would not have been possible without the University of Tasmania students who agreed to participate.

The assistance of staff from the UTas Student Centre and Students Systems and Business Improvement team, in particular, Ginni Woof, Terri Stevens and Ian Duke-Wilson, is also gratefully acknowledged.

The research team would also like to thank the Department of Health and Human Services (DHHS) Tasmania, for commissioning this research, and Ben Ross, Senior Program Officer, DHHS, for his advice and assistance throughout the project.

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Background

In 2017, the Department of Health and Human Services (DHHS) Gambling Support Program (GSP) commissioned researchers at the Centre for Rural Health, University of Tasmania (UTas), to investigate the occurrence and correlates of gambling behaviour among international UTas students, including the impact of problem gambling on students' health and well-being. The research was intended to form part of a public health response to problem gambling in young people and to inform local, community-based health promotion and early intervention programs.

Study methods

The primary method of data collection was an online survey (see Appendix, page 45). Pilot work was conducted to assess the utility of the survey instrument and to estimate likely response rates. Whilst the focus of the study was on the gambling behaviour of international students, domestic students were included for comparative purposes.

All currently enrolled international (n=4,289) and domestic (n=10,970) students were approached, via a bulk email that included a link to the online survey, to participate. This was followed by a reminder email and SMS. The study was advertised by means of flyers and postcards, both including links to the survey as well as QR scanning codes, distributed at on- and off-campus locations known to be frequented by students. Entry into a draw to win one of ten $100 gift vouchers was used as an incentive to participation.

The survey, which took approximately 20-25 minutes to complete, was designed to assess the occurrence and correlates of a broad range of gambling activities, including, in addition to the frequency of occurrence of different possible types of gambling behaviour, reasons for gambling, socio-demographic correlates of problem gambling risk, familiarity with problem gambling, adverse effects of problem gambling behaviour on health and well-being and help-seeking behaviour.

Participants whose survey responses indicated that they might have a current or past gambling problem were invited, via a separate, pop-up screen, to participate in a follow-up, face-to-face or telephone interview, in order to further explore their experience of problem gambling behaviour. Receipt of a $30 gift voucher upon interview completion was used as an incentive to interview participation, along with targeted advertising to subgroups of international students.

Surveys with little (< 5%) or no missing data were received from 1395 students, of whom 382 were international (27.4%), 1013 domestic (72.6%). Approximately half (52.2%) of the international students were male, whereas 36.4% of the domestic students were male. The mean age of international students was 25.30 (standard deviation, SD = 5.03). The mean age of domestic students was 27.04 (SD = 10.91).

Only two participants likely to have a current gambling problem according to their survey responses were willing to complete a follow-up interview, both were domestic students who reported developing this problem prior to commencing their studies. Hence, findings from the interview component of the research are not reported.

Key findings

Gambling behaviour

1. More than one third (38.0%) of international and more than half (56.3%) of domestic students (51.3% of all participants) reported engaging in one or more types of gambling over the past 12 months.
2. Casino table games were the type of gambling activity most often engaged in by international students, followed by instant lotteries ("scratchies") and Electronic Gaming Machines (EGMs) ("Pokies"), whereas instant lotteries and EGMs were the gambling activities most frequently engaged in by domestic students.
3. Casino table games (15.7% vs 13.3%) and informal private games, such as mah-jong and snooker (12.3% vs 8.0%), were the only forms of gambling that were more common among international students than domestic students.
4. Betting on sporting or other events, such as election results, was relatively common among both international (7.6%) and domestic (10.5%) students.

5. Among international students who reported engaging in any form of gambling over the past 12 months, a majority (62%) indicated that their first experience of gambling was in their home country.

Problem gambling behaviour

1. 2.6% of all international (6.9% of international students who reported any form of gambling during the past 12 months) and 1.4% of all domestic students (2.5% of domestic students who reported any form of gambling during the past 12 months) fell within the problematic gambling range, according to cut-off points of the Problem Gambling Severity Index (PGSI).
2. The figure of 2.6% for all international students classified as problem gamblers is substantially higher than that reported for both the Tasmanian adult population (0.5%) and for the Australian adult population (0.5-1.0%).
3. Some 15% of international male students (compared with 0% of international female students) who reported any form of gambling during the past 12 were classified as problem gamblers, a figure markedly higher than those reported for the Tasmanian and Australian adult populations.

Socio-demographic correlates of problem gambling

1. For both international and domestic students, males (international: 14.9%; domestic: 3.3%) were more likely to experience problem gambling than females (international: 0.0%; domestic: 2.4%).
2. Among international students, undergraduates (11.3%) were more likely than postgraduates (4.5%) to be in the problem gambling range.

Reasons for gambling

1. The most commonly endorsed reasons for gambling among both international and domestic students, were: fun (international: 84%; domestic: 75%); the chance of winning big money (60%; 67%); and excitement (60%; 55%). International students endorsed escaping boredom (37%; 25%), for the mental challenge (38%; 25%), for the sense of achievement when you win (48%; 35%), and to relax (47%; 17%), more often than domestic students.

Health-related correlates of problem gambling

1. Students falling in the problem gambling range, both international and domestic, had higher levels of smoking, alcohol and substance use, and poorer mental health, than those in all other PGSI categories.

Help-seeking behaviour

1. Of the 10 international students falling within the problem gambling range, five (50%) reported that they had sought professional help for a gambling, mental health or related problem (two for a gambling problem specifically). By comparison, 10 of 14 domestic students (71%) in the problem gambling range had ever sought such help (three for a gambling problem).
2. International students in the problem gambling range who had sought help favoured general practitioners and/or (campus-based, telephone or online) counsellors, whereas domestic students sought help from both primary care practitioners and mental health professionals.
3. More than one third (40%) of international students and the majority of domestic students (64%) in the problem gambling range reported that, at some point, they felt that they needed to seek help for one of the above-mentioned problems, but chose not to do so.
4. The most commonly reported reasons for not seeking help in these subgroups were: thinking that the service would not be able to help, not knowing the service was free, believing that they could manage the problem on their own and not wanting anyone to know about the problem.

Conclusions

Findings from this study contribute to the (currently very limited) evidence base concerning the gambling behaviour of international University students in Australia, and the impact of this on students' health and well-being. These findings are consistent with those of previous research suggesting that international university students, and university students more generally, tend to engage in gambling less often than young people in the general population (Moore et al., 2013). However, and also consistent with previous research, international students who do engage in gambling – male students in particular – are more likely to exhibit problem gambling behaviour than both domestic students and young people more generally. Further,

help-seeking may be uncommon, and variable, among international students with a gambling problem, despite adverse effects on health and well-being. The findings support the need for health promotion and early intervention efforts targeting male international students and those in their social networks.

Introduction

Background

In 2017, the Department of Health and Human Services (DHHS) Gambling Support Program (GSP) commissioned researchers at the Centre for Rural Health, University of Tasmania (UTas), to investigate the gambling behaviours of international UTas students and the impact of these behaviours on students' health and well-being.

The types of gambling most popular within the student cohorts, reasons for gambling, potential adverse effects of gambling behaviour on students' health and well-being, socio-demographic correlates of problem gambling risk, familiarity with problem gambling and help-seeking behaviours, were all examined.

The research was intended to form part of a public health response to the risks and harms of problem gambling in international students and to inform the design and conduct of local-level health promotion and early intervention programs seeking to reduce the occurrence and adverse impact of this behaviour.

Literature review

A preliminary search of the literature indicated that the existing literature relating to gambling behaviour among international university students was too small to permit a systematic literature search. A narrative review was therefore conducted.

Defining gambling and problem gambling

Powell and colleagues (1999, p. 1168), defined gambling as "staking something of value on the outcome of an uncertain contingency". Therefore, gambling is inherently based on risk-taking.

Problem gambling has been defined as "...gambling behaviour that creates negative consequences for the gambler, others in his or her social network, or for the

community" (Ferris & Wynne, 2001, p. 8). Adverse consequences of problem gambling range from criticism by others as a result of gambling behaviour, or feelings of guilt, restlessness and irritability when attempting to cut back gambling, to financial hardship, loss of employment, academic difficulties, relationship breakdowns, mental health problems, including alcohol and substance abuse, and suicidality (Davidson, Rodgers, Taylor-Rodgers, Suomi, & Lucas, 2015; Hare, 2015).

Problem gambling can be conceptualised as being at one end of a spectrum of gambling behaviour, comprising the following categories (Ferris & Wynne, 2001):

- **Non-problem gambling**: Participation in gambling activities (in the past 12 months) without adverse consequences (e.g., occasional bets at community events).
- **Low-risk gambling:** Participation in gambling activities unlikely to be associated with adverse consequences but with occasional signs of one or more behavioural indicators of problem gambling (e.g., betting more than one can afford to lose, chasing losses).
- **Moderate-risk gambling:** Participation in gambling activities which may or may not be associated with adverse consequences and with relatively more frequent occurrence of one or more behavioural indicators of problem gambling.
- **Problem gambling:** participation in gambling activities resulting in the experience of adverse consequences for the gambler and/or those in his or her social network, involving frequent occurrence of behavioural indicators of problem gambling and likely to involve a loss of control of behaviour.

Prevalence of gambling

Prevalence studies have shown that about two-thirds of adult Australians participate in gambling per year (Gainsbury et al., 2015). In addition to more traditional forms of gambling, such as lottery, scratch tickets, and more recently, EGM's, continuing technological advances have resulted in a rapid increase in "interactive gambling". Interactive gambling includes activities such as online sports wagering and virtual casino games (Gainsbury et al., 2015).

Recent prevalence estimates suggest that problem gambling occurs in approximately 0.6% of the adult Australian population (Gainsbury et al., 2014a). A

similar estimate, of 0.5%, was reported in the most recent prevalence study of gambling behaviour in the adult Tasmanian population in 2013 (Acil Allen Consulting, 2014).

Problem gambling in university students

Given the greater tendency of youth to engage in risky behaviours, it has been suggested that tertiary students may be at an increased risk of developing problem gambling behaviour (Moore et al., 2013). However, relatively limited empirical data exists concerning the gambling behaviour of tertiary students and potential adverse effects of problem gambling behaviour on students' health and well-being (Engwall, Hunter, & Steinberg, 2004; Moore et al, 2013).

Available evidence, both internationally and within Australia, suggests that whilst university students engage in gambling infrequently, the prevalence of problem gambling is considerably higher among students than the overall population. For example, Williams, Connolly, Wood, and Nowatzki (2006) found the rate of problem gambling in a sample of university students in Alberta, Canada, to be significantly higher than the general adult population in that province.

Similarly, Engwall et al. (2004) surveyed 1,350 American university students across Connecticut, and found that 5.2% of this population showed symptoms of pathological gambling. Similar results have been observed in the Australian context, with Moore et al. (2013) finding that 5.4% of their university student sample (N = 1,574) met the criteria for problem gambling; a rate almost 10 times higher than that of the Australian adult population.

Problem gambling and international students

While rates of gambling per se may be no higher among international students than domestic students, international university students in Australia may be more likely to develop *problem* gambling than domestic students. Australia has a well-established gambling culture, and exposure to this, combined with the stressors associated with acculturation, may be conducive to an increased risk of problem gambling (Moore et al., 2013; Rosenthal, Russell, & Thomson, 2008).

Additionally, culture-specific beliefs regarding luck and chance among certain international students may increase misunderstanding of the way in which commercial gambling facilities operate in Australia (e.g., "the house edge") and, in turn, the likelihood of winning (Zheng, Walker, & Blaszczynski, 2008).

For students from countries with greater restrictions on gambling activities, there may be a lack of understanding of the sorts of behaviours that constitute problem gambling (Dickins & Thomas, 2016). Further, international students who are financially supported by their families may have access to relatively large sums of money that are intended for living expenses but which, for one reason or another, may be used to gamble (Thomas et al., 2011; Zheng et al., 2008).

In some cases, gambling functions as a temporary outlet for stress release (Dickins & Thomas, 2016). Among international students, the pressures of tertiary study may be compounded by acculturative stressors such as language barriers and lack of social support, such that these students may be more likely to use gambling as an escape (Dickins & Thomas, 2016). In a study of international students (n = 979) attending an Australian University, 7.3% of participants reported taking up gambling since arriving in Australia and 3% considered their gambling behaviour to be a problem (Rosenthal et al, 2008)

In a study of domestic (n = 836) and international (n = 764) students at three Australian universities, 59% of international students who stated that they did not gamble prior to arriving in Australia reported gambling at least once in the past 12 months. In this study, 9.7% of male and 3.9% of female international students were classified as problem gamblers, compared with 7.8% and 2.4% of male and female domestic students (Moore et al, 2013). Findings from other studies similarly suggest that male international students may be particularly likely to develop a gambling problem (e.g., Rosenthal et al., 2008; Zheng et al, 2008).

Among individuals from culturally & linguistically diverse communities (CALD) who gamble, gambling may, in some cases, represent a culturally appropriate means of adapting to life in a new country. In a study of international students with Chinese backgrounds studying in Australia, 26.2% of participants had gambled on Mah-jong in the previous 12 months, of whom 2.9% were classified as problem gamblers (Zheng

et al., 2008). Consistent with findings from other studies, males were more likely than females to gamble money on Mah-jong in this study.

Relatively high rates of problem gambling among international students – male students in particular – may be compounded by relatively low rates of help-seeking. Low or inappropriate help-seeking may, in turn, reflect greater perceived stigma and/or adverse effects on academic progress associated with disclosure and poor awareness or understanding of the nature and adverse effects of problem gambling and of available services and how to access these (Dickens & Thomas, 2016; Li & Tse, 2015; Raylu & Oei, 2004; Rosenthal et al., 2008).

Notwithstanding these considerations, research bearing on the occurrence and correlates of gambling behaviour – and problem gambling behaviour – among international students residing in Australia remains limited. Research of this kind may be helpful in informing the development of targeted, culturally sensitive health promotion and early intervention programs. The goal of the current research was to add to this evidence base by examining the occurrence and correlates of gambling behaviour among international students in Tasmania.

Study Methods

Study design and recruitment of participants

The primary method of data collection was an anonymous, online survey which was developed by the research team for the current research. A pilot study, which consisted of focus group discussions and online distribution of the survey, was first conducted to assess the utility of the survey instrument and to estimate likely response rates. While the focus of the study was on the gambling behaviour of international students, domestic students were included for comparative purposes.

The survey was piloted through a random sample of 100 currently enrolled international and 100 currently enrolled domestic UTas students, who were invited to participate via a bulk email that included a link to the online survey. The response rates, of 1% for international students and 4% for domestic students, indicated the need for strategies (e.g., incentives, advertising) to increase response rates for the study proper.

Also as part of the pilot study, a small sample (n=15) of (undergraduate and postgraduate, male and female) international and domestic UTas students, were invited to participate in focus groups designed to elicit feedback regarding the survey content. Modifications to the survey instrument, including reducing length to ensure a completion time of ≤ 30 minutes, were made on this basis.

All currently enrolled international (n = 4,289) and domestic (n=10, 970) students were approached, via a bulk email that included a link to the online survey, to participate. This was followed by a (single) reminder email and (single) SMS. The study was advertised by means of flyers and postcards, both including links to the survey as well as QR scanning codes, distributed at on- and off-campus locations known to be frequented by international students in particular. Entry into a draw to win one of ten $100 gift vouchers was used as an incentive to participation.

The survey, which took approximately 20-25 minutes to complete, included sections assessing participants' socio-demographic characteristics, the frequency of occurrence of different possible types of gambling behaviour, reasons for gambling, risk for and potential adverse consequences, i.e., potential adverse effects on health and well-being, associated with problem gambling behaviour, familiarity with problem gambling and help-seeking behaviour (see below and Appendix).

Socio-demographic characteristics assessed, in addition to enrolment status (international, domestic) and other enrolment details (enrolment Faculty, full- vs part-time enrolment, undergraduate vs post-graduate enrolment), age, sex, country of birth, first language, marital/relationship status and main source of income.

Assessment of gambling and problem gambling behaviour

Gambling behaviour was assessed by asking whether, and how often, participants had engaged in any of a broad range of possible gambling activities during the past 12 months. For those who indicated any gambling activity during the past 12 months, supplementary questions addressed the frequency of this activity. The questions assessing gambling occurrence and frequency were designed to follow the methods employed in the 2013 Tasmanian Gambling Prevalence Survey (Acil Allen Consulting, 2014), with appropriate modification for self-report format.

Problem gambling, and risk for problem gambling, was assessed (among participants who reported engaging in any form of gambling during the past 12 months), using the Canadian Problem Gambling Severity Index (PGSI; Ferris & Wynne, 2001); a 9-item measure that has been widely used in epidemiological studies of problem gambling, including the 2013 Tasmanian Gambling Prevalence Survey (see Appendix, p.54). On the basis of responses to these items, individuals are classified into one of the four abovementioned categories: non-problem gambling; low-risk gambling; moderate-risk gambling; and problem gambling.

Additional items were included to assess: the location of participants first experience of gambling (country of birth vs Australia); the relative frequency of gambling prior to and since beginning tertiary studies; the maximum amount of money spent on gambling during any one week, and total amount of money spent on gambling during the past 12 months.

Assessment of familiarity with and reasons for gambling

Familiarity with problem gambling was assessing using a modified, 8-item version of the Level of Familiarity Questionnaire (Holmes, Corrigan, Williams, Canar, Kubiak, 1999), in which participants are asked whether or not they have experienced different possible levels of exposure to a given condition, in this case problem gambling, such as watching a movie or TV show in which a person with a gambling problem was featured or having a friend, relative or partner with a gambling problem.

Reasons for gambling were assessed using the Reasons for Gambling Questionnaire (Wardle et al, 2011), a 14-item measure designed to assess a broad range of potential reasons for gambling in the general population, such as "for the chance of winning big money", "because it's exciting", "because it helps when you're tense" and "because it's something that you do with friends or family".

Assessment of health and well-being

Mental health was assessed using the 10-item Kessler Psychological Distress Scale (K-10) (Kessler et al, 2002), a brief measure of the frequency of occurrence of each of 10 common symptoms of anxiety and depression during the past four weeks,

designed for use in general population surveys. Total scores ranging from 10 to 50 are calculated, with higher scores indicating higher levels of distress.

Social support was assessed using the Multidimensional Scale of Perceived Social Support (Zimet, Dahlem, Zimet, & Farley, 1988), a 12-item measure designed to assess the perceived adequacy of social support in each of three domains, namely, significant others, family members and friends. Item (and domain) scores range from 1 to 5, with higher scores indicating greater perceived support.

Satisfaction with living conditions was assessed using the (8-item) Environmental Health subscale of the World Health Organization Quality of Life Short Form (WHOQOL-BREF) (WHOQOL Group, 1998), a measure designed to capture perceived satisfaction with living conditions among individuals from diverse cultural backgrounds. Item (and scale) scores range from 1 to 5, with higher scores indicating greater perceived satisfaction with one's environment.

Subjective well-being was assessed using the Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985), a five-item measure designed to provide a brief assessment of the individual's perceived, overall satisfaction with their life. Item (and domain) scores range from 1 to 5, with higher scores indicating greater satisfaction.

Physical health was assessed using a single item that requires participants to rate their overall health during the past four weeks on a 5-point scale, from "excellent" to "poor". Responses to this item have been found to be strongly predictive of more objective measures of health status, including medical morbidity, health service use and mortality (DeSalvo, Fan, McDonell, & Fihn, 2005).

Additional items were included to assess: current levels of stress associated with study and financial situation; and levels of smoking, alcohol consumption and substance use. The latter items were adapted from those used in the Melbourne "Growing Experience" study (Rosenthal et al, 2008).

Assessment of help-seeking behaviour

Items assessing help-seeking (see Appendix, p.59) were developed for the current study and were designed to assess whether participants had ever sought advice or help from a health professional for any one of the following types of problems:

mental health problem; gambling problem; financial problem; alcohol or substance use problem; and relationship problem.

For participants indicating that they had sought advice or help for one or more of these problems, a follow-up question addressed from where/whom this advice or help had been received. Finally, participants who indicated that there was a time when they believed that they needed professional help for one or more of the abovementioned problems, but who had never sought such help, were asked the reason(s).

Items assessing first experience of gambling, relative frequency of gambling before and since commencing tertiary studies, money spent on gambling, reasons for gambling, and items of the PGSI, were completed only by participants who reported engaging in one or more forms of gambling over the past 12 months. All remaining items were completed by all participants.

Participants whose survey responses indicated that they might have a current or past gambling problem were invited, via a separate, pop-up screen, to participate in a follow-up, face-to-face or telephone interview, in order to further explore their experience of problem gambling behaviour. Receipt of a $30 gift voucher upon interview completion was used as an incentive to interview participation, along with targeted advertising to subgroups of international students.

Despite substantial efforts on the part of the research team, including targeted advertising and the recruitment of currently enrolled international students to assist in recruitment efforts, only two participants likely to have a current gambling problem according to their survey responses were willing to complete a follow-up interview. Both of these individuals were domestic students who reported developing a gambling problem prior to the commencement of their studies.

The remaining interviewees were individuals who reported having had a gambling problem in the past but not currently and, of these, only three were international students. Hence, given the focus of the current research on problem gambling behaviour among international students, findings from the interview component of the research are not included in the current report. These findings will be included, in due course, as an addendum to the current report.

Statistical analysis

Statistical analysis was conducted using IBM SPSS Statistics Version 24. Appropriate statistical tests, namely, independent-samples *t*-tests for continuous variables or Chi-square (χ^2) tests for categorical variables, were employed to identify differences between international and domestic students with respect to the occurrence and correlates of gambling behaviour, as well as differences between subgroups of international and domestic students classified as non-problem, low-level problem, moderate risk or problem gamblers. Follow-up tests were employed as appropriate, in order to identify the source of any overall group differences. A statistical significance (alpha) level of 0.05 was employed for all tests.

Results

Socio-demographics characteristics of participants

Surveys with little (< 5%) or no missing data were received from 1395 students, of whom 382 (27.4%) were international and 1013 (72.6%) domestic, aged 18 to 72 years (*M* = 26.58, *SD* = 9.72). Approximately half (52.2%) of the international students were male, whereas 36.4% of the domestic students were male. The mean (SD) age of international students was 25.30 (5.03). The mean (SD) age of domestic students was 27.04 (10.91). The demographic characteristics of participants, stratified by enrolment status (international vs domestic) and gender, are shown in Table 1.

Among international students, the most common countries of birth were: China (32.7%), Malaysia (21.2%), India (6.8%) and Singapore (5.5%), with students from these countries accounting for approximately two thirds (66.2%) of all international student participants. Small numbers of individuals from some 20 other countries comprised the remaining third of international student participants. As would be expected, the vast majority of domestic students (85.7%) were born in Australia.

Table 1. Socio-demographic characteristics of study participants by enrolment status (international, domestic) and gender

	International students (*N* = 382)				Domestic students (*N* = 1013)			
	Males (n = 199)[i]	Females (n = 181)[i]			Males (n = 368)[i]	Females (n =637)[i]		
	M (*SD*)	*M* (*SD*)	*t*	*p*	*M* (*SD*)	*M* (*SD*)	*t*	*p*
Age (years)	25.6(5.0)	24.9(5.0)	1.2	.22	26.4(10.6)	27.4(11.1)	-1.4	.16
Hours paid employment per week	8.8(28.6)	5.4(10.2)	1.4	.16	10.1(14.5)	10.1(12.1)	-0.1	.96
Income per week before tax[ii]	186.5(265.6)	478.9(4038.3)	-0.9	.36	818.4(5298.9)	820.6(6095.6)	-0.0	1.00
	%	%	χ^2	*p*	%	%	χ^2	*p*
Country of birth								
Australia	-	-	8.5	.04	83.7	86.7	7.4	.19
China	29.1	37.0			2.2	0.9		
Malaysia	19.1	23.8			0.0	0.8		
Great Britain	-	-			3.8	3.0		
India	10.1	3.3			0.5	0.8		
Singapore	5.0	6.1			0.0	0.3		
Other	36.7	29.8			9.8	7.5		
Main language								
English	80.7	76.1	1.2	.28	96.2	97.3	0.9	.32
Other	19.3	23.9			3.8	2.7		
Campus								
Hobart	69.8	71.8	0.0	.83	67.4	57.9	5.1	.02
Launceston	27.6	27.1			21.7	26.7		
Other	2.6	1.1			10.9	15.4		

i. These figures do not sum to N, as 10 participants chose not to indicate their sex or indicated that they were "intersex" or "other".

ii. These figures should be interpreted with caution given the marked variability in responses (very high SDs) for three of the four groups.

Table 1 (cont). Socio-demographic characteristics of study participants by enrolment status (international, domestic) and gender

	International students (*N* = 382)				Domestic students (*N* = 1013)			
	Males (n = 199)[i]	Females (n = 181)[i]			Males (n = 368)[i]	Females (n = 637)[ii]		
	%	%	χ^2	*p*	%	%	χ^2	*p*
Study mode								
On campus	98.5	99.4	0.8	.36	88.8	86.1	1.4	.23
Distance	1.5	0.6			11.2	13.9		
Relationship status								
Single	74.4	80.1	1.3	.26	71.0	64.1	3.5	.06
Married, living as married	22.6	18.2			23.0	27.6		
Other	3.0	1.7			6.0	8.3		
Children								
Yes	9.2	5.6	1.7	.20	15.5	20.3	3.4	.06
No	90.8	94.4			84.5	79.7		
Level of study								
Undergraduate	48.7	49.7	0.1	.96	82.7	83.1	0.1	.94
Postgraduate	49.2	48.6			15.9	15.3		
Other	2.1	1.7			1.4	1.6		
Study load								
Full time	99.0	98.3	0.3	.57	85.3	80.9	3.2	.08
Part time	1.0	1.7			14.7	19.1		
Source of income								
Paid employment	7.1	5.6	2.1	.56	41.1	40.4	1.1	.79
Govt. pension	1.5	0.6			34.2	30.8		
University scholarship	14.3	11.7			6.6	7.1		
Assistance from family	71.9	77.7			15.3	16.6		
Other	5.1	4.5			2.7	5.1		

Table 1 (cont). Socio-demographic characteristics of study participants by enrolment status (international, domestic) and gender								
	International students (*N* = 382)				Domestic students (*N* = 1013)			
	Males (n = 199)[i]	Females (n = 181)[i]			Males (n = 368)[i]	Females (n = 637)[i]		
	%	%	χ^2	*p*	%	%	χ^2	*p*
Faculty								
AMC	76.9	23.1	45.0	< .01**	80.0	20.0	75.3	< .01**
CAL	43.3	56.7			30.6	69.4		
Education	14.3	85.7			27.5	72.5		
Health	28.6	71.4			29.2	70.8		
SET	69.2	30.8			58.7	41.3		
TSBE	41.5	58.5			54.3	45.7		
Other	45.5	54.5			23.9	76.1		

Note. AMC = Australian Maritime College; CAL = College of Arts and Law; IMAS = Institute for Marine and Antarctic Studies; SET = Science, Engineering and Technology; TSBE = Tasmanian School of Business and Economics.

** = significant at a = < .01; * = significant at a = <.05

Gambling behaviour

More than one third (38.0%) of international students and more than half (56.3%) of domestics students (51.3% of all participants) reported having engaged in one or more types of gambling over the past 12 months ($\chi^2 = 36.33$, $p < .001$).

Among international students who reported engaging in any form of gambling over the past 12 months, a majority (62.2%) indicated that their first experience of gambling was in their home country, rather than in Australia.

More than two thirds (70.1%) of international students who reported engaging in any form of gambling during the past 12 months reported that they had gambled less since beginning their tertiary studies, whereas a majority of domestic students (57.1%) reported that they had gambled the same amount since beginning their tertiary studies.

As can be seen in Table 2, casino table games were the type of gambling activity most often engaged in by international students, followed by instant lotteries ("scratchies") and EGM's ("pokies"), whereas, instant lotteries and EGM's were the gambling activities most frequently engaged in by domestic students.

Casino table games (15.7% vs 13.3%) and informal private games, such as mah-jong and snooker (12.3% vs 8.0%), were the only forms of gambling that were more common among international students than domestic students. Also of note is that betting on sporting or other events, such as election results, was relatively common among both international (7.6%) and domestic (10.5%) students.

Problem gambling behaviour

2.6% of all international (6.9% of international students who reported any form of gambling during the past 12 months) and 1.4% of all domestic students (2.5% of domestic students who reported any form of gambling during the past 12 months) were classified as problem gamblers according to the PGSI.

Table 2. Proportion (%) of participants reporting engagement in different types of gambling during the past 12 months by enrolment status				
	International students (n = 382)	Domestic students (n = 1013)		
	% 'yes'	% 'yes'	χ^2	*p*
Played electronic gaming machines ("pokies")	14.1	25.0	19.0	< .01**
Bet on horse or greyhound races (excluding sweeps such as for Melbourne Cup)	3.1	12.1	25.4	< .01**
Purchased instant scratch tickets	7.6	24.9	51.1	< .01**
Played a lottery (e.g., Tattslotto, Powerball)	14.5	23.2	12.7	< .01**
Played TasKeno or other forms of KENO	3.4	21.1	62.7	< .01**
Played casino table games (e.g., blackjack, roulette, poker)	15.7	13.3	1.4	.24
Played bingo	5.3	4.8	0.13	.72
Bet on sporting on other events such as TV show results, election results	7.6	10.5	2.6	.11
Bet on informal private games (e.g., card games, mah-jong, snooker)	12.3	8.0	6.2	<.01**
Undertaken day trading (e.g., securities trading, buying and selling stocks)	3.9	3.9	0.0	.96
Participated in any other gambling activity that I haven't mentioned (involving money)	3.7	3.4	0.1	.77
Played social casino games (even if no money is involved; e.g., "PokerPro" or "Slots" on Facebook)	9.5	9.5	0.0	.99

Note. ** = significant at a = < .01

Socio-demographic correlates of problem gambling

As can be seen in Table 3, male international students were more likely to be classified as problem gamblers than females (14.9% vs 0%) whereas similar proportions of male (3.3%) and female (2.4%) domestic students were classified as problem gamblers. Further, undergraduate international students (11.3%) were more likely than postgraduate international students (4.5%) to be classified as problem gamblers.

While language spoken at home did not differ across PGSI categories among international students, domestic students in the non-problem gambling category were more likely to speak English at home than those in all other PGSI categories. Gambling risk did not differ as a function of any of the other demographic characteristics assessed for either international or domestic students.

Gambling expenditure

The maximum amount of money reportedly spent on gambling in any one week during the past 12 months by international students (who reported engaging in any form of gambling over the past 12 months) ranged from $0 to $3,000 (mean = $122, SD = $360) (domestic students: $0 to $7,500; mean = $85, *SD* = $411), whereas the total amount of money spent reportedly spent on gambling by international students during the past 12 months ranged from $0 to $10,000 (mean = $493, SD = $1484) (domestic students: $0 to $55,000; mean = $490, SD = $3044). These figures need to be interpreted with caution, however, as there was marked variability in the responses to both of these items in all PGSI subgroups.

As would be expected, problem gamblers tended to report higher levels of expenditure on gambling, both the maximum amounts of money spent in any one week and the total amount of money spent during the past 12 months, than non-problem gamblers and this was the case for both international and domestics students. This association was clearer for domestic students than international students, however, due in part to the larger sub-group sample size.

Table 3. Socio-demographic correlates of gambling risk among participants reporting any form of gambling in the past 12 months by enrolment status												
	International students (*n* = 145)						Domestic students (*n* = 570)					
	Non-problem	Low-risk	Moderate-risk	Problem			Non-problem	Low-risk	Moderate-risk	Problem		
	M(SD)	M(SD)	M(SD)	M(SD)	*F*	*p*	M(SD)	M(SD)	M(SD)	M(SD)	*F*	*p*
Age	25.7(5.0)	26.4(5.4)	23.1(3.1)	24.6(4.1)	2.1	.11	27.3(11.0)	26.2(9.9)	27.0(12.4)	27.1(7.9)	0.3	.81
	%	%	%	%	χ^2	*p*	%	%	%	%	χ^2	*p*
Gender												
Males	40.3	28.4	16.4	14.9	12.0	< .01	55.2	26.9	14.6	3.3	20.8	< .01*
Females	58.1	30.6	11.3	0.0		**	73.5	17.5	6.6	2.4		*
Country of birth												
Australia	-	-	-	-	12.9	.17	66.5	21.8	9.0	2.8	18.3	.11
China	43.2	38.6	11.4	6.8			50.0	16.7	33.3	0.0		
Malaysia	41.4	20.7	31.0	6.9			66.7	0.0	33.3	0.0		
Great Britain	-	-	-	-			78.6	7.1	14.3	0.0		
India	80.0	0.0	20.0	0.0			0.0	0.0	100.0	0.0		
Singapore	0.0	50.0	25.0	25.0			-	-	-	-		
Other	60.4	27.1	4.2	8.3			58.3	25.0	12.5	4.2		
Main language												
English	50.5	27.8	13.4	8.2	1.6	.67	67.0	20.6	9.8	2.6	12.4	< .01*
Other	45.2	35.5	16.1	3.2			20.0	60.0	10.0	10.0		*
Campus												
Hobart	50.6	29.2	11.2	9.0	3.3	.36	66.3	21.9	9.2	2.5	2.0	.56
Launceston	40.0	31.4	22.9	5.7			65.6	20.6	12.5	1.3		
Other	83.3	16.7	0.0	0.0			66.2	20.3	6.8	6.8		
Study mode												
On-campus	50.0	27.8	14.3	7.9	7.4	.06	65.4	21.3	10.3	3.0	2.5	.48
Distance	0.0	100	0.0	0.0			71.2	21.9	5.5	1.4		
Relationship status												
Single	47.4	28.9	17.5	6.2	4.9	.18	65.1	21.2	10.5	3.2	3.6	.31
Married, living as married	53.3	30.0	3.3	13.3			72.3	19.7	6.6	1.5		

Other	66.7	33.3	0.0	0.0			55.6	27.8	13.9	2.8		
Children												
Yes	66.7	22.2	0.0	11.1	2.2	.53	69.1	19.6	8.2	3.1	0.7	.88
No	47.9	29.9	14.5	7.7			65.5	21.5	10.3	2.7		
Level of study												
Undergraduate	41.9	24.2	22.6	11.3	10.3	.02*	65.4	20.9	10.9	2.8	2.7	.45
Postgraduate	56.1	33.3	6.1	4.5			67.9	24.4	5.1	2.6		
Other	50.0	50.0	0.0	0.0			83.3	16.7	0.0	0.0		
Study load												
Full-time	48.8	29.9	14.2	7.1	4.1	.25	64.2	22.3	10.4	3.1	3.9	.28
Part-time	66.7	0.0	0.0	33.3			74.2	17.2	7.5	1.1		
Source of income												
Paid employment	42.9	28.6	21.4	7.1	6.0	.74	68.5	16.9	11.0	3.5	7.7	.56
Assistance from family	44.9	29.2	16.9	9.0			63.2	26.3	8.8	1.8		
Govt. pension	100.0	0.0	0.0	0.0			63.6	25.0	8.7	2.7		
University scholarship	68.8	25.0	0.0	6.3			60.6	27.3	12.1	0.0		
Other	85.7	14.3	0.0	0.0			68.8	25.0	6.3	0.0		

Note. ** = significant at a = < .01; * = significant at a = <.05

Familiarity with problem gambling

The majority of both international (57%) and domestic (54%) students reported low levels of familiarity with problem gambling, such as having watched a movie or TV show in which such a problem was featured. Few participants reported having had a job that involved helping people with problem gambling (international: 0.4%; domestic: 3.6%) or having a friend, relative or partner who has a current problem (4.3%, 3.7%), while relative high proportions of participants reported having a friend, relative or partner who had had a gambling problem in the past (21.7%, 24.2%) or having lived with someone with a gambling problem (10.5% and 10.3%).

Reasons for gambling

As can be seen in Table 4, the most commonly reported reasons for gambling among international students were: fun (84%); excitement (60%); the chance of winning big money (60%); something you do with friends and family (60%); and the sense of achievement when you win (49%) (domestic students: fun – 75%; the chance of winning big money – 67%; excitement – 55%; something you do with friends and family – 50%; and to be sociable – 45%).

International students were more likely than domestic students to report escaping boredom (37% vs 25%), for the mental challenge/to learn about the activity (38% vs 25%), for the sense of achievement when you win (48% vs 35%), and to relax (47% vs 17%), as reasons for gambling.

Table 4. Reasons for gambling among participants who reported any form of gambling during the past 12 months by enrolment status										
	International students (n = 145)				Domestic students (n = 570)					
	Never	Sometimes	Most of the time	Almost always	Never	Sometimes	Most of the time	Almost always		
Reasons for gambling	%	%	%	%	%	%	%	%	χ^2	*p*
For the chance of winning big money	39.9	34.6	15.0	10.5	33.1	31.5	19.1	16.3	5.1	.17
Because it's fun	16.0	41.2	30.5	12.2	24.9	38.6	26.5	10.1	4.9	.18
As a hobby or a past-time	64.4	25.0	9.8	0.8	74.6	17.0	6.3	2.0	8.0	.05*
To escape boredom or to fill your time	62.6	29.8	7.6	0.0	75.4	17.2	6.1	1.3	12.9	< .01**
To compete with others (e.g. bookmaker, other gamblers)	82.6	12.1	5.3	0.0	87.2	9.5	2.2	1.1	6.2	.10
Because it's exciting	39.7	42.0	14.5	3.8	45.2	34.2	14.2	6.5	3.8	.29
For the mental challenge or to learn about the game or activity	61.5	24.6	10.8	3.1	74.7	17.2	6.3	1.8	9.4	.02*
Because of the sense of achievement when you win	50.8	34.1	11.4	3.8	64.9	18.8	13.6	2.7	15.7	<.01**

Table 4 (cont). Reasons for gambling among participants who reporting any form of gambling during the past 12 months by enrolment status										
	International students (n = 145)				Domestic students (n = 570)					
	Never	Sometimes	Most of the time	Almost always	Never	Sometimes	Most of the time	Almost always		
	%	%	%	%	%	%	%	%	X^2	*p*
To impress other people	87.0	9.2	1.5	2.3	92.3	6.1	0.9	0.7	4.8	.19
To be sociable	65.4	23.1	7.7	3.8	55.1	29.8	11.0	4.2	4.8	.19
Because it helps when you're feeling tense	87.0	10.7	0.8	1.5	94.1	3.6	1.6	0.7	12.7	<.01**
To make money	52.7	27.5	12.2	7.6	56.1	20.1	14.0	9.7	3.6	.31
To relax	53.0	31.1	12.1	3.8	83.1	12.2	3.1	1.6	57.3	< .01**
Because it's something that you do with friends or family	40.5	32.8	17.6	9.2	50.1	27.7	13.6	8.6	4.2	.24

Note. ** = significant at a = < .01; * = significant at a = <.05

Health-related correlates of problem gambling

International students' self-reported well-being did not differ depending on whether they were classified as non-problem, low-risk, moderate-risk, or problem gamblers. However, domestic students classified as moderate-risk and problem gamblers had poorer self-reported well-being than those in the non-problem and low-risk categories.

As can be seen in Table 5, students in the problem gambling range had higher levels of smoking and substance use than those in all other PGSI categories and this was the case for both international and domestic students. Also for both international and domestic students, participants in the problem gambling category had higher levels of general psychological distress (as measured by the K-10) than those in the non-problem and low-risk categories.

There were no differences in perceived support from significant others or friends across PGSI categories and this was the case for both international and domestic students. For domestic students only, perceived support from family members was lower among problem gamblers than non-problem gamblers.

Among international students, there were no significant differences in participants' satisfaction with their environmental circumstances (as measured by the WHOQOL-BREF environment subscale) across PGSI categories, whereas for domestic students, participants in the problem-gambling category had lower satisfaction with their environmental circumstances than non-problem gamblers.

There were no differences in current levels of stress relating to either study or financial situation across PGSI categories and this was the case for both international and domestic students.

Table 5. Health-related correlates of gambling risk among participants reporting any form of gambling in the past 12 months by enrolment status												
	International students (n = 145)						Domestic students (n = 570)					
	Non-problem	Low-risk	Moderate-risk	Problem			Non-problem	Low-risk	Moderate-risk	Problem		
	M(SD)	M(SD)	M(SD)	M(SD)	F	*p*	M(SD)	M(SD)	M(SD)	M(SD)	F	*p*
Life satisfaction[i]	3.3(0.8)	3.3(0.8)	3.1(0.6)	3.1(0.7)	0.7	.59	3.6(0.8)	3.5(0.8)	3.2(1.0)	3.1(0.8)	3.5	.02*
Substance use[ii]												
Cigarette smoking	3.6(1.7)	4.3(2.9)	3.5(1.5)	6.6(3.8)	5.4	< .01	3.6(2.0)	3.7(2.1)	4.5(3.0)	6.4(4.7)	9.5	< .01
Alcohol use	3.9(1.8)	4.1(1.8)	4.1(1.5)	6.5(3.4)	5.5	< .01	4.2(1.9)	4.8(2.1)	4.9(2.2)	5.6(3.2)	4.9	< .01
Drug use	3.3(1.1)	3.3(1.2)	3.1(0.2)	5.6(3.5)	8.6	< .01	3.3(1.0)	3.4(1.2)	3.6(1.2)	4.3(2.0)	5.2	< .01
General psychological distress[iii]	19.0(8.3)	17.6(7.1)	21.7(9.0)	27.1(11.4)	3.8	.01	20.6(8.2)	21.4(8.1)	23.5(8.5)	28.1(11.7)	4.9	< .01
Social support[iv]												
Significant others	3.7(1.2)	3.6(1.1)	3.4(1.1)	3.2(1.0)	0.9	.46	4.1(1.2)	4.0(1.1)	4.0(1.1)	4.2(0.6)	0.3	.83
Family	3.9(1.0)	4.0(0.8)	3.9(1.0)	3.3(0.6)	1.5	.22	4.1(1.0)	4.0(1.0)	3.7(1.1)	3.7(1.3)	3.3	.02*
Friends	3.9(1.0)	3.7(0.8)	4.0(0.8)	3.1(1.0)	2.0	.12	3.9(1.1)	3.8(1.1)	3.7(1.1)	3.7(0.9)	0.7	.57
Environmental health[v]	3.6(0.7)	3.6(0.7)	3.7(0.6)	3.6(0.7)	0.1	.95	4.1(0.6)	4.0(0.7)	3.8(0.9)	3.7(0.5)	6.2	< .01

i. Life satisfaction (subjective well-being) as measured by the *Satisfaction with Life Scale* (Diener et al, 1985) (higher scores indicating greater satisfaction).

ii. Levels of smoking, alcohol and substance use as measured by items of the Melbourne "Growing Experience" Study (Rosenthal et al, 1998) (higher scores indicate higher levels of the behaviours concerned)

iii. Levels of general psychological distress as measured by the *Kessler Psychological Distress Scale* (Kessler et al, 2002) (higher scores indicate greater distress).

iv. Perceived support from significant others, family member and friends as measured by the *Multidimensional Scale of Perceived Social Support* (Zimet al, 1988) (higher scores indicate greater perceived support).

v. Satisfaction with environmental conditions as measured by the *WHOQOL-BREF Environment subscale* (WHOQOL Group, 1998) (higher scores indicate greater satisfaction).

Table 5 (cont). Health-related correlates of gambling risk among participants who reported any form of gambling in the past 12 months by enrolment status

	International students (n = 145)						Domestic students (n = 570)					
	Non-problem	Low-risk	Moderate-risk	Problem			Non-problem	Low-risk	Moderate-risk	Problem		
	%	%	%	%	χ^2	*p*	%	%	%	%	χ^2	*p*
Health and well-being												
Excellent	22.2	30.6	27.8	50.0	8.8	.72	22.1	26.4	19.6	0.0	30.2	< .01
Very good	49.2	41.7	55.6	20.0			39.4	34.6	33.3	28.6		
Good	25.4	22.2	16.7	30.0			29.3	22.7	17.7	35.7		
Fair	1.6	5.6	0.0	0.0			8.1	12.7	25.5	28.6		
Poor	1.6	0.0	0.0	0.0			1.1	3.6	3.9	7.1		
Study stress												
Not at all	11.1	8.3	0.0	10.0	10.5	.57	8.5	9.9	7.8	0.0	5.8	.93
A little	34.9	33.3	27.8	20.0			34.4	32.4	25.5	35.7		
Moderately	34.9	50.0	38.9	50.0			34.1	32.4	39.2	42.9		
Very	12.7	8.3	27.8	10.0			15.3	18.9	19.6	21.4		
Extremely	6.4	0.0	5.6	10.0			7.7	6.3	7.8	0.0		
Financial Stress												
Not at all	28.6	22.9	27.8	11.1	7.8	.80	25.3	22.7	24.0	14.3	6.3	.90
A little	31.7	28.6	16.7	22.2			32.8	30.0	30.0	28.6		
Moderately	25.4	37.1	44.4	33.3			24.1	28.2	22.0	28.6		
Very	9.5	8.6	11.1	22.2			12.4	10.9	12.0	21.4		
Extremely	4.8	2.9	0.0	11.1			5.5	8.2	12.0	7.1		

Help-seeking

Both international and domestic students tended to seek advice or help for more than one type of problem and from more than one source.

Of the 10 international students falling within the problem gambling range, five (50%) reported that they had sought help for one or more of the problems assessed. Of these, two had sought help for a mental health problem, two for financial problems, two for a gambling problem and one for a relationship problem. General practitioners, the UTas counselling services, and online or telephone counselling services were the sources of help most often consulted for these problems.

By comparison, 17.5% of international students in the non-problem gambling category had ever sought help for one or more of the abovementioned problems.

Of the 14 domestic students falling within the problem gambling range, 10 (71.4%) reported that they had sought help for one or more of these problems. Of these, seven had sought help for a mental health problem, two for a relationship problem and three for a gambling problem. Domestic students sought help not only from general practitioners and/or (UTas and/or telephone/online) counselling services, but also mental health professionals and community mental health services.

By comparison, 57.5% of domestic students in the non-problem gambling category had ever sought help for one or more of the abovementioned problems.

More than one third (40%) of international students and the majority of domestic students (64%) in the problem gambling range reported that, at some point, they felt that they needed to seek help for one of the above-mentioned problems, but chose not to do so.

Among both international and domestic students, the most commonly reported reasons for not seeking help were: thinking that the service would not be able to help, not knowing the service was free, believing that they could manage the problem on their own and not wanting anyone to know about the problem.

Discussion

The aim of the current research was to examine the occurrence and correlates of international students' gambling behaviour, including: the types of gambling most popular within the student cohorts, reasons for gambling, potential adverse consequences of problem gambling behaviour, socio-demographic correlates of problem gambling risk, familiarity with problem gambling and help-seeking behaviour. Whilst the focus of the study was on the gambling behaviour of international students, domestic students were included for comparative purposes.

Participation in casino table games, instant lotteries and EGM's were the most common forms of gambling among international students, whereas EGM's and instant lotteries were most common among domestic students. However, casino table games and informal private games were the only form of gambling found to be more common among international students and only the difference between groups relating to participation in informal private games was statistically significant. Given that the majority of international students in the current study were from Asian countries, this difference is not surprising (Zheng et al., 2008).

The current findings are in line with research suggesting that while international university students engage in gambling less than the general population, those that do, exhibit relatively high rates of problem gambling behaviour. Thus, more than one third (38.0%) of international students in the current study reported engaging in some form of gambling during the past 12 months, 6.9% of whom were classified as problem gamblers. This equates to 2.6% of all international students surveyed, a figure that is substantially higher than that reported for the Tasmanian (0.5%) (Acil Allen Consulting, 2014) and Australian (0.5-1.0%) adult populations (Productivity Commission, 2010). By comparison, more than half (56.3%) of domestic students in the current study reported one or more forms of gambling in the past 12 months, of whom 2.5% (1.4% of all domestic students) were classified as problem gamblers.

Also consistent with findings from previous research (Rosenthal et al., 2008; Moore et al., 2013), male students were more likely than female students to show signs of problem gambling. This was particularly true for international students, with some 15% of males who reported gambling in the past 12 months being classified as problem gamblers compared with 0% of female international students. These findings suggest

that problem gambling is indeed an issue warranting attention among a small, but significant proportion of international students in Australia.

Also consistent with findings from previous research (Dickins and Thomas, 2016), international students were more likely than domestic students to report reasons for gambling relating to a loss of pastimes, lack of knowledge regarding gambling, and stress, including: escaping boredom, for the mental challenge/to learn about the activity, for the sense of achievement when they win, and to relax.

The present results suggest that undergraduate international students may be at greater risk of developing a gambling problem than postgraduate students. One possible explanation for this is that many of these students have only recently arrived in Australia and are new to navigating the high access gambling culture, along with experiencing higher acculturative stress and associated factors (e.g., boredom, loneliness) that may encourage them to take up gambling.

As expected, problem gambling was found to be associated with adverse effects on health and well-being and this was the case for both international and domestic students. Thus, international and domestic students falling within the problem gambling had significantly higher levels of smoking, alcohol and substance use, and general psychological distress than those in other PGSI categories.

Various other adverse correlates associated with problem gambling, including poorer subjective well –being/overall life satisfaction, lower perceived levels of support from family members, poorer perceived living conditions and poorer self-rated health, were observed only among domestic students. This likely reflects, at least in part, the relatively larger number of domestic students in PGSI subgroups and, in turn, the greater statistical power to detect differences between these groups.

In this regard, it should also be noted that impairment in key aspects of role functioning associated with gambling behaviour is built into the assessment, i.e., items of the PGSI, used to identify individuals likely to have a current gambling problem. Thus, it can be assumed that participants identified as problem gamblers in the current study were experiencing or had experienced adverse consequences of their gambling behaviour such as health and mental health problems, financial

problems, employment problems, relationship problems and impairment in the ability to carry out daily tasks and activities more generally.

Also of concern, only half of the international students classified as problem gamblers had ever sought advice or help from a health professional in relation to a gambling, mental health or related problem (such as financial or relationship difficulties), typically from a general practitioner or campus-based, telephone or online counselling service. Further, only two of these students (20% of international students classified as problem gamblers) had ever sought help specifically for a gambling problem. Although the numbers are small, and differences in research methodologies preclude direct comparison of the current findings with those of other, population-based studies in which the help-seeking behaviour of problem gamblers has been assessed, these findings are consistent with those of large-scale epidemiological studies, conducted both in Australia and overseas, in which low rates of gambling-related help-seeking among individuals with a gambling problem have been observed (Davidson et al, 2015; Gainsbury, Hing, & Suhonen, 2014b).

By comparison, 70% of domestic students classified as problem gamblers had sought help for a gambling, mental health or related problem. Further, domestic students classified as problem gamblers were more likely than international students to seek help from a mental health professional, as opposed to a primary care practitioner. These differences likely reflect factors such as greater perceived stigma associated with help-seeking, seeking help from a mental health professional in particular, poorer awareness and understanding of the nature of problem gambling behaviour, and poorer awareness and understanding of how to access treatment, among international students (Moore et al, 2013; Rosenthal et al, 2008). Similar to international students, however, only one in five (21.4%) domestic students classified as problem gamblers had ever sought help specifically for a gambling problem.

Finally, and also consistent with findings from previous, population-based studies (Davidson et al, 2015; Gainsbury et al, 2014b), the most commonly cited reasons for not seeking help among international (and domestic) students likely to have a gambling problem were thinking that the service would be unable to help, not knowing the service was free, believing that they could manage the problem on their own and not wanting anyone to know about the problem.

Implications

Overall, the results of the present study are in keeping with the limited research that has investigated gambling in international university students to date. They suggest that a small but significant minority of these students struggle with problem gambling, and that international male students who gamble are at a significantly greater risk for developing problem gambling than any other group. As is the case with problem gambling behaviour more generally, international students who develop problem gambling behaviour experience a range of adverse health and mental health impacts, including higher levels of smoking, alcohol and substance use and higher levels of general psychological distress.

These findings indicate the need for culturally sensitive health promotion and early intervention programs designed to minimise gambling-related harms among international students and improve the early uptake of appropriate treatment where this is needed (Gainsbury et al, 2014b; Moore et al, 2013; Rosenthal et al, 2008). Programs of this kind will need to address the reasons for engaging in gambling most commonly reported by international students, as outlined above. They will also need to address barriers to help-seeking where this is needed, including perceived stigma and/or adverse effects on academic progress associated with disclosure of gambling and related problems, poor awareness and understanding of the nature and adverse impact of problem gambling behaviour, and poor awareness and understanding of where and how to seek help.

Limitations and future directions

As in other large-scale studies of gambling behaviour among university students (e.g., Moore et al, 2013), response rates in the current study were low. Since it is possible that individuals with gambling problems were over- or under-represented among students who chose to complete the survey, any inferences from the current research concerning the prevalence of problem gambling are necessarily tentative.

Further, results of comparisons between PGSI subgroups with respect to socio-demographic characteristics and measures of health and well-being need to be interpreted with caution, given the small number of participants in the problem

gambling range and consequent lack of statistical power to detect differences between groups. Nevertheless, statistically significant differences between groups were observed on several outcome variables, in both international and domestic students, and findings in this regard are consistent with those of previous research in both student and general population samples.

Concerning the observed associations between problem gambling and students' health and well-being, it should be noted that the cross-sectional design of the current study limits any inferences as to the direction of these associations. For example, it is possible that problem gambling behaviour both gives rise to and follows from higher levels of psychological distress. Further, survey items assessing gambling behaviour and health outcomes related to different time frames, namely, past 12 months and past four weeks, respectively. Stronger associations may have been observed had the same time frames been employed for these questions.

Finally, it should be noted that, despite substantial efforts on the part of the research team, no international students likely to have a current gambling problem were willing to complete a follow-up interview. While the reasons for this are unknown, it is reasonable to infer that international students may be particularly averse to assessment methods that involve identification, due to relatively greater perceived stigma and/or adverse effects on academic progress, associated with this.

For all of these reasons, further research addressing the occurrence and correlates of problem gambling behaviour among international students is needed. This might usefully include assessment of international students' awareness and understanding of problem gambling behaviour, including the way gambling facilities operate in Australia and the signs that indicate a need for help, and of where and how to access treatment services. It is likely that novel research methods and incentives to participation will be needed in future research of this kind in order to pre-empt low survey participation rates and reluctance to participate in follow-up interviews.

Summary

The current findings contribute to the limited evidence base concerning the occurrence, and adverse impact, of problem gambling behaviour among international university students in Australia. They suggest that while international

students engage in gambling less often than the general population, those that do – male international students in particular – have a significantly elevated risk of developing a gambling problem and experiencing adverse effects on health and well-being associated with this. These findings will be communicated to organisations that support the health and well-being of international students in Tasmania and, in due course, will be used to inform the development of targeted, culturally-sensitive health promotion and early intervention programs.

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Appendix: Survey Instrument

Thank you for participating in the UTas Gambling, Health and Well-Being Study. As you complete the survey, please keep in mind that there are no “right” or “wrong” answers and that you should not spend too much time on any one question.

THIS SURVEY IS ANONYMOUS

Gambling Behaviour

1. In the last 12 months, have you (tick all that apply)

	No	Yes
Played poker machines or electronic gaming machines	☐	☐
Bet on horse or greyhound races (excluding sweeps such as for Melbourne Cup)	☐	☐
Purchased instant scratch tickets	☐	☐
Played a lottery (e.g., Tattslotto, Powerball)	☐	☐
Played TasKeno or other forms of KENO	☐	☐
Played casino table games (e.g., blackjack, roulette, poker)	☐	☐
Played bingo	☐	☐
Bet on sporting or other events such as TV show results, election results	☐	☐
Bet on informal private games (e.g., card games, mah-jong, snooker)	☐	☐
Undertaken day trading (e.g., securities trading, buying and selling stocks)	☐	☐
Participated in any other gambling activity that I haven't mentioned (involving money)	☐	☐
Played social casino games (even if no money is involved ; e.g., "pokerPro" or "Slots" on Facebook)	☐	☐

2. In the past 12 months, have you played poker machines or electronic gaming machines at a venue or online

   ☐ No

   ☐ Yes

   In the last 12 months, which of the following venues have you visited in order to use poker machines or other electronic gaming machines? (please tick all that apply)

   ☐ Club or hotel
   ☐ Casino
   ☐ Over the internet on a mobile device (website or app on a smartphone, laptop, or iPad)
   ☐ Over the Internet using a desktop computer

   In the last 12 months, how many times per week **OR** per month **OR** per year have you played poker machines? ? (regardless of the venue)

   Times per week _____
   Times per month _____
   Times per year _____

In the past 12 months, how much money, on average, did you spend on poker machines during each visit to a poker machine venue? (Please give values in Australian dollars)

Money spent _____

3. In the last 12 months, have you bet on horse or greyhound races (excluding sweeps such as for Melbourne Cup), and regardless of where (e.g., race track or at home) or how (e.g., internet or mobile app) you placed these bets?

   ☐ No
   ☐ Yes

   In the past 12 months, which of the following methods have you used when betting on horse or greyhound races? (please tick all that apply)

   ☐ At a race track
   ☐ At an off-course venue (e.g., TOTE/TAB, club, hotel or casino)
   ☐ Over the Internet on a mobile device (website or app on a smartphone, laptop, or iPad)
   ☐ Over the Internet using a desktop computer

   In the last 12 months,how many times per week, **OR** per month **OR** per year have you bet on horse or greyhound races? (regardless of the venue)

   Times per week _____
   Times per month _____
   Times per year _____

   In the past 12 months, approximately how much money, on average, did you spend during each session of betting on horse and greyhound races? (Please give values in Australian dollars).

   Money Spent _____

4. In the past 12 months, have you purchased instant lottery ("scratchie") tickets?

   ☐ No
   ☐ Yes

   In the last 12 months, how many times per week, **OR** per month **OR** per year have you purchased instant scratch tickets? (regardless of the venue)

   Times per week _____
   Times per month _____
   Times per year _____

   In the past 12 months, which of the following methods have you used when purchasing instant lottery tickets? (please tick all that apply)

   ☐ In a newsagent or Tattersalls outlet
   ☐ Over the Internet on a mobile device (website or app on a smartphone, laptop, or iPad)

☐ Over the Internet using a desktop computer

In the past 12 months, how much money, on average, did you spend during each transaction of purchasing instant scratch tickets? (Please give values in Australian dollars).

Money spent_ _____

5. In the past 12 months, have you played a lottery (e.g, Tattslotto, Powerball, Super 66, Pools, Lucky Keno, Lucky Lines, Lucky Bingo Start, Pick 3, and Pick 5 Heads or Tails)?

☐ No
☐ Yes

In the last 12 months, how many times per week **OR** per month **OR** per year have you played a lottery? (regardless of the venue)

Times per week _____
Times per month _____
Times per year _____

In the past 12 months, which of the following methods have you used when playing a lottery? (please tick all that apply)

☐ In a newsagent or Tattersalls outlet
☐ Over the Internet on a mobile device (website or app on a smartphone, laptop, or iPad)
Over the Internet using a desktop computer

In the past 12 months, how much money, on average, did you spend during each transaction of playing a lottery? (Please give values in Australian dollars)

Money spent_____

6. In the past 12 months, have you played TasKeno or other form of Keno?

☐ No
☐ Yes

In the past 12 months, which of the following methods have you used when playing TasKeno or other form of Keno? (please tick all that apply)

☐ In a club or hotel
☐ In a casino
☐ In a newsagent or Tattersalls outlet
☐ Over the Internet on a mobile device (website or app on a smartphone, laptop, or iPad)
☐ Over the Internet using a desktop cpmputer

In the last 12 months, how many times per week **OR** per month **OR** per year have you played TasKeno or other form of Keno? (regardless of the venue)

Times per week _____
Times per month _____
Times per year _____

In the past 12 months, how much money, on average, did you spend during each session of playing TasKeno or other form of Keno? (Please give values in Australian dollars)

Money spent _____

7. In the past 12 months, have you played casino table games (e.g., blackjack, roulette or poker)?

☐ No
☐ Yes

In the past 12 months, which of the following methods have you used when playing casino table games? (please tick all that apply)

☐ At a casino
☐ Over the Internet in a mobile device (website or app on a smartphone, laptop, or iPad)
☐ Over the Internet using a desktop computer
Other (please specify below)

In the last 12 months, how many times per week **OR**per month **OR** per year have you played casino table games? (regardless of the venue)

Times per week _____
Times per month _____
Times per year _____

In the past 12 months, how much money, on average, did you spend during each session you played casino table games? (Please give values in Australian dollars)

Money spent _____

8. In the past 12 months, have you played bingo?

☐ No
☐ Yes

In the past 12 months, which of the following methods have you used when playing bingo? (please tick all that apply)

☐ In a club or hall
☐ Over the Internet on a mobile device (website or app on a smartphone, laptop, or iPad)
Over the Internet using a desktop computer
In the last 12 months how many times per week **OR**per month **OR** per year have you played bingo? (regardless of the venue)

Times per week _____
Times per month _____
Times per year _____

In the past 12 months, how much money, on average, did you spend during each session of playing bingo (Please give values in Australian dollars)

Money spent _____

9. In the past 12 months, have you bet on sporting or other events (e.g., TV football game results, election results)?

   ☐ No
   ☐ Yes

   In the past 12 months, which of the following methods have you used when betting on sporting or other events? (please tick all that apply)

   ☐ At an off-course venue (such as TOTE/TAB, club, hotel or casinoOver the Internet on a mobile device (website or app on a smartphone, laptop, or iPad)
   ☐ Over the Internet using a desktop computer

   By telephone or SMS (landline or mobile phone)

   In the last 12 months, how many times per week **OR** per month **OR** per year have you bet on sporting or other events? (regardless of the venue)

   Times per week _____
   Times per month _____
   Times per year _____

   In the past 12 months, how much money, on average, did you spend during each session of betting on sporting or other events? (Please give values in Australian dollars)

   Money spent_____

10. In the past 12 months, have you bet on informal private games, such as cards, mah-jong, snooker, online or offline computer games, board games, sports)?

    ☐ No
    ☐ Yes

    In the past 12 months, which of the following methods have you used when betting on informal private games? (please tick all that apply)

    ☐ At a place of residence (e.g., family or friends house)
    ☐ At a club or hotel
    ☐ Over the Internet, telephone landline or using a mobile app
    ☐ Other (please specify below)

    In the last 12 months, how many times per week **OR** per month **OR** per year have you bet on informal private games for money (e.g. cards, mah-jong, snooker, online or offline computer games, board games, sports)?

    Times per week _____
    Times per month _____
    Times per year _____

    In the past 12 months, how much money, on average, did you spend during each session of betting on informal private games for money? (Please give values in Australian dollars)

    Money spent _____

11. In the past 12 months, have you engaged in day trading (e.g., securities trading, buying and selling stocks, currencies or futures trading)?

    ☐ No
    ☐ Yes

    In the past 12 months, which of the following methods have you used when engaging in day trading? (please tick all that apply)

    ☐ Over the internet on a mobile device (website or app on a smartphone, laptop, or iPad)
    ☐ Over the internet using a desktop computer
    ☐ Over the telephone (landline or mobile phone)

    In the last 12 months, how many times per week **OR** per month **OR** per year have you undertaken day trading? (regardless of the venue)

    Times per week _____
    Times per month _____
    Times per year _____

    In the past 12 months, how much money, on average, did you spend per week, or per month, or over the 12 months on day trading? (Please give values in Australian dollars)

    Money spent per week _____
    Money spent per month _____
    Money spent over year _____

12. In the past 12 months, have you engaged in any other gambling activity that I haven't mentioned (excluding raffles or sweeps)?

    ☐ No
    ☐ Yes

    If yes, what sort of gambling activity was this and, approximately how many times per week **OR** per month **OR** per year did you engage in this activity during the past 12 months?

    Type of other gambling activity _____

    Times per week _____
    Times per month _____
    Times per year _____

    In the past 12 months, approximately how much money, on average, did you spend during each session of playing this gambling activity? (Please give values in Australian dollars)

    Money spent _____

13. In the past 12 months, have you played social casino games? (including without the use of money)

- ☐ No
- ☐ Yes

In the past 12 months, approximately how much money, on average, did you spend playing social casino games? (if you have never spent any money on these games then please enter "0" in the space below) (Please give values in Australian dollars)
Money spent _____

In the last 12 months, how many times per week **OR** per month **OR** per year have you played social casino games?

Times per week _____

Times per month _____

Times per year _____

Where was your first experience of gambling?

- ☐ Australia
- ☐ Other country (please specify)

Have you gambled more or less often since beginning studies at UTas?

- ☐ Gambled much less
- ☐ Gambled less
- ☐ Gambled the same amount
- ☐ Gambled more
- ☐ Gambled much more

In the past 12 months, what is the **most** money you have gambled **in one week**? (Please give values in Australian dollars)

☐ $ per week

In the past 12 months, approximately how much money have you spent on gambling in total, including **all** types of gambling (Please give values in Australian dollars)

☐ $ past 12 months

Thinking about the past 12 months, how often ….	**Never**	**Sometimes**	**Most of the time**	**Almost always**
1. Have you bet more than you could really afford to lose?	☐	☐	☐	☐

2. Have you needed to gamble with larger amounts of money to get the same feeling of excitement?	☐	☐	☐	☐
3. Have you gone back another day to try to win back the money you lost?	☐	☐	☐	☐
4. Have you borrowed money or sold anything to get money to gamble?	☐	☐	☐	☐
5. Have you felt that you might have a problem with gambling?	☐	☐	☐	☐
6. Have people criticized your betting or told you that you had a gambling problem, whether or not you thought it was true?	☐	☐	☐	☐
7. Have you felt guilty about the way you gamble, or what happens when you gamble?	☐	☐	☐	☐
8. Has your gambling caused you any health problems, including stress or anxiety?	☐	☐	☐	☐
9. Has your gambling caused any financial problems for you or your household?	☐	☐	☐	☐
10. Has your gambling reduced how well you perform in undertaking daily tasks and activities?	☐	☐	☐	☐
11. Has your gambling resulted in you changing jobs or being dismissed from work?	☐	☐	☐	☐
12. Has your gambling led to the breakup of an important relationship in your life?	☐	☐	☐	☐
13. Has your gambling led you to miss classes, fail assignments or otherwise disrupt your studies?	☐	☐	☐	☐

How often, if at all, do you take part in gambling activities for each of the following reasons …

	Never	**Sometimes**	**Most of the time**	**Almost always**
1. For the chance of winning big money	☐	☐	☐	☐
2. Because it's fun	☐	☐	☐	☐
3. As a hobby or a past-time	☐	☐	☐	☐
4. To escape boredom or to fill your time	☐	☐	☐	☐
5. To compete with others (e.g. bookmaker, other gamblers)	☐	☐	☐	☐
6. Because it's exciting	☐	☐	☐	☐
7. For the mental challenge or to learn about the game or activity	☐	☐	☐	☐

8. Because of the sense of achievement when you win	□	□	□	□
9. To impress other people	□	□	□	□
10. To be sociable	□	□	□	□
11. Because it helps when you're feeling tense	□	□	□	□
12. To make money	□	□	□	□
13. To relax	□	□	□	□
14. Because it's something that you do with friends or family	□	□	□	□

Please read each of the following statements and for each statement tick the box that indicates your level of familiarity with/experience of problem gambling …

	No	Yes
1. I have watched a movie or TV show in which a person with problem gambling was featured	□	□
2. I have observed, in passing (e.g., at a casino), a person with problem gambling	□	□
3. My job involves/involved helping people with gambling problems	□	□
4. A friend, relative or partner currently has a gambling problem	□	□
5. A friend, relative or partner has had a gambling problem in the past	□	□
6. I live or have lived with a person who has/had a gambling problem	□	□
7. I currently have a gambling problem myself	□	□
8. I have had a gambling problem in the past (but not currently)	□	□

Health and Well-Being:

1. In general, would you say your health is:

   □ Excellent
   □ Very good
   □ Good
   □ Fair
   □ Poor

	Not at all stressed	A little stressed	Moderately stressed	Very stressed	Extremely stressed
Currently, how stressed are you about your studies?	□	□	□	□	□
Currently, how stressed are you about your financial situation?	□	□	□	□	□

During the past two weeks …

	Not at all	A little	A moderate amount	Very much	Extremely
1. How safe do you feel in your daily life?	☐	☐	☐	☐	☐
2. How healthy is your physical environment? (e.g., clean water and air)	☐	☐	☐	☐	☐

	Not at all	A little	Moderately	Mostly	Completely
3. Have you enough money to meet your needs?	☐	☐	☐	☐	☐
4. How available to you is the information that you need in your day-to-day life?	☐	☐	☐	☐	☐
5. To what extent do you have the opportunity for leisure activities?	☐	☐	☐	☐	☐

	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
6. How satisfied are you with the conditions of your living place?	☐	☐	☐	☐	☐
7. How satisfied are you with your access to health services?	☐	☐	☐	☐	☐
8. How satisfied are you with your transport?	☐	☐	☐	☐	☐

On a scale of 1 to 5, what is your level of agreement with the following statements?

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1. In most ways, my life is close to my ideal.	☐	☐	☐	☐	☐
2. The conditions of my life are excellent.	☐	☐	☐	☐	☐
3. I am satisfied with my life.	☐	☐	☐	☐	☐
4. So far I have gotten the important things I want in life.	☐	☐	☐	☐	☐

5. If I could live my life over, I would change almost nothing.	☐	☐	☐	☐	☐

To what extent would you agree with each of the following statements?

Currently, …	Strongly Disagree	Mildly disagree	Neither agree or disagree	Mildly agree	Strongly agree
1. There is a special person who is around when I am in need.	☐	☐	☐	☐	☐
2. There is a special person with whom I can share joys and sorrows.	☐	☐	☐	☐	☐
3. My family really tries to help me.	☐	☐	☐	☐	☐
4. I get the emotional help & support I need from my family.	☐	☐	☐	☐	☐
5. I have a special person who is a real source of comfort to me.	☐	☐	☐	☐	☐
6. My friends really try to help me.	☐	☐	☐	☐	☐
7. I can count on my friends when things go wrong.	☐	☐	☐	☐	☐
8. I can talk about my problems with my family.	☐	☐	☐	☐	☐
9. I have friends with whom I can share my joys and sorrows.	☐	☐	☐	☐	☐
10. There is a special person in my life who cares about my feelings.	☐	☐	☐	☐	☐
11. My family is willing to help me make decisions.	☐	☐	☐	☐	☐
12. I can talk about my problems with my friends.	☐	☐	☐	☐	☐

For each statement, please indicate how much the statement applies to you at present by circling the appropriate number on the scale:

	Does not apply to me at all/ever	Applies to me a little of the time	Applies to me a moderate amount of the time	Applies to me most of the time	Applies to me completely/all of the time
1. Cigarette smoking is a problem for me	☐	☐	☐	☐	☐
2. I smoke more heavily since I began my university studies here	☐	☐	☐	☐	☐
3. My cigarette smoking is out of control	☐	☐	☐	☐	☐
4. Consumption of alcohol is a problem for me	☐	☐	☐	☐	☐
5. I drink more alcohol since I began my university studies here	☐	☐	☐	☐	☐
6. My consumption of alcohol is out of control	☐	☐	☐	☐	☐
7. Drug use is a problem for me	☐	☐	☐	☐	☐
8. I take drugs more often since I began my university studies here	☐	☐	☐	☐	☐
9. My drug use if out of control	☐	☐	☐	☐	☐

Over the past 4 weeks (28 days), how often have you felt... (tick <u>one</u> box to answer each question)	None of the time	A little of the time	Some of the time	Most of the time	All of the time
1. Tired out for no good reason	☐	☐	☐	☐	☐
2. Nervous	☐	☐	☐	☐	☐
3. So nervous that nothing could calm you down	☐	☐	☐	☐	☐
4. Hopeless	☐	☐	☐	☐	☐
5. Restless or fidgety	☐	☐	☐	☐	☐
6. So restless that you could not sit still	☐	☐	☐	☐	☐
7. Depressed	☐	☐	☐	☐	☐
8. That everything was an effort	☐	☐	☐	☐	☐
9. So sad that nothing could cheer you up	☐	☐	☐	☐	☐
10. Worthless	☐	☐	☐	☐	☐

Help-Seeking

1. Have you ever sought advice or help, for example from a health professional or online counselling service, for any of the following problems? (please tick all that apply)
   - ☐ A mental health problem, such as being anxious or depressed?
   - ☐ A relationship problem (e.g., marriage breakdown)
   - ☐ An alcohol or substance use problem (e.g., drinking too much)
   - ☐ Financial problems (e.g., difficulty paying the rent)
   - ☐ A problem with gambling (e.g., gambling more than you can afford to lose)
   - ☐ None of the above (go to question 4)

2. If yes, when did you last seek such help?
   - ☐ Past month
   - ☐ Past 12 months (but not past month)
   - ☐ More than 12 months ago

3. From where, or whom did you seek advice or help? (tick all that apply)
   - ☐ University counselling service
   - ☐ General practitioner/family doctor
   - ☐ Psychologist in private practice
   - ☐ Psychiatrist in private practice
   - ☐ Religious leader (e.g., pastor)
   - ☐ Community mental health services (e.g., Headspace or Anglicare)
   - ☐ Online or telephone counselling service (e.g., Beyond Blue, Lifeline, Gamblers Helpline)
   - ☐ Other (please specify)

4. Has there ever been a time when you felt that you needed to seek advice or help for one or more of the problems mentioned above but chose not to do so at the time?
   - ☐ No (go to demographic characteristic questions)
   - ☐ Yes

5. If yes, what was the *main* reason for this (please tick one box only)?
   - ☐ I didn’t know where to go or how to get an appointment
   - ☐ I thought my problem was not important/serious enough
   - ☐ I didn't know the service was free/couldn’t afford it
   - ☐ I thought it might influence my academic results
   - ☐ I thought they wouldn't be able to help me
   - ☐ I felt that I could manage the problem on my own
   - ☐ I didn’t want anyone to know about the problem
   - ☐ Other (please specify)

Demographic characteristics

1. Do you reside in Tasmania?
   - ☐ Yes
   - ☐ No
2. What is your age?
3. Are you:
   - ☐ Male
   - ☐ Female
   - ☐ Intersex
   - ☐ Other (please specify)
4. In what country were you born? (drop down menu)
5. Do you study on-campus or via distance?
   - ☐ On-campus
   - ☐ Via distance
6. Which campus to you usually attend?
   - ☐ Hobart
   - ☐ Launceston
   - ☐ Cradle Coast
   - ☐ Other (please specify)
7. What is the main language spoken at your current place of residence?
   - ☐ English
   - ☐ Other (please specify)
8. What is your current relationship status?
   - ☐ Single, never married
   - ☐ Single, previously married/separated or divorced
   - ☐ Married or living as married (cohabiting with partner)
   - ☐ Other (please specify)
9. Do you have children?
   - ☐ Yes
   - ☐ No
10. For university fees, are you a domestic or an international student?
    - ☐ Domestic
    - ☐ International
11. Which faculty are you enrolled in?

12. Are you currently an undergraduate or postgraduate student?

- ☐ Undergraduate
- ☐ Postgraduate
- ☐ Other (please specify)

13. Are you enrolled:

- ☐ Full-time
- ☐ Part-time

14. In what year and month did you commence your studies at UTas? (drop down menu)

15. Which year of your Degree are you in?

- ☐ 1st
- ☐ 2nd
- ☐ 3rd
- ☐ 4th
- ☐ 5th
- ☐ Other (please specify)

16. What is your *main* source of income at present? (please tick one box only):

- ☐ Paid employment
- ☐ Government pension, allowance or benefit (e.g., Youth Allowance, child support)
- ☐ University scholarship
- ☐ Superannuation/annuity or other investments
- ☐ Assistance from family
- ☐ Other (please specify)

17. Approximately, how many hours of paid employment per week are you working at present?

☐ hours per week

18. What is your approximate income per week from sources BEFORE TAX. (Please give values in Australian dollars).

☐ $ per week

… LINK TO SEPARATE WINDOW FOR SELECTED (INTERVIEW) PARTICIPANTS TO PROVIDE PREFERRED CONTACT DETAILS …

… PLEASE CLICK TO RETURN TO SURVEY EXIT PAGE …

BY SUBMITTING THIS SURVEY, YOUR CONSENT TO PARTICIPATE IS IMPLIED

THANK YOU FOR PARTCIPATING IN THE UTAS GAMBLING, HEALTH AND WELL-BEING STUDY!