

11-2009

A Comparison of gambling motivation factors between Chinese and Western casino players

Lu Ye

University of Nevada, Las Vegas

Follow this and additional works at: <https://digitalscholarship.unlv.edu/thesesdissertations>

 Part of the [Gaming and Casino Operations Management Commons](#), and the [Psychology Commons](#)

Repository Citation

Ye, Lu, "A Comparison of gambling motivation factors between Chinese and Western casino players" (2009). *UNLV Theses, Dissertations, Professional Papers, and Capstones*. 588.

<https://digitalscholarship.unlv.edu/thesesdissertations/588>

This Professional Paper is brought to you for free and open access by Digital Scholarship@UNLV. It has been accepted for inclusion in UNLV Theses, Dissertations, Professional Papers, and Capstones by an authorized administrator of Digital Scholarship@UNLV. For more information, please contact digitalscholarship@unlv.edu.

A Comparison of Gambling Motivation Factors
Between Chinese and Western Casino Players

by

Lu Ye
Bachelor of Arts
Shanghai University
2007

A professional paper submitted in partial fulfillment
of the requirements for the

Master of Science in Hotel Administration
William F. Harrah College of Hotel Administration

Graduate College
University of Nevada, Las Vegas
November 2009

ABSTRACT

A Comparison of Gambling Motivation Factors Between Chinese and Western Casino Players

by

Lu Ye

Dr. Antony F. Lucas, Examination Committee Chair
Associate Professor of Hotel Management
University of Nevada, Las Vegas

This paper explored literature on gambling motivation of Western and Chinese casino players to find out the similarities and differences of their motivation factors. Study found that they are motivated in similar ways by the desire to win, social and early memories. However, the Chinese gamblers exhibit severer cognitive errors, stronger risk-taking tendency and higher level of stress and depression, which explained the common findings of literature that Chinese have higher gambling and problem gambling rates than other ethnic groups. The findings would benefit casino operators in making marketing strategy at the Chinese players as well as problem gambling treatment organizations in implementing customized treatment programs.

TABLE OF CONTENTS

ABSTRACT.....	ii
LIST OF TABLES	iv
PART ONE	Error! Bookmark not defined. 1
Introduction	1
Purpose	1
Justification.....	2
PART TWO	3
Introduction	3
Literature Review of Western Gambling Motivation Theories.....	3
Biopsychosocial approach.....	4
Self-determination theory.....	5
Hedonic consumption theory	6
Hedonic consumption theory	7
Risk taking theories	Error! Bookmark not defined. 8
Motivation from early experiences.....	Error! Bookmark not defined. 9
Research on Chinese Gambling Motivations.....	Error! Bookmark not defined. 10
Chinese gambling cognitions.....	Error! Bookmark not defined. 11
Chinese risk taking in gambling.....	12
Baccarat, the Chinese favorite game	13
Motivation of Chinese high rollers.....	14
Conclusion to Literature Review	16
PART THREE	19
Introduction	19
Findings and Discusion	19
Higher levels of cognitive biases	20
Different psychological and emotional needs.....	20
Less desire for learning and accomplishing	21
Cogniitve biases enlarged effects of other factors.....	22
Implications	Error! Bookmark not defined. 24
Coonclusion.....	26
Limitation	27
BIBLIOGRAPHY.....	28

LIST OF TABLES

Table 1	Western Gambling Motivations	16
Table 2	Chinese Gambling Motivation	17
Table 3	Major Difference in Motivation factors	22

PART ONE

Introduction

Gambling motivations have received much attention in research. Although there are numerous studies in this area, few take demographic and cultural differences into account. Among all the populations studied, higher gambling and problem-gambling rates have been reported among people from the Chinese culture (Blaszczynski, Huynh, Dumlao, & Farrell, 1998; Chen, Wong, Lee, Chan-Ho, & Lau, 1993; Chinese Family Services of Greater Montreal, 1997; GAMESCS Project, 1999; The Victorian Casino and Gambling Authority, 2000), which is supported by further empirical studies on Chinese gambling patterns (Blaszczynski, Huynh, Dumlao, & Farrell, 1998; Fong & Ozorio, 2005; Ozorio & Fong, 2004; Wong & So, 2003). Most previous research on gambling motivation has been based on Western samples; however, little is known about motivation factors among Chinese casino players.

Purpose

The purpose of this paper is to understand why people from the Chinese culture are more attracted to casino gambling compared with people from Western cultures. The following two questions will be answered:

1. What are the motivation factors among Chinese casino gamblers?
2. How do these factors differ from those of Western culture, and how are they similar?

Justification

The findings of this research will have important implications for casino operators in many legalized gaming areas, such as Las Vegas, Macao, Canada, and Australia, because the Chinese represent a remarkable proportion of their market. With the upsurge of outbound tourism from mainland China, the competition among casinos for this market is getting more and more intense. The country's population size, the high level of interest in gambling activities, and increasingly relaxed outbound travel policies have made China an attractive target source market (Kim et al., 2004). Research has established the correlation between motivation and gaming frequency as well as betting size (Lam, 2007); thus if a casino intends to maintain and increase its market share of Chinese players, their motivations should be thoroughly understood.

In addition, in the domain of problem gambling treatment, studies have revealed that it is crucial to understand problem gamblers' motivation-related factors, because the reduction of these factors was proved to be the most effective approach in controlling and stopping the initiation and maintenance of gambling (Raylu & Oei, 2002; Sylvain, Ladouceur, & Boisvert, 1997; Viet, 1998; Viets & Miller, 1997). Because Chinese problem-gambling rates have proven to be higher than those of other populations, this paper will have practical use in developing targeted and customized treatment for Chinese pathological gamblers.

PART TWO

Introduction

The literature review contains two sections: a summary of Western gambling-motivation literature and an exploratory review of gambling-motivation research based on Chinese samples.

Literature Review of Western Gambling Motivation Theories

Gambling is generally defined as a risk-taking activity to obtain something of greater value (Abbott & Volberg, 2000; Bernstein, 1996). Research on gambling motivation started as early as 1928, when Freud reported gambling as an instinct and an irrational behavior. Most early studies perceived gambling negatively from psychoanalytic perspectives and identified the enjoyment of “pleasurable-painful tension” as a common characteristic of gamblers. Thus gamblers’ motives include rebellion, guilt, and self-punishment (Bergler, 1957; Lindner, 1974).

However, most recent studies do not share this view. For example, Custer and Milt (1985) argued that gambling motives were different among gamblers. They classified gamblers into six categories based on their purpose for gambling: (a) social gamblers, who play for fun and are not emotionally affected by their wins or losses; (b) professional players, who gamble as a career and play for money but can tolerate losses as part of their business; (c) antisocial gamblers, whose only purpose is winning and thus might cheat during gambling to ensure they win; (d) serious social gamblers, who gamble as a leisure and social activity; (e) relief and escape gamblers, who play to seek emotional relief; and (f) addictive and compulsive gamblers, whose gambling behaviors are not self-controlled and affect their lives negatively. These findings play an important role in gambling research, having brought to light diverse motives behind gambling

behaviors. However, instead of matching one motive to each type of gambler, other researchers have examined motivations across all players, with the most recognized theories listed as follows.

Biopsychosocial approach.

The biopsychosocial approach was employed to examine gambling behaviors by using interviews and focus groups (Blaszczynski & Nower, 2002; Clarke, 2006; Griffiths & Delfabbro, 2001). This research suggested that motivations for gambling are a combination of economic, social, and psychological needs, as well as accomplishing and learning. The first three motives are the most important.

Economic motives. Some researchers have advocated that the major reason for gambling was to become wealthy. For example, Walker (1992) claimed that gambling is a behavior motivated by purely economic reasons. Aasved (2003) agreed with him by pointing out the human desire to acquire something from nothing present in gambling activity. Others argued that monetary gain is not the only motivation, because other factors such as excitement and challenge also play important roles in gambling activity (DIA, 2004). Nevertheless, most researchers have agreed that financial gain is a crucial factor impacting all gambling activities (Blaszczynski & Nower, 2002).

Social motives. Although the opportunity to win makes gambling attractive, many also admitted that another motivation to gamble is social (Griffiths, 1995; Walker, 1992). This is especially true in card games that require human interaction (Aasved, 2003; Rogers, 1998). Some gamblers like to be accompanied by other players and have a crowd surrounding them, and others indicated that gambling is an opportunity to interact with friends and family (Browne & Browne, 1994).

Psychological motives. The link between gambling and psychological needs such as relieving anxiety and escaping from stress has been revealed; it was particularly highlighted in studies about problem gambling (Clarke, 2004; Raylu & Oei, 2002). Research has found that psychological needs as motivation factors were less common among non-problem-gambler samples and were dramatically more common among problem gamblers (Clarke et al., 2007). This finding confirmed previous conclusions that stress, anxiety, and depression contribute to the development of gambling involvement (Blaszczynski, McConaghy, & Frankova, 1991; Friedland, Keinan, & Regev, 1992; Henry, 1996; Raylu & Oei, 2004c). For instance, Coman et al., (1997) revealed that as much as 75% of gamblers who sought pathological gambling treatment suffered from depression. Blaszczynski et al. (1991) also showed that those who sought treatment and recovered from problem gambling also had a noticeable reduction in stress and anxiety (Coman et al., 1997; Friedland et al., 1992).

Self-determination theory

Self-determination theory was originally used to examine various behavioral motivations, such as work, leisure, and education (Deci & Ryan, 1985, 1991). In 2001, Chantal, Vallerand, and Vallieres found it applicable to gambling activity. The theory suggests that the main purpose of gambling is to satisfy one's self-determined needs on intrinsic, extrinsic, and amotivation levels.

Intrinsic motivation stimulates gambling activity for inherent satisfaction, including experiencing fun and excitement, learning knowledge, and accomplishing something new (Chantal, Vallerand, & ValHerès, 1995; Vallerand & Losier, 1999). Intrinsic motivation leads to

higher levels of engagement and persistence as well as greater satisfaction in gaming activity (Alexandris, Tsorbatzoudis, & Grouios, 2002).

Extrinsic factors enhance gambling activity through external, introjected, and identified regulations. External regulation involves the desire for secondary rewards such as becoming rich; introjected regulation limits an individual's ego enhancement, pressure controlling, and self-esteem achievement; identified regulation, which is related to self-determination, occurs when gamblers pursue personally valuable outcomes, for example, socializing and escaping from daily life (Ryan & Deci, 2000).

Amotivation is a concept that describes when players gamble with no clear intention of achieving an outcome through their behavior. This dimension measures motivation that is neither intrinsic nor extrinsic, often characterized as "going through the motions" (Ryan & Deci, 2000a, p. 72).

Chantal et al. (2001) ranked the prediction consequences of the different types of motivation from the most positive to the least positive, based on their relationships with repeated behaviors. They found that intrinsic motivation was associated with the most positive results, and amotivation was associated with the worst consequences.

Hedonic consumption theory

Another group of scholars considered gambling as one type of consumption behavior and found that it fit the hedonic theory related to the "multi-sensory, fantasy, and emotive aspects of one's experience of products" (Hirschman & Holbrook, 1982, p. 92). Consumer decisions were claimed to be driven by economical reasoning or by affective elements; gambling was found to belong to the latter category, because it promotes pleasure, emotional arousal, and hedonic

reinforcements (Titz et al., 2001). This theory explains the reason why one would be more addicted to gambling when he or she is “under-aroused,” for example, bored and depressed (Walker, 1992). This point of view coincides with the self-determination theory in that intrinsic motivational factors lead to higher levels of gambling involvement (Walker, 1992); it also is related to risk-taking theories on sensation seeking (Anderson & Brown, 1984; Conventry & Brown, 1993; Conventry & Hudson, 2001).

Cognition-based theories

Cognition-based theories such as the theory of reasoned action, the attitude model, and the theory of planned behavior are often employed in literature in exploring the reason for gambling (Delfabbro, 2004; Oh & Hsu, 2001; Rogers, 1998). These theories hypothesize that gamblers are driven by false beliefs (Walker, 1992). Several scholars have tried to categorize gambling cognitions (Clotfelter & Cook, 1993; Raylu & Oei, 2004a; Toneatto, 1999). Based on previous research, Raylu and Oei abstracted five categories of cognition associated with gambling motivation: illusion of control, predictive control, interpretive bias, gambling expectancy, and perceived inability to stop/control gambling.

- Illusion of control is the belief that people could control their gambling outcomes by engaging in activities such as praying before gambling (Ladouceur et al., 1988);
- Predictive control refers to the belief that gambling outcomes could be predicted based on salient cues or past wins and losses (Raylu & Oei, 2004a). A study found that gamblers remember their wins better than their losses, thus developing dispositional optimism about future results (Gibson & Sanbonmatsu, 2004);

- Interpretive bias consists of the belief that luck and skill can influence gambling outcomes (Langer, 1975), the belief that there must be a win after several losses, which is attributed to the gambler's fallacy that the probability of random and independent gambling events are predictable (Clotfelter & Cook, 1993), and the belief that one's gambling result is influenced by others.
- Gambling expectancy is a type of gambling cognition that relates to personal emotions and feelings. For example, many players indicated that they gamble for relaxation, to reduce boredom, and to escape from pressure.
- Perceived inability to stop/control gambling mostly relates to pathological gambling behavior. It describes a self-fulfilling prophecy that a gambler plays to fulfill his or her sense of helplessness that results from his or her previous gambling behavior (Raylu & Oei, 2004b).

The first three categories suggest possible gambling motivations, while the other two explain the reasons for maintaining the behavior. These cognitions interact with each other, creating a comprehensive cognitive-motivation model.

When explaining problem-gambling behaviors, researchers often found that the cognitive biases were associated with the strong desire to win (Ladouceur et al., 2002). According to this view, false cognitions enlarged the perceived chance of winning and thus resulted in non-stop gambling behavior.

Risk taking theories

Some researchers have tried to explain gambling behavior from a risk-taking perspective (Abbott & Volberg, 2000; Bernstein, 1996), as the definition and essence of gambling is a risk-

taking behavior in exchange for something of greater value. In general, the tendency of risk taking is influenced by both individual variables, such as one's skills and abilities, perception of control, and the probability and magnitude of reward, and situational factors that are divided into instrumental and stimulating categories (Zaleskiewicz, 2001).

Zaleskiewicz (1999) divided risk-taking behavior into stimulating risk taking (SRT) and instrumental risk taking (IRT). Based on experiments, he claimed that gambling was a typical SRT activity, because gamblers were motivated by the need to experience varied, novel, and complex sensations. In contrast, IRT behaviors were driven by exterior rewards and achievements, mostly found in financial investment activities. The division of risk-taking motivations between gambling and financial investment was confirmed by Weber et al. (1999), who discovered that IRT affects investment decisions but not gambling behaviors, while SRT contributes to gambling and other general risk taking. Researchers explained that unlike other consequential activities, gambling was a process utility; gamblers' risk-taking behaviors were more related to immediate physiological arousal and thus tended to be rapid, effortless, and automatic (Harsanyi, 1993; Le Menestrel, 2001).

In the research of gambling as a risk-taking behavior, researchers also suggested that the level of involvement in gambling is associated with probabilistic thinking. Gamblers who show less probabilistic thinking tend to be more overconfident toward gambling outcomes and thus are willing to take greater risks (Keren, 1994; Langer, 1975; Wagenaar, 1988).

Motivation from early experiences

Some researchers have argued that compared with cognitive and affective factors, past behaviors posted the greatest influence on an individual's continuing activities under stable

conditions (Ehrenberg, 1972; Ouellette & Wood, 1998). According to this theory, numerous gambling studies started paying attention to players' early experiences (Mizerski & Miller, 2003; Mizerski, Miller, Mizerski, & Lam, 2004). Although the relationship between past and future gambling patterns has not been fully established, many found it an important factor in motivating continuing gambling behavior. For example, Wiebe et al. (2001) found a positive relationship between the likelihood that a gambler could remember his or her first big win and the level of current gambling involvement. Lambos et al. (2007) reported that 43.5% of the problem-gambler sample identified their previous winning experience, compared to 38.2% of at-risk gamblers and 11% of not-at-risk gamblers. Thus they concluded that the early experience of winning encourages further gambling to some extent, especially among problem gamblers.

Research on Chinese Gambling Motivations

Recently, attention has been paid to researching gambling motivations among Chinese populations, given their high gambling and problem-gambling rates. Papineau (2005) suggested that what has been found in Western gambling studies might not be applicable to Chinese populations, because many industry observers reported that the gambling patterns of Chinese are somehow different from Western gamblers. For example, they have more interest in table games, especially baccarat (Hype, 1987; Miller, 2005); they are more risk oriented in betting; and they seem to be more easily addicted to gambling (Ozorio & Fong, 2004). In order to understand their specific motivation factors, empirical research has been conducted based on pure Chinese samples.

Chinese gambling cognitions

Cognitions and psychological factors have been found to be important gambling motivations (Clotfelter & Cook, 1993; Toneatto, 1999). However, Raylu and Oei (2009) pointed out that almost all of this research has been based on Western samples, so their validity for other ethnic groups is questionable. Therefore, they conducted a cross-cultural study of Chinese and Caucasian gamblers in Australia, and the hypothesis that gambling cognitions and psychological status differ between the two populations was supported. The results showed significantly higher levels of illusion of control, predictive control, perceived inability to stop gambling, and reported stress and anxiety in the Chinese group as compared to the Caucasian group. This finding provided an explanation for their early conclusion that Chinese people have stronger gambling desires and greater involvement than other ethnic groups (Raylu & Oei, 2004b).

Raylu and Oei (2004) suggested that the notions of luck, fate, control, and destiny in the traditions and belief systems of the Chinese culture lead to a stronger illusion of control and inability to stop gambling. The Chinese's superstitious thinking approach contributed to their tendency to predict gambling outcomes. The social structure, parental attitudes, and environmental stressors in Chinese society resulted in a higher level of stress and anxiety among the population.

Chinese risk taking in gambling

Studies have found that Chinese gamblers exhibit a high risk-taking level. For example, Hsee and Weber (1999) observed that Chinese were more risk oriented in gambling and investment tasks than Americans. Lau and Ranyard (1999) compared the same issue between gamblers in the United Kingdom and Hong Kong and found the British less engaged in risk-taking activities, which was explained by the fact that they were more chance oriented while the Chinese were more luck oriented.

Friedland (1998) has defined two types of risk takers: the chance-oriented person looking for the probability of occurrence by collecting information that helps him or her identify the results, and the luck-oriented person who concentrates on "signs" that will tell if that person is lucky at that moment or if his or her luck can be trusted to make the right decision. The Chinese belong to the latter category. A study conducted in a Chinese community in Australia found that the top reason for gambling behavior was to test their luck (Weber, Hsee, & Sokolowska, 1998).

In terms of risk-taking patterns, while Western literature has consistently suggested that gambling is different from many other rational risk-taking behaviors in that the major motivation to gamble is for sensation seeking, studies found Chinese people possess different risk-taking

propensities (Chen, Li, & Du, 2002; Ozorio & Fong, 2004). The survey conducted by Ozorio and Fong (2004) of casino players in Macau, including those from mainland China (46%), Macau (39.1%), and Hong Kong (14.9%), showed that their risk-taking tendency in gambling was associated with monetary returns, which was consistent with financial investment activities. The purpose of sensation seeking, a major factor in Western gamblers' risk-taking, was found to be secondary to the need for quick rewards in the Chinese samples. However, the instrumental risk-taking identities of analyzing outcome possibilities and the ability to make rational decisions were not applicable to the Chinese survey respondents. The author explained that the Chinese gamblers and speculators tended to overestimate the chance of success, which is attributed to cognitive bias and less probabilistic thinking (Ozorio & Fong, 2004). In another explanation (Vong, 2007), the Chinese gamblers tended to mix the need for sensations with the expectancy of monetary rewards in gambling and thus would enjoy the risk-taking aspect of gambling more.

Baccarat, the favorite game of the Chinese

In terms of game preference, many agreed that baccarat was the favorite game of Chinese people. As reported by the Macau Gaming Inspection and Coordination Bureau, baccarat generated 85% of Macau's gross gaming revenue in 2005. Lam (2007) examined Chinese baccarat players' psychological and motivational factors through an observational study. Results showed that they gambled for monetary rewards, excitement, entertainment, and social interaction.

The economic driving force is the main reason why table games are so popular among the Chinese. The perceived high probability, speed, and size of winnings offered in baccarat coincide with Chinese players' drive to win, making baccarat the favorite over other games. The social

motive is another reason why Chinese people prefer baccarat. Lam (2007) observed that Chinese baccarat players appeared to enjoy the exchange of ideas and discussion of betting strategies; these aspects are similar to those of Mahjong, which is another traditional Chinese social game. Players also enjoyed the excitement of collaborating with each other by betting on the same side to beat the house.

By observing their card reading and betting behaviors, The researcher found another important common psychological factor shared among Chinese baccarat players: high illusion of control. For example, players sitting at the same table often bet on the same side that they considered lucky, they discussed predicted results of the upcoming hand and compared it with the real outcome to assess their prediction skills, and many players tried to manipulate the result of each hand by peeling their cards and shouting the number they wanted. These actions demonstrated their belief that they could control and predict gambling results, even though the probability of winning was random (Lam, 2007).

Motivations of Chinese high rollers

A recent content analysis (Zheng & Forrest, 2009) of 99 cases of high rollers from mainland China in Macau found that although they were motivated by many factors, the strongest drive was to win, which was enhanced by their early winning experiences and cognitive bias. The 99 cases were reported by the media because of issues such as taking bribes, misappropriating public funds, and suicide.

When stating their gambling motivations, many people highlighted early winning experiences that made gambling exciting for them, made them more confident of their luck, and thus motivated them to engage more in gambling activities. Previous winning experience was

repeatedly stated by research subjects and thus concluded by the author as a major factor contributing to gambling addiction (Zheng & Forrest, 2009).

Cognitive bias is another factor highlighted by the literature. The high rollers' favorite game was baccarat, a table game in which the chance of winning each hand is random, with certain advantages to the house (MacDonald, 2001). However, this fact was not accepted by many high rollers. Most of them believed that "I have good luck so can win a lot but lose little," "as long as one has enough money and good luck, he is sure to win," and so "gambling is a short cut to make money," "it's faster than doing my business." Such cognitive bias was shared broadly among Chinese high rollers, leading to further gambling even after great losses (Zheng & Forrest, 2009: 40).

Conclusion to Literature review

The key findings of the review of literature on both Western and Chinese gambling motivations are summarized in Table 1 and Table 2.

Table 1. Western gambling motivations.

Theory	Key Findings	Literature
Biopsychosocial Approach	<ul style="list-style-type: none"> • Social, economic, psychological, accomplishing, and learning 	Blaszczynski and Nower (2002); Browne and Browne (1994); Clarke, (2006); Griffiths and Delfabbro (2001)
Self-determination Theory	<ul style="list-style-type: none"> • Fun, excitement, knowledge gaining • Self-achievement, ego enhancement, pressure controlling • Secondary awards, socializing, escaping from daily life • Amotivation 	Chantal, Vallerand, and Vallieres (2001); Walker (1992)
Hedonic Consumption Theory	<ul style="list-style-type: none"> • Experiencing excitement and fantasy • Escaping from boredom and depression 	Titz et al. (2001)
Cognitive Status	<ul style="list-style-type: none"> • Illusion of control, predictive control, interpretive bias, gambling expectancies, perceived inability to stop/control gambling (amotivation) 	Clotfelter and Cook (1993); Raylu and Oei (2004a); Toneatto (1999)
Risk Taking Tendency	<ul style="list-style-type: none"> • Experiencing varied, novel, and complex sensations • Stimulating risk-taking tendency • Less probabilistic thinking 	Weber et al. (1999); Anderson and Brown (1984); Conventry and Brown (1993); Conventry and Hudson (2001)
Early experience	<ul style="list-style-type: none"> • Memory of previous wins 	Ehrenberg (1972); Ouellette and Wood (1998)

Table 2. Chinese gambling motivations.

Research	Key Findings	Literature
Gambling Cognitions	<ul style="list-style-type: none"> • High level of illusion of control, predictive control, perceived inability to stop gambling • High reported stress and anxiety 	Raylu and Oei (2009)
Risk Taking in Gambling	<ul style="list-style-type: none"> • Highly risk oriented • Luck oriented in making decisions • Instrumental risk-taking tendency • Tendency to mix the need for sensations with the expectancy of monetary rewards in gambling, thus enjoying gambling risk taking 	Chen, Li, and Du (2002); Hsee and Weber (1999); Lau and Ranyard (1999); Ozorio and Fong (2004)
Baccarat, Favorite Game of Chinese	<ul style="list-style-type: none"> • Economic, excitement, entertainment, and social interaction • High illusion of control • Belief that they can control and predict gambling results 	Lam (2007)
Motivations of Chinese High Rollers	<ul style="list-style-type: none"> • Strong drive to win • Early winning experience that made gambling exciting and made them more confident of their luck • High level of cognitive bias 	Zheng & Forrest (2009)

Although Western researchers classified gambling-motivation factors from different perspectives, many factors were highly repeated: winning, cognitive bias, psychological and emotional needs, social interaction, learning and accomplishing, risk-taking tendency, and past gambling experience. However, considering significantly higher levels of gambling involvement and different gambling patterns were repeatedly reported in the Chinese population, the findings in literature on Western gambling were questionable in their applicability to the Chinese population. Many scholars have examined gambling motivations using purely Chinese samples, and their results highlighted the motivational factors of a strong desire to win, cognitive bias,

high risk-taking tendencies, and early experience. In part three of this paper, these similarities and differences are analyzed.

PART THREE

Introduction

The literature review has categorized seven types of gambling motivation factors. This section analyzes the similarities and differences between Chinese and Western gamblers from these seven aspects and also discusses the reasons why the Chinese have higher gambling and problem-gambling rates.

Findings and Discussion

By comparing the studies of Chinese and Western gambling behaviors, it is found that, except for the aspect of learning and accomplishing, which is not mentioned in the literature on Chinese gambling, the gambling behaviors of both groups were influenced by winning, cognitive bias, psychological and emotional needs, social interaction, risk-taking tendencies, and early gambling experience.

Among these factors, no significant differences were found within the economic, social, and early experience categories. Winning, or the economic reason, is indicated as one of the most important factors in almost every Western or Chinese gambling study, reflecting the human desire to obtain something from nothing (Aasved, 2003). The motive of social interaction is also identified in similar patterns in the biopsychosocial approach of Western gamblers and in an observational study of Chinese baccarat players. Based on this research, the need for social interaction is a common but not the strongest motivator for both Chinese and Western casino players. Another similar factor is the memory of past wins. The literature suggests that early big wins would encourage further gambling and could lead to problem gambling behaviors (Lambos et al., 2007; Wiebe et al., 2001), consistent with the study of Chinese high rollers, which the first

winning experience make them more confident for further playing (Zheng & Forrest, 2009).

Despite these three similarities, significant differences were found in the following categories.

a. Higher levels of cognitive bias

Given the specific patterns exhibited in Chinese gambling, much attention was paid to the related cognitions. The literature shows that among the five general cognitive biases, Chinese gamblers rank significantly higher in illusion of control, predictive control, and perceived inability to stop gambling (Raylu & Oei, 2004b). The unusual behaviors observed among Chinese Baccarat players, such as sitting at the same table they consider lucky, comparing their prediction and real outcomes to test their skills, and trying to manipulate the gambling results by peeling cards or shouting the wanted number, also revealed a common belief that gambling results could be predicted and controlled (Lam, 2007). These false cognitions are closely associated with the Chinese luck-oriented culture and resulted in a perception that the probability of winning was magnified.

b. Higher risk-taking tendencies

According to the literature, Chinese gamblers are more risk oriented than Western gamblers (Hsee & Weber, 1999; Lau & Ranyard, 1999), and their risk-taking patterns are different. Western risk-taking behaviors were associated with sensation seeking, while Chinese gamblers took risks mainly for situational factors such as financial return. The higher tendency of risk taking was explained by the Chinese luck-oriented thinking style. In contrast, Western-style probabilistic thinking could reduce risky decision making (Keren, 1994; Langer, 1975; Wagenaar, 1988).

c. Different psychological and emotional needs

Psychological and emotional needs, which involve factors of excitement, sensation, stress, anxiety and depression, are repeatedly confirmed as top reasons for gambling in Western literature. Sensation seeking was argued to be a major contributor to gambling by the hedonic consumption and risk taking theories (and Brown, 1993; Conventry and Hudson, 2001; Titz et al, 2001; Weber et al, 1999). However, in examining whether physiological arousal is a major factor in Chinese gambling, researchers found less interest in emotional satisfaction (Chen, Li, & Du, 2002; Ozorio & Fong, 2004).

On the other hand, research concluded that Chinese gamblers are more motivated by the need to escape negative emotions and psychological status. The cross-cultural study by Raylu & Oei (2009) revealed that the Chinese group reported significantly higher levels of anxiety and stress than did the Caucasians. Gambling for escape and avoidance is common among Chinese gamblers. As suggested, stress, anxiety, and depression are usually associated with problem gambling (Chantal, Valleratid, & ValHeres, 1995).

d. Less desire for learning and accomplishing

The motivations to learn or experience something new and self-achievement were revealed in Western research to be factors that lead to self-satisfaction and positive results (Chantal, Valleratid, & ValHeres, 1995; Vailerand & Losier, 1999). However, no research found that Chinese gamblers have these identifying factors. Although it is not appropriate to conclude that knowledge gaining and self-achievement do not motivate Chinese players, it can be argued that they are not as important as demonstrated in Western gamblers.

Table 3. Major differences in motivation factors.

Motivation factors	Western	Chinese
Cognitive bias	Less false cognitions	Higher illusion of control, predictive control, and perceived inability to stop gambling
Risk taking correlates	Less risk prone	More risk oriented
	Chance-oriented, more probabilistic thinking	Less probabilistic thinking, more luck oriented
	Stimulating risk taking	Instrumental risk taking
Psychological and Emotional Needs	Fewer motives of escaping from stress, anxiety, and depression	Higher level of avoidance of stress, anxiety, and depression
	Strong needs for sensation seeking and experiencing fun and excitement	Lower level in pursuing fun and excitement
Learning/ Accomplishing	Motivated by learning and accomplishing something new	Lower level of factors related to learning and accomplishing

e. Cognitive bias enlarged the effects of other factors

According to the literature review, despite the direct motivational effects of each of these factors, some also interact or mediate with others to impose more powerful effects on gambling behaviors. The most critical one is false cognition.

First, although both Chinese and Western gamblers may be motivated by the desire for monetary reward, that effect could be magnified through the influence of cognitive biases. For Chinese casino players, the motive to make money is often propelled by the belief that they really will make money, and their hopes for economic gains are more often stimulated by the fallacy that they can control or predict gambling results.

In addition, cognitive status also mediates with risk-taking attitudes to pose stronger impacts on gambling involvement. Researchers have concluded that risk-taking tendency is influenced by perception of control and thinking style (Horvath & Zuckerman, 1993; Ribes & Sanchez, 1992; Rosenbloom, 2003). Therefore, the relatively severe cognitive biases interact with the Chinese risk-taking attitude in that Chinese gamblers have a higher level of illusion of control and think less probabilistically. Instead of seeking event probability, they tend to look for the signs of luck to make risk-taking decisions or even take risks just to test their luck (Friedland, 1998; Hsee & Weber, 1999; Lau and Ranyard, 1999). The research on Chinese high-rollers has shown that the fantasy of luck twists their rational thinking and leads them to extend their playing time, because “as long as one has enough money and good luck, he is sure to win” (Zheng & Forrest, 2009:40).

Fianlly, the relationship between psychological factors and cognitive status leads to higher rates of problem gambling. It has been suggested that the perceived inability to stop or control gambling is the most critical factor leading to problem gambling. This is especially true when the gambler is suffering from depression and stress and needs to fulfill his or her sense of helplessness, which results in a self-fulfilling prophecy. Thus the high rate of problem gamblers among the Chinese population could be explained by the larger observed degree of depression and stress (Raylu & Oei, 2004b).

Implications

The findings of this paper could help explain the relatively higher gambling and problem-gambling rate found in the Chinese population: Chinese gamblers appear less motivated by excitement, amusement, learning and accomplishing, yet these factors are usually attributed to healthy or mild results, which means they have a limited influence on gambling severity (Chantal et al., 2001). However, serious cognitive bias, risk-prone attitudes, and higher levels of stress and anxiety are more important factors that contribute to gambling addiction, as they interact and enhance each other's effects to cause higher tendencies to initiate and maintain gambling activities among Chinese people.

This paper has several practical implications for casinos that market to Chinese players. Casinos could employ tactics that utilize Chinese players' cognition status to stimulate their desire to play. For instance, it would be better to promote the size of winning rather than the chance of winning, because Chinese players are often confident that they can get the prize. Based on their luck-oriented, instrumental risk-taking attitudes, casinos could create signs of "luck" through service communication. Also, considering their elevated need to escape from stress and depression, a casual and relaxed casino environment would be more comfortable for Chinese players; the exciting or stimulating atmosphere that attracts Western gamblers may not be appealing for Chinese players.

On the other hand, this paper can also benefit problem-gambling treatment organizations in implementing customized treatment programs. In treating Chinese problem gamblers, one of the most critical practices should be to address erroneous beliefs about winning and psychological properties such as stress and depression. Recommendations include educating Chinese problem gamblers on the odds of winning to convince them that their chance to win is

random, breaking the link between superstitious thinking and gambling results, and encouraging a positive lifestyle to help them recover from depression and stress.

Conclusion

This paper compared the motivational factors of Western and Chinese gamblers based on previous research. Chinese casino players are motivated by winning, cognitive bias, psychological and emotional needs, social interaction, risk-taking tendencies, and early gambling experience; similar factors motivate Western gamblers, in addition to the factors of learning and accomplishing.

Studies found Chinese gamblers are similar to Western gamblers in their desire to win, social interaction, and motivation from past gambling experience. However, differences exist in cognitive status, psychological and emotional needs, and risk-taking correlates. In addition, an important difference lies in the interrelationship among these motivation factors. The higher levels of cognitive bias were seen to have strong influences on other factors, such as winning, risk taking, and psychological needs, working with them to enlarge motivational effects. These findings answer the question of why Chinese people are more interested in gambling and have practical value in the fields of casino marketing and problem-gambling treatment.

Limitation

It has been argued that these motivational factors that affect Chinese individuals' gambling intentions and behaviors are shaped by culture, belief systems, and social structures (Raylu and Oei, 2004). However, because gambling undoubtedly has an ancient provenance in China and has been called a national pastime, it is also possible that the Chinese culture and belief systems have been influenced by gambling activity over time. In addition, Chinese people's stronger gambling intention could be a result of economic status, societal complexity, political regulations, and population density as well. Due to the limitations of the current literature, the reasons for particular motivations found in this paper could not be thoroughly examined and would be an important topic for further study.

BIBLIOGRAPHY

- Aasved, M. (2003). *The sociology of gambling*. Springfield, IL: Charles C. Thomas Publisher.
- Abbott, M. W., & Volberg, R. A. (2000). Taking the pulse on gambling and problem gambling in New Zealand: A report on phase one of the 1999 national prevalence survey. New Zealand: The Department of Internal Affairs.
- Alexandris, K., Tsorbatzoudis, C., & Grouios, G. (2002). Perceived constraint on recreational sport participation: Investigating their relationship with intrinsic motivation, extrinsic motivation and motivation. *Journal of Leisure Research*, 34, 233-252.
- Anderson, G., & Brown, R. I. F. (1984). Real and laboratory gambling, sensational-seeking and arousal. *British Journal of Psychology*, 75, 401-410.
- Bergler, E. (1957). *The psychology of gambling*. New York: Hill and Wang.
- Bernstein, P. L. (1996). *Against the gods*. New York: John Wiley and Sons.
- Blaszczynski, A. and Nower, L. (2002). A pathways model of gambling and problem gambling *Addiction*, 97, 487-99.
- Blaszczynski, A., McConaghy, N., & Frankova, A. (1991). Control versus abstinence in the treatment of pathological gambling: A two to nine year follow-up. *British Journal of Addiction*, 86, 299-306.
- Blaszczynski, A., Huynh, S., Dumlao, V. J., & Farrell, L. (1998). Problem gambling within a Chinese speaking community. *Journal of Gambling Studies*, 14(4), 359-380.

- Blaszczynski, A., McConaghy, N., & Frankova, A. (1991). Control versus abstinence in the treatment of pathological gambling: A two to nine year follow-up. *British Journal of Addiction*, 86, 299-306.
- Browne, B. A. & Browne, D. J. (1994). Predictors of lottery gambling among American college students. *Journal of Social Psychology*, 134(3), 339–347.
- Chantal, Y., Vallerand, R.J. and Vallieres, E.F. (1995). Motivation and gambling involvement, Journal of economic risk-taking. *European Journal of Personality*, 15, S105–22.
- Chantal, Y., Vallerand, R.J. and Vallieres, E.F. (1995). ‘Motivation and gambling involvement’, *Journal of Social Psychology*, 135, pp. 755–63.
- Chen, B., Li, S. M., & Du, Y. C. (2002). Individual investors in China’s stock markets. Report prepared for Shenzhen Stock Exchange Composite Research Center.
- Chen, C., Wong, J., Lee, N., Chan-Ho, M., & Lau, J. (1993). The Shatin Community Mental Health Survey in Hong Kong: II. Major findings. *Archives of General Psychiatry*, 50, 125-133.
- Chinese Family Service of Greater Montreal. (1997). *Gambling and problem gambling among the Chinese in Quebec: An exploratory study*. Quebec, Canada: Author.
- Clarke, D., Tse, S., Abbott, M. W., Townsend, S., Kingi, P., & Manaia, W. (2007). Reasons for starting and continuing gambling in a mixed ethnic community sample of pathological and non-problem gamblers. *International Gambling Studies*, 7(3), 299–313.
- Clarke, D. (2004). Impulsiveness, locus of control, motivation and problem gambling, *Journal of Gambling Studies*, 20(4), 319–45.
- Clarke, D. (2006). Impulsivity as a mediator in the relation between depression and problem gambling, personality and individual differences. 40, 5–15.

- Clotfelter, C. T., & Philip, J. C. (2003), Notes: The “Gambler’s fallacy” in Lottery play. *Management Science*, 39 (12), 1521-1525.
- Coman, G. J., Burrows, G. D., & Evans, B. J. (1997). Stress and anxiety as factors in the onset of problem gambling: Implications for treatment. *Stress Medicine*, 13(4), 235–244.
- Conventry, K. R., & Brown, R. (1993). Sensation seeking, gambling and gambling Addiction, 88(4), 541–554.
- Conventry, K. R., & Hudson, J. (2001). Physiological arousal and sensation seeking in female fruit machine gamblers. *Addiction*, 94(3), 425–430.
- Custer, R.L., & Milt, H. (1985). *When luck runs out: Help for compulsive gamblers and their families*. New York: Facts on File.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum Press.
- Deci, E. L., & Ryan, R. M. (1991). A motivational approach to self: Integration in personality. In R. Dienstbier (Ed.), *Nebraska symposium on motivation*. 38, 237-288. Lincoln: University of Nebraska Press.
- Delfabbro, P. (2004). The stubborn logic of regular gamblers: Obstacles and dilemmas in cognitive gambling research. *Journal of Gambling Studies*, 20(1), 1–21.
- DIA (2004). Gambling statistics 1980–2004. (New Zealand), at [http://www.dia.govt.nz/pubforms.nsf/URL/198004statstable.pdf/\\$file/198004statstable.pdf](http://www.dia.govt.nz/pubforms.nsf/URL/198004statstable.pdf/$file/198004statstable.pdf)
- Ehrenberg, A. S. C. (1972). *Repeat-buying: Theory and applications*. London: North-Holland Publishing.

- Fong, D. K., & Ozorio, B. (2005). Gambling participation and prevalence estimates of pathological gambling in a far-East gambling city: Macau. *UNLV Gaming Research & Review Journal*, 9, 15-28.
- Friedland, N. (1998). Games of luck and games of chance: The effect of luck- versus chance orientation on gambling decisions. *Journal of Behavioral Decision Making*, 11, 161-179.
- Friedland, N., Keinan, G., & Regev, Y. (1992). Controlling the uncontrollable: effects of stress on illusory perceptions of controllability. *Journal of Personality and Social Psychology*, 63, 923-931.
- GAMECS Project. (1999). *Gambling among members of ethnic communities in Sydney: Report on problem gambling and ethnic communities* (Pt. 3). Sydney, Australia: Ethnic Communities' Council of NSW.
- Gibson, B., & Sanbonmatsu, D. (2004). Optimism, pessimism, and gambling: The downside of optimism. *Personality and Social Psychology*, 30(1), 149–160.
- Griffiths, M. and Delfabbro, P.H. 2001. The biopsychosocial approach to gambling: Contextual Factors in Research and Clinical Interventions. at <http://www.camh.net/egambling/issue2005/feature/index.html> (accessed August 2006).
- Griffiths, M. D. (1994). The role of cognitive bias and skill in fruit machine gambling. *British Journal of Psychology*, 85, 351-369.
- Harsanyi, J. C. (1993). Normative validity and meaning of von Neumann-Morgenstern Utilities. In K. Binmore, A. Kirman, & P. Tani (Frontiers of game theory, 307-320). Cambridge & London: MIT Press.
- Henry, S. L. (1996). Pathological gambling: Etiological considerations and treatment efficacy of eye movement desensitization/reprocessing. *Journal of Gambling Studies*, 12, 395-405.

- Gibson, B., & Sanbonmatsu, D. (2004). Optimism, pessimism, and gambling: The downside of optimism. *Personality and Social Psychology*, 30(1), 149–160.
- Hsee, C. K., & Weber, E. U. (1999). Cross-national differences in risk preference and lay predictions. *Journal of Behavioral Decision Making*, 12, 165-179.
- Hype, C. C. (1987). Never play poker with a man named spare ribs in Macao – Asian card pros act like pigs but you’ll soon find it out they are really sharks. *Wall Street Journal (Eastern edition)*. Jun 10, pp. 1
- Keren, G. (1994). The rationality of gambling: Gamblers’ conceptions of probability, chance and luck. In Wright, G. & Ayton, P. (Eds.), *Subjective probability* (pp. 485-499). Chichester, UK: John Wiley.
- Kim, C, Laroche, M., & Tomiuk, M. (2004). The Chinese in Canada: A study of ethnic change with emphasis on gender roles. *Journal of Social Psychology*, 144, 5-29
- Ladouceur, R., Gaboury, A., Dumont, D., & Rochette, P. (1988). Gambling relationship between the frequency of wins and irrational thinking. *Journal of Psychology*, 117, 47-52.
- Ladouceur, R., Sylvain, C., Boutin, C. and Doucet, C. (2002). *Understanding and Treating the Pathological Gambler*. John Wiley, New York.
- Lam, D. (2007). An exploratory study of gambling motivations and their impact on purchasing frequencies of various gambling products. *Psychology & Marketing*. 24 (9), 815-827.
- Lambos, C., Delfabbro, P., & Pugliese, S. (2007). Adolescent Gambling in South Australia: report prepared on behalf of the department for education and children's services for the independent gambling authority of South Australia. Retrieved from <http://www.scimas.sa.edu.au>.

- Langer, E. J. (1975). The illusion of control. *Journal of Personality and Social Psychology*, 31, 311– 328.
- Le Menestrel, M. (2001). A process approach to the utility for gambling. *Theory and Decision*, 50, 249-262.
- Lindner, R. M. (1974). The psychodynamics of gambling. In J. Halliday & P. Fuller (Eds.), *The psychology of gambling* (217–239). London, UK: Allen Lane.
- MacDonald, A. (2000). Game volatility at baccarat. *UNLV Gaming Research & Review Journal*, 6(1), 73-77.
- Mizerski, R. & Miller, R. (2003). The measurement and implications of the gambling habit. 12th International Conference on Gambling & Risk Taking, Institute for the Study of Gambling and Commercial Gaming, University of Nevada at Reno, Vancouver, CA, (May).
- Mizerski, D., Miller, R., Mizerski, K., & Lam, D. (2004). The stochastic nature of purchasing a State's lottery products. *Australasian Marketing Journal*, 12(3), 56–69.
- Miller, M. (2005). The gambler. *Forbes*, 175 (6), 142.
- Oh, H., & Hsu, C. H. C. (2001). Volitional degrees of gambling behaviours. *Annals of Tourism Research*, 28(3), 618–637.
- Ouellete, J. A., & Wood, W. (1998). Habit and intention in everyday life: The multiple process by which past behavior predicts future behavior. *Psychology Bulletin*, 124, 54–74.
- Ozorio, B., & Fong, D. K. (2004). Chinese casino gambling behaviors: Risk taking in casinos vs. investments. *UNLV Gaming Research & Review Journal*, 8, 27-38.
- Papineau, E. (2005). Pathological gambling in Montreal's Chinese community: An anthropological perspective. *Journal of Gambling Studies*, 21, 157-178.

- Raylu, N., & Oei, T. P. S. (2002). Pathological gambling: A comprehensive review. *Clinical Psychology Review*, 22, 1009-1061.
- Raylu, N. & Oei, T. P. S. (2004) The Gambling Urge Scale (GUS): development, confirmatory factor validation and psychometric properties. *Psychology of Addictive Behaviors*.
- Raylu, N., & Oei, T. P. S. (2004a). The Gambling Related Cognitions Scale (GRCS): Development, confirmatory factor validation and psychometric properties. *Addiction*, 99, 757-769.
- Raylu, N., & Oei, T. P. S. (2004b). Role of culture in gambling and problem gambling. *Clinical Psychology Review*, 23, 1087-1114.
- Rogers, P. (1998). The cognitive psychology of lottery gambling: A theoretical review. *Journal of Gambling Studies*, 14(2), 111–134.
- Sylvain, C., Ladouceur, R. & Boisvert, J. M. (1997) Cognitive and behavioral treatment of pathological gambling: a controlled study. *Journal of Consulting and Clinical Psychology*, 65, 727– 732.
- Victorian Casino and Gaming Authority. (2000). *The impact of gaming on specific cultural groups report*. Melbourne: Cultural Partners Australia Consortium.
- Titz, K., Andrus, D., & Miller J. (2001). Hedonistic differences between mechanical game players and table game players. *UNLV Gaming Research and Review Journal*, 6(1), 23–32.
- Toneatto, T., (1999). Cognitive psychopathology of problem gambling. *Substance Use and Misuse*, 34, 1593–1604.
- Vallerand. R., & Losier. G. (1999). An integrative analysis of intrinsic and extrinsic motivation in sport. *Journal of Applied Sport Psychology*. 11. 142-169.

- Viets, V. C. (1998). Treating pathological gambling. In W. R. Miller & N. Heather (Eds.), *Treating addictive behaviors* (2nd ed., pp. 259-270). New York: Plenum.
- Vong F., (2007) The psychology of risk-taking in gambling among Chinese visitors to Macau. *International Gambling Studies*, 7(1), 29–42.
- Wagenaar, W. A. (1988). *Paradoxes of gambling behavior*. Hillsdale, NJ: Erlbaum
- Walker, M.B. (1992). *The Psychology of Gambling*. Pergamum Press, Sydney.
- Weber, E. U., Blais, A., & Betz, N. (1999). A domain-specific risk-attitude scale: Measuring risk perceptions and risk behaviors.
- Weber, E., Hsee, G., & Sokolowska, J. (1998). What folklore tells us about risk and risk taking: Gross-cultural comparisons of American, German, and Chinese proverbs. *Organizational Behavior and Human Decision Processes*, 75, 170-186.
- Wiebe, J., Single, E., & Falkowski-Ham, A. (2001). *Measuring gambling and problem gambling in Ontario*. Canadian Centre on Substance Abuse & Responsible Gambling Council (Ontario). Retrieved June 18, 2008, from <http://www.responsiblegambling.ca/articles>
- Wong, I. L. K., & So E. M. T. (2003). Prevalence estimates of problem and pathological gambling in Hong Kong. *American Journal of Psychiatry*, 160, 1353–1354.
- Zaleskiewicz., T. (1999). Between excitement and investment: Individual differences in financial risk taking. *Polish Psychological Bulletin*, 30, 153-165.
- Zaleskiewicz, T. (2001). Beyond risk seeking and risk aversion: personality and the dual nature of economic risk taking. *European Journal of Personality*, 15, S105-S122.
- Zheng. Z., & Forrest. D. (2009) High rollers from mainland China: A profile based on 99 cases. *UNLV Gaming Research & Review Journal*, 3(1).

