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# Senior gambling in Hong Kong: through the lenses of Chinese senior gamblers – an exploratory study

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## Abstract

The meanings of gambling among senior gamblers in Hong Kong were investigated using semi-structured interviews based on an ethnographic approach. 18 senior gamblers (10 men; 8 women) over the age of 55 years were asked to describe their childhood, adolescent and early adult experience and developmental history of gambling and gambling trajectories. They also completed the Problem Gambling Severity Index (PGSI) of the Canadian Problem Gambling Index. Most senior gamblers ( $n = 15$ ) were non-problem gamblers, except 3 participants who were classified as pathological gamblers. The majority of the senior gamblers began their lifelong gambling career when they were young. Their family members often introduced the participants to gambling. Some participants reported that an early big win was a focal memorable experience in their early gambling history. Women played mahjong most frequently, whereas men gambled on horse races and sports betting such as football lotteries. The main motivation of gambling for older adult women was socialisation with friends, whereas older adult men were motivated to gamble because of potential financial gain. To senior women, games of mahjong with friends have provided an oasis and a comfort zone, within which they can find peace and comfort away from hustles of daily life. Cultural conditions in Hong Kong and their link to senior gambling have been also discussed.

**Keywords:** Senior gambling; Chinese gambling in Hong Kong; Ethnographic approach; Older adult gamblers

In the last decade, there has been an increase of research interest in gambling and its social implications in Hong Kong and Macau. The majority of earlier studies are prevalence studies (e.g., Fong & Ozorio 2005; The Hong Kong Polytechnic University 2002, 2012; The University of Hong Kong 2005). The recent prevalence study (The Hong Kong Polytechnic University 2012) reported that the prevalence rates of problem gambling and that of pathological gambling were 1.9% and 1.4%, respectively. Our re-analysis of the 2011 survey data shows that the prevalence of problem/pathological gambling among the respondents who gambled in the past 12 months was 5.1%.

More recent studies have focused on cultural influence on gambling (Cheng 2006; Lam 2007; Ohtsuka & Chan 2009, 2010). For example, Ohtsuka and Chan (2009) argue that the characterisation of female gamblers in Hong Kong movies reflects traditional Chinese female stereotypes. That is, while male gamblers portrayed in Hong Kong movies are regarded as heroes, which accords titles such as the “God of Gamblers” or

“the Saint of Gamblers” (Chan & Ohtsuka 2011a), female gamblers are often depicted in a negative way. The authors attribute this bias to the prevailing cultural stereotypes that “good” women should not gamble; their expected social role in the Chinese society is predominantly of that of the caregivers who attend to family duties. Consequently, Chinese women who do gamble, even though their involvement in gambling is mahjong, a low key gambling game played at home, are portrayed in a negative light as “desperate” housewives who play mahjong when their husbands are not around.

Another subgroup of gamblers often portrayed in media is older adult gamblers (Chan & Ohtsuka 2011a; Ohtsuka & Chan 2009). Retired elderly spending their leisure time on social gambling such as mahjong is almost a cliché. It is perhaps rather surprising that one area hitherto ignored by gambling research in Hong Kong is gambling amongst the elderly. Research evidence indicates that Senior gambling is mostly controlled recreational gambling and the extent of problem gambling appears to be rather benign (McNeilly & Burke 2000; Ohtsuka 2013; Ohtsuka & Karoglidis 2001). Cavion et al. (2008) posit an excellent explanation of senior gambling from a sociological perspective: “... gambling is one of a cluster of historically condemned behaviours more easily or openly adopted by groups with weaker affiliation to the dominant power structure.” (pp. 112–113). Gambling has its own social rewards, including membership in a gambling subculture and “provides new peers, a social purpose, an identity, and a private language.” (Cavion et al. 2008, pp.112-113).

The literature indicated that gambling decreases amongst groups as they get older (Vander Bilt et al. 2004). In the Chinese community in New Zealand, the easy access to gambling and the availability of abundant leisure time, as a result of retirement or dislocation from original families, and access to money were found to contribute to the increase of Chinese senior gambling (Wong 2010). The motivation for gambling among the elderly, however, may not be only for winning money (Nixon et al. 2005). Ohtsuka (2013) reports that the Chinese older adult gamblers in Australia cite reasons for gambling on electronic gaming machines such as killing time, finding something to do, or an excuse to get out of houses and socialise. Likewise, older gamblers gamble for pleasant social interaction and food rather than simply to gain money (Hope & Havir 2000). Further, older adults often gamble to escape from life’s problems (Nixon et al. 2005). In addition, some elderly gamblers participate in gambling as a means to escape from stress or to cope with stress (McNeilly & Burke 2000, 2001, 2002). In a study of self-excluders in Missouri casinos ( $n = 161$ ), Nower and Blaszczynski (2008) found that older adults tended to begin gambling in mid-life, experienced problem gambling at around the age of 60, preferred non-strategic forms of gambling and identified suicide as their major fear for self-exclusion. The same study highlighted the importance of further research on gambling amongst the elderly. However, the literature on senior gambling also implicates the deterioration of mental and physical health among older adults with gambling problems. Erickson et al. (2005) reported approximately 10% of their older adult gamblers (60 years or older) were classified as problem or pathological gamblers. They also noted that problem and pathological gamblers were more likely to report mental and physical health problems compared to non-problem gamblers in the same age group.

Our re-analysis of the 2011 Hong Kong prevalence study (The Hong Kong Polytechnic University 2012) provides snapshots of senior gambling in Hong Kong. Senior gamblers (aged 60 or over) accounted for 7% of the survey respondents ( $n = 141$ ; non-problem

gamblers  $n = 131$ , problem/pathological gamblers  $n = 10$ ). The 12 months retrospective gambling participation rate of senior gamblers (60%) is on par with the gambling participation rate of the younger gamblers (aged 59 years or younger, 61.9%). The prevalence rates of problem gambling among senior citizens in Hong Kong is approximately 4.1% among the senior respondents in the sample, or 7% among the senior respondents who gambled in the past 12 months. In contrast, the younger gamblers in Hong Kong (aged 59 years or younger) show a prevalence of problem/pathological gambling of 3.1% and 5%, respectively among the respondents in this age group (see Table 1.5.1a in The Hong Kong Polytechnic University 2012).

To date, few studies on elderly gamblers in Hong Kong or Macau have been published. The present study aims to address this gap in knowledge through investigation of the meanings and the incidence of gambling among the elderly in Hong Kong. The purpose of the current study is thus to understand the subjective world, the personality development, and trajectories of gambling of senior gamblers. A further aim is to gather information on the social and clinical construction of the senior gamblers in Hong Kong. In order to assess the participants' problem gambling risks, Problem Gambling Severity Index (PGSI) was also used to find out problem gambling risk profile of the interviewees.

## **Method**

### **Research methodology**

The current study employed a mixture of qualitative and quantitative methodology: gamblers' subjective views were investigated using an ethnographic approach (Hammersley & Atkinson 1995) supplemented by the use of Problem Gambling Severity Index (PGSI) in the Canadian Problem Gambling Index (CPGI) to assess the respondents' gambling risk profiles. The purpose of ethnographic research is to explore and understand the culture and lifestyle of a specific group through intensive participant observation and detailed interviews. Since the relationship between culture and gambling has been established, we understand that gambling behaviour is context dependent and must be investigated taking into account cultural values and personal, subjective meanings to gamblers. Therefore, ethnographic research was deemed more appropriate than grounded-theory. The interviewer tried to exclude any preconceived perspective about senior gambling at the interview. Instead, the researcher encouraged the participants to talk about their stories of gambling. In the current investigation, a semi-structured interview schedule was used to gain information about the participant's early childhood and family environment, educational and career history, their involvement in gambling, and relationship issues. A copy of the semi-structured interview schedule is given in Appendix A. Thematic analysis was performed on the interview record and notes. Major themes and recurrent topics were identified and classified. This qualitative enquiry helped the researchers to appreciate and understand the subjective experiences and behaviours of the participants.

### **Participants**

Eighteen participants (10 men,  $M$  age = 66 years old, and 8 women  $M$  age = 70 years old) were recruited in Hong Kong for the current research project. About 70 percent of the respondents ( $n = 13$ ) were retired. Their occupations prior to their retirement

included government worker, driver, and housewife. Demographically, the majority of the participants came from the working class. Among the participants, 12 participants completed less than secondary education. A female participant (85 years old) described herself as illiterate. The requirements for inclusion were that they had to be active gamblers and they should be older than 55 years of age. Table 1 includes the summary of demographics, gambling initiation, favourite forms, and PGSI scores of the interviewed participants.

### Measures

In addition to the semi-structured interview schedule used to guide the interview process, all the participants were assessed by the Chinese translation of the Problem Gambling Severity Index (PGSI) of the Canadian Problem Gambling Index (CPGI) (Ferris & Wynne 2001). This gambling screen contains nine forced-choice questions measuring symptoms of pathological gambling. Those who score from 3 to 7, are considered as “moderate risk gamblers” and those with scores of 8 or higher are regarded “problem gamblers” according to this instrument. PGSI/CPGI is a widely used

**Table 1 Participant demographics, gambling initiation, favourite forms, and PGSI scores**

Pseudonym	Sex	Age	Occupation	Marital status	Gambling initiation	Favourite forms	PGSI score
Alice	Female	65	Homemaker	Married	Friends	Mahjong	0
Mrs Fong	Female	68	Retired	Widowed	Family	Mahjong	1
Cindy	Female	Unknown	Homemaker	Married	Neighbours	Mahjong	0
Mary	Female	65	Retired	Married	Family	Mahjong	1
Mrs Guo	Female	85	Retired	Unknown	Family	Mahjong	1
Mrs Lo	Female	71	Retired (Homemaker)	Unknown	Unknown	Mahjong	1
Natalie	Female	55	Homemaker	Married	Family	Mahjong,	10
Eva	Female	65	Retired	Single	Unknown	Mahjong, Mark Six	0
Peter	Male	56	Truck driver	Married	Family	Horse races, Mahjong	2
John	Male	56	Retired	Married	Family	Horse races, Casino table games	8
Jack	Male	85	Retired (ex prison officer)	Unknown	Family (uncle)	Horse races, Mahjong, Mark Six	6
Tong	Male	58	Retired	Divorced	Neighbours	“Fifteen Lakes” card game	0
Mathew	Male	71	Retired	Unknown	Unknown	“Fifteen Lakes” card game, Mahjong	0
David	Male	78	Retired	Married	Unknown	“Fifteen Lakes” card game	0
Walter	Male	68	Retired	Married	Family, Friends	Mark Six, Mahjong	0
Michael	Male	76	Retired	Unknown	Friends	Horse races, Mahjong	0
Bob	Male	65	Retired	Unknown	Unknown	“Fifteen Lakes” card game, horse races, Chinese Chess	1
Ron	Male	62	Taxi driver	Unknown	Friends at work	Mark Six, Horse races	1
Shawn	Male	55	Restaurant chef	Married	Unknown	Mahjong, casino table games	13

screening tool in clinical and research settings and has been proved to be a reliable instrument in gambling research (Delfabbro 2008; Young & Stevens 2008). However, the authors are not aware if the Chinese translation of Problem Gambling Severity Index (PGSI) has been validated. A copy of the Chinese translation of PGSI is given in Appendix B.

### **Procedure**

All the ethics procedures for psychological research laid out by the Upper Iowa University were followed for the collection of interview data. The participants were all active gamblers. A research assistant, under supervision by the second author, recruited participants from the low income housing areas in Hong Kong. Although gambling is practiced by all strata of socio-economic status, the popularity of gambling as a leisure option has been noted elsewhere (Caillois 1961). Hong Kong is no exception. The participants were invited to participate in an individual interview, which took approximately 40 to 50 minutes, after consent had been given. Only unidentifiable key demographic variables were recorded, but the names and addresses of the participants were not recorded to ensure confidentiality. In the current research report, all names of the participants are pseudonyms (fake names) to ensure the anonymity of the participants.

### **The data analysis procedure**

The interviews were transcribed as notes. Detailed thematic analysis was then conducted from these notes. The current study employed Hycner's (1999) explication process in the analysis of the data. The data were delineated into units of meaning and clustered into specific themes, which were validated according to the subjective interpretation. The resulting themes were then extracted and developed into general and unique themes to a composite summary.

### **Findings**

Regarding problem gambling status, the results of the clinical interviews and the scores on the Problem Gambling Severity Index (PGSI) formed the basis of the present findings. Out of the 18 participants, 3 participants (16.67%), two males and one female, were classified as pathological gamblers according to the criteria of the Diagnostic and statistical manual of mental disorders (4th ed., text rev.) (American Psychiatric Association 2000). Their scores on the PGSI were 8, 10 and 13, respectively, which indicated significant levels of negative impacts of gambling. Detailed analysis on their gambling trajectories and pathways to development of problem gambling indicates that two of them can be classified as a behaviorally conditioned gambler and the third one as an antisocial/impulsive gambler according to the Blaszczynski and Nower (2002) model. Blaszczynski and Nower's (2002) pathways model of problem and pathological gambling recognises the diversity within the problem gambling population and addresses the development process of problem and pathological gambling. One basic premise of this pathways model is that the authors depict the pathways to pathological gambling as a linear model with three different groups of gamblers, each with different behavioural outcomes and treatment needs. Accessibility to gambling is crucial in the development of gambling. Gamblers either come from gambling families or grow up in a family or

peer environment that condones or encourages gambling. Usually, their first encounters with gambling are positive: an early win is often reported by these gamblers. There are common influences that affect all problem gamblers, such as availability and access, classical and operant conditioning effects in the maintenance of gambling, arousal factors and biased cognitive thinking patterns. Behaviourally-conditioned gamblers are normal and function well prior to their gambling experiences. This group of gamblers may have had a stable career prior to gambling. They are not pathologically disturbed before they start to gamble excessively but, with repeated exposure to gambling activities, symptoms of the pathological gambling may emerge. These symptoms include a pre-occupation with gambling, depression, chasing losses, anxiety, insomnia and even substance dependency. Their problems are the consequences of their excessive gambling behaviour. In contrast, antisocial/impulsive gamblers might have innate biological deficiencies, either neurological or neurochemical, to control impulses. These individuals are characterised by antisocial personality disorders and impulsivity and/or attention-deficit disorders. Their lack of control over the impulsivity can also be a consequence of learned behavioural patterns. These individuals may learn to seek immediate gratification of wants and desires during development. Impulsive gamblers have a propensity to seek out constant stimulation from their environment. In addition to their gambling, they tend to be clinically impulsive and display a broad range of problems, which might include substance and alcohol abuse, poor relationship skills, a propensity to commit criminal acts, and a family history of antisocial behaviour.

These characteristics best described the three pathological gamblers in the current study. For instance, Shawn's (Male, 55 years of age) developmental history of gambling best described the pathway development of an antisocial gambler. He developed gambling habits at the age of 12 and has continued to gamble excessively since his teenage years. Although married and with two children, he has assumed little responsibility to support his family. As he has never entered any treatment program for his gambling problem, he still owes a large sum of money to loan sharks. His wife left him a few months prior to the interview and went back to the United Kingdom. However, Shawn seemed to care little for his family. His disregard for family responsibilities in favour of a carefree lifestyle in pursuit of gambling displays the characteristics of an antisocial/impulsive gambler. During his interview, he frankly admitted that he had been a pathological gambler all his life. He said: "Now, I cannot gamble as much... I have to wait till payday to gamble." He had attended treatment for problem gambling for three times, but as he said, "I cannot quit..... just cannot." One of his recurrent remarks, which he made during the interview was that he had been always tight on finances. Every month, he had to pay HKD 8,000 to pay off his debt. After paying off this amount, he would then gamble the rest of his money.

#### **Game preferences**

There were significant gender differences in game preferences. Men usually played *Pai Kau*<sup>[a]</sup> (排九), *Sap Ng Wu* (十五糊) ("Fifteen lakes" card game), bet on horse races and the outcome of Chinese chess games and purchased Mark Six (a form of state lottery). Chinese chess is a cognitive mind game, which is a favourite pastime for many, especially the elderly. Some seniors, however, who play Chinese chess, put a gambling element into this traditional game. Usually they might bet HKD 20-HKD 50 on each

set. *Pai Kau* and *Sap Ng Wu* are traditional Chinese gambling games that require substantial skill and decision making analysis. Women mainly played mahjong. Mahjong is a traditional Chinese tile game played at home, which requires both luck (quality of dealt hands) and skill (to construct melds with high scores) (Ohtsuka & Chan 2010). All the participants identified fun and social interaction as the main motivation for their gambling. A good example is Mrs Lo (aged 71 years). She played mahjong three to four times a week, usually in the afternoon. However, she has conscious control on the wagering and the investment. As she said, "Usually, I would play mahjong after I have done my shopping in the morning. I then play mahjong with my neighbours. We are on the mahjong table till dinner time." Mrs. Lo scored only 1 on the PGSI.

### **The participants' involvement in gambling**

Most interviewees started gambling at an early age. John (aged 56 years) said that he started gambling with family and friends at the age of 7 or 8. In his description, he used to enjoy watching his relatives gambling in the village. "I watched my Uncles gambling. We lived in the village where children started gambling at an early age back then." Tong (Male, aged 58 years) also reported that he began to gamble as a child. Gambling was considered as part of family activities. There was no stigma associated with gambling. As he described his first experiences of gambling in childhood, his thoughts were dominated with positive memories. He said, "We liked to play cards when we were little. Usually we played with friends in our neighbourhood." Such "normalcy" has also been reported by Wong et al. (2009) in their study of problem gamblers in treatment. In the interviews with the participants, almost all used the word "play" (玩) to describe their gambling. The notion of play is evident in their involvement in gambling as the majority of them gambled on a regular basis. One of the female participants, Mrs. Lo (aged 71 years) stated that she gambled three to four times a week. One major difference between the pathological gamblers ( $n = 3$ ) and the non-pathological gamblers ( $n = 15$ ) found in the current study was that pathological gamblers usually recalled their early big wins in their gambling development. For example, Shawn (male, aged 55 years) once scored a big win when he was only a teenager. "In the 60's, my monthly salary was a bit more than HKD 1,000. But on one occasion, I won more than HKD 10,000... That's ten months' worth of my salary then. But not long after the early winnings, I lost that big winning all in my later gambling." Having grown up with an impoverished background, a win of HKD 10,000 represented a very big fortune. Like other pathological gamblers, Shawn enjoyed the retelling of his gambling success as if he relished the excitement and joy of gambling wins.

The second major difference between the social gamblers and the pathological gamblers was the level of control of gambling. Mrs. Fong (aged 68 years), for example, had conscious control of her gambling behaviour. She used to gamble five times a week, usually in the afternoon. However, because her daughter does not want her to gamble frequently, she stopped gambling about two years ago. "I stopped gambling as I had to move in with my daughter to take care of the young grandchildren. Now I don't have the time to play mahjong," she said. Mrs. Fong clearly had control over all aspects of her gambling: i.e., the control over the efforts, time and expenditure on gambling. Mrs Fong's case supports the argument of Dickerson & O'Connor (2006) that conscious control of gambling is a significant deficit among pathological gamblers.

### **Motivation for gambling**

All participants cited social interaction and fun as their motivations to gamble. Mary (aged 65 years) loved to play mahjong once a week. She enjoyed the companionship that the game offered. “ My first time at the mahjong table was when I was in my twenties. I usually go to my friends’ houses to play.” Mary does not have any significant problems in gambling as she scored only 1 on the PGSI. In fact, the majority of the older adult women played mahjong or card games at least four to five times a week. To them, these games provided a cognitively stimulating pastime and an opportunity to get out of the home. Very often, the bets they placed on each round of mahjong were small, usually less than HKD 1. It seems that they played with the money and not for the money. A similar gambling behaviour has been observed among older Chinese female Electronic Gaming Machine (EGM) players in Australia: Their motivations for playing EGM are socialisation and excuses to go out, rather than for money (Ohtsuka 2013).

### **Discussion**

The findings provided insight into the gambling behavior of senior Chinese gamblers in Hong Kong. Further, through the in-depth interviews, the information about their gambling history, views and meanings of gambling was revealed. Senior gamblers in the current study gambled because they had more free time, especially after retirement, and at the same time, they had easy access to gambling. Firstly, many of the participants who gambled regularly grew up in a working class family with low socio-economic status. They were often introduced to gambling by extended family members and from an early age, sometimes from childhood. Gambling was often normalised in these environments with no associated stigma. Even in some cases, children were encouraged to develop prowess and skills in gambling. Secondly, the main motivation for the senior gambling was pursuit of pleasure and fun, not necessarily gambling winnings. Monetary gain, although desirable, seemed the secondary reason. The primary reason for senior gambling was social interaction, companionship and reasons to go out. Lastly, senior gamblers gambled mainly to stay in the game so that they have more time for social interaction.

The majority of Chinese older adult gamblers who were interviewed in the current study undertook gambling as a means of social interaction and a daily pastime. The findings are consistent with previous studies that have addressed gambling as a means for socialising activities in the aged community (Loroz 2004; McNeilly & Burke 2000). This was especially true for elderly women. Women gamblers enjoyed mahjong, which served as a “group activity” that brought friends together. To these women, playing mahjong provided an oasis and a comfort zone, within which they could find peace and comfort in their hectic lives. Unlike female gamblers, male gamblers favoured skill-orientated games such as horse racing and football betting. Female gamblers tended to see gambling as a means to socialise or pass time. In Hong Kong society, especially among working class people, gambling can be seen as a social function for marginalised groups. Most of the elderly participants in the present study gambled for social interaction, type of interaction dictated within the context of the game, without intimacy. Similar motivation has been reported by elderly



gamblers from the Chinese community in Australia who gamble on Electronic Gaming Machines (EGM) (Ohtsuka 2013). Obviously, there seems a need for future research to investigate if this need for stylised social interaction in gambling is related to the personality or other individual characteristics of gamblers. Further, this preference for a stylised social interaction echoes what Australian EGM gamblers from culturally and linguistically diverse (CALD) backgrounds in Australia wanted from the gaming venue staff (Ohtsuka 2013). The CALD gamblers want friendly interaction with the gaming venue staff, which could be called professional “friendliness,” without getting too personal or intruding, that is friendliness at an arm’s length.

As the research literature reported, the amount of outlay for gambling decreases among the very old compared to those in their 60’s and early 70’s. However, when the decline in decision making ability with advancing age is taken into account (Bakos et al. 2008), the reduced expenditure in gambling does not automatically mean that older gamblers would remain low-risk social gamblers. Older gamblers are more likely to play the familiar games and rely on word-of-mouth for information regarding gambling games and promotions (Moufakkir 2006). Elderly gamblers are more likely to subscribe to culture-specific schema that may increase their illusion of control (Ohtsuka & Ohtsuka 2010). Combined with a general decline in cognitive flexibility, older adult gamblers, especially those who lack a social network as a safety net, could be vulnerable to problem gambling.

This study has some limitations. Qualitative research allows salient information regarding subjective experiences of the informants to be obtained. The experiences and views reported by the research participants may include undoubtedly more personal, idiosyncratic subjective interpretation of gambling as well as the attitudes and views shared by other elderly gamblers (e.g., Ohtsuka 2013). Although the number of participants in the current study ( $n = 18$ ) is more than adequate for qualitative research, the findings cannot be used to establish the prevalence of elderly gambling in Hong Kong. Due to social stigma of gambling, recruitment of active senior gamblers was not easy. Future studies can supplement the current findings from participants in retirement facilities.

In conclusion, the findings of the current study reveal how gambling can reflect the cultural characteristics of the community of Hong Kong. To elderly gamblers, gambling provides them with not only the dissociation from daily hassles and frustration in life (Brown 2002) but it transports senior gamblers to a social space where everyday rules do not apply. In this sense, the senior gamblers in Hong Kong, although their gambling is not as extensive as that of Paichais in Macau, “resident” gamblers who gamble extensively (Chan & Ohtsuka 2013), or treatment-seeking problem gamblers (Chan & Ohtsuka, 2011b) live in a gambling culture where the shared participation in gambling forms a core of social interaction. In that sense, the elderly gamblers in Hong Kong share the social space created through gambling with fellow senior gamblers, which seems to provide social interactions in the form in which they are comfortable to participate. And for our senior gamblers, through the lenses into their subjective worlds, gambling may provide an existential meaning to their lives in the hectic city life of Hong Kong.

## Appendix A

### Semi-structured Interview Schedule

1. What is the development background of the senior gamblers? Are there similarities or common themes in their developments?
2. What are their pathways of development? What triggers their first gambling experiences? Are there significant milestones in their development of gambling?
3. What are their subjective world and feelings towards gambling?
4. How do they see their families and their communities?
5. What are the cognitive schemas, especially their cognitive distortions of these gamblers?
6. What are their behavioural traits? And what are their personality characteristics?
7. Do they have any somatic complaints like anxiety and headaches?
8. Do they show any signs of clinical depression?
9. What kinds of superstitions these individuals hold? Do these relate more to particular social issues in the local culture?
10. What are the behavioral outcomes of their cognitive patterns?
11. What are their relationships with their families?
12. What is their career development? How do their habits influence their career?
13. What are their daily living routines? How does their gambling fit in with their lives and those around them? How have their lives been influenced by their behaviour?
14. Have they attempted any treatment program for their behaviour?
15. What are their dreams and long-term hopes?

## Appendix B

*Problem Gambling Severity Index of Canadian Problem Gambling Index (CPGI)* (Ferris & Wynne 2001) translated in Chinese (Traditional Chinese Font - Hong Kong).

請你想想過往十二個月內 (In the past 12 months how often ...)

1. 你有冇在賭博中下注多過你可應付的金額? (Have you bet more than you could really afford to lose?)
2. 仍然是以往十二個月中, 你有冇試過用大量的金錢去賭博以獲得興奮的感覺? (Have you needed to gamble with larger amounts of money to get the same feeling of excitement?)
3. 當你賭完之後, 過些日子再去賭, 希望贏回輸了的錢? (Have you gone back another time to try and win back the money you lost?)
4. 你有冇試過問人家借錢或賣去自己的物品以取得金錢去賭博? (Have you borrowed money or sold anything to get money to gamble?)
5. 你有冇感覺自己有賭博的問題? (Have you felt that you might have a problem with gambling?)
6. 賭博有沒有影響你的健康, 包括壓力及憂慮? (Have you felt that gambling has caused you any health problems, including stress or anxiety?)
7. 曾經有人批評你的賭博行為或你有賭博的問題(就算你無感覺這是真的)? (Have people criticized your betting or told you that you have a gambling problem, whether or not you thought it was true?)

8. 你的賭博有冇對你或你的家庭造成經濟問題? (Have you felt that your gambling has caused financial problems for you or your household?)
9. 你有沒有對自己的賭博行為或賭博的後果有罪惡感? (Have you felt guilty about the way you gamble or what happens when you gamble?)

計分方法: 0 = 從來沒有, 1 = 有些時候, 2 = 很多時候, 3 = 時常 (Scoring: 0 = Never, 1 = Sometimes, 2 = Most of the time, 3 = Almost always; Cut off scores: 1-2 = Low risk gambling, 3-7 = Moderate risk gambling, and 8-27 = Problem gambling).

#### Competing interests

The authors declare that they have no competing interests.

#### Authors' contributions

CC developed the research plan, recruited and interviewed participants, and completed preliminary analysis of interview data and drafted manuscript. KO and CC jointly conducted data analysis and drafted the discussion. KO wrote the final manuscript in consultation with CC. All authors read and approved the final manuscript.

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