

# Cultural Differences in Reasons for Gambling Between Chinese-Heritage and Euro-Canadian Students

Shirley Yiu & Jessica Dere  
University of Toronto Scarborough

## INTRODUCTION

- **Gambling** is commonly described as any activity in which something of value is risked on the outcome of an event - when the probability of winning or losing is less than certain (Korn and Shaffer, 1999).
- **Pathological gambling** as classified in the Diagnostic and Statistical Manual 5<sup>th</sup> Edition (American Psychiatric Association, 2013) refers to a condition in which an individual shows persistent and recurrent maladaptive gambling behaviour, which may result in dysfunctions in the areas of work, studies, and social and family relationships.
- **Problem gambling** refers to a condition in which an individual's gambling behaviours are less severe than required by the diagnostic criteria of the DSM.
- Gambling is legal in 90 countries worldwide and prevalence studies have shown that 70-90% of adults and adolescents have gambled sometime in their lives (Raylu & Oei, 2002).
- Cross-cultural gambling research has focused on groups of Chinese heritage. From the studies completed using ethnic minorities, many of them have found greater problem gambling and pathological gambling rates among Chinese samples (Oei & Raylu, 2009).
- Recent research has shown that cultural factors such as beliefs, values and the process of acculturation (Kim, 2012), and beliefs about luck also influence gambling behaviours (Darke & Freedman, 1997).
- A study conducted in Montreal found that Allophone and Anglophone adolescents who had acculturation issues had higher levels of gambling problems. The results suggest that minorities who have acculturation difficulties are more prone to pathological gambling (Ellenbogen, Gupta, & Derevensky, 2007)
- In order to better understand the factors that may promote elevated gambling behaviours in Chinese-Heritage individuals, the current study examined the role of beliefs in luck and acculturation in shaping this behaviour among both Chinese-Heritage and Euro-Canadian students.

## METHOD

### Hypotheses:

- Chinese-Heritage students will have higher levels of gambling behaviour compared to Euro-Canadians students
- Beliefs in luck will be positively correlated with levels of gambling behaviour; and
- Mainstream acculturation will be negatively associated with gambling behaviour among Chinese-Heritage students.

### Participants:

- Undergraduate students recruited from the University of Toronto Scarborough Campus (UTSC).
- Self-identified Chinese Cultural background and Euro-Canadian

	Chinese-Heritage	Euro-Canadian
n	108	43
Sex (% female)	66.7	72.1
Age (years); mean (SD)	19.16 (1.60)	18.88 (1.57)
Born in Canada (%)	40.7%	90.7%
Mother born in Canada	0.9%	67.4%
Father born in Canada	0.9%	58.1%

## Measures

### Gambling Measure

**The South Oaks Gambling Screen (SOGS;** Lesieur & Blume, 1987)

- 20-item self-report questionnaire based on DSM-III criteria for pathological gambling

### Belief in Luck Measures

**The Gambling Beliefs Questionnaire (GBQ;** Steenbergh, Meyers, May, & Whelan, 2002)

- 21-item self-report assessment tool for evaluating gamblers' cognitive distortions

**The Belief in Good Luck Scale (BIGLS;** Darke & Freedman, 1997)

- Two subscales:

**Personal Luck:** e.g., 'Luck plays an important part in everyone's life'

**General Luck:** e.g., 'I consider myself to be a luck person'

**The Personal Luck Usage Scale (PLUS;** Wohl, Stewart & Young, 2011)

- 12-item self-report questionnaire for evaluating personal luck in relation to gambling

### Acculturation Measure

**The Vancouver Index of Acculturation (VIA;** Ryder, Alden & Paulhus, 2000)

- 20-item self-report measure of the two dimensions of acculturation

#### Heritage Subscale

The extent to which an individual identifies with their culture of origin

#### Mainstream Subscale

The extent to which an individual identifies with Canadian mainstream culture

## RESULTS

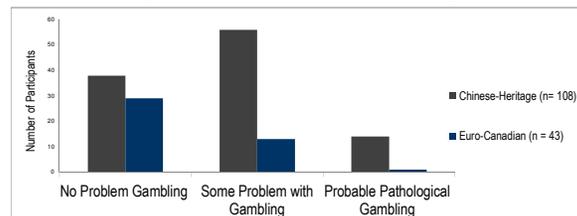
### Scale reliabilities (Cronbach's alpha)

	Chinese-Heritage	Euro-Canadian
	$\alpha$	$\alpha$
BIGLS	0.71	0.79
Personal luck subscale	0.80	0.70
General luck subscale	0.77	0.80
GBQ	0.86	0.87
Luck subscale	0.84	0.83
Illusion subscale	0.79	0.70
SOGS	0.75	0.67
PLUS12 item	0.81	0.86
VIA	--	--
Heritage subscale	0.85	0.88
Mainstream subscale	0.82	0.87

### Group Comparison on the SOGS Total Score

- A comparison of gambling behaviour based on the SOGS total score showed a significant group difference, with the Chinese-Heritage group ( $M=1.93$ ,  $SD=2.37$ ) reporting higher levels of gambling behaviours than the Euro-Canadians ( $M=0.60$ ,  $SD=1.20$ ),  $t(141)=4.52$ ,  $p < .001$

### Chi-Square analysis of the SOGS Problem Gambling Score



### Group Comparisons in beliefs in luck on the BIGLS, GBQ Luck, and PLUS 12 item

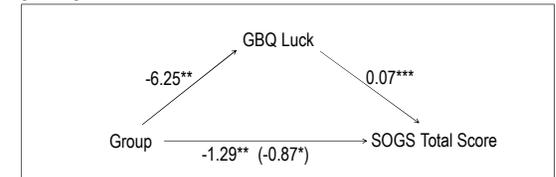
	Chinese-Heritage		Euro-Canadian		Comparison	
	M	SD	M	SD	t	df
<b>BIGLS</b>						
Personal Luck	13.39	3.58	11.74	3.40	2.59*	149
General Luck	16.56	4.22	14.09	4.20	3.24*	149
<b>GBQ Luck</b>	35.1	11.58	28.93	9.97	3.04*	149
<b>PLUS 12 item</b>	32.54	6.93	26.10	7.31	5.08*	149

\* $p < .0125$ , Bonferroni correction

### The bivariate correlation of gambling behaviour and beliefs in luck

Results revealed a significant correlation between SOGS Total Score and the BIGLS personal luck score, GBQ luck score, and the PLUS 12 item score for the Chinese-Heritage participants. A correlation was found between SOGS Total Score and GBQ luck score in Euro-Canadian participants

**Mediator model:** GBQ luck score partially mediates the effect of group membership on gambling behaviour



\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$  (numbers reported are unstandardized coefficients)

## DISCUSSION

- Our first two hypotheses were supported. Chinese-Heritage students reported higher levels of gambling than Euro-Canadians based on the SOGS. Chinese-Heritage students also endorsed higher beliefs in both general and personal luck.
- Chinese-Heritage students possess gambling-related beliefs that luck is a personal quality that can be utilized to influence gambling outcomes.
- Acculturation showed no significant association with gambling behaviour.
- An important limitation of the current study is the convenience sample and small sample size.
- The current findings suggest that there is a significant association between stronger beliefs in luck and elevated gambling behaviour in Chinese-Heritage students.

## REFERENCES

- American Psychiatric Association. (2013). *Diagnostic and Statistical Manual of Mental Disorders: The Fifth Edition*. Arlington, VA: American Psychiatric Association.
- Darke, P. R., & Freedman, J. L. (1997). The belief in good luck scale. *Journal of Research in Personality*, 31(4), 486-511.
- Ellenbogen, S., Gupta, R., & Derevensky, J. L. (2007). A cross-cultural study of gambling behaviour among adolescents. *Journal of Gambling Studies*, 23(1), 25-39.
- Kim, W. (2012). Acculturation and gambling in Asian Americans: When culture meets availability. *International Gambling Studies*, 12(1), 69-88.
- Korn, D. A., & Shaffer, H. J. (1999). Gambling and the health of the public: Adopting a public health perspective. *Journal of Gambling Studies*, 15(4), 289-365.
- Lesieur, H. R., & Blume, S. B. (1987). The South Oaks Gambling Screen (SOGS): A new instrument for the identification of pathological gamblers. *American Journal of Psychiatry*, 144(9).
- Oei, T., & Raylu, N. (2009). The relationship between cultural variables and gambling behavior among Chinese residing in Australia. *Journal of Gambling Studies*, 25(4), 433-445.
- Raylu, N., & Oei, T. P. (2002). Pathological gambling: A comprehensive review. *Clinical psychology review*, 22(7), 1009-1061.
- Ryder, A. G., Alden, L. E., & Paulhus, D. L. (2000). Is acculturation unidimensional or bidimensional? A head-to-head comparison in the prediction of personality, self-identity, and adjustment. *Journal of personality and social psychology*, 79(1), 49.
- Steenbergh, T. A., Meyers, A. W., May, R. K., & Whelan, J. P. (2002). Development and validation of the Gamblers' Beliefs Questionnaire. *Psychology of Addictive Behaviors*, 16(2), 143.
- Woh, M. J., Stewart, M. J., & Young, M. M. (2011). Personal Luck Usage Scale (PLUS): psychometric validation of a measure of gambling-related belief in luck as a personal possession. *International Gambling Studies*, 11(01), 7-21.

