

Increasing Chinese Tourist Gamblers in Macao: Crucial Player Characteristics to Identify and Exploit

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Abstract

Casinos are today considered major tourist attractions and are a strategic component in the development of a tourism destination. Tourist gamblers are an important market segment providing a reliable source of revenue for casinos. It is necessary to understand the characteristics of these gamblers and to design services and products that cater for their needs. In this study a survey of 402 Chinese tourist gamblers indicated that they have distinctive characteristics, gambling motivations, behaviors and preferences that must be considered and catered to for depth of understanding and devising ways to attract, keep and increase these important customers. Management and marketing implications for local casino operators and destination marketers are drawn.

Key words: Chinese gamblers, characteristics, motivations, behaviors, preferences

Introduction

Casinos nowadays are considered as a strategic component in the development of tourism destinations (Kim, Prideaux & Kim, 2002). A survey revealed that 83% of Americans view casino gaming as an acceptable form of entertainment (American Gaming Association, 2004). Nearly 75% of them believe that casinos can be an important part of a community's entertainment and tourism options (Woodruff & Gregory, 2005). The number of visitors, the length of stay and average expenditures are expected to rise in any gaming destinations which provide a wide range of leisure and entertainment activities. Understanding the gamblers in terms of their characteristics, gambling behaviors, motivations, and preferences can provide useful information to destination marketers and casino operators about their customer base to assemble services and products in a manner best suited to the customer groups' characteristics, preferences, and perceptions.

Research studies profiling gamblers are many in the western context (Morrison, Braunlich, Cai, & O'Leary, 1996; Park, Yang, Lee, Jang, & Stokowski, 2002; Shoemaker & Zemke, 2005; Tan, Yen, & Nayga, 2010; Tarras, Singh, & Moufakkir, 2000), but there are none for Macao. Macao is a world-famous gaming capital and is the only place in the People's Republic of China in which commercial gambling is permitted. It has more than 150 years of experience in the gambling sector. Gambling is a major attraction of the city. Millions of tourists visit Macao annually to gamble. Although statistics are lacking regarding the gambler profile in Macao, the Chinese are regarded as the major customers of the casinos, as people from Hong Kong, Mainland China and Taiwan constitute nearly 90% of the visitors. The existing studies on the Chinese gamblers in Macao focus on their gambling motivations (Lam, 2005; Vong, 2007, 2004) and the reasons for not playing slot machines (Liu & Wan, 2011) but there is no comprehensive assessment of the profile, characteristics, motives, and preferences of these gamblers. Destination managers and casino operators generally lack a holistic picture of who their customers

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are, their spending and betting patterns, what they prefer and do not prefer, and what service attributes appear more important to these customers in choosing a casino to visit, although individual casinos may have surveys on their own customers.

Aims of the Study

This study therefore aims to fill in some of the research gaps by acquiring a deeper understanding of the Chinese gamblers in Macao. It has five aims: (1) to explore the characteristics of the Chinese gamblers, including their demographic characteristics, travelling patterns and experiences, modes of spending, and length of stay in Macao; (2) to examine their gambling behaviors such as their choice of games, the amount they bet on each hand, the number of casinos they plan to visit and the hours they spend in both the gaming and non-gaming facilities in a casino resort; (3) to investigate these customers' motivations for gambling, (4) to examine what service attributes are important to these customers; and finally (5) to identify the areas that could be improved in order to lengthen the stay and spending of these Chinese gamblers in Macao. The results of this study therefore will inform casino operators of the approach to serve their customers better and local destination managers of ways to attract the gamblers to stay longer and spend more, for wider destination management and marketing purposes.

Tourism and Casino Development in Macao

Macao's casino gaming industry plays a significant role in the city's economy. It currently accounts for more than 50 percent of Macao's gross domestic product (GDP), 14 percent of its total employment, and 80 percent of government revenue (Statistics and Census Service [DSEC], 2008). The liberalization of casino licensing in 2002 and the implementation in 2003 of the Chinese government's new visa regulations, which permit many mainland Chinese to travel to Hong Kong and Macao on an individual basis, triggered a boom in the tourism and gaming industry. The numbers of tourists jumped from 11 million in 2002 to 21.7 million in 2009 (DSEC, 2009). Since the liberalization of casino licensing in 2002, Chinese customers have become the major source of tourism in Macao, accounting for nearly 90% of the total number of visitors. In 2009, approximately 50.5% of visitors to Macao were from Mainland China, 30.9% from Hong Kong, and 5.9% from Taiwan (Table 1). Foreign investment increased dramatically as international companies began to build casinos and hotels. By 2006, gaming revenues had reached a record annual high of US\$10.33 billion, far exceeding the US\$6.6 billion made on the Las Vegas strip (Gaming Inspection and Coordination Bureau [DICJ], 2010). Tourist numbers more than doubled, from 11 million in 2002 to 21.7 million in 2009 (DSEC, 2010).

Before 2001, Stanley Ho (under the name Sociedade de Jogos de Macao (SJM)) had owned the exclusive right to operate casinos in Macao for more than 40 years. In 2001, the government decided to deregulate casino licensing with these objectives: (1) to increase competition among casino operators; (2) to improve service quality; (3) to enhance economic development and social stability and finally; (4) to position Macao as the regional center of casino gaming which free from criminal influence (Commission for the First Public Tender to Grant Concessions to Operate Casino Games of Chance of the Macao SAR [CFPT], 2001). After a public tendering process, the government finally awarded casino concessions to three syndicates; SJM, Wynn Resorts SA, and Galaxy Casino SA. Three additional sub-concessions were created in 2006; MGM Grand Paradise (a venture between Stanley Ho's daughter Pansy Ho and MGM Grand), Melco-PBL (a partnership managed by Stanley Ho's son Lawrence Ho and an Australian, James Packer), and Las Vegas Sands (run by Sheldon Adelson).

Since the liberalization of casino licensing in 2002, Chinese customers have become the major source of tourism in Macao, accounting for nearly 90% of the total number of visitors.

Table 1. Visitor Arrivals by Top Three Places of Origin, 2002-2009 (Percentages in Brackets)

Year	Mainland China	Hong Kong	Taiwan	Total tourist numbers
2002	4,240,446 (36.8%)	5,101,437 (44.2%)	1,532,929 (13.3%)	11,530,841
2003	5,742,036 (48.3%)	4,623,162 (38.9%)	1,022,830 (8.6%)	11,887,876
2004	9,529,739 (57%)	5,051,059 (30.3%)	1,286,949 (7.7%)	16,672,556
2005	10,462,787 (55.9%)	5,611,131 (30%)	1,482,287 (7.9%)	18,711,187
2006	11,985,655 (54.5%)	6,935,554 (31.5%)	1,437,752 (6.5%)	21,998,122
2007	14,866,391 (55.1%)	8,174,064 (30.3%)	1,444,082 (5.3%)	26,992,995
2008	11,613,200 (50.6%)	7,016,500 (30.6%)	1,315,900 (5.7%)	22,933,200
2009	10,989,533 (50.5%)	6,727,822 (30.9%)	1,292,551 (5.9%)	21,752,751

Source: Statistics and Census Service (2010).

Since then, the number of casinos has trebled, from 11 in 2002 to 33 in 2009 (Table 2), and the number of slot machines has increased from 808 to 14,363 within the same period (Table 3). Gaming revenues also increased dramatically, from US\$2.7 billion in 2007 to US\$14.9 billion in 2009. Two-thirds of the revenues of the casinos come from high-rollers (Gaming Inspection and Coordination Bureau of Macao, 2009). Presently, the VIP market accounts for 66.8% of Macao's casino revenue. The most popular games are the table games, mainly baccarat, which contributes 66.8% of the revenue. Slot play, however, is the primary interest of the mass gaming market, with 16.25% of the revenue coming from slot machines in 2009 (Table 3).

Table 2. The Growth in the Numbers of Casinos and Tables (2002-2009)

Concessionaires	2002	2003	2004	2005	2006	2007	2008	2009	2010 2nd Quarter
SJM	11	11	13	15	17	18	19	20	20
Galaxy	-	-	1	1	5	5	5	5	5
Las Vegas Sands	-	-	1	1	1	2	3	3	3
Wynn Resorts	-	-	-	-	1	1	1	1	1
Melco-PBL	-	-	-	-	-	1	2	3	3
MGM Grand	-	-	-	-	-	1	1	1	1
Total	11	11	15	17	24	28	31	33	33
No. of tables	-	424	1092	1388	2762	4375	4017	4770	4828

Source: Gaming Inspection and Coordination Bureau (DICJ) (2010).

Table 3. Revenues Generated from Different Types of Games in Macao Casinos (US\$ million) (2002-2009)

Year	2002	2003	2004	2005	2006	2007	2008	2009
Total Casino Revenue	2772	448	646	5756	7078	10378	13596	14921
Baccarat VIP	2043	2772	37229	3608	45979	6970	9222	9979
Slot Revenue	29	30	80	156	257	449	708	813
Slot % to Total Revenue	1.04%	.82%	1.55%	2.71%	3.63%	4.33%	5.21%	5.45%
VIP % to Total Revenue	73.67%	77.35%	71.98%	62.68%	64.96%	67.17%	67.82%	66.88%
Mass Market % to Total Revenue	26.33%	22.65%	28.02%	37.32%	35.04%	32.83%	32.18%	33.12%
Slot % to Mass Market	3.96%	3.63%	5.52%	7.27%	10.35%	13.18%	16.18%	16.45%
No. of Gaming Tables*	339	424	1092	1388	2762	4375	4017	4770
No. of Machines*	808	814	2254	3421	6546	13267	11856	14363
Yearly Revenue/Table	8.1	8.4	4.7	4.0	2.5	2.3	3.2	2.9
Yearly Revenue/Machine	0.036	0.036	0.035	0.046	0.038	0.034	0.06	0.056

Source: Liu and Wan (2011).Gaming Inspection and Coordination Bureau (2010).

*As of the end of the year.

MOP\$8 = US\$1

As the tourism product diversified, the average length of stay of tourists also increased, from 1.23 nights in 2002 to 1.44 nights in 2009 (DSEC, 2010), which increased the demand for hotel rooms. The number of hotel rooms almost doubled, from 8869 in 2002 to 16,928 in 2008. Another 21,737 rooms were due to be completed in the nearest future (Loi, 2008).

Literature Review

Characteristics

In marketing research, the demographic characteristics of respondents provide useful information in predicting consumer behaviors and preferences. Demographic characteristics include an individual's gender, age, employment status, educational level, marital status and income. For instance, age has been found to have a positive and significant effect on the probability as well as the level of gambling expenditures among American and Australian gamblers (Hing & Breen, 2001; Shoemaker & Zemke, 2005). Elderly people, who had more leisure time after their retirement, tend to participate and spend more in casinos as a social activity (Shoemaker & Zemke, 2005). Other studies show that gambling participation rate declines with age (Scott & Garen, 1994; Niffenegger & Muuka, 2001). Besides, males tend to be risk takers and speculators, whereas females are less speculative (Kitchen & Powells, 1991; Hing & Breen, 2001). Therefore, men prefer more table/card games than women, whereas more women enjoy bingo more than men (Delfabbro, 2000).

There are studies which attempt to develop profiles of the gamblers. Shoemaker and Zemke (2005), for instance, reported that the local casino players in Las Vegas were mostly female and married in their early forties, earned a yearly household income of US\$60,000 or more, and were employed full time. A survey conducted by Harrah also revealed that most of the casino players in the USA were female, with a median age of 46 years and had college level or above education. Most of them were white-collar workers, earning an average yearly household income of US\$56,663 (Harrah's Entertainment, 2006). These results show some consistency in the casino players in the US market. Gamblers in the USA are predominantly female, in their late forties and fifties, married, white-collar workers with college or above education level.

The profile of gamblers in the Asian market, however, is different. They are mostly male (either single or being the family-head), younger, and earn a lower annual household income than those in the US market. For instance, Lee, Lee, Bernhard and Yoon (2006) examined casino gamblers in Korea and concluded that they were predominantly male, single, aged between 30 and 39 years and with a relatively low annual household income. Most of them had university or graduate education level. Tan et al. (2010) found that gamblers in Malaysia were also predominantly male (and usually the head of a family), about 47 years old, white-collar workers, with at least high school education.

The profile of gamblers also includes understanding their trip patterns and behavior, such as the type of accompanying visitors (e.g. friends, family or alone), length of stay in a destination, the purpose of the visit, and the amount and patterns of spending. The 2009 Las Vegas Visitor Profile Annual Report (Las Vegas Convention and Visitors Authority [LVCVA], 2009) showed that visitors stayed an average of 3.6 nights and 4.6 days in Las Vegas. Gambling was not the only trip purpose of the visitors as 16% of them did plan to visit other attractions beyond casino resorts such as theme parks, water parks, or virtual reality rides. Sixty-four percent (64%) of them attended shows during their stay. A different finding, however, was reported by Morrison et al. (1996) who discovered that casino vacationers participated in very few activities outside of the casino during the trip; and they spent significantly less time planning their trip than other resort visitors.

Tarras et al. (2000) reported that elderly women gamblers in Michigan tended to go with their family members (47.1%). In terms of financial budgets, the amount budgeted for gambling was ranked the highest (US\$130.46), followed by lodging (US\$107.69), transportation (US\$112.30), food and drink (US\$48.95) and non-gaming activities (e.g. shopping) (US\$94.69). Park et al. (2002) discovered that in Black Hawk, Colorado, 91.2% of gamblers came to the city primarily to gamble mainly because the City has few other attractions, and 98% of them spent less than a day in Black Hawk, which meant a length of stay of about seven hours. Lee et al. (2006) also reported that the primary reason for gamblers to visit casino destinations in Korea was for gambling purposes and most stayed one night or more in the area.

Gambling Behavior

The demographic characteristics of gamblers are also associated with their patterns of behavior within casinos. Gamblers' behaviors are often analysed by their frequency of gambling, frequency of visits to particular casinos, the time and money spent gambling at one visit and the game played most often.

The Las Vegas Visitor Profile (LVCVA, 2009) revealed that of the 83% of visitors who visited Las Vegas in 2009 had been involved in gambling. Gamblers spent an average of 3.2 hours on gambling. Slots remained the most popular game, mentioned by 70% of gamblers, followed by blackjack (18%) and video poker (10%). The average number of casinos they visited in 2009 was 6.2, and the number of casinos at which these gamblers gambled was 3.0. The average gambling budget was US\$481.57.

The 2008 Clark County Residents Study (LVCVA, 2008) also showed that two-thirds (65%) of Clark County residents gambled at least occasionally, while one-third (35%) did not gamble at all. Thirty-two percent (32%) of the gamblers gambled only once or twice a month and 27% did so twice a week or more. Their average gaming budget was about US\$64 per day. Slot machines (39%) and video poker (31%) were the two popular games amongst these gamblers.

Tarras et al. (2000) examined the profile and motivations of elderly women gamblers in Michigan. They concluded that, on average, the respondents spent 4.54 hours on casino games per visit with a median of 3.0 hours. The median expenditures on gaming per visit were US\$50 and the overwhelming majority (81.5%) of elderly women ranked slot machines as their favorite casino game. Shoemaker and Zemke (2005) surveyed 637 local gamblers in Las Vegas and found that 65% of the residents gambled at least once a year. One-half of the respondents (49.9%) spent one hour or less in gambling, while a quarter

(25.9%) gambled for four hours or more. Video poker was the local residents' favorite game, played most often by 49.6% of the respondents, following by slot machines (18.1%). About 52.3% of respondents claimed a monthly gambling budget of less than US\$100. Sunset Station (21.4%) and Boulder Station (21.0%) were the two most popular casinos.

Gambling Motivation

Gambling motivations determine why people gamble (Lee et al., 2006). Motivational factors are psychological needs that cause an individual to feel psychological disequilibrium that may be corrected through travel or gambling experience (Kim, Crompton, & Botha, 2000; Lam 2005). A motive often creates a feeling of desire for satisfying a need (Crompton, 1979). Understanding gamblers' motivations is useful in identifying effective service and business strategies to meet the needs of customers.

According to Lee et al. (2006), there are three broad approaches in explaining a person's gambling motivation; sociological, psychological and experiential consumption. The first approach is to view gambling motivation from a sociological perspective, classifying gamblers with different social needs. Freeston (1997) (cited in Tarras et al., 2000: 34-35), for example, categorized six types of gamblers with six different social motivations: (1) Life-liners: Elderly who engaged in one type of regular activity, such as bingo; (2) Thrill-seekers: Gamblers who gamble for the buzz and action, they enjoy betting on horses and roulette because they enjoy the adrenaline-induced rush associated with these games; (3) Escape artists: gamblers who indulge in gambling as an escape mechanism; (4) Social adventurers: those who enjoy the social advantage associated with gaming; (5) Accompanists: those who accompany friends and relatives to casinos, and finally; (6) Novelty acts: those who enjoy learning and experiencing a new environment. Socializing, particularly interaction with the dealers and other gamblers is also found to be a major reason for many Chinese to prefer table games over slot machines (Aasved, 2002; Lam, 2007; Rogers, 1998). Lam and Ozorio (2008:3) argue that "while engaging in these gambling activities, Chinese deepen their friendship with each other and realize the real characters of those who gamble. For some Chinese, gambling provides a form of business networking or guanxi opportunities."

The second approach is to view gambling motivation from a psychological perspective (Lam, 2005; Lee & Lee, 2003). Specific types of motivations can predict relevant psychological responses (e.g. excitement, sense of accomplishment) and lead people to gamble (Chantal, Vallerand, & Vallieres, 1995; Jang, Lee, Park, & Stokowski, 2000). For instance, O'Hyde (1978) identified four reasons why people gamble: (1) Entertainment; (2) Fun; (3) Challenge; and (4) Skill mastery. While some studies report that winning money is not the primary motivation for gambling (Brenner and Brenner, 1990; Glassman, 1995; Martinez, 1983), monetary gain is found as a primary motive of Chinese people to gamble (Ozorio & Fong, 2004; Vong, 2007).

The third approach is to view gambling motivation from an experiential consumption perspective (Lee et al., 2006). People gamble because they like the experiences and feelings that can be gained from gambling. Cotte (1997), for example, found eight motives and consuming experiences of gamblers: (1) gambling as learning and evaluating; (2) gambling as a rush (high and low emotion, excitement); (3) gambling as self-definition (reinforcing self-image); (4) gambling as risk-taking; (5) gambling as cognitive self-classification; (6) gambling as emotional self-classification; (7) gambling as competing; and (8) gambling as communing (interpersonal interactions). Loroz (2004) argued that for some elderly people, gambling could help them to have a feeling of regaining a sense of control as many of them might feel a loss of control over their lives.

Gambler Preferences

Casino operators and gaming marketers are not only interested to know who their customers are, their motivations to gamble and their gambling behaviors, but also what

they regard as good quality in casino service. Previous studies find that good service is an important attribute. For instance, Johnson (2002) reported that the greatest customer dissatisfaction results from the inability to reserve a room or obtain a non-smoking room, a slow and poor-quality change service, slot machine malfunctions, overly long coin-fill procedures, language barriers when communicating with employees, and slow food and beverage service. In contrast, customers are generally impressed when employees remember their names, talk to them about personal rather than gaming matters, anticipate their needs before they have to ask for help (i.e., carry coins to the booth for elderly customers, show customers how to play different machines, and point out safety and security precautions), wish them good luck, congratulate winners, and help customers to pick “hot” slot machines.

Lucas (2003), however, stressed the importance of “servicescape” to gambler satisfaction in the slot-machine areas. “Servicescape” dimensions, including cleanliness, interior décor, comfortable seating, ease of navigation, and ambience of the casino are very important. However, in the study of Liu and Wan (2011), “servicescape” was found to be an unimportant factor for slot-machine players in Macao casinos.

Shoemaker and Zemke (2005) asked the gamblers in Las Vegas what seemed more important to them in choosing a casino to visit. The top five attributes identified were: (1) Easy drive from where I live, (2) Employees are friendly and courteous; (3) You feel safe there, (4) A good place to take out-of-town guests; and (5) Convenient parking is always available. The five least important attributes were: (1) The table limits are within my comfort range; (2) The types of promotions offered; (3) Always have good entertainment in bars and lounge areas; (4) Receive mailing from the casino, and finally (5) The benefits provided by joining the casino’s slot club.

To summarize, understanding gamblers in terms of their characteristics, gambling behaviors, motivations, and preferences can inform destination marketers and casino operators about their customer base and to provide services that cater for these customers’ needs better. The literature review indicates that research on gamblers should include their demographic characteristics, gambling motivations, behaviors and preferences.

In view of the paucity of such research in the context of Macao, a major world gambling capital, this study focuses on crucial factors describing and motivating the Chinese gamblers in Macao casinos who are presently its main source of visitors.

Methodology

The population of interest was the Chinese gamblers who were visiting Macao. Questionnaires were constructed to survey these gamblers’ characteristics, gambling motivations, behaviors, and preferences. Participants had to fulfill four criteria: (1) nationality is Chinese in origin, (2) a tourist, (3) had gambled in a casino in the 12 months prior to the interview (adopting the same operational definition of casino gambler as the Harrah’s surveys of 2002 and 2006). Additionally, in our study (4) respondents must have already participated in gambling or had plans to gamble during their current visit to Macao.

A questionnaire was designed and developed in Chinese. The measuring items used in the questionnaire were generated from a review of related literature pertaining to gamblers’ profiles, gambling motivations, behaviors, and preferences. It is divided into five sections. Section one was designed to understand the respondents’ trip pattern and behavior. It included questions such as the primary and secondary purposes of their visit, length of stay, number and type of accompanying gamblers and the budgets assigned for various items (i.e. gambling, transportation, food and lodging). Section two obtained

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information on the respondents' gambling involvement and behaviors; the frequency of visiting Macao casinos, the money and time they spent per visit, and the types of games played. Section three assessed the gambling motivations of the respondents. A list of gambling motivations (i.e. escape, socializing, winning money, challenge) as used in the study by Lee et al. (2006) was also adopted in this study. This list summarizes the gambling motivations as discussed amongst the existing literature that we previously reviewed. In Sections one to three, mainly closed-ended questions, largely with checklists requiring ticks in boxes, were used.

Section four asked the respondents what attributes were important in their decision to visit one casino over another. This section comprised twenty attributes, the majority of which were adopted from the study of Shoemaker and Zemke (2005), with others added to reflect Macao's unique situation. For example, shuttle buses provided by the casinos serve as an important transportation link between the ferry port and border gate to different casinos, thus, the shuttle bus service was also included in the attribute list. The respondents were asked to rate the importance of each attribute using a five-point Likert scale that ranged from 1 ("very unimportant") to 5 ("very important"). Section five asked the respondents what the Macao government, casino operators, and citizens could do to attract them to stay longer and spend more in the city, especially in the non-gaming sector. A list of 17 choices was given and respondents were allowed to select multiple answers. They were also encouraged to provide additional comments in an open-ended question. The last section of the questionnaire collected the basic demographic information on the respondents, including sex, age, and place of residence.

Prior to the survey, we conducted eight pilot tests which consisted of eight respondents, randomly selected outside casino hotels, to check the relevance and clarity of the questions, but no changes were required. The questionnaire survey was administered in July 2010 in face-to-face interviews with Chinese gamblers through purposive sampling. Twenty University of Macau students who were fluent in both Cantonese and Mandarin were recruited to conduct the interviews, and provided with in-class training and on-site demonstration and supervision. To improve the representativeness of the data, these student researchers were stationed outside ten large casinos and asked to invite target customers, identified using convenience sampling, to participate in interviews. The interviews took place on the street, with the survey responses completed by the interviewers, who read the questions out to the participants.

A total of 2634 Chinese customers were invited to participate in the study and were asked screening questions to determine their eligibility. Of these customers, 423 met the selection criteria and agreed to participate (a response rate of 16%). No incentives to participate were offered. Of the 423 questionnaires completed, 21 were discarded due to missing values or inconsistent answers, leaving 402 usable questionnaires for analysis. The quantitative data they generated were analyzed using Excel and the SPSS statistical software package. Descriptive analyses such as mean, mode, standard deviation and ranking of the importance of attributes were employed.

Findings

Demographic Profile of the Respondents

Table 4 presents the demographic profile of the respondents. Among the 402 respondents, 271 (67.4%) were male and 131 (32.6%) were female. The majority of them were between 28 and 37 years old (39.3%) and married with children (38.2%). Also, most of them had completed either university (32.5%) or high school (31.5%), earned a monthly income between MOP\$5001 and 10,000 (US\$625–1250) (31.5%) and worked as sales or service personnel (22.6%). Half (n=203; 50%) were from Mainland China, mainly from the Guangdong provinces (49.7% of the 203 mainland Chinese tourists). The rest were from Hong Kong (168; 41.4%), Taiwan (29; 7.1%) and elsewhere (4; 1%). These samples represented well the three main sources of visitors to Macao, except that

respondents from Hong Kong are overrepresented in the sample because they appear to have been more willing to participate in this research.

Table 4. Demographic Profile of the Respondents

MOP\$8=US\$1

<i>Demographics</i>	N	%	<i>Demographics (Continued)</i>	N	%
Gender			Occupation		
Male	271	67.4	Technical/administration	45	11.2
Female	131	32.6	Sales/service	91	22.6
			Professional	37	9.2
Age			Managerial	64	15.9
18-27	81	20.1	Operator/fabricator/labourer	37	9.2
28-37	158	39.3	Unemployed/retired	24	6.0
38-47	88	21.9	Student	26	6.5
48-57	49	12.2	Boss	35	8.7
58-67	14	3.5	Other	10	2.5
67 and over	12	3.0	Unknown	33	8.2
Marital Status			Origin of Region		
Single	129	31.8	Hong Kong	168	41.4
Married	102	25.1	Mainland China	203	50.0
Married with child/children	155	38.2	Taiwan	29	7.1
Widowed	5	1.2	Other	4	1.0
Separated/divorced	1	.2			
Unknown	10	2.5			
			Province in Mainland China		
Education			Guangdong	101	49.7
Primary	19	4.7	Zhejiang	12	5.9
High School	128	31.5	Hubei	8	3.9
Vocational/technical school	95	23.4	Shanghai	16	7.9
University	132	32.5	Beijing	9	4.4
Postgraduate or above	13	3.2	Jiangxi	11	5.4
			Shanxi	2	1.0
Income(MOP)			Fujian	10	4.9
5000 and under	48	11.8	Jiangsu	9	4.4
5001-10000	128	31.5	Chongqing	5	2.5
10001-15000	102	25.1	Hunan	7	3.5
15001-20000	42	10.3	Sichuan	1	.5
20001-25000	10	2.5	Tianjin	2	1.0
25001-30000	8	2.0	Guizhou	3	1.5
30001-35000	11	2.7	Hainan	2	1.0
35001-40000	1	.2	Heilongjian	1	.5
40001-45000	2	.5	Guangxi	3	1.5
50000 and over	6	1.5			
Unknown	46	11.3			

Trip Pattern and Behaviors

Table 5 shows that over half (57.7%) of the respondents had been to Macao between one and five times. Unlike some studies which have found that over 90% of gamblers came to the city primarily to gamble (Lee et al., 2006; Park et al., 2002), our study found that just 35% of the respondents claimed their primary purpose of visiting Macao was for gambling. There were respondents claimed that their primary purposes were to visit the cultural heritage assets (21.9%) and for shopping (21.7%). This result reveals that visitors come for different purposes beyond merely gambling. As to their secondary purpose for visiting Macao, the most popular was shopping (27.7%). The majority of respondents would stay two–three nights (61.8%). Over 90% of the respondents came to Macao through individual travelling with their friends/colleagues (49.3%).

In terms of the travel budget, Table 6 indicates that an average of 45% of the budget were assigned for gaming, following by accommodation (21.5%), food (14.7%) and non-gaming activities (14.3%). The medium amount budgeted for gambling was MOP\$3,000 (or US\$375). And the minimal and maximum amount budgeted for gambling were MOP\$100 (or US\$12.5), and MOP 1 million (or US\$125,000), respectively.

Gambling Behaviors

Table 5. Trip Pattern

Variables	N	%	Variables	N	%
Trip pattern			Trip pattern (Continued)		
Times of Visiting to Macao			Length of stay		
1 - 5	232	57.7	1 Day	80	19.7
6-10	98	24.4	2 Days	143	35.2
11-15	29	7.2	3 Days	108	26.6
16-20	7	1.7	4 Days	21	5.2
Over 20	36	9.0	5 Days	19	4.7
			6 Days	2	.5
			7 Days	22	5.4
			> 7 Days	11	2.7
Primary Purpose			Travel Pattern		
Gaming	144	35.5	Tour group	26	6.4
Shopping	88	21.7	Individual travelling	373	91.9
Visiting heritage/culture	89	21.9			
Business	39	9.6	Travelling Partners		
Visiting relatives or friends	25	6.2	Alone	72	16.7
Food	12	3.0	Family/relatives	142	32.9
Other	4	1.0	Friends/colleagues	213	49.3
			Other	5	1.2
Secondary Purpose					
Gaming	118	21.1			
Shopping	155	27.7			
Visiting heritage/culture	97	17.3			
Business	46	8.2			
Visiting relatives or friends	53	9.5			
Food	90	16.1			
Other	1	.2			

Table 6. Trip Budget (MOP\$)

Variables	Min	Max	Average (%)
Spending & Budget			
Gaming	100	1000000	42.5
Accommodation	0	200000	21.5
Transportation	0	6000	4.5
Food	50	30000	14.7
Non-gaming	0	30000	14.3

MOP\$8 = US\$1

Referring to Table 7, the vast majority (82.5%) of the respondents were not first-time visitors to Macao's casinos. Nearly one-third of them gambled about once a month (31%). Most (35.2%) spent from no time to a maximum of two hours in both a casino or a casino/resort as well as in playing games inside a casino (49.3%). The respondents were not loyal

to one casino, over half (51.7%) preferred to visit three or four casinos. The games they played most were baccarat (28.6%), following by blackjack (17.2%) and slot machines (14.6%). This is an interesting finding, as the previous studies report that Chinese people usually do not like playing slot machines and that their usage of slot machines is low (Liu & Wan, 2010; Siu & Eadington, 2009). Most of the respondents (49.5%) said they usually bet between MOP \$100 and MOP \$200 (US\$12.50–25.00) per hand.

Table 7. Gambling Involvement and Behaviour

Variables	N	%	Variables	N	%
Gamble Experience			Gamble Experience (Continued)		
First Time Gamble			Numbers of Casino visit		
Yes	69	17.0	1	39	9.6
No	335	82.5	2	73	18.0
			3	108	26.6
			4	102	25.1
			5	60	14.8
			6	13	3.2
			7	5	1.2
			8	2	.5
			>10	3	.7
Gamble Frequency			Games Play Most		
About 6 times a year	116	28.6	Blackjack	133	17.2
About once a month	126	31.0	Baccarat	221	28.6
About twice a month	46	11.3	Poker	103	13.3
About once a week	5	1.2	Roulette	71	9.2
About twice a week	11	2.7	Slot Machines	113	14.6
More than 5 times a week	3	.7	Video Poker	18	2.3
			Bingo	8	1.0
			Dice	97	12.5
			Craps	9	1.2
			Other	1	1
Hours Spent in Casino			Spend on each bet (MOP)		
0-2.0	143	35.2	<50	21	5.2
2.01-4.0	129	31.8	50	33	8.2
4.01-6.0	72	17.7	100	114	28.2
6.01-8.0	24	5.9	200	86	21.3
8.01-10.0	8	2.0	300	56	13.9
10.01-12.0	10	2.5	400	18	4.5
12.01-14.0	8	2.0	500	39	9.7
14.01-16.0	3	.7	600	1	.2
16.01-18.0	1	.2	700	2	.5
18.01-20.0	3	.7	800	2	.5
20.01-22.0	3	.7	900	1	.2
22.01-24.0	2	.5	1000	14	3.5
			2000	10	2.5
			Other	7	1.7

MOP\$8 = US\$1

Gambling Motivation

The respondents were also asked about their motivations to visit casinos and they were permitted to make multiple responses. Table 8 lists the survey results. Of the 1300 responses, 269 (20.7%) of them revealed that winning money was their primary purpose for visiting casinos. Amongst them 136 (10.5%) said they wanted to “win money” and 133 (10.2%) hoped to “win back previous losses.” Another major purpose of visiting casinos was to take a “risk” (122 or 9.4%) and for the “challenge” (121 or 9.3%) and excitement (112 or 8.6%). These results confirm the conclusions of previous studies (Liu & Wan, 2011; Ozorio & Fong, 2004; Vong, 2007).

Table 8. Gambling Motivation

Variables	N=1300	%
<i>Gambling Motivation</i>		
Winning		
To win Money	136	10.5
To win back previous losses	133	10.2
Challenge		
To experience my achievement	32	2.5
Because gaming offers excitement	112	8.6
To take risks	122	9.4
For the challenge	121	9.3
Because I expect something that will satisfy my personal needs	102	7.8
Because gambling provides thrill	30	2.3
Because gambling is enjoyable	73	5.6
Because gambling is interesting	53	4.1
Socialization/learning		
To increase friendship or kinship	13	1.0
To compete with others (including friends)	19	1.5
To be with friends	84	6.5
To meet new people	36	2.8
To learn gambling (casino games)	13	1.0
To see or do something new	100	7.7
To be with people who enjoy the same things I do	44	3.4
To practice gambling (casino games)	4	3
Because others (friends) are doing gambling	24	1.8
Escape		
To escape from routine life	4	.3
To alleviate boredom	14	1.1
To escape from responsibility	3	.2
To release tensions	28	2.2

Perceived Importance of Casino Attributes

Respondents were given a list of attributes comprising such dimensions as property features (e.g. brand name, casino design, smoke environment etc.), food and entertainment issues (quality and variety), service issue (e.g. courtesy, friendliness and appearance of employees, transportation arrangements), gambling issues (e.g. machines pay off better, bet limits, speed of games), promotion issues (e.g. availability of complimentary items, types of promotions). They were asked to indicate the level of importance of each attribute in their decision to visit a casino.

Table 9 shows the rankings. Results show that respondents ranked “free shuttle buses offered by casinos” and “attractive casino design” as the two most important

attributes. The perceived importance of the free shuttle bus service is because of the poor transportation network of Macao. Macao does not yet have a mass transit railway system. Internal transportation relies on taxis and buses which are often not enough to cater for the local needs and the influx of tourists. Free shuttle bus services therefore play a crucial role to take gamblers directly from the two border gates and the ferry port to the casinos. Many Chinese gamblers are also attracted by the glamorous architecture and design of a casino, perhaps due to the Chinese “face” culture that they feel more honorable to visit a casino which is glamorous and grand. It is important that casino owners put sufficient resources into designing and constructing their casinos to impress the customers. Respondents ranked the casino’s brand name, the variety of game choice and table limits, and good atmosphere with crowds of people as the third, fourth and fifth most important attributes of casinos. The implication for casinos is that they need to ensure that baccarat, blackjack and poker games with the minimum bet limits between MOP \$100 and MOP \$200 (or US\$12.50–25.00) are available. Smaller casinos with relatively less well known brand names should improve these items to attract customers. On the other hand, complementary benefits, types of promotions offered, speed of games, invitation mailing from casinos, choice of dining, machines paying off better, were considered as the least important attributes of a casino.

Table 9. Perceived Important Attributes of a Casino

Variables	Mean	Std. Deviation	Ranking
Free shuttle buses offered by casino	3.93	.778	1
Attractive casino design	3.93	.778	1
Good brand name and famous casino	3.79	.783	2
There are a variety of game choices and table limits	3.78	.758	3
Good atmosphere crowded with people	3.72	.760	4
Employees are friendly and courteous	3.71	.757	5
Good past experience at that casino	3.65	.687	6
Free drink are available, delivered in a timely manner	3.61	.943	7
The table limits are within my comfort range	3.60	.740	8
Always have good entertainment in the bars and lounge areas	3.60	.817	8
Offer non-smoking area (e.g. on game floor, in restaurant)	3.56	.994	9
It is a place where my friends/family like to go	3.55	.806	10
Employees look good	3.50	.685	11
It seems to have better odds than other places	3.49	.827	12
You can get complementary benefits	3.48	.901	13
The types of promotions offered	3.48	.930	13
The speed of game is fast enough	3.47	.820	14
Receive a mailing from casino	3.40	.917	15
Enjoy eating at one of the restaurants on the premises	3.37	.853	16
Machines pay off better	3.34	.853	17

1 = the most important 17= the least important

Suggested Improvements to Enhance the City’s Attractiveness

Finally, we also solicited the respondents’ suggestions of ways that Macao (including the government, the industry, local citizens) could improve in order to attract them to stay longer and spend more in the city. The respondents were allowed to make multiple responses. Table 10 shows that a total of 1349 responses were collected. The majority (204; 15.1%) of the respondents believed that Macao should improve the food and beverages on offer by providing a wider variety of dining choice, better tasting food and better value-for money. Other suggestions included improving heritage facilities and promotion (133; 9.9%), local transportation (130; 9.6%), shopping (116; 8.6%) and facilities for children (97; 7.2%).

Table 10. Measures to Enhance the Length of Stay and Spending in Macao

Variables	N=1,349 %	
<i>Opinions</i>		
1. More new and modern casinos	78	5.8
2. More children's facilities	97	7.2
3. Better food and beverages (choice, taste, price)	204	15.1
4. More new games in casinos	85	6.3
5. More shopping facilities	116	8.6
6. Improve heritage facilities and promotion	133	9.9
7. Macao people more friendly and welcoming	35	2.6
8. Improve transportation	130	9.6
9. More promotion about Macao	40	3.0
10. More gifts, coupons and incentives	41	3.0
11. Clear signage and directories	92	6.8
12. More services in casinos	45	3.3
13. Better service personnel in Macao (including attitudes and languages)	51	3.8
14. Cheaper hotel price	76	5.6
15. Improve the air quality	43	3.2
16. Improve overcrowding	43	3.2
17. Increase the quantity and quality of attractions	27	2.0
18. Others	13	1.0

Discussions, Implications and Conclusion

This study has attempted to understand the Chinese gamblers in Macao who are currently the major source of visitors to the city. Their characteristics, gambling motivations, behaviors and preferences are examined. The use of these profiles and information permits casino marketers and destination managers to assemble services and products in a manner best suited to the specified customer groups' characteristics, preferences, and perceptions.

The Chinese gamblers in Macao show distinctive characteristics. Table 11 summarizes the characteristics of these gamblers.

The results offer policy implications to casino operators, destination managers and the government. First, Chinese gamblers visit Macao regularly, around once a month, with an average length of stay of two to three days, which is above the average 1.44 days when including other leisure and business visitors. These gamblers are potential customers not just for casinos but also for other businesses in Macao as a whole. Although their length of stay is longer than many gamblers in other gaming cities (Lee et al., 2006; Park et al., 2002), yet it is shorter than those visiting Las Vegas (3.6 nights) (LVCVA, 2009). There is certainly room for improvement in terms of extending the average length of stay of the Chinese tourist gamblers in Macao.

Second, most of them visit a casino and gamble for less than two hours at a time which is longer than those gamblers in Las Vegas as reported by Shoemaker and Zemke (2005) but and is shorter than the gamblers as reported by LVCVA (2009). However, unlike the gamblers in Las Vegas (LVCCA, 2009), the Chinese gamblers we surveyed spend very little time exploring the non-gaming components within the casinos such as spa, shopping and dining. In order to attract them to stay and explore more of the non-gaming activities, our suggestion is to strengthen the shopping and children's facilities. The majority of the respondents believe that Macao lacks these facilities and claim that if more of these facilities were provided they would be happy to stay longer. This perhaps is also one of the reasons why most of them came to Macao with their friends/colleagues instead of their spouses and children. More provision of shopping and children's facilities (e.g. a children's library, nursery, playground, theme park) within the casinos would certainly help encourage families to visit casinos. Casino resorts that already have plans to include such family-friendly facilities should speed up their projects. Since the Chinese

Table 11. Characteristics of Chinese Gamblers in Macao Casinos

Category	Characteristic
Gender:	Male
Age:	28–37
Marital status:	Married with child/children
Education:	University
Profession:	Sales or service personnel
Monthly income	US\$652–US\$1250
Residence (province):	Mainland China (Guangdong)
Times of visiting Macao:	1–5 times
Primary purpose of visiting Macao:	Gambling
Secondary purpose of visiting Macao:	Shopping
Length of stay:	2–3 days
Travel pattern:	Individual travel
Partners to travel with:	Friends/colleagues
Budget assigned for the trip (in order):	Gambling (median US\$375), accommodation, food.
Gambling experience in Macao:	Not the first time
Frequency of gambling:	Once a month
Hours spent in a casino:	0–2 hours
Hours spent gambling in casino:	0–2 hours
Preferred games (in order):	Baccarat, blackjack, slot machines
Money spent on each bet:	US\$12.50–US\$25.00
Number of casino visits per trip:	3–4 casinos
Gambling motivation:	Monetary wins; challenge and excitement;
Attributes within casinos that are considered important:	free shuttle bus services; casino design; brand name; suitable table limits; good playing atmosphere
Attributes within casinos that are considered least important:	Complementary benefits, promotions offered, invitation mailing from casinos, the choice of dining; machines paying off better
Suggestions that may lengthen their stay and increase spending:	Improve transportation, food and beverage services, heritage, shopping, and children's facilities

gamblers we surveyed are not high-rollers or big spenders, it is important that there is a wide price range to cater to the different affordability levels of the customers.

Third, as the preferred games are baccarat and blackjack and the amount the respondents spent on each bet ranges between MOP\$100 and MOP\$200 (US\$12.5–25.0) per hand, casinos should provide enough baccarat and blackjack tables that fall within these minimum bet limits in order to stimulate gamblers' interest to play. Additionally, different from the findings of other studies (Liu & Wan, 2011; Lam, 2005), slot machines are ranked by the respondents as the third most preferred game in casinos. There are certainly opportunities for casino operators to expand this market. Slots are profitable business. Slot machines are considered to be more cost-effective and profitable than table games due to the smaller demand they make on space and human resources, and they draw a wider range of customers because they are commonly viewed as a form of entertainment. Presently, slot play is primarily of interest to the mass gaming market, 16.25% of whose revenue came from slot machines in 2009. The share of the mass gaming market revenue also increased significantly, from just 3.96% in 2002 to 16.25% in 2009 and is a growing segment within Macao casinos. To encourage more slot-machine playing, Liu and Wan (2011) suggest focusing more on service. Casino operators should first try less expensive and relatively easy improvements, such as the provision of

simpler explanations of slot machine rules in Chinese, more drinks, prompt assistance, and non-smoking areas, improving the hygiene of these areas, publishing data on the house advantage, and hiring more staff to manage the slot-machine areas.

Fourth, consistent with the findings of the previous studies on Chinese gamblers (Lam, 2007; Lam & Ozorio, 2008; Vong, 2007), results of this study reveal that respondents' primary motivations to visit casinos are; to win, to take a risk and to experience challenge and excitement. The result can be used to explain why Chinese players prefer more challenging games (i.e., table games) where there is the possibility to win big money, and they are easily stimulated by the external environment such as noise, sound, flashing lights and the feelings of crowdedness of a casino. Although offering bigger and more attractive prize money will stimulate their interest in playing, this has to be carefully planned as it might incur huge cost to casinos. What we suggest instead is to make the promotion of prize money and winnings more visible to players, like publicizing the winners of jackpots or games on television, in newspapers and in the casino. In addition, casinos have to enhance the excitement values of gambling such as allowing and encouraging crowds to surround the table and regularly holding some games competitions and events.

Fifth, same as the gamblers in Las Vegas (LVCVA, 2009), Chinese tourist gamblers in Macao are not loyal to one casino. While on average the number of casinos that gamblers in Las Vegas visit in one trip was 6.2, the number for the Chinese gamblers in Macao are three to four. The reason for this difference perhaps is because in Las Vegas, there are more casinos which have more diverse themes and attractions than in Macao. The lack of loyalty to a particular casino therefore provides huge opportunities for different casinos to develop strategies to attract their customers. According to the respondents, the attributes important to them in choosing a casino are: free shuttle bus services, casino design, brand name, a variety of game choices and table limits and good atmosphere. Casinos, and particularly those with a relatively less well-known brand name, should pay more attention to these items and develop strategies to respond to the customers' needs.

Finally, there are policy implications for the Macao government and local destination managers. Our findings show that about 35% of respondents claim that their primary purpose of visiting Macao is gaming, and some have their primary purposes visiting the city's cultural heritage and shopping (about 21.9% and 21.7% respectively). There is an opportunity here for the Macao government to lengthen the average stay and boost tourists' spending by further strengthening its shopping and heritage facilities. Although there have been increasing numbers of shopping facilities since the opening of the western casino resorts (i.e. Venetian, Wynn Resort and MGM Grand) in 2004, they are centralized within the resorts and sell very high-end products. There is only one larger-scale shopping mall in the downtown which sells middle to higher-end products. The provision of more shopping malls, markets or streets which sell a wider range of products and of varied prices may suit the gamblers' needs better. Promotion and conservation of heritage properties also need greater attention and effort. Poor signage, lack of maintenance and promotion, too few events and activities, poor streetscape and sites being difficult to reach due to the poor transportation network are commonly found as major shortcomings of local heritage sites (Wan & Pinheiro, 2009, 2005; Wan & Cheng (in press)). Further, there is also an urgent need to improve Macao's transportation facilities and network. Speeding up the construction of the Light Railway Transit project, arrange more direct bus routes and encouraging walking through pedestrianization could be some of the solutions.

Chinese tourist gamblers in Macao are not loyal to one casino.

According to the respondents, the attributes important to them in choosing a casino are: free shuttle bus services, casino design, brand name, a variety of game choices and table limits and good atmosphere.

In the past ten years, there have been debates within the community about whether Macao should be positioned as a gaming capital or a heritage tourism destination, because both are the major attractions of the city, and the Macao government would like to project a much clearer destination image to the public. The findings of this study suggest that such debate perhaps can be put aside because gamblers are also interested in exploring the city's cultural heritage. Gambling and cultural heritage could co-exist and be developed together, which offers huge opportunities for Macao to integrate local cultural heritage into the gaming business. For instance, visitors who visit a heritage site/property could be given some free coupons to spend in local casinos, and vice versa, visitors visiting casinos could be offered some coupons to spend in heritage properties (e.g. for food and beverages and souvenirs, free or reduced price of admission). The government could use its revenues that are collected mostly from the casino business to subsidize some of the costs involved. By doing so, Macao would be able to achieve its development goal of shifting from a gaming capital to a leisure and entertainment destination. All this requires close collaboration with all stakeholders, as well as creative thinking in product innovation.

Like other studies, this one is not without limitations. First, it employed the convenience sampling of casino players to minimize any potential disruptions to normal casino operations. Thus, its findings cannot be generalized to the population of casino gamblers as a whole. Second, our results are not generalizable because the scope of our study is limited to Macao only. Third, only Chinese gamblers were sampled, and the sample size was relatively small at 402. Future studies could enlarge this sample size. Fourth, we fail to distinguish between VIP and mass market players. It will be useful to compare the two groups. Fifth, this study aims to acquire general understanding of the Chinese gamblers in Macao in terms of their characteristics, behaviors, motivations, and preferences. More researches on the segmentation of the Chinese customers (i.e. based on culture, gender, sex, residence) and each segment's requirements will help to design services that suit different customer needs better. Research on the local gamblers will also be beneficial. The overall satisfaction of the Chinese gamblers towards Macao and gambling in particular, and the factor(s) (i.e., motivations, casino visit experience) influencing their future visitation are also worthwhile to investigate to provide more insights for product development. Finally, for the successful development of a leisure and entertainment destination, more research needs to be conducted on how Macao's cultural heritage and casino industry can cooperate in their future development. Nonetheless, the results enhance our understanding of the Chinese tourist gamblers in Macao thus providing baseline evidence for further debate and research in this area.

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