PATHOLOGICAL GAMBLING: PREVALENCE, TYPE OF OFFENCE, CORMORBID PSYCHOPATHOLOGY AND DEMOGRAPHIC CHARACTERISTICS IN A PRISON POPULATION

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An overview of the relationship between pathological gambling and criminal behaviour

Gambling is a significant risk factor for offending.

- There is general acknowledgment in the research literature that there is an association between gambling and offending, ie, the gambling-offending cycle.

30-50% of individuals suffering from pathological gambling offend to support their gambling.

- Pathological gambling is a significant risk factor for offending. Depending on the population assessed and the methodology used, the percentage of pathological gamblers that offend to support their gambling ranges from 30 to 50%.

The gambling-offending cycle.

- When pathological gamblers are chasing their losses they can experience snowballing financial difficulties and enter a phase of desperation commonly characterised by depression, suicidal ideation, and secrecy.
- These snowballing financial difficulties result in the severe depletion of the gambler's resources resulting in a financial crisis and a high level of personal debt.
- During this desperation phase, the pathological gamblers may seek dishonest and illegal means of obtaining money to service his/her debts and to continue gambling.
- Once a gambler has offended to finance his/her gambling, he/she generally continues to do so as he/she chases his/her loses until they are discovered.

Most offending is associated with a gambler's financial difficulties are caused by chasing their losses.

- Gamblers' offending is an extension of "chasing losses" and is part of the psychopathology of gambling;

Pathological gamblers generally commit non-violent offences to finance their gambling

- Most of the offending committed by gamblers appears to be of the non-violent type and consists mainly of fraud, eg, social security, property offences, clerical crime, etc.

Accessibility to publicly promoted gambling and pathological gambling are inter-related.

- There is a relationship between accessibility to publicly promoted gambling, the potential to develop a pathological gambling disorder, and the potential to become an offender.
- It is important for public policy makers who control the regulation of gambling to be aware of its impact on the criminal-justice system.

Aims of the research project

1. To determine the prevalence of PG in newly sentenced prisoners who are given a custodial sentence?

2. To investigate the relationship between PG, offending, and type of offences committed?

3. To investigate the relationship between PG and familial patterns of gambling?

4. What is the relationship between PG and type of gambling?

5. To determine the prevalence of psychological and psychiatric comorbidity in PG?

Methodology

Subjects

Yatala Labour Prison (YLP):

- Subjects were chosen from Yatala Labour Prison.
- YLP is South Australia's main reception jail for sentenced prisoners and houses 395 inmates;
- Data was collected between the 12th of August and the 1st of December, 1997;
- During this period YLP admitted 719 inmates;
- 296 of these inmates were transfers from other correctional institutions;

- 423 of these inmates where "new intakes" from the courts or the police (eg, fine defaulters, etc);
- These 423 "new intakes" consisted of 176 inmates were newly sentenced and from the courts, and 65 inmates where unsentenced but during the course of the study became sentenced.

Subject selection:

- The study sampled 103 inmates from the 176 inmates who were "new intakes" from the courts and had been sentenced to an immediate period of imprisonment;
- The subjects were new admissions to E Division and chosen alphabetically using their surname;
- The subjects were all male inmates and in the age range of 18 to 56 years;
- An additional 6 subjects already in Yatala Labour Prison identified as pathological gamblers were included in the psychiatric comorbidity part of the study;
- The study excluded Aboriginals and Torres Straight Islander inmates due to lack of test standardization on these populations.
- Only one inmate who was approached to participate in the study declined to do so.

Measurement of PG: the six month version of the SOGS

- The South Oaks Gambling Screen (SOGS) was used to screen for probable PG (Lesieur & Blume, 1987).
- The SOGS is a 20 item questionnaire that has been based on the DSM-III-R criteria for pathological gambling;
- The SOGS has been widely used in prevalence surveys and has good validity and reliability as a measure of PG;
- The present study used the "six month" version of the SOGS, as used by the Australian Institute for Gambling Research (AIGR);
- The advantage of using a six month time period is that it allows the differentiation between current versus lifetime prevalence rates;
- The six month version of the SOGS overcomes the problem of overestimating the prevalence of pathological gambling.

The Measurement of psychiatric and psychological comorbidity

- Psychiatric and psychological comorbidity was assessed using the Revised Psychiatric Diagnostic Interview (PDI-R) (Othmer, Penick, Powell, Read and Othmer 1998);

- The PDI-R represents an elaboration and implementation of the psychiatric diagnostic criteria in DSM-III-R;
- The PDI-R is arranged into 17 clinical syndromes consisting of:

1. Organic Brain Syndrome (OB)
2. Alcoholism (Al)
3. Drug Abuse (Dr)
4. Depression (De)
5. Mania (Ma)
6. Schizophrenia (Sc)
7. Antisocial Personality Disorder (As)
8. Somatization Disorder (So)
9. Anorexia Nervosa (AN)
10. Bulimia (Bu)
11. Post-traumatic Stress Disorder (PS)
12. Obsessive-Compulsive Disorder (OC)
13. Phobic Disorder (Ph)
14. Panic Disorder (Pa)
15. Generalized Anxiety Disorder (GA)
16. Mental Retardation (MR)
17. Adjustment Disorder (Ad)
18. Undiagnosed Psychiatric Disorder (Undx)

The Measurement of Offending History

- A list of the subjects' names was given to the Strategic Services Division of the Department of Correctional Services who provided information on their present and past offending history using the Justice Information System, a computer data base containing inmates' offending histories;
- The Justice Information System categorises inmates' offending histories using a modified version of the Australian National Classification of Offences (ANCO) called the Justice Australian National Classification of Offences (JANCO).
- The ANCO classification system is used by all states;
- The main difference between ANCO and JANCO, is that JANCO has more subcategories for a more detailed classification of offending behaviour. Both ANCO and JANCO are compatible for classification purposes on a national level.

Assessment Procedure

- The researchers obtained a daily list of the names and cell locations of all inmates newly admitted to Yatala Labour Prison;
- Only subjects from Division E were chosen using alphabetical order;

- The subject was given an information sheet and a brief explanation of the nature and purpose of the study;
- If the subject agreed to participate he was asked to sign a consent form and given a copy of the data collection protocol;
- The interviewer read through the protocol questions with the subject to ascertain that the subject could clearly read the question;
- All subjects who agreed to participate answered the demographic questions and completed the SOGS;
- Only those subjects who obtained a SOGS score greater than 5 or reported having a history of illegal behaviour committed to support a gambling problem were included in the second part of the study. They were administered a number of additional tests (eg, PDI-R, etc).

Results

The prevalence of PG in newly sentenced inmates admitted to prison directly from court

Table 1 shows a frequency distribution of the SOGS scores obtained in the present study.

SOGS Sogs score

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	0	38	36.9	36.9	36.9
	1	14	13.6	13.6	50.5
	2	9	8.7	8.7	59.2
	3	5	4.9	4.9	64.1
	4	3	2.9	2.9	67.0
	5	2	1.9	1.9	68.9
	6	3	2.9	2.9	71.8
	7	6	5.8	5.8	77.7
	8	3	2.9	2.9	80.6
	9	2	1.9	1.9	82.5
	10	3	2.9	2.9	85.4
	11	1	1.0	1.0	86.4
	14	3	2.9	2.9	89.3
	15	3	2.9	2.9	92.2
	16	2	1.9	1.9	94.2
	17	1	1.0	1.0	95.1
	18	2	1.9	1.9	97.1
	19	2	1.9	1.9	99.0
	20	1	1.0	1.0	100.0
	Total	103	100.0	100.0	

Mean 4.291 Std dev 5.694 Minimum .000
Maximum 20.000

Valid cases 103 Missing cases 0

From this table the following main findings can be observed:

- 33% of the sample can be classified as probable pathological gamblers (ie, obtained a SOGS of five or greater);
- 30% of the sample can be classified as problem gamblers (ie, obtained a SOGS score of between 1 and 4);

- 37% of the sample did not suffer from PG (ie, obtained a SOGS score of 0);

The relationship between PG and offending

Subjects were asked "Has gambling ever got you in trouble with the law?".

Table 2 shows that subjects who answered "Yes" to having gotten into trouble with the law due to gambling obtained a higher average SOGS score (12.38) than subjects who answered "No" (1.56).

	Count	Mean	Std Deviation
Broken the law due to gambling			
Yes			
Sogs score	26	12.38	4.70
No			
Sogs score	77	1.56	2.51

Table 3 shows the relationship between having gotten into trouble with the law due to gambling and PG as measured by the SOGS.

	Broken the law due to gambling			
	Yes		No	
	Sogs score		Sogs score	
	Count	%	Count	%
0			38	49.4%
1			14	18.2%
2			9	11.7%
3			5	6.5%
4			3	3.9%
5	1	3.8%	1	1.3%
6	1	3.8%	2	2.6%
7	3	11.5%	3	3.9%
8	3	11.5%		
9	1	3.8%	1	1.3%
10	3	11.5%		
11	1	3.8%		
14	2	7.7%	1	1.3%
15	3	11.5%		
16	2	7.7%		
17	1	3.8%		
18	2	7.7%		
19	2	7.7%		
20	1	3.8%		

From this table the following main findings can be observed:

- 100% of subjects who were classified as probable pathological gamblers (ie, having obtained a SOGS score of 5 or greater) answered "Yes" to having committed gambling-related offences;
- 90% of subjects who were not classified as probable pathological gamblers (ie, a SOGS score of less than 5) answered "No" to having committed gambling-related offences;

The relationship between PG and having a familial history of problem gambling

Subjects were asked "Check which of the following people in your life has (or had) a gambling problem.

- father
- mother
- a brother or a sister
- a grandparent, a spouse or partner
- a child, another relative

- a friend or someone else important in my life."

Table 4 describes the relationship between classification as a PG (ie, having a SOGS score greater or less than five) and reporting having relatives with a gambling problem.

	<5	5+
	%	%
brother/sister with gamb.problem	2.9%	17.6%
father with gambling problem	2.9%	32.4%
mother with gambling problem	4.3%	2.9%
grandparent with gambling problem	1.4%	8.8%
spouse/partner with gamb.problem	1.4%	5.9%
another relative with gamb.problem	7.2%	8.8%
friend or some else imp. with gamb.prob.	21.7%	29.4%

From this table the following main findings can be observed:

- A PG is more likely to have had a father (2.9% Vs 32.4%) and siblings (2.9% Vs 17.6%) with a gambling problem.

The relationship between PG and type of gambling

Table 5 shows, for the total sample, what where the most popular forms of gambling engaged in by all subjects.

TOTAL SAMPLE

	not at all	< once a week	once a week or more
	%	%	%
played bingo	93.2%	4.9%	1.9%
cards for money	82.5%	8.7%	8.7%
dice games	92.2%	4.9%	2.9%
played keno	49.5%	22.3%	28.2%
some form of gambling not listed	97.1%	1.0%	1.9%
played poker machines	53.4%	18.4%	28.2%
pull tabs or paper games	77.7%	9.7%	12.6%
shot pool,played golf etc	73.8%	9.7%	16.5%
bet on sports	82.5%	6.8%	10.7%
played stock market	94.2%	3.9%	1.9%
bet on TAB, horses	57.3%	15.5%	27.2%

From this table it can be seen that in descending order the five most popular forms of gambling that were played "once a week or more" are: poker machines (28.2), keno (28.2%), TAB (27.2), pool and golf (16.5%), and pull tabs or paper games (12.6).

Table 6 shows the relationship between being classified as a PG (ie, having a SOGS score greater or less than five) and type of gambling engaged in "once a week or more".

	% gambled once a week or more	
Type of gambling	**SOGS less than five**	**SOGS five or more**
Type of gambling	4.3%	17.6%
bet on TAB, horses	15.9%	50.0%
bet on sports	7.2%	17.6%
dice games	0.0%	8.8%
gambled in a casino	1.4%	26.5%
played keno	20.3%	44.1%
played bingo	0.0%	5.9%
played stock market	0.0%	5.9%
played poker machines	10.1%	64.7%
shot pool, play golf, etc	13.0%	23.5%
pull tabs or paper games	11.6%	14.7%
some form of gambling not listed	0.0%	5.9%

From this table the following main findings can be observed:

- PG engage in a greater diversity of gambling "once a week or more" than non-PG;
- The four most popular forms of gambling played "once a week or more" by PG relative to non-PG in descending order are: poker machines (64.7% Vs 10.1%), TAB and horses (50.0% Vs 15.9%), keno (44.1% Vs 20.3%), and Casino (26.5% Vs 1.4%).

The relationship between PG and psychological and psychiatric comorbidity

Table 7 lists the percentage of subjects who were identified as having a PG disorder (ie, a SOGS score greater than 5) who also suffered from a co-existing psychological or psychiatric disorder as assessed using the Revised Psychiatric Diagnostic Interview (PDI-R)

	no	yes
	%	%
PDI Adjustment Disorder	94.1%	5.9%
PDI Alcoholism	61.8%	38.2%
PDI Anorexia Nervosa	100.0%	
PDI Antisocial Personality	52.9%	47.1%
PDI Bulimia	100.0%	
PDI Depression	85.3%	14.7%
PDI Drug problems	38.2%	61.8%
PDI Generalized Anxiety	94.1%	5.9%
PDI Mania	94.1%	5.9%
PDI Mental Retardation	100.0%	
PSI organic brain	100.0%	
PDI Obsessive-Compulsive Disorder	91.2%	8.8%
PDI Panic Disorder	91.2%	8.8%
PDI Phobic Disorder	94.1%	5.9%
PDI Post Traumatic Stress Disorder	91.2%	8.8%
PDI Schizophrenia	97.1%	2.9%
PDI Somatization Disorder	100.0%	
PDI Undiagnosed Psychiatric Disorder	100.0%	

From this table the following main findings can be observed:

- The PDI was not administered to subjects who did not suffer from PG; therefore no comparison with the general prison population was possible;
- PG scored highly on alcoholism (38%), drug abuse (61%), depression (14%), and antisocial personality disorder (47%);

Discussion

In summary, the following major findings were made in the present study:

Prevalence of PG:
- 33% of the sample can be classified as probable pathological gamblers (ie, obtained a SOGS of five or greater than five);
- 30% of the sample can be classified as problem gamblers (ie, obtained a SOGS score of between 1 and 4);

PG and offending:
- Subjects who said "Yes" to having gotten into trouble with the law due to gambling obtained a higher average SOGS score (12.38) than subjects who answered "No" (1.56).
- 100% of subjects who were classified as probable pathological gamblers (ie, having obtained a SOGS score of 5 or greater) answered "Yes" to having committed gambling-related offences;
- 90% of subjects who were not classified as probable pathological gamblers (ie, a SOGS score of less than 5) answered "No" to having committed gambling-related offences;

Familial patterns of PG:
- A PG is more likely to have had a father (2.9% Vs 32.4%) and siblings (2.9% Vs 17.6%) with a gambling problem.

PG and types of gambling:
- The five most popular forms of gambling that were played "once a week or more" for all subjects are: poker machines (28.2), keno (28.2%), TAB (27.2), pool and golf (16.5%), and pull tabs or paper games (12.6).
- PG engage in a greater diversity of gambling "once a week or more" than non-PG;
- The four most popular forms of gambling played "once a week or more" by PG relative to non-PG in descending order are: poker machines (64.7% Vs 10.1%), TAB and horses (50.0% Vs 15.9%), keno (44.1% Vs 20.3%), and Casino (26.5% Vs 1.4%).

PG and psychological and psychiatric comorbidity:
- PG scored highly on alcoholism (38%), drug abuse (61%), depression (14%), and antisocial personality disorder (47%);

Main Conclusions: The question of causality between pathological gambling and crime:

1. It cannot be assumed that all illegal behaviours committed by pathological gamblers are directly gambling-related in a prison population.

2. There is a need to differentiate between criminals who gamble excessively and the pathological gambler who turns to gambling-related crime. Individuals who have no prior offending history and commit non-serious offences are more likely to be given a suspended prison sentence with a condition to receive treatment while being supervised by a Probation and Parole Officer in Community Corrections.

3. Research on pathological gamblers in community corrections may help differentiate between the two groups.

4. PG with a prior criminal record are more likely to re-offend to support their gambling. There is a gap in services for PG in custody and there is an urgent need to provide them with rehabilitation services.