PROBLEM GAMBLING AND EMOTIONAL VULNERABILITY AMONG WOMEN

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“Problem gambling” is often defined as a continuous loss of control over gambling, irrational thinking and will lead to significant negative consequences (Oei & Gordon, 2008; Measuring Problem Gambling in Canada, 1999).

Emotionally vulnerable gambler refers to whose participation in gambling is motivated by a desire to modulate affective states and/or meet specific psychological needs (Blaszczynski & Nower, 2002).
Many studies found high correlations between psychological states (e.g. depression, anxiety and stress) and problem gambling (Raylu & Oei, 2002).

Women gamblers tend to gamble to escape emotional problems, dysphoric moods like depression, anxiety, or loneliness (Porter et al., 2004; Thomas & Moore, 2003;)
THEORETICAL BACKGROUND

- There is a known correlation between depression and gambling (Ballon, 2006). Depressive individuals tend to gamble pathologically (Griffiths & Woods, 2007).

- Haw (2009) found that the temporal sequencing of depression and problem gambling depends on individual cases.
THEORETICAL BACKGROUND - 2

- Blaszcyznski and Nower (2002) find a distinctive group of emotionally vulnerable gamblers in their study.

- According to Papineau (2005), children from the Chinese culture are more susceptible to gambling than other cultures.
 Chan & Ohtsuka (2010): Depressive gamblers are a minority among gamblers in Hong Kong. Chan & Ohtsuka (2010) recruited a small number of female gamblers from casinos for interviews. However, women tend to belong to dissociation gamblers (escapists) who are more likely to experience negative emotional states that lead to their gambling activities (Noella, 2010; Porter et al., 2004).
Superstition exists in most gambling activities and other game of chance (Roger, 1998)

Ohtsuka and Chan (2010) have found significant correlation between the superstitious beliefs and problem gambling among 158 participants in a survey. The problem gamblers are more superstitious belief compared with r gamblers.
AIMS OF THE CURRENT STUDY

To identify correlations between predictors such as depression, superstitious beliefs and problem gambling among female gamblers in Hong Kong.

If correlations are found, a multiple regression analysis was used to predict problem gambling (CPGI scores) from key demographic variables (i.e., age, years of mahjong playing, education levels), superstitious beliefs, and depression (Beck Depression Inventory Scores).
HYPOTHESES

1. Age, years of mahjong playing, education levels, superstitious beliefs, and depression together will predict problem gambling (PGSI in CPGI).

2. In particular, education levels, superstitious beliefs and depression together will predict problem gambling (PGSI).

3. Divorced women and women without families would be more likely to be problem gamblers.

4. Women from lower education level are more likely to become problem gamblers.
A total of 145 women (aged from 21 to 69) were recruited.
Problem Gambling Severity Index (PGSI) of the Canadian Problem Gambling Index (CPGI) (Ferris & Wynne, 2001) and Chinese Beck Depression Inventory (CBDI) (Zheng et al., 1988) were administered to participants.

Upon confirming correlations between predictors and problem gambling (the criterion variable), multiple regression analyses were used to evaluate the effectiveness of prediction models.
METHOD (CON’T)

- PGSI
  - >= 8 problem gambling with negative impact/consequences and possible loss of control (Centre for Addiction and Mental Health, 2011).

- Chinese Beck Depression Inventory (Zheng et al, 1988)
  - Score Range
  - Categories
  - 0-13 Minimal depression
  - 14-19 Mild depression
  - 20-28 Moderate depression
  - 29-63 Severe depression
PARTICIPANTS

Marital Status

- Single: 55%
- Married: 35%
- Divorced: 7%
- Other: 3%
PARTICIPANTS

- University or above: 16%
- Institution: 41%
- Primary or below: 14%
- Secondary school: 29%

Education
PARTICIPANTS

PSGI Score

- <8: 86%
- 8 or above: 14%
Total participants (n=145)
- Non-problem gambler (n=123)
  - PSGI score (M=1.83, SD = 1.93)
  - BDI Score (M=6.42, SD =8.05)
- Problem gambler (n=22)
  - PSGI score (M=11.14, SD = 3.78)
  - BDI Score (M=26.23, SD =17.78)
PARTICIPANTS

- 0-13: 81%
- 14-19: 3%
- 20-28: 6%
- 29-63: 10%
RESULT 1

- A Standard regression analysis revealed that age, years of mahjong playing, education level, depression and superstitious beliefs as predictors significantly predicted problem gambling (PGSI), $F(5, 139) = 19.00, p < .001$. They explain 38.5% of the variance in PGSI.

- Depression and superstitious beliefs are statistically significant independent predictors of gambling harm (PGSI), $t(139)=7.69, p < .001$, $t(139)=2.52, p = .013$.

- Namely, in the absence of other sources of information, the information on depression and superstitious beliefs significantly improves prediction of problem gambling (PGSI).
RESULT 2 - STEP-WISE REGRESSION

Step-wise regression analysis was used to select a minimum number of key predictors to predict problem gambling.

1. Step 1, Depression (BDI) was selected as a predictor of problem gambling (CPGI). Depression alone explains 34.1% of the variance in CPGI.

2. Step 2, in addition to Depression, superstitious beliefs were selected. Depression and Superstitious Beliefs together explain 36.6% of the variance in problem gambling scores (CPGI).

3. Step 3, Education Levels were selected as third predictor and step-wise regression stopped at this stage.

4. Depression, Superstitious Beliefs, and Education Levels explain 38.6% of the variance in problem gambling.

Conclusion: A step-wise regression model using only three predictors, Depression, Superstitious beliefs and education levels significantly predict problem gambling, $F(3, 141) = 31.13, p < .001$. 
RESULTS 3 - NONPARAMETRIC CORRELATION ANALYSIS

- Women from lower education level have more possible to be problem gambler
  - Education Levels have significant negative correlation with problem gambling,
  - \( r_s (145) = -0.29, p < 0.001 \), showing people with lower level of education tend to show higher levels of risk with regard to gambling.

- No correlation between living arrangement (alone or with family) and problem gambling
  - \( r_s (145) = -0.15, p = 0.082, \) NS.
The present study has validated the claim of Blaszczynski and Nower (2002) the current findings showed that depression are highly correlated with women problem gamblers.

It also supports the findings of Woods and Griffiths (2007) that gamblers gamble to escape from negative emotions.
The present study points to the direction that working class women with comparatively low education will more likely to gamble. This concurs with one of the consistent findings that people with limited resources are more likely to gamble more (Fong & Ozario, 2005).
There is high correlation between education level and superstitious belief, the person who is lower education level will endorsed more superstitious belief. (Ohtsuka and Chan, 2010)

Depression, superstitious belief and education level as a main predictor of problem gambler (PGSI) and these variables are all partial related to cognitive. Cognitive behavior therapy can be used to solve problem gambling behavior.
The study does not imply the causal relationship between depression and problem gambling. A prediction model establishes that information on age, years of mahjong playing, depression, and superstitious beliefs together help predict problem gambling risk. Future studies need qualitative interviews to investigate gamblers’ trajectories to develop problem gambling.
This paper is to be presented at the 1st Annual Meeting of the Asia Pacific Association for Gambling Research, Macau, China in 5th-8th November 2012.

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