



**AUT GAMBLING & ADDICTIONS  
RESEARCH CENTRE**



# **Social connectedness and associations with gambling risk among ethnic groups in New Zealand**

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# Background

## Harmful gambling

- which do not meet the diagnostic criteria of gambling disorder but lead to significant harm to individuals and communities.

## Why some people develop problems with gambling while others do not.

- Cognitive Theory
- Behaviour Theory
- Biopsychosocial Theory
- Pathways Model

Higher levels of problematic gambling have been noted amongst indigenous and migrant groups in many countries.

# Some facts and stats

- In the US, African Americans have a higher prevalence of problem gambling compared with Caucasians
- Increased problem gambling amongst the Canadian indigenous population compared with the non-indigenous population as well as with the indigenous communities of Australia compared to the non-indigenous communities
- In NZ, Māori (NZ's indigenous population) and Pacific peoples are more likely than NZ Europeans to be moderate-risk/problem gamblers
  - In 2012, for example, 6% of Māori and 8% of Pacific people were classified as problem or moderate risk gamblers compared with 1.8% of European/Others
  - Casinos also pose particular risk for Asian groups
- However, race and ethnic minority status themselves are not a risk factor for gambling disorder but underlying potential risk factors related to this status are.



# Social connectedness and gambling

- Social connectedness
  - a psychological sense of belonging to a group and interpersonal closeness with society
  - be beneficial, promoting individual well-being, reducing the risk of developing addictive behaviours, and facilitating recovery from addictions
- Ethnic minorities or subgroups often report high levels of social isolation and loneliness
- Problem gamblers typically engage in few social and recreational activities apart from gambling
- While the associations between social connectedness and gambling is well supported by evidence, it is unclear whether social connectedness could explain individual progression to problem gambling, and its role in the observed racial/ethnic differences in gambling risk.

# Aim

- To explore the associations of social connectedness, leisure activities, psychological distress and gambling risk (including frequency and type of gambling activities) and quality of life.
- It was hypothesized that:
  - (1) social connectedness would be associated with increased gambling risk;
  - (2) social connectedness would predict increased gambling frequency and type of gambling activities involved;
  - (3) social connectedness, severity of gambling problem, and psychological distress would predict individuals' quality of life; and
  - (4) Ethnic identity would also modulate gambling risk.



# Participants

- This study involved secondary analysis of data collected from the baseline wave (in the year 2012) of the NZ National Gambling Study
- 4,904 participants who had involved in gambling and reported their ethnicity.
- Mean age was  $47.9 \pm 17.0$  years (range 18 to 93), 20.3% self-identified as Māori (n= 997), 11.9% self-identified as Pacific (n= 582), 10.1% reported Asian (n= 493) identity, and 57.7% were European (n= 2832).

# Measures

- *Severity of gambling problems*
- *Gambling frequency and participation in specific gambling activities*
- *General psychological distress*
- *Quality of life*
- *Leisure activity*
- *Social connectedness*

# Comparison of severity of gambling problem, quality of life, psychological distress, social connectedness between ethnic groups

Table 1: Demographic and outcome measures across groups.

	Māori	Pacific	Asian	European
	(n=997)	(n=582)	(n=493)	(n=2832)
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
<b>Age</b>	43.03(15.31)	41.41 (13.78)	40.27(13.13)	52.33 (17.45)
<b>Female (%)</b>	62.7	59.3	50.1	56.1
<b>Social connectedness</b>	17.65(3.07)	18.50 (2.97)	17.89(2.87)	18.43(3.00)
<b>Leisure</b>	8.62(3.49)	8.96 (3.81)	8.97(3.49)	9.09 (3.27)
<b>Quality of life</b>	23.81(5.22)	24.16 (4.81)	24.43(4.45)	24.83(4.67)
<b>Psychological distress</b>	5.34(6.13)	5.29 (5.82)	3.84 (4.69)	3.77 (4.41)
<b>PGSI</b>	0.68 (2.48)	0.74(2.25)	0.30 (1.14)	0.16 (0.97)

- There were significant group differences in severity of gambling problem (PGSI scores) ( $H=147.87$ ,  $P<0.001$ ), psychological distress ( $H=58.4$ ,  $p=0.009$ ), social connectedness ( $H=80.1$ ,  $p<0.001$ ), leisure activities ( $H=21.5$ ,  $P<0.001$ ) and quality of life ( $H=32.3$ ,  $p<0.001$ ).



## Correlations of severity of gambling with quality of life, psychological distress, and social connectedness and leisure activities

Table 2: Spearman's correlations of social connectedness, leisure activity, quality of life and gambling severity

	1	2	3	4	5
1. Social connectedness	-				
2. Leisure activity	.220**	-			
3. Quality of life	.244**	.123**	-		
4. Psychological distress	-.114**	0.023	-.440**	-	
5. PGSI	-.068**	-.032*	-.151**	.192**	-

\*\* . Correlation is significant at the 0.01 level (2-tailed); \* . Correlation is significant at the 0.05 level (2-tailed).

Predicting risk of developing gambling disorders by ethnicity, social connectiveness, leisure activities and psychological distress

Table 3: Poisson regression results – frequency of gambling count, social connectedness, leisure activities, psychological distress, and ethnicity.

Variables	B	SD	P	Exp(B)	95% Confidence Interval for Exp(B)	
					Lower	Upper
Social connectedness	-0.001	0.0020	0.547	0.999	0.995	1.003
Leisure activities	-0.009	0.0018	<0.001	0.991	0.988	0.994
Psychological distress	-0.002	0.0012	0.092	0.998	0.996	1.000
Māori <sup>a</sup>	0.084	0.0147	<0.001	1.088	1.057	1.119
Pacific <sup>a</sup>	0.071	0.0181	<0.001	1.074	1.036	1.112
Asian <sup>a</sup>	-0.111	0.0209	<0.001	0.895	0.859	0.933

B: Unstandardised coefficient; SD: Standard error; p: hypothesis test significance value; Exp(B): exponentiated regression coefficient; a: Reference category is European group.

Table 4: Poisson regression results – type of gambling activity count, social connectedness, leisure activities, psychological distress, and ethnicity.

Variables	B	SD	P	Exp(B)	95% Confidence Interval for Exp(B)	
					Lower	Upper
Social connectedness	-0.008	0.004	0.043	0.992	0.984	1.000
Leisure activities	0.012	0.004	<0.001	1.012	1.005	1.020
Psychological distress	-0.003	0.0024	0.276	0.997	0.993	1.002
Māori <sup>a</sup>	0.130	0.0298	<0.001	1.139	1.074	1.207
Pacific <sup>a</sup>	0.063	0.0374	0.092	1.065	0.990	1.146
Asian <sup>a</sup>	0.010	0.0406	0.809	1.010	0.933	1.094

Prediction of quality of life by social connectiveness, leisure activity, psychological distress and gambling

Table 5: Regression analysis for quality-of-life prediction.

Predictor	B	SD	t	p
Social connectedness	0.283	0.020	14.185	<0.001
Leisure activities	0.123	0.018	6.862	<0.001
Psychological distress	-0.430	0.012	-35.911	<0.001
PGSI scores	-0.102	0.037	-2.743	0.006

B: Unstandardised coefficient; SD: Standard error

# Discussion

- Poorer social connectedness was associated with increased risk for gambling problem, greater psychological distress, and poorer leisure activities and quality of life.
- Social connectedness strongly predicted range of gambling activities and quality of life.
- Neither social connectedness nor psychological distress was significant predictor of gambling frequency.
- Ethnicity plays an important role in gambling participation.
- Leisure activities were associated with social connectedness, and modulated frequency of gambling and type of gambling participation, in different ways.



# Conclusion

- Weaker social connectedness may lead to increased risk of problem gambling, and this link could be related to greater number of gambling activities individuals participated in.
- The effect of leisure activities on gambling is more complicated than we expected, which can be either positive or negative, and future research on this is required.
- Our findings highlight the effects of risk factors of problem gambling vary with ethnicities and importance of addressing social connectedness and mental well-being in reducing harmful effect of gambling participation.
- Persons' social connectedness might fluctuate over time and our findings provide first snapshot of the relationship between social connectedness and gambling in NZ context.

Thank you!