

Problem Gambling and Cognitive Distortions among Macao VIP Hosts: A Brief Report

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Abstract

This report investigates the understudied group of VIP Hosts in Macao casinos, who cater to high rollers and may be more vulnerable to problem gambling due to their exposure to heavy betting. To comprehensively profile their gambling behaviors and cognitions, we conducted an anonymous online survey using the Chinese Version of South Oaks Gambling Screen (C-SOGS) and the Gambling Fallacies Measure (GFM). Given the difficulty of accessing this population, we employed the snowball sampling technique to recruit eligible participants. Our analysis included data from 41 participants, and the findings revealed high levels of gambling-related cognitive distortions among VIP Hosts. In addition, 83% of the respondents were classified as non-problem gamblers, with 10% of respondents classified as at-risk gamblers, and 7% classified as pathological gamblers. Despite the small sample size, this report offers a preliminary understanding of VIP Hosts' gambling behaviors in Macao, paving the way for future research.

Keywords: VIP Hosts; casino employees; Macao; problem gambling

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Introduction

VIP Hosts, a unique and small group of Macao casino employees, are considered at risk for problem gambling because of their working environment. Macao, a special administrative region of China, is the only place where land-based gambling (e.g., casinos) is legal in China. In 2019, it attracted more than 39 million visitors (“*Visitor Arrivals for December 2019*,” 2020), and has been recognized as the world’s gambling capital. With 41 casinos, Macao generated US \$36 billion in annual gross gaming revenue prior to the COVID-19 pandemic (*Gaming Statistics*, 2021), nearly three times the gaming revenue of Nevada (United States) and ten times that of Singapore.

Macao casinos operate through two primary systems: a) mass gaming and b) VIP gaming. Mass gaming floors function similarly to traditional Las Vegas-style casinos, while VIP gaming caters to “high rollers” who often bet up to US \$500,000 per hand in designated rooms filled with Baccarat tables. In a typical VIP gaming system, VIP junkets, also known as gaming promoters, sign contracts with casino operators to manage VIP rooms (Godinho, 2014). These junkets recruit high rollers directly or through sub-junkets who introduce high rollers in exchange for commissions (Ho, 2017, 2018). Alternatively, casino operators may directly recruit high rollers if they maintain relationships with them. In any case, VIP junkets and casino operators employ a specialized team of gaming employees, known as VIP Hosts, to cater to high rollers and provide round-the-clock customer service.

Although VIP Hosts handle high rollers’ general requests like other service providers (e.g., making restaurant reservations), their role differs in that they are often asked by VIP players to engage in specific gambling-related behaviors such as chanting for a strong hand in the middle of play. This is because many Chinese players believe shouting and peeling cards (i.e., the casino dealer deals cards face down to the player, then the player peels open the cards, often accompanied by chants of short words, such as the face value of the desired card) could help them obtain a favorable hand (Lam, 2007). Furthermore, VIP Hosts have a distinct role compared to other employees on the casino floor, such as dealers, as they are responsible for monitoring high rollers’ bets and promptly informing managers of significant wins or losses. As a result, VIP Hosts are consistently exposed to substantial wins and losses, a factor sometimes associated with problem gambling (Hing & Breen, 2008). Thus, this unique working environment places VIP Hosts at an elevated risk for problem gambling.

The existing literature has shown that casino employees exhibit higher rates of participation in gambling than the general population and are more likely to develop gambling-related problems (Guttentag et al., 2012; Hing & Gainsbury, 2011). Researchers found that gambling-related cognitive distortions (i.e., exaggerated or irrational beliefs specific to gambling behavior) played a pivotal role in the maintenance of problem gambling behaviors (Cunningham et al., 2014; Michalczuk et al., 2011). These cognitive distortions mainly include illusion of control, misperceptions about randomness, and superstitions (Ladouceur, 2004). Specifically, illusion of control was found to be significantly associated with pathological gambling (Orgaz et al., 2013), while a previous meta-analysis suggested that gambling problems could result from superstitions and misunderstandings related to randomness (Goodie & Fortune, 2013).

However, most gambling studies focusing on casino employees, which typically consider the working environment in their inquiries, are Western based in origin (e.g., United States, Canada, and Australia). Currently, limited research has investigated casino employees in Asia, and because of the uniqueness of the Macao gaming market, and in particular, its VIP gaming system, previous research examining gambling behaviors among Western casino employees may not be culturally relevant when applied to Eastern countries. This is the first-ever report that provides a holistic profile of Macao VIP Hosts, detailing their gambling behaviors and cognitions. Specifically, the following research questions and hypothesis are addressed:

Research Question 1. What is the gambling profile of VIP Hosts?

Research Question 2. How do VIP Hosts' gambling-related cognitive distortions correlate with problem gambling?

Hypothesis 1: Consistent with findings that distorted beliefs about gambling are prevalent among problem gamblers (e.g., Cunningham et al., 2014), the gambling-related cognitive distortions of VIP Hosts will be positively related to problem gambling severity scores.

Methods

We used Qualtrics, an online platform, to collect survey responses. Ethics approval for this report was granted by the University of Nevada, Las Vegas Institutional Review Board. The survey was first made available for respondents on April 21, 2020, and closed on July 12, 2020. Samples were drawn from gaming employees who had worked as VIP Hosts in the past six months in Macao. Notably, researchers have difficulty reaching VIP Hosts because they possess confidential information about high rollers and do not wish to be contacted due to fear of breaking company policy. Therefore, we employed a snowball sampling technique to recruit participants for the report. The snowball sampling technique has been previously used to recruit difficult-to-reach groups for data collection purposes (Etikan, 2016). We sent recruitment messages to several VIP Hosts who were acquainted with the first author (due to his tenure in the same industry), and these VIP Hosts in turn, shared the survey with other VIP Hosts. The survey contained demographic questions (e.g., gender, income, education level) and questions relating to gambling behaviors (e.g., "How often did you gamble in the past 12 months?"). The survey also included the Chinese Version of South Oaks Gambling Screen (C-SOGS), an instrument to screen for problem and pathological gambling (Tang et al., 2007), and the Gambling Fallacies Measure (GFM), an instrument to assess gambling cognitions (Leonard et al., 2015; Leonard & Williams, 2016).

Chinese Version of South Oaks Gambling Screen (C-SOGS)

C-SOGS is a reliable and valid instrument to screen for problem and pathological gambling (Tang et al., 2010). The C-SOGS was first available in 2007 when the SOGS was translated from English into Chinese by local clinicians in Macao (Tang et al., 2007). Individuals who score 8 or higher on the C-SOGS are classified as pathological gamblers, those who score between 5 and 7 are classified as at-risk gamblers, and scores between 0 and 4 are considered non-problem gamblers in Chinese societies (Tang et al., 2010). For the current report, Cronbach's alpha for the C-SOGS measure was 0.77.

Gambling Fallacies Measure (GFM)

The GFM measures cognitive distortions related to gambling and is comprised of 10 multiple-choice questions (e.g., "Your chances of winning a lottery are better if you are able to choose your own numbers." [Agree or Disagree]). GFM scores are the summation of the correct responses and range from 0 to 10. The greater the resistance to cognitive distortions, the higher the score. Research has supported that the GFM has strong content validity, adequate convergent, discriminant validity, and external validity when measuring gambling-related cognitions (Leonard et al., 2015; Leonard & Williams, 2019). Cronbach's alpha for GFM was 0.83.

Data analysis was conducted in SPSS 27. Univariate outliers were assessed using $z > 3$ criterion. Descriptive statistics were used to summarize VIP Hosts' demographic information and gambling behaviors. A Pearson's correlation was used to examine *Hypothesis 1*, regarding the relationship between gambling cognitive distortions scores and problem gambling severity scores.

Results

A total of 56 participants completed the survey. Of the respondents, 14 did not qualify for the report (i.e., they were not VIP Hosts in Macao), and 1 person was an outlier (i.e., $z[C\text{-}SOGS] > 3$). Therefore, 41 VIP Hosts were included in the data analysis. The demographic and occupational characteristics of the study sample are presented in Table 1. The group's mean age was 30.2 years ($SD = 3.6$), with a maximum age of 40 and a minimum age of 24. Approximately half of the sample was male (54%), and over 70% of the sample held a bachelor's degree. More than two-thirds of the respondents worked in the VIP gaming industry for at least 3 years (71%). Most of the respondents reported having received Responsible Gambling (RG) training at least once a year (85%), and 6 respondents reported they had not received any RG training in the past 12 months (15%).

Table 1
VIP Host Respondents' Demographic and Occupational Characteristics

	<i>n</i>	Percent
Gender		
Male	22	54
Female	18	44
Prefer not to respond	1	2
Country/Region of residence		
Macao	20	49
Taiwan	17	42
Malaysia	3	7
Hong Kong	1	2
Highest level of education		
High school or equivalent	11	27
Bachelor's degree	29	71
Master's degree or above	1	2
Marital status		
Single	28	68
Married	13	32
Monthly income (HK\$)		
15,000–24,999	15	37
25,000–34,999	16	39
35,000–44,999	5	12
45,000–54,999	3	7
55,000 and above	2	5
Years in the VIP gaming industry		
Less than 1 year	2	5
1–2.99 years	10	24
3–4.99 years	13	32
5–6.99 years	9	22
7 years and above	7	17
Frequency of Responsible Gambling training		
Never	6	15
Once a year	19	46
Twice a year	9	22
More than twice a year	7	17

Gambling behaviors are reported in Table 2. Approximately 37% of the respondents gambled in the past 12 months ($n = 15$). On average, respondents spent HK\$4,043 per month on gambling. Out of the 15 respondents who reported gambling in the past

Table 2
VIP Host Respondents' Gambling Behaviors

	<i>n</i>	Percent
Gambled in the past 12 months		
Yes	15	37
No	26	63
Gambling frequency		
Less than once a month	13	86
Once a month	1	7
More than once a month	1	7
Monthly gambling expenditure (HK\$)		
Below 1,000	6	40
1,000–4,999	4	27
5,000–9,999	2	13
10,000 and above	3	20
Forms of gambling activities*		
Betting at Macao Casinos	9	60
Mark Six	5	33
Playing Mahjong or Cards at Home	3	20
Betting at Slot Venues	2	13
Soccer/Basketball Betting	1	7

Note: *Multiple responses were allowed.

12 months, 13 gambled less than once a month (87%). Most respondents who reported gambling behaviors engaged in betting at Macao casinos (60%, $n = 9$), while only one respondent reported betting on soccer/basketball (7%, $n = 1$).

Most of the respondents were classified as non-problem gamblers (83%) based on their C-SOGS score, with 10% of respondents classified as at-risk gamblers and 7% classified as pathological gamblers (see Table 3). The average GFM score for all respondents was 6.4 ($SD = 2.0$), with scores ranging from 2 to 10 correct responses. A Pearson's correlation coefficient was computed to examine the linear relationship between GFM and C-SOGS scores. There was no significant correlation between the two variables, $r = -.13$, $p > .05$.

Table 3
Problem Gambling Classification and Gambling Fallacies Measure (GFM) Scores

	<i>n</i>	Percent
Problem Gambling Classification		
Non-problem gambler (0–4)	34	83
At-risk gambler (5–7)	4	10
Pathological gambler (≥ 8)	3	7
Gambling Fallacies Measure Scores		
0	0	0
1	0	0
2	1	2
3	1	2
4	6	15
5	5	12
6	9	22
7	5	12
8	8	20
9	4	10
10	2	5

Note: C-SOGS scores had $M = 2.3$, $SD = 2.5$;
 CFM scores had $M = 6.4$, $SD = 2.0$.

Discussion

Overall, nearly one-third of VIP Hosts reported that they had gambled in the past 12 months. This finding is inconsistent with previous literature that found much higher rates of gambling participation among Western casino employees (95%–97%) (Guttentag et al., 2012; Hing & Gainsbury, 2011). Notably, 39% of the participants in our study received RG training twice or more times per year. The higher frequency of RG training could be a contributing factor to the lower gambling participation rate among VIP Hosts, as the training might have increased their awareness of the risks and consequences associated with gambling (Hing & Breen, 2005). Meanwhile, we posit that two significant external factors may have contributed directly to this finding. First, a new law, which prohibited Macao casino employees from entering (and therefore, gambling at) casinos when off-duty, took effect on December 27, 2019 (Macao Gaming Law, 2018). Second, the data were collected during the initial stages of the COVID-19 pandemic. The Macao gambling industry experienced a substantial downturn because of the coronavirus outbreak (McCartney et al., 2021). A particularly notable consequence was the temporary closure of all casinos, which, along with other factors, led to a considerable decline in overall gambling participation (Sayre & Yu, 2021).

The forms of gambling activities reported by the respondents provide further insights into VIP Hosts' gambling behaviors. Over half of the respondents who reported gambling behaviors engaged in betting at Macao casinos, while only one respondent reported betting on soccer/basketball. This preference for casino betting among VIP Hosts could be attributed to their familiarity with the casino environment and games. Also, the COVID-19 pandemic led to the suspension of many soccer and basketball matches, which may have contributed to the small number of respondents reporting betting on these sports (Yahoo Sports, 2020).

Despite the lower gambling participation rate, we observed a higher rate of problem gambling among VIP Hosts (7%) compared to the general population in Macao (1%) (Institute for the Study of Commercial Gaming, University of Macau, 2019). However, this

finding aligns with previous research that indicates casino employees are more likely to develop gambling-related problems than the general population (Guttentag et al., 2012; Hing & Gainsbury, 2011). In line with these studies, which reported 12% and 16% of casino employees being at moderate-risk or worse (Guttentag et al., 2012; Hing & Gainsbury, 2011), our report found that 17% of VIP Hosts were at risk or worse. The higher rate of problem gambling among VIP Hosts might be explained by the unique stressors and work environment they experience, which could lead to a higher susceptibility to developing problem gambling behaviors (Shaffer et al., 1999). Further research is needed to better understand the factors contributing to the high problem gambling rate among VIP Hosts.

The gambling cognitive distortions scores were considered high on the GFM scale, suggesting that gambling fallacies may be prevalent among VIP Hosts. This finding is in accordance with a recent study that indicated gambling fallacies could be commonly found among gamblers in Macao (Zeng et al., 2020), though not specific to VIP Hosts. This report, however, found no significant relationship between GFM scores and problem gambling scores measured via the C-SOGS. That is, gambling-related cognitive distortions were not related to VIP Hosts' scores on a measure of problem gambling severity. It is important to note that this finding is not conclusive because of the limitations of the small sample size. Further research with large sample sizes to identify factors attributed to problem gambling severity in VIP Hosts will help solidify or refute our initial findings.

Implications

Despite the small sample size of VIP Hosts, the present report provided preliminary evidence to support practical implications. The high prevalence of problem gambling among VIP Hosts suggested that VIP Hosts should be encouraged to routinely participate in the problem gambling screening and thus be provided with adequate support in a timely manner. Additionally, gaming operators should be aware of VIP Hosts' behavioral characteristics and develop tailored strategies to reduce gambling-related harms, particularly in the evolving market environment.

Limitations and Future Research

The current report has several limitations that warrant discussion. First, snowball sampling, a non-random selection method, was employed. The recruitment of participants relies on referrals, so people who have a large number of social connections are more likely to get invited (Cohen & Arieli, 2011). Second, this report included a total of 41 responses; yielding a small sample which, in turn, greatly impacted statistical power for hypothesis testing and subsequently, strength of findings and recommendations. Moreover, our results may be also biased because the survey data were collected during the initial stage of the COVID-19 pandemic, a global economic crisis, from which impacts on gambling behaviors and beliefs have not yet been fully realized. Government-imposed restrictions on casinos during the lockdown period, including a complete shutdown in February 2020 (Liu et al., 2021), might have caused respondents to gamble less frequently at Macao casinos.

Considering the limitations of this report, we recommend the following steps for future research. First, researchers should increase the sample size to mitigate small sample bias. This could be achieved by providing participants with higher incentives or collaborating directly with gaming operators to identify eligible VIP Hosts with safeguards in place to ensure anonymity. Additionally, future studies may also benefit from employing alternative research methods, such as content analysis, in-depth interviews, or mixed methods, as exemplified by Zeng & Forrest (2009) and Liu et al. (2021). Second, since this report focuses solely on VIP Hosts, future studies could investigate the gaming behaviors among Macao casino employees in other departments within the casino, such as Table Games and Surveillance, and make comparisons between employees with different job duties. Including other departments could help researchers understand how casino employees' gambling behaviors and cognitive distortions may differ by department and could directly help iden-

tify casino employees who may be at risk for developing problem gambling. Moreover, this report notes a low gambling participation rate among Macao VIP Hosts, warranting further examination. Future research should explore the potential influence of factors, such as cultural and social attitudes toward gambling, on gambling participation rates in this population. This approach would provide a more in-depth understanding of the factors affecting VIP Hosts' gambling behaviors. Finally, our findings may serve as a starting point for investigations exploring the potential impact of external factors, such as legislative changes, regulatory shifts, and market fluctuations, on VIP Hosts' gambling behaviors. For example, the arrest and sentencing of Alvin Chau, former chairman of Suncity Group (once the largest VIP junket in Macao), revealed the volatility of the VIP market, which experienced a slump following Alvin's arrest and the closure of Suncity's VIP rooms (Leung, 2023). The resulting uncertainty and job insecurity may lead to increased stress and financial pressure among VIP Hosts, potentially influencing their gambling behaviors as a coping mechanism. This highlights the importance of investigating the factors influencing VIP Hosts' gambling behaviors in such a volatile environment.

Conclusion

In conclusion, this report offers a preliminary examination of gambling behaviors among Macao VIP Hosts during the early stage of the COVID-19 pandemic, marking the first report of its kind. Despite the small sample size, the findings provide a foundational understanding of VIP Hosts' gambling behaviors, highlighting a lower participation rate compared to Western casino employees but a higher rate of problem gambling compared to the general population. The report demonstrates the potential of regular problem gambling screening and tailored harm reduction strategies for VIP Hosts. However, limitations, such as the small sample size and data collection during the pandemic, warrant caution in interpreting the results. Future research should address these limitations, explore external factors influencing VIP Hosts' gambling behaviors, and examine other casino employee populations. Building on this foundation, future research can contribute to a more comprehensive understanding of VIP Hosts' gambling behaviors and inform effective strategies to mitigate problem gambling.

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