

Problem gambling in people presenting to a public mental health service

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This report outlines the background, project aims, context and results of a research project examining the incidence and nature of gambling in people presenting to a public mental health service. The study cohorts were people screened for problem gambling by the Crisis Assessment Treatment Team (CATT), of the Department of Psychiatry at The Alfred Hospital, Melbourne. The project partner was Gambler's Help Southern Problem Gambling Service, and the project was funded by the Victorian Government Department of Justice.

Authored by Anthony de Castella, Pip Bolding, Adeline Lee, Sonja Cosic, Professor Jayashri Kulkarni

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PROBLEM GAMBLING IN PEOPLE PRESENTING TO A PUBLIC MENTAL HEALTH SERVICE

FINAL REPORT

Anthony de Castella, Pip Bolding, Adeline Lee, Sonja Cosic,
Professor Jayashri Kulkarni.

October 2011



TABLE OF CONTENTS

Executive Summary	1
Background	4
Mental Health Service in Context	5
Study Participants	6
Aims of the Study	6
Sponsoring Organisation and Study Location	7
Study Support	7
Expenditure	8
Timetable of Events	9
Study Methodology	12
Procedures	12
Screening	12
<i>In-depth interview</i>	12
<i>Follow-up In-depth interview</i>	13
Instruments	13
Statistical Analyses	15
Results	16
Sample Characteristics	16
Psychopathology, Impulsivity, & Quality of Life	19
Gambling and Alcohol & Drug Issues	22
Gambling Activities and Behaviours	25
Prior Help Seeking Behaviours	25
Follow-up In-depth Interview	26
Help Seeking Behaviours after Initial In-depth Interview	27
Study Limitations	28
Summary	29
FUTURE DIRECTIONS	30
References	32
Appendices	34
Appendix 1: Screening Tool for Problem Gambling	34
Appendix 2: Participant Information and Consent Form	35
Appendix 3: Quantitative and qualitative questions to assess Demographics, context of gambling habits, and suicidal ideation	41

LIST OF TABLES

Table 1: Expenditure	8
Table 2: Timetable of events.....	9
Table 3: Presentation of study sample with gambling problems by gender	16
Table 4: Demographic variables of participants	18
Table 5: Gender and age of participants.....	18
Table 6: Psychopathology Scores of Study Sample	19
Table 7: Mean Impulsivity and Quality of Life Scores	21
Table 8: Participants scores on gambling, drug and alcohol scales	23
Table 9: Services Engaged by Participants after Initial Interview	27

TABLE OF FIGURES

Figure 1: Suicidality identified at presentation to CATT by gender	16
Figure 2: Alcohol problems identified at presentation to CATT by gender	17
Figure 3: Anxiety Severity Category Scores by Gender.....	19
Figure 4: Depression Severity Category Scores by Gender	20
Figure 5: Suicide Intent Severity Category Scores by Gender.....	20
Figure 6: Mean of Psychopathology, Impulsivity & Quality of Life Scores by Gender	22
Figure 7: Gambling Category by Gender	23
Figure 8: Alcoholism Category by Gender	24
Figure 9: Substance Category by Gender.....	24
Figure 10: Participants' Gambling Activities.....	25
Figure 11: Time 1 vs Time 2 Comparisons of Mean Scores of Outcomes Measures.....	26
Figure 12: Self-exclusion Information.....	28

EXECUTIVE SUMMARY

This report outlines the background, projects aims, context, and results of a research project examining the incidence and nature of gambling in people presenting to a public mental health service. The study cohorts were people screened for Problem Gambling by the Crisis Assessment Treatment Team (CATT), of the department of Psychiatry at The Alfred Hospital, Melbourne, Victoria. The project partner was Gambler's Help Southern (GHS) Problem Gambling Service, and the project was funded by Department of Justice, Victorian State Government.

The study examined 1108 consecutive presentations of 893 separate individuals who were; a) assessed by The Alfred's Crisis Assessment & Treatment Team (CATT), or b) admitted to the Alfred Hospital Emergency Department and subsequently assessed by The Alfred's Psychiatry Triage Team. The main aims of the project were to determine the prevalence of problem gambling in these individuals, and to further understand the emotional, mental and physical health problems, and the nature of suicidal ideations and/or behaviours of those people identified with gambling problems.

Screening for problem gambling by the Alfred Hospital "Psychiatry Triage" staff was conducted over a six month period and staff members were encouraged to administer a problem gambling "screening tool" to all people they assessed. Not all people were able to be screened due to clinical and logistical issues (290 screening tools completed out of 893 people). 50 people out of 290 were identified with gambling problems, giving a prevalence rate of 17.2%, which is consistent with findings from a previous study by the same group/site using a similar methodology. People identified with problem gambling in the current study were followed up by a research project officer and invited to participate in an in-depth interview to better understand the nature and depth gambling problem (21 people participated in the in-depth interview). The previous study did not include this component of the study, and much of this report focuses on this component of the study. Participants identified with problem gambling were also referred to a gambling service for intervention to address their gambling problem. Participants of the in-depth interview were also invited to complete a 2nd follow-up interview 6 months later to assess any changes in the nature of their gambling problem from when they initially presented to the service, and to investigate the impact of the intervention delivered by Gamblers Help Southern (15 out of 21 people completed the follow-up interview).

The main findings of the study included in this report are:

- The prevalence of problem gambling identified in the study cohort was more than four times that reported in the general community

- Overall, men and women with gambling problems had similar levels of depression, anxiety, suicide intent, alcohol, and substance use issues. However, women presented to CATT triage with slightly higher severity levels of depression and anxiety, whilst males presented with slightly higher levels of alcohol and substance use problems.
- Depression and anxiety co-occurred for 76% of study participants whilst 57% of participants had a co-morbid alcohol problem, and 24% a co-morbid substance use problem.
- The top three gambling activities reported by problem gamblers were:
 - i. Pokies
 - ii. Casino gambling, and
 - iii. Horse racing
- Almost half of the study participants with identified gambling problems followed-up on referral pathways provided and attended either a Gamblers Help Service or Gamblers Anonymous. Ten percent of effected participants' family members also attended for assistance.
- The majority of participants found information on self-exclusion helpful and 68% of participants who were followed-up went on to self-exclude from gambling venues.
- There was a significant decrease in levels of depression, anxiety, suicide intent, and alcohol problems 6-months after the baseline "in-depth" interview. There was also a decrease in levels of impulsivity and substance use, and a slight increase in the levels of well being of participants. Further investigation is required to ascertain the cause of these changes.

Based upon the high prevalence of gambling found in this study, the inclusion of routine screening for gambling problems for both new and existing clients of Mental Health Services is clearly warranted.

Effective linking of people who have co-occurring mental health and gambling problems with specialist problem gambling services is essential for optimal treatment of this vulnerable subgroup of people. Effective linking requires the establishment of clear working protocols between proximal Mental Health Services and their associated problem gambling services.

The following recommendations are made in relation to the project:

1. Given the limitations in the study sample size, and the relatively low rate of screening tool completion, it is recommended that the study receive additional funding to continue data collection for an additional twelve months, with a focus on increased compliance with the use of the problem gambling screening tool, to further validate the findings of the current study.
2. That an extension of this study as recommended above be widened to include a broader population group to establish the transferability of the results to clients of Mental Health Services in other geographical areas.
3. Given almost half of those identified with problem gambling engaged with problem gambling help services, it is recommended that information on available problem gambling services be made available to all people assessed by mental health services in Victoria.
4. Further research into the co-morbidity of gambling and mental illness is urgently required to identify potential interventions specific to this vulnerable subgroup of people in our community.
5. It is recommended that each area mental health service receive recurrent funding for a problem gambling training and education worker within their workforce to ensure appropriate adaptation and sustainability of change in practice related to co-morbid gambling and mental health problems, for staff of both mental health and problem gambling services. This role would fulfil the following goals:
 - Development of close inter-agency working relationships for staff of area mental health and problem gambling services to facilitate pathways to care across services for clients of both services.
 - Support and education for Mental Health Service staff regarding the importance of screening for gambling problems as part of their routine clinical risk assessment for new and existing clients.
 - Support and education for Mental Health Service staff regarding the importance and value of timely referral to Problem Gambling Services for people with identified gambling problems.
 - Education and support of Problem Gambling Service staff concerning mental health disorders in their clients.

BACKGROUND

While a few previous studies have focused on gambling as a co-morbid factor for people with a mental illness (e.g. Bland et al. 1993), no known previous studies have examined the prevalence of problem gambling in people presenting at public hospitals in acute mental health crisis, to examine its role as a precipitating factor. This project specifically screened for problem gambling in people who presented to the Alfred Hospital in crisis with or without suicidal ideation.

The link between mental illness and problem gambling has been reported from both directions. Mental illness has been reported to be more common in problem gamblers while at the same time, problem gambling has been reported to be more prevalent in people with mental illness. While confirming the coexistence of problem gambling and mental illness in both populations has been relatively straightforward, understanding the causal relationship between the two is more complex. People presenting to the public hospital system, including the psychiatry department, include both problem gamblers and people with existing mental illness, and thus provide a unique opportunity to study the relationship between them.

Mental Illness and Problem Gambling

Problem gamblers have been reported to be more than three times as likely to meet criteria for certain psychiatric illnesses compared with the general population (Bland, Newman, Orn & Stebelsky, 1993). Black and Moyer (1998) also found a high prevalence of co-occurring mental illness in a group of problem gamblers. Petry, Stinson, and Grant (2005), found that nearly half of problem gamblers had a mood disorder, more than a third had an anxiety disorder, and nearly two-thirds had a personality disorder. Additionally, three quarters of gamblers had an alcohol disorder. Sumitra and Miller (2005) noted that depression and substance abuse are common co-morbid disorders in people with problem gambling, with as many as 47% of problem gamblers being substance users, and almost one in five having a mood disorder.

Suicide and Problem Gambling

Suicide is a major and growing problem in our society. It has been suggested that as many as nine out of ten individuals who die by suicide have a mental disorder at the time, and around 50% of all people who suicide are suffering primary depression at the time (Bouch & Marshall, 2005). Highlighting the importance of adequately treating people who attempt suicide is the fact that one of the major risk factors for future suicide attempts is a previous history of suicide attempt (Newman & Thompson, 2003). While it is well established that depression is a highly prevalent mental disorder which

is strongly correlated with both attempted and completed suicide (Lonnqvist, 2000), it is also known that depression is a common comorbid disorder amongst problem gamblers.

A number of studies have clearly highlighted a strong association between gambling problems and suicidal thoughts and behaviours (Battersby et al. 2006, Penfold et al. 2006a & 2006b, Ledgerwood, 2005, Ledgerwood and Petry 2004, Kausch 2003, Petry and Kiluk 2002, and Blaszczynski & Farrell 1998). Lesieur & Blume (1990) and Henderson (2004) examined the rate of gambling problems in psychiatric services and found it was significantly higher than the rate for the general population. Desai and Potenza (2009) found that a high proportion of people treated for psychotic disorders reported problems with gambling in the previous year, and those individuals who had depression and alcohol problems had a significantly increased risk of developing gambling problems.

From the research, it is likely that a proportion of people who present to psychiatric services are likely to have a co-occurring gambling problem, with or without suicidal thought or behaviours. In 2005, we conducted an initial study screening for the presence of problem gambling in people presenting to the Alfred Psychiatry Service and found an incidence rate of 17.8%. Apart from this initial project no previous studies identified have examined the prevalence and impact of problem gambling amongst people presenting to a psychiatric service.

Mental Health Service in Context

The Alfred's Department of Psychiatry consists of adult acute hospital beds, including a state wide psychiatric Intensive Care Unit, and community-based mental health services, with approximately 800 registered clients at any one time. It offers a broad range of clinical programs including a Psychiatric Triage and Crisis Assessment and Treatment Team (CATT), Acute Adult Inpatient Services, Continuing Care and Consultancy Services, Mobile Support and Treatment Services, Residential Continuing Care Services, Homeless Outreach Psychiatric Services, an Aged Psychiatry Service, Child and Adolescent Services, and an innovative Youth Early psychosis service.

The Psychiatry Triage Service co-ordinates service entry and provides outreach via the C.A.T Team for people who are in crisis. It provides a 24-hour, 7 day a week, community-based service to those people who have mental health issues and experience a crisis. This service is intensive in nature and offers a treatment alternative to hospitalisation. As with all Victorian Mental Health Services, the programs are organised along geographical lines with The Alfred Department of Psychiatry providing services to the inner southeast areas of Melbourne, Victoria, including the cities of Port Philip, Stonnington, and Glen Eira.

There is also a Clinical Liaison and Consultancy Psychiatric Service for patients of The Alfred.

The clinical programs at the Alfred Psychiatry Service are uniquely accompanied by the Monash Alfred Psychiatry Research Centre (MAPrc). MAPrc is also affiliated with Monash University, School of Psychology and Psychiatry. MAPrc acts to facilitate and coordinate all research conducted within the Alfred Department of Psychiatry.

Study Participants

The study was aimed at consecutive presentations of people with or without suicidal ideas or attempts, who were assessed The Alfred's Crisis Assessment & Treatment Team, or who were admitted to the Emergency Department of The Alfred Hospital and subsequently seen by The Alfred's Psychiatry Triage Team. Over a six-month period, people seen by the service were screened for the presence of co-morbid gambling problems. Problem gambling was confirmed via administration of a screening tool devised specifically for the study. An affirmative report of problem gambling included reports of problems for someone close to the person being assessed. The total sample size of consecutive presentations was 1108 people; however 215 of these included people who were re-presenting to the service and so were removed from the analysis resulting in a final number of individual presentations by 893 people.

Aims of the Study

The study had the following aims:

1. To assess the prevalence of problem gambling by screening people seen by the Alfred Psychiatry Triage Team and CATT with/without suicidal ideas or behaviours.
2. To further examine and understand the depth of problem gambling in people who present in crisis with/out suicidality who are seen by The Alfred's Psychiatry Triage Team and CATT in relation to the following factors:
 - Psychiatric factors
 - Substance abuse
 - Social factors
3. To further enhance and ingrain screening for problem gambling within routine clinical mental health assessment.
4. To raise awareness of problem gambling as an important co-morbid risk factor, among health professionals who work in acute health and mental health crisis

services.

5. To promote the established linkages with Gamblers Help Services for people who present to Psychiatric Triage service and CATT who have gambling problems.
6. To investigate the nature and impact of problem gambling and its relationship with mental health by inviting identified individuals to participate in an in-depth interview at baseline and at 6 months follow-up.
7. To use the study results to help develop a framework of policy and training activities around problem gambling within The Alfred Psychiatry Service.

Sponsoring Organisation and Study Location

The 12 month project was funded by the Victorian State Department of Justice, Problem Gambling Strategy. It was conducted by the Monash Alfred Psychiatry Research Centre (MAPrc) and The Alfred Department of Psychiatry. The study was conducted in partnership with Gambler's Help Southern, which provides free, confidential, professional support for gamblers, their families and others affected by gambling in the Southern region of Melbourne, Victoria.

Study Support

Support was provided to the study by the following:

- Staff of The Alfred, Department of Psychiatry, in particular the Triage Team and Crisis Assessment & Treatment Team.
- Staff of Gamblers Help Southern, Melbourne, Victoria.
- Staff of the Office of Gaming & Racing, Department of Justice, State Government of Victoria - Ms Rosa Billi & Mr Paul Marden

EXPENDITURE

Table 1: Expenditure

Component	Proposed Allocation
Project Officer from Nursing or allied health background @ 0.8 EFT for 12 months @ \$70,000 + 14.5% On-Costs (LSL, Work Cover, Superannuation, etc.)	\$64,120
Project Chief Investigator time @ 0.15EFT for 12 months @ \$80,000 + On-Costs.	\$13,740
Equipment & operating costs (Computer, telephone, printing, stationery, etc.)	\$5,000
Staff Travel to meetings, participant interviews and presentations at external services etc.	\$1,500
Participant reimbursement for in-depth interviews @ \$30 x 50	\$1,500
Participant reimbursement for out of pocket travel expenses	\$1,000
Conference costs to present findings and outcomes.	\$2,500
Infrastructure and overheads @ 14%	\$12,038
TOTAL	\$99,590

TIMETABLE OF EVENTS

Table 2: Timetable of events

Activities	Description	Completion Date
Initial project plan	<ul style="list-style-type: none"> Pilot study continued in consultation with the Department of Justice 	August 2008
Establishment of organisational infrastructure and processes	<ul style="list-style-type: none"> Establishment of operating fund within Monash University, SPPPM 	August 2008
Establishment of organisational infrastructure and processes	<ul style="list-style-type: none"> Sign off of service agreement and completion of DOJ paperwork 	August 2008
Establishment of organisational infrastructure and processes	<ul style="list-style-type: none"> Submission of recruitment paperwork for internal approval to establish project positions including development of position descriptions 	October 2008
Advertise and recruit Project Officer	<ul style="list-style-type: none"> Advertise and interview for Project Officer 	October 2008
<p>Confirm reference group membership and convene 1st meeting</p> <p>Establish schedule and dates for reference group meetings for the duration of the project</p>	<ul style="list-style-type: none"> Reference group will consist of representatives of APRC, Alfred Psychiatry, Gambler's Help Southern, and the Department of Justice. Reference Group Meeting to be incorporated with existing reference group for concurrently run Education & training, and After Hours Crisis Service projects in Problem Gambling at Alfred Psychiatry. Schedule of meetings confirmed. Monthly steering committee meetings and quarterly reference group 	September 2008

	<p>meetings.</p> <ul style="list-style-type: none"> ▪ Terms of reference for group established. 	
Preparation of study instruments, including finalization of the qualitative instrument for the in-depth interview and study CRF's	<ul style="list-style-type: none"> ▪ Review of study instruments to be administered to participants ▪ Development of case report forms for data collection ▪ Ethics submission with additional assessment instruments included. 	November 2008
Prepare and Submit Amendment to original ethics approval	<ul style="list-style-type: none"> ▪ Alfred ethics amendments can usually be approved outside the monthly full committee dates by review and response with two members of the committee ▪ Amendment to ethics approval of original project submitted to ethics for approval. ▪ Project reviewed and considered by full ethics committee ▪ Ethics approval obtained 23rd 	December 2008
Integration of PG screening tool into CATT Triage instruments	<ul style="list-style-type: none"> ▪ Liaise with CATT to integrate the PG screening tool to be administered by CATT / triage staff into existing screening instruments 	January 2009
Conduct education and information session with CATT and Triage staff	<ul style="list-style-type: none"> ▪ Coordinate with CATT manager to meet with CATT team at multiple meetings to discuss potential issues and strategies for roll out of the study 	Three sessions: January, February & July 2009
Commence Screening and data collection from CATT Triage	<ul style="list-style-type: none"> ▪ CATT / Triage staff to commence implementing the PG screening tool into routine clinical practice ▪ Collection of completed screening 	January - July 2009

	tools for data collection and entry into database	
Commence data collection from medical records of clients identified with PG	<ul style="list-style-type: none"> ▪ Review medical records of clients identified with PG on the screening tool 	March – July 2009
Commence follow-up of identified clients PG for enrolment in in-depth interviews	<ul style="list-style-type: none"> ▪ Follow up clients identified with PG to invite them to participate in the 1st in-depth interview. 	September 2009
Conduct 2nd in-depth interviews and data collection	<ul style="list-style-type: none"> ▪ Clients identified and participated in 1st in-depth interview to be followed for 2nd interview. 	February 2010
Data entry into study database	<ul style="list-style-type: none"> ▪ Enter data collected from all sources into database and clean data for data analysis 	February 2010
<p>Commence data analysis</p> <p>Produce final study report</p> <p>Preparation of manuscripts for publication in peer reviewed journals</p> <p>Preparation of presentation at appropriate conference</p> <p>Press release of major findings from the study</p>	<ul style="list-style-type: none"> ▪ Analyse data according to data analysis plan ▪ Prepare final study report of findings obtained for key stakeholders ▪ Finalise target journals for publication and prepare manuscripts accordingly ▪ Finalise target conferences and forums for presentation of results ▪ Liaise with University public relations department and DOJ for potential media release of findings 	January - April 2010

STUDY METHODOLOGY

This study **screened** for problem gambling in people who present to the Alfred Hospital Psychiatry Triage and of CATT, with/without suicidal ideation or attempted suicide, over the six month study period. People meeting criteria for problem gambling were followed up and invited to participate in an **in-depth interview** to gain a greater understanding of the nature and depth of their gambling problems. Identified participants were also referred to a gambling service for a specific intervention to address their gambling problem. Participants who completed the in-depth interview were invited to complete a **follow up in-depth interview** six months post their initial interview to assess the impact of the intervention by gamblers help and to assess any changes in aspects of their gambling from their baseline interview.

Procedures

Screening

People who presented to the Alfred Psychiatry CATT Triage service were screened for gambling problems as part of the routine clinical assessment conducted by the CATT triage workers, by incorporating a simple and easy to administer problem gambling screening tool (Appendix 1). People identified as having a gambling problem were referred to Gamblers Help for assistance with their problem. They were also notified to the project officer, who arranged to extract additional information from the person's medical record and assessment documents.

At the time of initial assessment, those people identified as having a gambling problem, who also expressed interest in participating in the in-depth interview component of the study, were notified that they would be re-contacted within two weeks (or as soon as possible after the person's mental health crisis resolved) by the research officer to discuss participation in the in-depth interview component of the study.

In-depth interview

The project officer obtained referrals from the CATT triage team of clients who were identified with a gambling problem. The project officer followed-up the outcome of the person's clinical engagement with the service and, in conjunction with the person's treating team, determined when the acute episode sufficiently resolved to allow re-contact and invited the person to participate in the in-depth interview. The in-depth interview was conducted either at the person's home, following a clinical risk assessment, or at the research centre.

When a person agreed, the research officer arranged to meet with the participant and provided them with a detailed "patient information and consent form" (Appendix 2)

relating to the study. Once the person signed the consent form in the presence of a witness, the research officer conducted the in-depth interview.

Each participant who completed the in-depth interview was reimbursed \$30 for any out of pocket expenses in relation to their participation. They were also provided referral options to Gamblers Help Southern to deal with their gambling issues.

Follow-up In-depth interview

The project officer invited participants who completed the in-depth interview to participate in a follow-up interview. Participants who consented to be followed up were re-contacted 6 months post in-depth interview to arrange the follow-up interview. The follow-up in-depth interview was conducted either at the person's home, following a clinical risk assessment, or at the research centre. Each participant who completed the follow-up in-depth interview was reimbursed \$30 for any out of pocket expenses in relation to their participation.

Instruments

The following data and questions/instruments were utilised in the study:

- **Problem Gambling Screening Tool** A four item problem gambling screening tool was developed specifically for the study (Appendix 1)
- Demographic data such as gender, age, ethnicity, country of birth, education, living situation, employment etc.
- A range of 31 quantitative and qualitative questions were formulated with the purpose to assess both context of gambling habits and suicidal ideation. To establish whether problem gambling developed first or was suicide ideation present before the development of problem gambling (Appendix 3)
- **The Beck Anxiety Inventory (BAI)** (Beck, Epstein, Brown & Steer, 1988)
The BAI is a 21 item self-report instrument that asks the person to rate common symptoms of anxiety, indicating how much they have been bothered by that symptom during the past week on a scale from "Not at all" to "Severely".
- **Beck's Depression Inventory Second Edition (BDI-II)** (Beck, Steer, Ball & Ranieri, 1996)
The BDI-II is a self-report questionnaire that consists of 21 groups of statements that the person is asked best describes the way they have been feeling during

the past two weeks to assess the existence and severity of symptoms of depression. Scores range from a minimum score of 0 to a maximum score of 63.

- **The Barratt Impulsivity Scale (BIS-11)** (Patton et al., 1995)

The BIS-11 measures general levels of impulsivity in motor, attentional and planning domains. The minimum total score is 30 and the maximum total score is 120, with scores ranging from 10 to 40 in the sub-domains.

- **The Drug Abuse Screening Test (DAST)** (Cocco & Carey, 1998; Gavin, Ross & Skinner, 1989)

The DAST is a 28 item test for the presence of a drug problems, not including alcohol. A score of five or less points indicates a normal score.

- **The Massachusetts Gambling Screen (MAGS)** (Shaffer, Labrie, Scanlan & Cummings, 1994)

The MAGS is a brief clinical screening instrument that measures an index of non-pathological and pathological gambling and places the DSM-IV pathological gambling criteria into a set of survey questions. (*Diagnostic and Statistical Manual of Mental Disorders, version IV, 1994*).

- **The Brief Michigan Alcoholism Screening Test (Brief MAST)** (Selzer, 1971)

The Brief MAST is a 10 item self-report questionnaire that focuses on alcohol use. A total score of 0 - 3 points indicates non-alcoholic; 4 points indicates “suggestive of alcoholism”; and 5 or more points indicates alcoholism.

- **Ferrans and Powers Quality of Life Index- Generic Version-III (FPQOLI)** (Ferrans & Powers, 1985)

The FPQOLI is a measure of a person’s personal happiness and life satisfaction, captured over the subjective assessments of importance and satisfaction. It produces scores for overall quality of life as well as domains of health and functioning, psychological/spirituality, social and economic, and family.

- **Symptom Checklist – 90 – Revised (SCL-90-R)** (Derogatis, 1994)

The SCL-90-R is a quick screening instrument for self-reporting clinical symptoms in psychiatric outpatients as a measure of the status of psychopathology along nine symptom constructs.

- **The Suicide Intent Scale (SIS)** (Pierce, 1977)

The SSI is a 12 item clinician rated scale with scale with a minimum score of 0 and a maximum score of 25. It covers areas around circumstances related to suicide attempt and self-report on suicide related thoughts and actions.

- **Beck's Scale for Suicide Ideation (BSI)** (Beck, Steer & Raneri, 1988)

The BSI is a 19-item rating scale used to evaluate the intensity of a patient's specific attitudes, behaviour and plans relating to suicide.

Statistical Analyses

All data was entered into SPSS version 18 for analysis. Demographic variables and descriptive data were analysed using descriptive statistics and reported using means, percentages and sum totals.

Scores from rating scales used in the in-depth interviews are reported as mean total score for groups and sub groups. Comparisons between groups were performed using Chi-square tests, Mann-Whitney U Tests, and Wilcoxon Signed Ranked Tests (non parametric alternatives to t-tests).

Non-parametric tests were employed due to the small sample size (21 participants), the fact that data was not normally distributed (differences were found between participants), and the fact that most of the scales used within the study were categorical.

RESULTS

Sample Characteristics

The study looked at 1108 consecutive presentations of people assessed by The Alfred's Crisis Assessment & Treatment Team, or who were admitted to the Emergency Department of The Alfred and then seen by The Alfred's Psychiatry Triage Team over the 6-month study period. Two-hundred and fifteen of the 1108 were people re-presenting to CATT during the six-month study period and were consequently removed. Of the 893 unique presentations, 32.5% (n=290) were screened for problem gambling issues using the screening tool developed for the study. People who were too acutely mentally ill or who refused to participate were excluded from the study. Of the 290 people administered the problem gambling screening tool 17.2% (n = 50) were identified as having a gambling problem, 4.2% (n = 12) had a significant other with a gambling problem, and 44.8% (n = 130) had suicidal ideation. Of the 50 problem gamblers 72% were males and the mean age was 40.6 years (SD= 13.5). Other relevant data by gender is summarised in Table 3 and Figures 1 & 2 below.

Table 3: Presentation of study sample with gambling problems by gender

Gender	N (%)	Mean Age (SD)	Identified substance use (%)	Identified substance Abuse (%)	Suicidality (%)
Males	36 (72)	39.3 (13.7)	21 (58)	3 (8 %)	15 (42%)
Females	14 (28)	43.8 (13.0)	5 (36%)	0 (0)	9 (64%)
Total	50 (100)	40.6 (13.5)	30 (60%)	3 (6%)	24 (48%)

Figure 1: Suicidality identified at presentation to CATT by gender (N = 50)

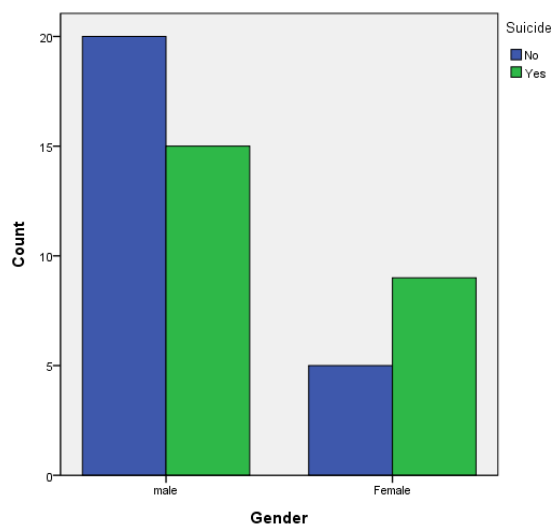
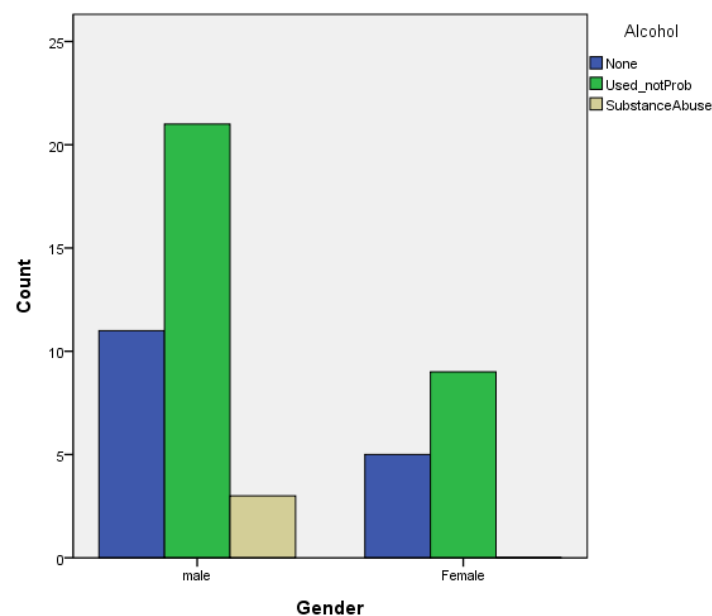


Figure 2: Alcohol problems identified at presentation to CATT by gender (N = 50)



By comparison, the average age of men with gambling problems was 39.3 years while for females it was 43.8 years. Almost three quarters of those screened positive for problem gambling issues at the time of assessment were men. Almost half of all males and more than half of females who identified problem gambling issues also identified having suicidal thoughts or intent. Six percent of persons with gambling issues (who were all males) were identified as having co-morbid substance abuse.

Of the 50 people identified with problem gambling, 21 (42%) consented to participant in the in-depth interview looking at the extent of their gambling and co-morbid mental illness. Of the 21 participants 52% were male and the mean age was 49.1 year (SD= 13.7). These participants were born in Australia (66.7%), had previously commenced a university degree (23.8%), lived with an unrelated other (28.6%), and were on a disability pension (33.3%). Of the 21 participants, 15 participants were followed up to complete a second in-depth interview. Of these 15 participants 53% were male with a mean age of 49.8 year (SD=14.8). Tables 4 and 5 summarises the demographic data of participants.

Table 4: Demographics of In-depth Interview Participants (N = 21)

Demographics	N (%)
<i>Country of Birth</i>	
Australia	14 (66.7)
New Zealand	1 (4.8)
United Kingdom	2 (9.6)
Pakistan	1 (4.8)
Vietnam	1 (4.8)
Spain	1 (4.8)
<i>Education</i>	
Completed Year 7	1 (4.8)
Completed Year 9	2 (9.5)
Completed Year 10	2 (9.5)
Completed Year 11	3 (14.3)
Completed Year 12	4 (19.0)
Commenced University	5 (23.8)
Completed trade	1 (4.8)
Completed University	3 (14.3)
<i>Living Situation</i>	
Alone	5 (23.8)
With partner/spouse	5 (23.8)
With unrelated other	6 (28.6)
With relatives	5 (23.8)
<i>Employment Status</i>	
Full-time	5 (23.8)
Part-time	1 (4.8)
Unemployed	5 (23.8)
Aged pension	1 (4.8)
Single mother pension	1 (4.8)
Disability pension	7 (33.3)
Work Cover	1 (4.8)

Table 5: Gender and Age of In-depth Interview Participants

Gender	1st In-depth Interview		Follow-up in-depth Interview	
	N (%)	Mean Age (SD)	N (%)	Mean Age (SD)
Males	11 (52)	48.4 (17.0)	8 (53)	51.6 (18.1)
Females	10 (48)	50 (9.9)	7 (47)	47.7 (10.9)
Total	21 (100)	49.1 (13.7)	15 (100)	49.8 (14.8)

Psychopathology, Impulsivity, & Quality of Life

Data on psychopathology such as anxiety, depression, suicide ideation and suicide intent was collected from study participants during the in-depth interview. Of the 21 participants, a majority were identified as having severe levels of anxiety and depression, and while 18 participants expressed varying levels of suicidal ideation, they were classed as low risk for suicide intent. The severity category scores are presented in Table 6. Figures 3 – 6 below illustrate the severity category scores by gender for depression, anxiety and suicide intent.

Table 6: Psychopathology Scores of Study Sample (N = 21)

Mental Illness Severity Categories	N	(%)
<i>Beck Anxiety Inventory (BAI)</i>		
Minimal	2	(9.5)
Mild	3	(14.3)
Moderate	5	(23.8)
Severe	11	(52.4)
<i>Beck Depression Inventory (BDI-II)</i>		
Minimal	2	(9.5)
Mild	3	(14.3)
Moderate	4	(19.0)
Severe	12	(57.1)
<i>Pierce Suicide Intent Scale (SIS)</i>		
Low	16	(76.2)
Medium	1	(4.8)
High	4	(19.0)

Figure 3: Anxiety Severity Category Scores by Gender (N = 21)

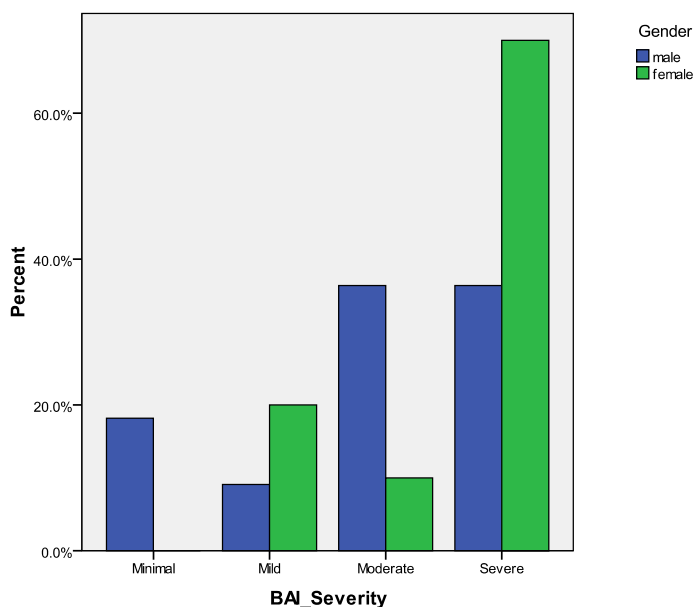


Figure 4: Depression Severity Category Scores by Gender (N = 21)

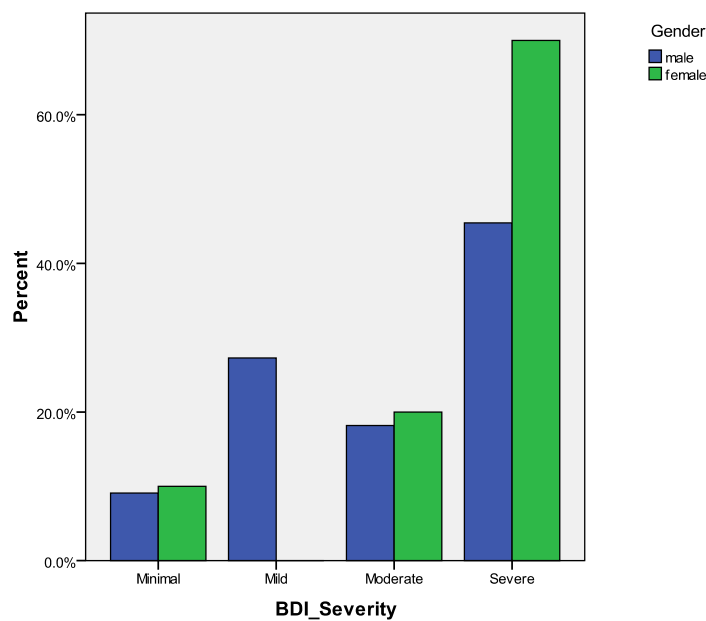
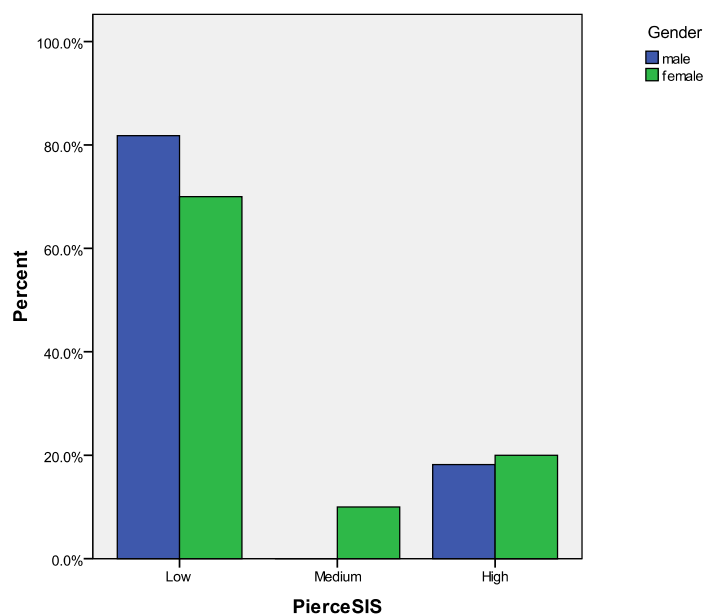


Figure 5: Suicide Intent Severity Category Scores by Gender (N = 21)



To test the difference between gender on total severity score of depression, anxiety and suicide intent a Mann-Whitney U Test was conducted. No significant gender differences were found. Similarly, a Chi-square test for independence (with Likelihood Ratio) indicated no significant association between gender and severity of anxiety, $\chi^2 (3, n = 21) = 5.8, p = .12, \phi = .49$; severity of depression, $\chi^2 (3, n = 21) = 4.5, p = .22, \phi = .40$; and severity risk of suicide intent $\chi^2 (2, n = 21) = 1.6, p = .45, \phi = .55$.

Table 7: Mean Impulsivity and Quality of Life Scores

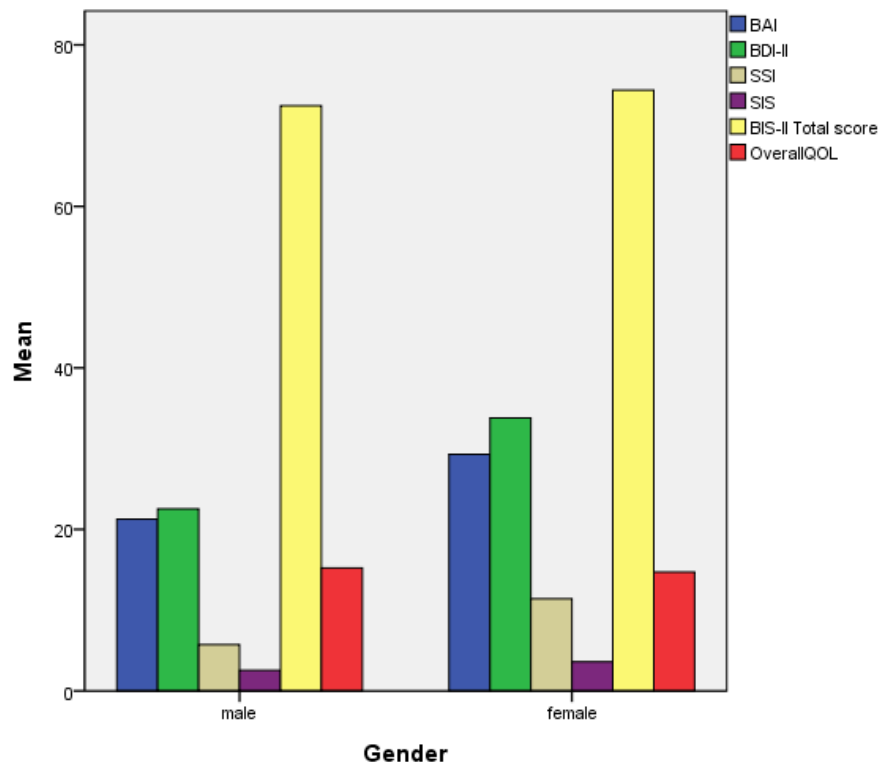
Scales	Min	Max	Mean(SD)
Barratt Impulsivity Scale (BIS-11)			
Attentional	12	24	18.9 (3.3)
Motor	19	33	24.6 (3.2)
Non-Planing	17	39	29.9 (5.7)
Total Score	50	86	73.4 (9.3)
Quality of Life			
Health & Functioning	6.69	26.38	14.5 (5.7)
Social & Economic	6.14	27.00	14.1 (5.3)
Psychological/ Spiritual	5.50	28.21	14.4 (7.3)
Family	6.00	30.00	19.8 (7.6)
Overall	8.38	26.66	15.0 (4.8)

The Barratt Impulsivity Scale mean scores were comparable to normative data of general psychiatric inpatients (Patton et al. 1995). Highest mean scores for the group were recorded for the non-planning domain of the instrument.

Participants had an overall mean Quality of Life Score of 15 out of a possible 30 suggesting participants had moderate self assessed quality of life. Scores on sub-scale domains were similarly in the mid range.

Gender comparisons were further explored to ascertain whether males and females with problem gambling issues differed significantly impulsivity and quality of life and again there did not appear to be a gender difference. Figure 6 summarizes the findings based on gender. This result indicated that presentation of both males and females who identified as having problem gambling issues and co-morbid mental illness were similar.

Figure 6: Mean of Mental Illness Severity, Impulsivity & Quality of Life Scores by Gender



Gambling and Alcohol & Drug Issues

Of study participants with gambling issues, the majority (81%) met criteria for pathological gambling as defined in the DSM-IV-TR. The MAGS was chosen over the South Oaks Gambling Screen (SOGS) (Lesieur & Blume, 1987) due to differences between the scoring of SOGS for the Australian population, and the Victorian (Australian) SOGS was perceived to be too cumbersome for participants to complete.

Three of the problem gambling participants (14.3%) denied having a problem with gambling on the MAGS. One of the participants believed that losing \$6,000 a week on the horses was acceptable stating “That’s your lot in life when you are a bookie; I just backed the wrong horse.” The second participant believed that their gambling was not an issue as there were not experiencing any adverse financial issues, and the third participant reported that “I can spend my money any way that I want”. Based on the MAGS classification, the three participants that denied issues with gambling were classified as non-pathological gamblers solely based on their responses to the questionnaire. Four participants did not meet DSM-IV criteria for pathological gambling on the MAGS. However, one of these participants appeared to have gambling issues which could be categorized as being ‘in transition’ to meeting DSM-IV-TR criteria for pathological gambling.

The majority of in depth interview participants reported significant alcohol use with nearly half indicating use at the level of alcoholism, and 23.8% were identified as having substance abuse/dependence issues. Table 8 provides a summary of these findings. Figures seven through nine illustrates category scores by gender for gambling, alcoholism and drug abuse/dependence.

Table 8: Participants scores on gambling, drug and alcohol scales (N = 21)

Scales	N	(%)
The Massachusetts Gambling Screen (MAGS) – DSM-IV-TR Classification		
Non-Pathological	4	(19.0)
Pathological	17	(81.0)
The Massachusetts Gambling Screen (MAGS) – MAGS classification		
Non-Pathological	3	(14.3)
In Transition	2	(9.5)
Pathological	16	(76.2)
The Brief Michigan Alcoholism Screening Test (Brief MAST)		
Non-alcoholics	9	(42.9)
Suggestive of alcoholism	2	(9.5)
Alcoholism	10	(47.6)
The Drug Abuse Screening Test (DAST)		
No substance problems	16	(76.2)
Substance abuse/dependence	5	(23.8)

Figure 7: Gambling Category by Gender

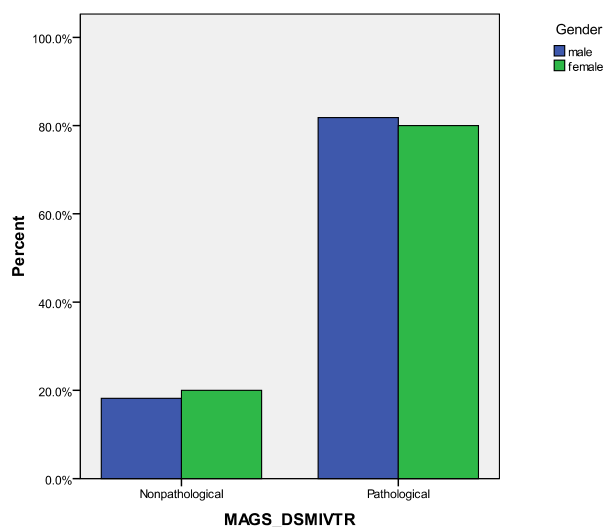


Figure 8: Alcoholism Category by Gender

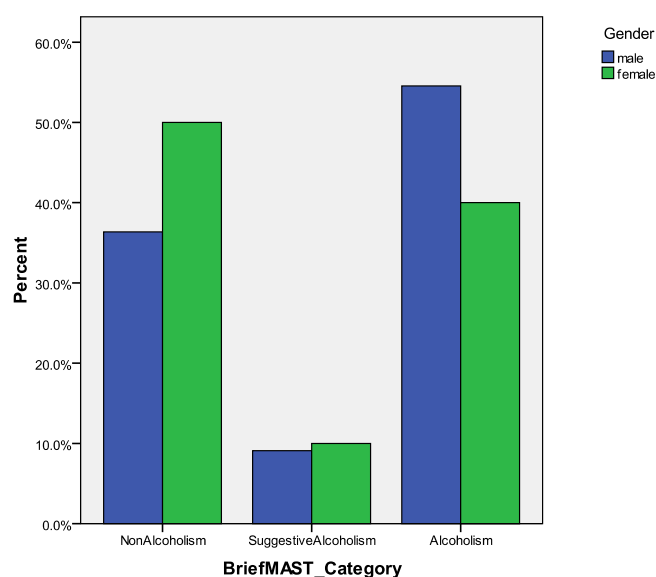
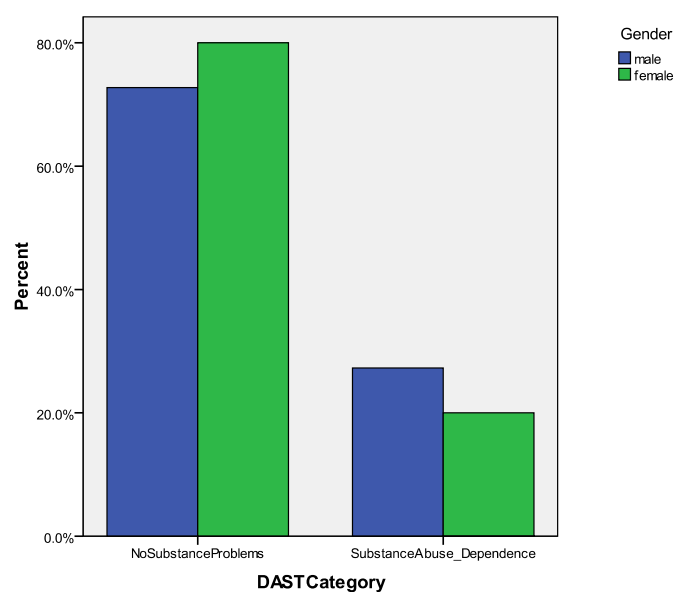


Figure 9: Substance Category by Gender

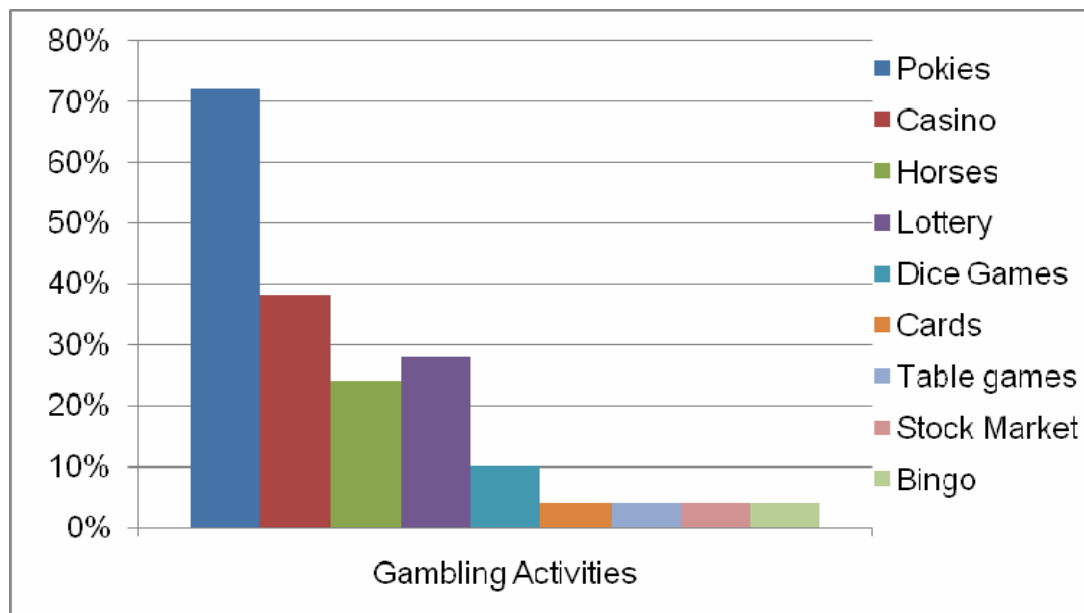


Gender difference were explored with Chi-square test for independence (with Likelihood Ratio) indicated no significant associate between gender and severity of gambling, $\chi^2 (1, n = 21) = .01, p = .92, \phi = -.03$; alcoholism, $\chi^2 (2, n = 21) = .47, p = .79, \phi = .15$; and drug abuse/dependence $\chi^2 (1, n = 21) = .15, p = .70, \phi = -.09$. Results obtained indicated that males and females did not differ in their gambling, alcohol or substance use characteristics.

Gambling Activities and Behaviours

The top three reported gambling activities in order were gambling at the pokies, at the casino, and betting on horses respectively. Figure 10 summarizes the types of gambling activities utilised by participants. The average number of years participants had spent gambling was 14.2 years (SD=6.5) and more than half (57%) spent between \$100 - 500 each week on gambling activities. Thirteen participants (62%) had a family member/s who gambled. Of these, eight participants identified that their family members' gambling impacted negatively upon on their own gambling behaviours, and that they had received tips and gambling strategies from those family member/s. Two participants indicated that they gambled only because their family gambled. Twelve participants (57%) related their current gambling behaviours to their upbringing or environment. Contributory factors noted included trauma, poverty and feelings of loneliness.

Figure 10: Participants' Gambling Activities



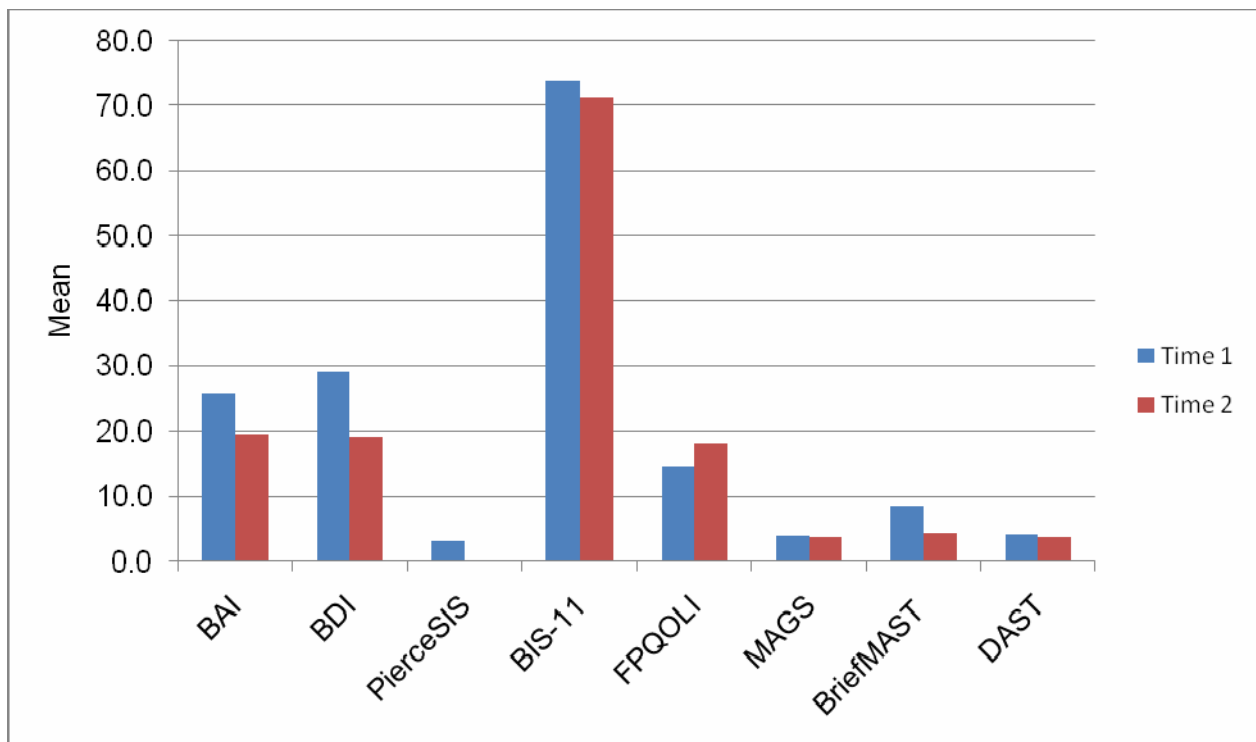
Prior Help Seeking Behaviours

Eighty-one percent of participants identified had spoken to a doctor about their depression and 47.6% spoke to their doctor about their gambling. Seventy-six percent of participants noted that it was helpful to talk about their gambling. Of these, 38% (8 participants) found it helpful speaking with Gamblers Help and 19% (4 participants) found Gamblers Anonymous helpful.

Follow-up In-depth Interview

Fifteen of the twenty-one participants that completed the initial in-depth interview (time 1) consented to completing a second in-depth interview (time 2) 6 month after initial completion. Participants completed the same outcome measures at both interviews. Figure 11 below illustrates the difference in mean total instrument scores for participants at time 1 and time 2.

Figure 11: Time 1 Vs Time 2 Comparisons of Mean Scores of Outcomes Measures (N = 21 Vs N = 15)



Based on Figure 11 mean scores for participants at time 2 improved from those at time 1. Differences within median scores were also examined due to the skewed distribution of our sample and yielded similar results. Severity scores of anxiety, depression, suicide intent, gambling, alcoholism and substance use reduced and overall quality of life scores increased. A Wilcoxon signed rank test which is the nonparametric alternative to a repeated measures t-test was also conducted to identify the statistical significance of the changes of participants from time 1 and time 2. A statistically significant reduction was found in anxiety scores, $z = -2.04$, $p < .05$, with a medium effect size ($r = .37$). The median score on the BAI decreased from 30 (severe) to 22 (moderate). Similarly, statistically significant reductions were found in: scores of depression $z = -2.10$, $p < .05$, with a medium effect size ($r = .38$) with decrease of BDI-II median scores from 30 (severe) to 18 (mild); scores of suicide intent $z = -2.03$, $p < .05$, with a medium effect size ($r = .37$); and scores on alcoholism $z = -2.28$, $p < .05$, with a

medium effect size ($r=.42$) with decrease of median scores 7.5 (alcoholism) to 2 (non-alcoholism). Although not statistically significant, a trend of reduction of in median scores were observed for overall impulsivity and substance use, and increased for overall quality of life scores. A reduction in scores was also found in scores of gambling however, median scores of gambling still placed participants within the MAGS pathological gambling category.

Help Seeking Behaviours after Initial In-depth Interview

Surprisingly, the majority of participants found the questions asked by CATT triage during their presentation regarding their gambling as helpful. A total of 61.9% acknowledged that their initial presentation to the Psychiatry Service was related to high levels of distress caused by gambling and associated financial stress. Half of the participants had contacted Gamblers Help, and 60% had attended Gamblers Anonymous. One participant had sought assistance from a private psychologist. Service engagement by participants is summarized in Table 9 below. Additionally, two participants identified that their family members with gambling issues had also attended a self-help group.

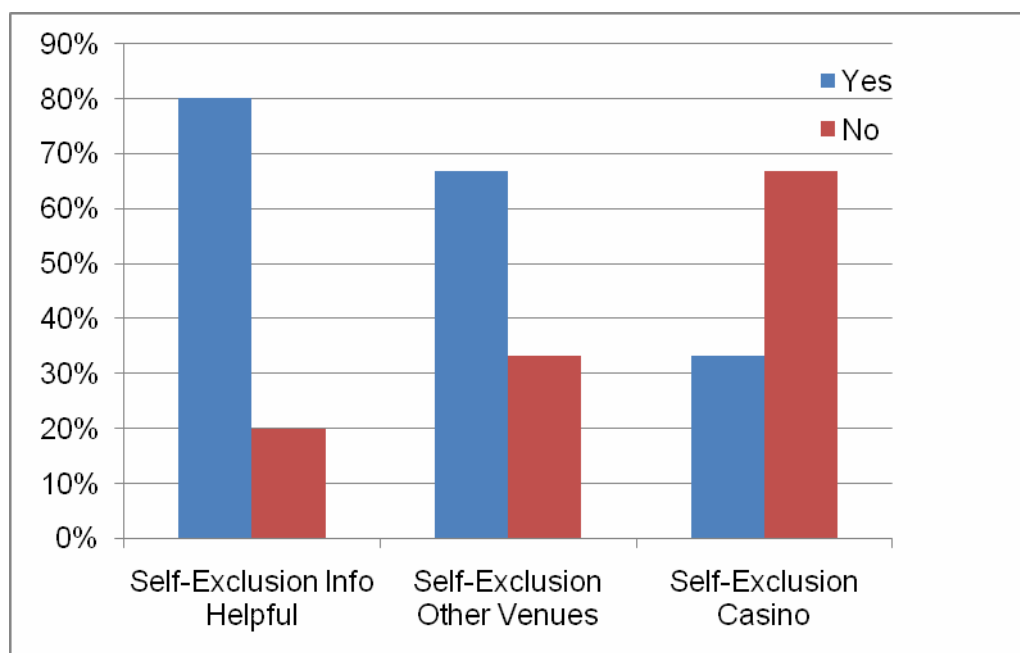
Table 9: Services Engaged by Participants after Initial Interview (N = 15)

Services	N (%)	
Initial CATT Engagement Regarding Problem Gambling		
Not Helpful	3	20.0
A bit helpful	3	20.0
Moderately helpful	5	33.3
Very helpful	4	26.7
Gambler's Help Services		
Did not contact	7	46.7
Contacted	7	46.7
Sought private psychologist	1	6.7
Gamblers Anonymous & Other Self-help groups		
Attended	9	60.0
Did not Attend	6	40.0

Self Exclusion from Gambling Venues

As displayed in Figure 12 below, eighty percent of participants found information on self-exclusion was of benefit to them, and subsequently more than half of all participants had self-excluded from gambling venues. Thirteen of the fifteen participants also reported that they had practiced strategies to minimize their gambling.

Figure 12: Self-exclusion Information



STUDY LIMITATIONS

Observational studies such as this are highly beneficial in identifying and highlighting the issues of a particular population. These types of studies help generate hypotheses about the determinants of the issues, but lack the necessary methodological rigour that allows conclusive assumptions to be made about relationships of association. An assumption exists that there is some relationship between problem gambling and mental health issues, as has been suggested in the literature, but it is possible that within this study, one or more other variables contribute to the explanations of the problems and, as such, supposition on causality cannot be made with complete confidence. Nonetheless, this study highlights some important issues that relate to people accessing a public mental health system at the point of their crisis. It also raises implications for practice for staff of both mental health and problem gambling counselling services and it has identified that clients were not adverse to being asked about their gambling problems and do seek assistance for gambling issues when information is provided.

SUMMARY

The results of this study are consistent with findings from the previous study by this group and confirmed a prevalence of problem gambling of 17% in people presenting to the Alfred Psychiatry Service who were screened with a structure screening tool.

The study highlights the role that Acute Health Services such as public hospitals play in addressing and responding to problem gambling in our community. There are implications for the delivery of both mental healthcare and problem gambling counselling services.

First, the results have important clinical significance for staff of Mental Health Services. Based on the high prevalence rate detected, the inclusion of screening for gambling problems for both new and existing clients of Mental Health Services is warranted and should be incorporated as routine clinical practice. Clinical mental health workers currently do not routinely include the investigation or examination of problem gambling in risk assessment, overlooking an important dimension of clinical risk.

Second, the linkage of people with comorbid mental health and gambling problems with specialist problem gambling services is required. Referrals, which are often currently on an *ad hoc* basis, should be strengthened by the establishment of working protocols between proximal Mental Health Services and Problem Gambling Services.

Third, the results of this study provide a strong rationale for investing in mental health services to better equip them to respond to the issue of problem gambling in its clients by establishing a permanent specialist problem gambling and mental health worker in each area mental health service in Victoria.

This report identifies the extent of problem gambling in a group presenting in crisis to psychiatric care and highlighted the impact of problem gambling upon person's mental health and psychological and social wellbeing. Identification and knowledge of problem gambling will likely assist mental health practitioners in the planning of effective interventions to promote overall mental health and well-being for the individual and their carers, as well as enhancing collaboration with other specialist service providers.

FUTURE DIRECTIONS

Mental health literacy is being increasingly emphasised in its importance (Lauber, Nordt, Falcato & Rossler, 2003) and value to the community in de-stigmatising mental illness, but also in raising awareness of mental health problems. This work is of importance to the general community, but may be seen of considerably higher importance to the mental health workforce. An improvement in the knowledge of mental health professionals makes an immediate and direct impact upon the type and quality of care that they provide to Service users. Within Victoria, there have been developments in the range of specialist psychiatric and mental health services in such clinical areas as Intellectual Disability, Koori mental health, first episode psychosis and dual diagnosis that tend to highlight the complexities that co-morbidities present to Mental Health Services. Thus, it is not unrealistic to conclude that specialist knowledge in the area of problem gambling is needed and is justified.

The following recommendations are therefore made in relation to the project:

The following recommendations are made in relation to the project:

1. Given the limitations in the study sample size, and the relatively low rate of screening tool completion (32.5% of presentations), it is recommended that the study receive additional funding to continue data collection for an additional twelve months, with a focus on increased compliance with the use of the problem gambling screening tool, to further validate the findings of the current study.
2. That an extension of this study as recommended above be widened to include people presenting to two other area mental health services to establish the transferability of the results to clients of Mental Health Services in other geographical areas.
3. Given almost half of those identified with problem gambling engaged with problem gambling help services, it is recommended that information on available problem gambling services be made available to all people assessed by mental health services in Victoria.
4. Further research into the co-morbidity of gambling and mental illness is urgently required to identify potential treatments and management strategies specific to this vulnerable subgroup of people in our community.

5. It is recommended that each area mental health service receive recurrent funding for a problem gambling training and education worker within their workforce to ensure appropriate adaptation and sustainability of change in practice related to co-morbid gambling and mental health problems, for staff of both mental health and problem gambling services. This role would fulfil the following goals:

- Development of close inter-agency working relationships for staff of area mental health and problem gambling services to facilitate pathways to care across services for clients of both services.
- Support and education for Mental Health Service staff regarding the importance of screening for gambling problems as part of their routine clinical risk assessment for new and existing clients.
- Support and education for Mental Health Service staff regarding the importance and value of timely referral to Problem Gambling Services for people with identified gambling problems.
- Education and support of Problem Gambling Service staff concerning mental health disorders in their clients.

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APPENDICES

Appendix 1: Screening Tool for Problem Gambling



Name: _____ Date _____

1. "How **often do you gamble?**" (e.g. casino, internet gambling, poker machines, horse races, or other sports)

Daily ☐ Weekly ☐ Monthly ☐ Rarely ☐ Never ☐

2. "Has gambling ever been a **problem for you or someone close to you?**"

YES ☐ NO ☐

3. "How is it a problem?" (eg., financial problems, relationship problems, substance use)

4. "Do you think **gambling is one of the reasons for you being referred** to Primary Mental Health Team/Waiora/Junction Clinic?"

YES ☐ NO ☐

DSM IV Axis I Diagnosis: _____

DSM IV Axis II Diagnosis:

You may be contacted by Pip (Bolding) in the near future to be invited to participate in a Research Project.

Detach here and give bottom portion to client

Appendix 2: Participant Information and Consent Form



**ALFRED PSYCHIATRY
RESEARCH CENTRE**

Alfred Psychiatry Research Centre
Level 1, Old Baker Building, The Alfred
Commercial Road, Melbourne 3004, A
Tel: 61 (0) 3 9076 6564
Fax: 61 (0) 3 9076 6588

PARTICIPANT INFORMATION AND CONSENT FORM

Participant Information and Consent Form

Version 2 Dated 22nd December 2008

Site Alfred Hospital/Bayside Health

Full Project Title: "Suicide and Problem Gambling – A Community Partnership Strategy for Problem Gamblers"

Principal Researcher: Mr. Anthony de Castella,

Associate Researcher(s): Dr. Yitz Hollander, Ms. Suellen Butler, Stephen Goldsmith, Michael Field, Pip Bolding, and Jayashri Kulkarni

This "Participant Information and Consent Form" is 6 pages long. Please make sure you have all the pages.

1. Your Consent

You are invited to take part in this research project.

This Participant Information sheet contains detailed information about the research project. Its purpose is to explain to you as openly and clearly as possible all the procedures involved in this project before you decide whether or not to take part in it.

Please read this Participant Information carefully. Feel free to ask questions about any information in the document. You may also wish to discuss the project with a relative or friend or your local health worker. Feel free to do this.

Once you understand what the project is about and if you agree to take part in it, you will be asked to sign the Consent Form. By signing the Consent Form, you indicate that you understand the information and that you give your consent to participate in the research project. However, you may withdraw this consent at any time without giving a reason.

You will be given a copy of this Participant Information and Consent Form to keep as a record.

2. Purpose and Background

Previous experience has shown that gambling is associated with emotional, psychological, and mental crisis. It can affect the well being of the person as well as his/her family members and friends. It can create stresses in relationship, employment, financial, legal, and other aspects of the person's life. Recent studies report elevated levels of suicidality in problem gamblers (between 17% - 80% for suicidal ideas, and 4% to 23% for suicidal attempts.)

The purpose of this project is to find out how many of the people who present to the Alfred Hospital Emergency Department and/or the Crisis Assessment and Treatment Team (CATT) with or without suicidal thoughts or attempts, have a gambling problem, and if so, whether it has contributed to their current crisis/presentation. Those identified with problem gambling will be referred to our community partnership Southern Gambler's Help Service for general counselling, financial counselling, or other services that would provide assistance. They will also be invited to participate in an interview to learn more about the nature of their gambling problem, and its impact on aspects of their life.

Participant Information & Consent Form, Version # 11 22nd December 2008 PI&CF Pages 1

A total of up to 50 people are expected to participate in this project. This study has been developed by the psychiatric research team at the Alfred Hospital with funding from the Gambler's Help Program, Victorian Department of Justice.

The present study aims to provide a linkage between the acute medical services and the community based Problem Gambling Services, and to provide better care for those in crisis who have gambling problems. This will be achieved by identifying people with a gambling problem, by providing immediate assistance, and by collecting further information from the people involved. The project also aims to improve the delivery of services to people with gambling problems by improving our understanding of the issues they face and the consequences of their gambling.

You are invited to participate in this research project because you presented to the Alfred Hospital emergency department, and/or the CATT Triage, and indicated that you were experiencing problems with gambling.

3. Procedures

If you choose to participate in the project, you will be requested to attend an initial interview of approximately 1.5-2 hours, either at your home or at the Alfred Hospital. You will also be invited to attend a second similar follow-up interview after 6 months.

During the interview, you will be asked a series of questions by the researcher for this project. The questions include demographic information such as age, gender, marital status etc., information about your gambling behaviours, any other addictions you may experience, any mental health issues you may be facing, and questions about your quality of life. The follow-up interview will repeat the same series of questions.

You will be given an offer to be referred to the Southern Gambler's Help Service for help and support which will be tailored to your individual needs and circumstances.

4. Possible Benefits

A possible benefit of your participation is the improvement of yours and our understanding of the psychological, emotional and social impacts that gambling has on the lives of people like you?. Your participation will also provide information and data which will help improve the services offered by groups like the Gambler's Help Program, the Department of Justice, and the mental health services such as those you accessed at The Alfred.

You would also be provided with details about how to access community resources to assist you to make changes to your behaviours if you so choose too. The changes you choose to make are your decision. However, we cannot guarantee or promise that you will receive any benefits from participating in this project.

You will be given \$30.00 for your time and travel at the completion of your interview.

5. Possible Risks

This study will gather detailed information and data about your gambling and about your physical and mental health. Some of the questions may cause some people emotional stress during the interview, because of the nature of the questions. However, you have the right to refuse answering any questions that may cause you distress, and confidentiality is ensured at all times.

There may be additional risks which are unforeseen or unknown to the research team.

6. Alternatives to Participation

Your consent to participate in this project is your choice. Even if you choose not to participate in this project, and request for the available information and resources to assist you to address your problems, we shall forward them to you.

7. Privacy, Confidentiality and Disclosure of Information

Protection of your privacy is an important element of this project. The researchers will naturally learn information about you from the interviews and from your medical files. This information however will not be stored in a way that identifies you. Information about you will not be given to any family member or to other people outside the research team.

All information gained in this study will be stored in a way which does not identify you and will be locked in an area only accessible to the researcher.

Any information obtained in connection with this project and that can identify you will remain confidential. It will only be disclosed with your permission, except as required by law.

Some of the information collected in this study may come from your medical record. For example, details about any illnesses you may have and your treatment history. Again, this information will be stored in a non-identifiable manner and will only be accessible to members of the research team.

In any publication, information will be provided in such a way that you cannot be identified.

8. New Information Arising During the Project

During the research project, new information about the risks and benefits of the project may become known to the researchers. If this occurs, you will be told about this new information. This new information may mean that you can no longer participate in this research. If this occurs, the person(s) supervising the research will stop your participation. In all cases, you will be offered all available care to suit your needs and medical condition.

9. Results of Project

If you give us your permission by signing the Consent Form, and you would like to know about the study findings, we will forward you a summary of the project findings upon its completion.

10. Further Information or Any Problems

If you require further information or if you have any problems concerning this project, you can contact the Principal researcher Anthony de Castella (03) 9076 6554 or the research assistant...Pip Bolding..... on (03) 9076 8649.

The researchers responsible for this project are:

Mr Anthony de Castella	9076 6554
Dr Yitz Hollander	9076 2205
Ms Suellen Butler	9076 2773

11. Other Issues

If you have any complaints about any aspect of the project, the way it is being conducted or any questions about your rights as a research participant, then you may contact Ms Rowan Frew.

Position: Ethics Manager

Telephone: 9076 3848

You will need to tell Ms Frew the name of one of the researchers given in section 10 above.

12. Participation is Voluntary

Participation in any research project is voluntary. If you do not wish to take part you are not obliged to. If you decide to take part and later change your mind, you are free to withdraw from the project at any stage.

Your decision whether to take part or not to take part, or to take part and then withdraw, will not affect your routine treatment, your relationship with those treating you or your relationship with The Alfred Hospital.

Before you make your decision, a member of the research team will be available to answer any questions you have about the research project. You can ask for any information you want. Sign the Consent Form only after you have had a chance to ask your questions and have received satisfactory answers.

If you decide to withdraw from this project, please notify a member of the research team before you withdraw.

13. Ethical Guidelines

This project will be carried out according to the *National Statement on Ethical Conduct in Research Involving Humans* (2007) produced by the National Health and Medical Research Council of Australia. This statement has been developed to protect the interests of people who agree to participate in human research studies.

The ethical aspects of this research project have been approved by the Human Research Ethics Committee of The Alfred Hospital.

14. Reimbursement for your costs

You will be paid for your participation in this project. Participants after each interview will be given \$30.00 for time and travel.



ALFRED PSYCHIATRY RESEARCH CENTRE

Alfred Psychiatry Research Centre
Level 1, Old Baker Building, The Alfred
Commercial Road, Melbourne 3004, A
Tel: 61 (0) 3 9076 6564
Fax: 61 (0) 3 9076 6588

CONSENT FORM

(Attach to Participant Information)

Consent Form

Version 2 Dated 22nd December 2008

Site Alfred Hospital/Baysid Health

**Full Project Title: "Suicide and Problem Gambling – A Community Partnership
Strategy for Problem Gamblers"**

I have read, or have had read to me in my first language, and I understand the Participant Information version 2 dated 22nd December 2008

I freely agree to participate in this project according to the conditions in the Participant Information.

I will be given a copy of the Participant Information and Consent Form to keep

The researcher has agreed not to reveal my identity and personal details if information about this project is published or presented in any public form.

Participant's Name (printed)

Signature:

Date

Name of Witness to Participant's Signature (printed)

Signature:

Date

Researcher's Name (printed)

Signature:

Date

Note: All parties signing the Consent Form must date their own signature.



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Commercial Road, Melbourne 3004, A
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REVOCATION OF CONSENT FORM

Version 11 Date 22nd December 2008

(To be used for participants who wish to withdraw from the project.)

(Attach to Participant Information)

Revocation of Consent Form

**Full Project Title: "Suicide and Problem Gambling – A Community Partnership
Strategy for Problem Gamblers"**

I hereby wish to WITHDRAW my consent to participate in the research proposal described
above and understand that such withdrawal WILL NOT jeopardise any treatment or my
relationship with ***Name of Institution.***

Participant's Name (printed)

Signature

Date

Appendix 3: Quantitative and qualitative questions to assess Demographics, context of gambling habits, and suicidal ideation



Demographics

We would like to ask you some basic background questions. Like all your other answers, this information will be kept strictly confidential.

1. Gender Male ☐ Female ☐
2. Year of birth _____
3. Are you an aboriginal or Torres Islander? Yes ☐ No ☐
4. To which ethnic or cultural group did you or your ancestors belong on first coming to Australia? _____
5. Were you born in Australia? YES ☐ NO ☐
6. If not, where were you born? _____
7. What is your first language? _____
8. Do you read and/or write another language? YES ☐ NO ☐
If so, which one? _____
9. What is the highest level of education you have completed?
 - Primary school
Years 1 – 6 ☐
 - High School
Years 7 –10 ☐
 - Year 11 ☐
 - Year 12 ☐
 - Commenced tertiary ☐
 - Completed tertiary ☐
 - Other higher degrees ☐
10. Are you living with your;
Mother ☐ Father ☐ Brother ☐ Sister ☐ Grandparents ☐ Aunt ☐ Uncle ☐

11. Are you living; alone ☐ friend ☐ housemate ☐ partner ☐
12. How many people live in your household? _____
13. How many people in this house hold are younger than 16 years old? _____
14. Are you visited by a program worker, or mental health worker? _____
15. Have you had any housing problems recently? No ☐ Yes ☐
- (ie eviction, no money to pay accom, needing to move)
-

16. Currently are you?

☐ single ☐ partner ☐ married ☐ separated ☐ divorced ☐ widowed.

17. Do you have any children? Yes ☐ How many _____ No ☐
18. Are you living with your child/children? Yes ☐ No ☐

19. Have you ever worked? (please tick all appropriate boxes)

Occasionally (How long?) Days ☐ Weeks ☐ Months ☐ Years ☐

Part-time (How long?) Days ☐ Weeks ☐ Months ☐ Years ☐

Full time (How long?) Days ☐ Weeks ☐ Months ☐ Years ☐

Shift-Work (How long?) Days ☐ Weeks ☐ Months ☐ Years ☐

Home Manager/manageress (How long?): _____ (years)

20. What type of work have you done in the past?

21. What is your current employment status?

Full time	<input type="checkbox"/>
Part-time	<input type="checkbox"/>
Occasionally	<input type="checkbox"/>
Shift-Work	<input type="checkbox"/>
Home Manager/manageress	<input type="checkbox"/>
Student – full time	<input type="checkbox"/>
Student – part time	<input type="checkbox"/>
Pensioner Aged	<input type="checkbox"/>
Unemployed – On New Start	<input type="checkbox"/>
Disability Pension	<input type="checkbox"/>

Other: _____

22. What is your current occupation? _____

23. Does your work frequently take you away from home? YES ☐ NO ☐

24. Does your work involve cash transactions? YES ☐ NO ☐
(E.G. taxi driving, take away foods etc.)

Details: _____

26. We don't need the exact amount of money you earn, but could you please tell me which of these broad categories it falls into? (Please tick appropriate box)

\$1000 - \$10,000 ☐

\$10,000 - \$40,000 ☐

\$40,000 - \$60,000 ☐

\$60,000 - \$100,000 ☐

Over \$100,000 ☐

Prefer not to comment ☐

27. Have you had any financial problems in the last month?

Days ☐ Weeks ☐ Months ☐ NA

If yes _____

28. Do you think your financial situation has impacted on you being seen by the CAT/Emergency Dept staff?

Yes ☐ No ☐

In what way _____

29. What is your religion?

Protestant ☐

Catholic ☐

Jewish ☐

Muslim ☐

Buddhism ☐

Hinduism ☐

No Religion ☐

Don't know ☐

Prefer not to comment ☐

Other: _____

Health

30. How often do you go to the doctor (GP)/Psychiatrist ?

Weekly ☐ Fortnightly ☐ Monthly ☐ 2-3 Months ☐ 6 Monthly ☐ Yearly ☐

31. When was your last appointment?

Weekly ☐ Fortnightly ☐ Monthly ☐ 2-3 Months ☐ 6 Monthly ☐ Yearly ☐

32. Medical conditions of

Brain _____

Mental illness _____

Lungs _____

Skin _____

Bowels _____

Kidneys _____

Muscles _____

Bones _____

Liver, blood _____

Other? _____

Head, ears, throat neck _____

Eyes _____

Heart _____

Thyroid _____

Stomach _____

Bladder _____

Genitals _____

Pancreas _____

Breast _____

33. Are these on going medical conditions?

34. Are you currently on any medications?

35. Have you taken anti-depressant or any other medication for mental illness?

36. Have you stopped taking medications for any reasons?

37. Have you spoke to your doctors about feeling down?

38. Have you spoken to your doctor about your gambling problems?

39. Have you spoken to your doctor/health care worker about thoughts/attempts of suicide?

Thank you, is there any other information that you would like to convey regarding yourself?

