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Understanding Leisure Gaming and Urban Community Development in China

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Abstract

This study seeks to examine local community perspectives toward gaming development in China. It seeks to develop a framework for understanding socio-cultural acceptance of gaming development through examining the impacts of social influence and community attachment to gaming development support via the mediation of perceived social and economic impacts. A pilot test was conducted with 191 respondents prior to the main survey, which yielded 694 complete responses. The research found perceived positive social impact was the most important factor influencing support for gaming development. Residents who perceived themselves as having a certain degree of social influence felt gaming had stronger positive impacts than negative impacts and, consequently, they were supportive of further gaming development. There are direct positive relationships between residents' community attachment and perceived positive social impacts of gaming. The study concludes with implications for theory and practice, limitations and future research directions.

Keywords: Gaming, community development, social influence, community attachment, China

INTRODUCTION

China has a prolonged history of gaming, with an exceptionally rich culture centering on this activity. Gaming is deeply rooted in the culture, and small-scale gaming has long been welcomed in society as entertainment, relaxation, leisure, or social activity(Shostak, 2012). Although casino gaming remains illegal in most regions of China, the Chinese obsession with gaming has been widely documented as a major motivation to travel to gaming destinations (Lee, Lee, Bernhard, & Yoon, 2006). Gaming development is closely associated both with efforts to increase tourism and with a wide range of leisure and entertainment activities (Platz & Millar, 2001; Wong & Rosenbaum, 2012). Commercialized gaming in China is expected to provide a major source of funding for financing social welfare programs and community sports facilities(Tang & Wu, 2012) . Income from gaming has a broad influence on various areas of society (e.g., public welfare, sanitation, education, and sports programs). Currently, the Chinese government has planned to legalize a number of gaming options in Hainan Islands (China Daily, 2018).

The increasing popularity and rapid expansion of gaming as a leisure activity and a tourism product have generated a need for impact assessment (Chhabra, 2009). However, models for analyzing gaming impacts have been primarily created in Western contexts and focused on casino gaming (Kang, Lee, Yoon, & Long, 2008; Wan, 2012). In countries such as China, gaming is often stigmatized as sinful and is often associated with pathological gaming, bribery, embezzlement of public funds, fraud, and money laundering (Wong, 2015; Zeng & Forrest, 2009). As a consequence,

casino gaming and promotion of gaming are strictly prohibited in mainland China. Given such a constrained environment, one might expect that Chinese residents would harbor negative attitudes toward gaming and have a low level of engagement and support for gaming development. However, prior research has consistently observed that the Chinese have a strong affinity for gaming (Papineau, 2005). Given this unique context and the common perception of Chinese gaming as a major leisure activity, it is prudent to examine the antecedents of support for gaming development in such a conservative society (Li, Zhang, Mao, & Min, 2012b; Wu & Lau, 2015).

This study seeks to investigate and understand the impacts of gaming on the development of urban communities in China. Respondents of this study were not only residents but were also gaming travelers in other destinations such as Macau. With tourism becoming an indispensable part of Chinese people's lives, more and more residents travel away from their homes to experience gaming (Jin & Wang, 2016). Gaming and casino tourism development has been widely acknowledged as an important tourism agenda (Nichols & Tosun, 2017). That said, findings of this research help tourism scholars and practitioners alike to enrich their understanding of gaming from a bottom-up, grassroots approach, since it emphasizes local decision making and community participation (Panda, 2007). From a practical perspective, while the study was conducted in China, the results may benefit other regions in the world in promoting gaming as a tourism product.

The purpose and objective of this research was to understand leisure gaming and urban community development in China. The study provides a timely update to the

literature by answering the following two questions: (1) What are the impacts of gaming on the development of urban communities in mainland China? and (2) What factors predict residents' support for gaming in a constrained community? This study also makes a contextual contribution by demonstrating the applicability of the observed relationships among residents' attitudes to gambling in China and, by extension, many Asian communities. In summary, this research helps to reconcile and mitigate negative sentiments that often thwart gaming development initiatives.

LITERATURE REVIEW

Leisure Gaming in the Community

The words *gaming* and *gambling* elicit many different interpretations and meanings that are contingent on cultural and historical contexts. *Gaming*, which is sometimes used interchangeably with the word *gambling* in English, refers to the activities of betting money or properties on an uncertain outcome of an event in the hopes of winning a larger reward(Yi, Stewart, Collins, & Stewart, 2015). Beside casino gaming, other kinds of gaming such as lotteries or sports betting have also been a prevalent part of the Chinese culture (Ariyabuddhiphongs, 2011). In this paper, we use the term *gaming* with the specific meaning of "leisure betting mainly for entertainment instead of monetary gain"(Wu & Lau, 2015) .

Chinese culture, in the values and belief system that it passes on to its members, provides a collective manner in which members decide how to address risk and evaluate the uncertain outcomes of life situations (Abt & McGurrin, 1992). The Chinese are known for their desire to gamble (Blaszczynski, Huynh, Dumlao, &

Farrell, 1998). In the Chinese culture, gaming has important social functions. Because of its social acceptance within the Chinese culture, there has been an increase in the participation rates of all forms of gaming (Loo, Raylu, & Oei, 2008).

Chinese gamblers may be predisposed to seek both exciting sensations and the opportunity to become wealthy from gaming(Tong, Hung, Lei, & Wu, 2018). Prior studies have suggested that many Chinese believe that one's success and wealth depend on fate, luck, Feng Shui or an accumulation of good deeds (Prentice & Wong, 2015). However, Chinese gamblers are less likely to seek professional help than other cultural groups despite having financial problems(Lim & Rogers, 2017). Recent researchers of residents' attitudes toward the gaming industry have observed that the Chinese exhibit mixed emotions toward the industry (Kang, et al., 2008; Luo & Xiao, 2017). The results differed depending on a variety of variables, such as the type of community, geographic location, composition of residents, and economic structure (Chhabra, 2009). The Chinese government has attempted to meet public demand for leisure gaming by opening more gaming opportunities in dedicated tourism destinations (Greenwood & Dwyer, 2017).

Delving more deeply into the literature reveals early studies that proposed two polarized views of gaming impacts. Although gaming produces extensive negative changes in the social fabric of a community in terms of crime, bankruptcy, and social pathologies, gaming also creates a stream of positive consequences(Zhou, Lu, & Yoo, 2014). For example, the economic boosterism model suggests that gaming stimulates the local economy, overshadowing the negative impacts. The gaming industry is

credited with attracting tourists who seek not only gaming but also opportunities to experience novelty and increased socialization in casino complexes (Wong & Rosenbaum, 2012). Long (1996) concludes that the most difficult and least resolved issues relative to the introduction of gaming in communities relate to social consequences. Thus, planning is important at every stage of development and should begin during the early conceptual stages. Of course, planning requires support from the local community and government. Roehl (1999) observes that their quality of life was positively correlated with employment in a casino and with casino patronage. Kang et al. (2008) showed that residents expressed support for gaming development because gaming enhanced community development and helped improve community activities; however, residents also expressed concern regarding the effectiveness of gaming in providing financial support for community development.

In the next section, we provide the theoretical foundations that led to the development of the proposed research framework (see Figure 1). In the study, many elements that related to social and economic impacts were explored. It uses a deductive approach and seeks to establish facts and test hypotheses, which also helps us gaining an overall understanding about residents' perceptions in urban areas with a population too large to observe directly.

FIGURE 1 HERE

Theoretical Background

Perceived Impacts and Their Relation to Gaming Developing Support

Social exchange theory, which posits that all human relationships are formed by the use of a subjective cost-benefit analysis and the comparison of alternatives

(Cropanzano & Mitchell, 2005), was adopted as the theoretical basis of this research. Prior studies have concluded that social exchange theory is valid for explaining the relations between residents' perceptions of the impacts and benefits of and support for gaming development (Lee & Back, 2006); the findings are robust and revealed that residents support gambling if they perceive stronger positive impacts. Therefore, the theory was used to assess the impacts of gaming on mainland Chinese populations, a topic which has been rarely studied in the context of non-casino gaming. However, despite the wide application of social exchange theory by scholars investigating gaming impacts, important constructs such as social influence and community attachment—which are relevant to the exchange relationship between residents of the community and the leisure gaming industry—have been left out and need to be investigated further. Residents' support for gaming development has been examined as the ultimate dependent variable of the study(Wu & Chen, 2015) . We argue that residents' support for gaming development is an opening to enter into an exchange (Ap, 1992). Local residents are likely to support gaming development if the residents perceive that the industry results in more benefits than costs (Gursoy & Rutherford, 2004).

Over the last few decades, the question of whether gaming is a leisure activity has emerged as an important issue in related research. Researchers who agree with this view assert that gaming can offer various benefits, such as entertainment, leisure options, job creation, and tax revenues (Walker, 2007). However, opponents of gaming stress certain undesirable consequences, including increases in addiction and

criminality (Hing & Breen, 2001). Some studies ignore the pleasurable aspects of risking money on an uncertain venture and instead focus on gaming as an addiction and pathological compulsion(Wood & Tirone, 2013) .

Residents' perceptions of casino development can be divided into economic, environmental, and social impacts (Lee & Back, 2003). When managed properly, gaming may help generate revenues that can advance the economic and social development of a community. Gaming is an effective means of boosting consumer spending and generating tax income, which may promote other related industries(Li et al., 2012a) . A recent study conducted by Rosenbaum and Wong (2015) further acknowledges the positive impacts of gaming as a means of alleviating mental fatigue and stress. This health-related consequence of gaming stems from its properties that allow people to escape from boredom and daily routines and enjoy the novelty of wagering. While the direct relationships between perceived impacts and support of gaming development are well documented in the tourism literature, there is a need for researchers to make a more comprehensive model by considering other important variables in the context of leisure gaming.

Despite the positive aspects of gaming, there are evident negative impacts associated with this activity. Problem gaming is a major issue and can have a drastic effect on a community if mismanaged. Lee and Back (2003) observe that residents had strong perceptions of some types of negative social impacts, such as gaming addiction, speculative gaming and destructive impacts on families. Socio-environmental problems caused residents to develop negative sentiments or even

resentment toward gaming development. In the case of Macao, environmental deterioration caused by a rapidly growing tourism and gaming industry has become the focus of the local media. These factors have caused residents to become more conservative (Vong, 2008). In Colorado, the rapid increase in traffic volume on rural roads leading to communities disrupted residents' lives (Kang et al., 2008). Gaming is thus associated with both positive social and economic benefits and negative social and environmental consequences. This duality leads to different levels of support from community stakeholders, the residents. A general consensus is that if local residents' attitudes are more positive toward the impact of gaming, whether casino or non-casino style, they are more likely to support gaming development. Accordingly, the study presents the following hypotheses:

H1: Residents' perceived positive social impacts positively influence their support for gaming development.

H2: Residents' perceived positive economic impacts positively influence their support for gaming development.

H3: Residents' perceived negative social impacts negatively influence their support for gaming development.

H4: Residents' perceived negative environmental impacts negatively influence their support for gaming development.

Social Influence, Community Attachment and Their Relation to Gaming Impacts

Social influence renders residents' ability to secure personal returns from having a certain industry in their community (Kayat, 2002). Ap (1992) indicates that social influence is the central variable of exchange and provides a basis for determining the form of the exchange relation. Social influence is thus derived from having and controlling resources that another actor requires and values. It is determined by access

to resources (e.g., economic), the position held in a community (e.g., the role of an officer), and skills (Latkova & Vogt, 2012). Ap further concluded that social influence is related to greater satisfaction with the consequences of the exchange (that is, perceptions of impacts). Usually, the less influential groups are marginalized in gaming and tourism development because of inherent power relationships among stakeholders in society with roles already established in those communities (Nunkoo & Smith, 2013). An actor with low level of social influence is usually negatively disposed towards the exchange relationship (Ap, 1992).

In an exchange situation, individual social influence comes from control of the resources owned by residents that dictate residents' abilities to influence the development of gaming in a manner that satisfies their needs (Blau, 1964). Nunkoo and Ramkissoon (2011) indicate that social influence is an important construct for influencing overall satisfaction within a tourism community. Local communities usually have the least influence on tourism planning and governance processes (Moscardo, 2011). Their level of power influences their disposition towards tourism development. For example, a number of studies have reported that residents' perceived level of social influence in tourism planning is positively related to their perceptions of the benefits and negatively related to their perceptions of the costs of tourism (Lee, Kang, Long, & Reisinger, 2010b). Although the role of social influence is important, previous gaming research often neglects to consider such a role.

Earlier studies used community attachment to identify the key attributes required for developing support for specific recreational activities and for studying settings,

including recreational and natural areas. McCool and Martin (1994) define community attachment as the "extent and pattern of social participation and integration into community life, and sentiment or affect toward the community" (p. 30). Residents who express a high level of attachment to their communities are more likely to regard tourism as both economically and socially beneficial (Gursoy & Rutherford, 2004). Lee et al.'s (2010) findings support the notion that differences in community attachment influence residents' support for gaming development and their perception of gaming's benefits. However, previous research found community attachment was related to residents' support and to perceived impacts of casino gaming, but not to leisure gaming (Lee, Kang, & Reisinger, 2010a; Perdue, Long, & Kang, 1999). Residents who had strong community attachment were more likely to perceive the positive social impacts of casino development. Accordingly the following hypotheses were proposed:

H5: Residents' social influence positively affects their (a) perceived positive social impacts and (b) perceived positive economic impacts of gaming; it negatively affects their (c) perceived negative social impacts and (d) perceived negative environmental impacts of gaming.

H6: Residents' community attachment positively affects their (a) perceived positive social impacts and (b) perceived positive economic impacts of gaming; it negatively affects their (c) perceived negative social impacts and (d) perceived negative environmental impacts of gaming.

Methods

This study collected data in Guangzhou, China. With a population of 13 million, Guangzhou is the third largest city in China. The city is located in the southern part of the country and is one of the most important metropolitan areas in China. Hence, the city is a good representation of urban China. Moreover, residents in Guangzhou find it

very convenient to travel to Macau as it is just one hour by train from this gaming destination. Residents are becoming accustomed to gambling due to the growth of the gambling industry in Macau, the world's gambling capital and the only jurisdiction in China with casino gambling. As detailed below, this study followed the sequence of literature review, scale refinement, pilot test, main survey, and data analysis. Both the pilot test and the main study were administered in Guangzhou.

Development and Validation of Measurement Items

Measurement items were initially generated from an extensive literature review. Based on the reviewed literature, a comprehensive list of variables was compiled that included all of the measurement items of interest that were discussed in previous research, such as community support, perceived positive impacts and perceived negative impacts related to gaming, community attachment, and social influence (see Table 1). Thirty-two items were included in the list of measurements, and each item was assessed using a Likert scale ranging from 1 (strongly disagree) to 7 (strong agree).

TABLE 1 HERE

The research context is unique in that the context investigates gaming development in China. The adopted scales were subjected to a pilot test that included 191 respondents, to ensure that scale items were valid. Exploratory factor analysis (EFA) was performed on the pilot test sample. Three items were discarded because their communality was below 0.5, and four items were discarded because those items had factor loadings lower than 0.4 and were poorly represented in the factor solution (Hair

et al., 2006). More details are presented in the results section below.

Data Collection

After taking the aforementioned steps to refine the scales, data collection for the main study was conducted at major residential and commercial districts in Guangzhou. Because the target population comprised residents who had lived in the city for more than one year and were over 18 years old, areas with a high proportion of local residents were chosen to obtain easy access to target groups. All the respondents had been to Macau and visited casinos before and hence, they were also considered as gaming travelers. A quota sampling technique was used in the survey. Quotas were established for sociodemographic characteristics (i.e., gender, age, education) based on government population statistics (Guangzhou Census Bureau, 2015), to ensure the representativeness of the sample (Michalkó, 2012; Wong & Li, 2015). Trained student helpers traveled to the specified locations and asked residents to complete the questionnaire. The author selected different locations to administer the survey in order to improve representation of the population of interest. Of the 950 questionnaires distributed with the assistance of trained and experienced student helpers, a total of 694 completed questionnaires were returned.

Results

The data were analyzed using SPSS 20.0 and AMOS 20.0. Confirmatory factor analysis requires complete data for every subject, to preserve the integrity of the data set. Initial data screening using the Shapiro–Wilk's test indicated that 22 cases had non-normal distributions; therefore, those cases were discarded. Missing values were

imputed by the mean value of that variable. After replacement of the missing variables, a total of 672 cases were retained, which was considered sufficiently large to satisfy the sample size requirements of confirmatory factor analysis and structure equation modeling (Hair, Black, Babin, Anderson, & Tatham, 2006). The profiles of the respondent details are as follows.

Male respondents composed more than half of the sample (53.9%). The age groups of 26–35 and 36–45 represented the two largest groups in the sample, each representing more than one-third. In terms of education, respondents with a senior middle or secondary school diploma accounted for 40%, followed by participants with a bachelor's degree (37.1%). The top three occupational categories were service or sales workers (18.6%), self-employed (16.8%), and skilled workers (13.7%). In terms of monthly household family income, over one-third earned RMB 4,001–8,000 per month, which is the average income for Guangzhou citizens. Due to use of quota sampling, the sample appeared to be broadly representative of the Chinese population and showed similar ratios to the Guangzhou population (Guangzhou Census Bureau, 2015).

Factor Analysis and Scale Validation

Exploratory factor analysis (EFA) was conducted on a sample (n=672) of the primary study to verify the dimensions of the scale of interest. Seven latent variables with eigenvalues greater than 1 were extracted from the data to represent the underlying structure of the measures. As hypothesized, the positive impacts were represented along two dimensions (positive social and economic consequences), as

were the negative impacts (negative social and environmental consequences). The Kaiser-Meyer-Olkin (KMO) statistic for this factor solution was 0.875, greater than the previously suggested satisfactory value of 0.70, and Bartlett's test of sphericity was $\chi^2_{(946)} = 1465.934$ ($p < 0.001$). The Cronbach's alpha values ranged from 0.79 to 0.91, well above the generally accepted threshold of 0.7. The results indicate a high internal consistency among the variables of interest.

Next, confirmatory factor analysis (CFA) was conducted to diagnose whether the proposed seven-factor solution fit the data, and to further examine scale validity. The measurement model yielded the following fit indices: $\chi^2_{(303)} = 624{,}257$, $p < 0.001$, $\chi^2/df = 2.06$; goodness of fit index (GFI) = 0.936; comparative fit index (CFI) = 0.955; Tucker-Lewis index (TLI) = 0.947; and root mean square error of approximation (RMSEA) = 0.040. The results also indicated that all items were statistically significant and loaded onto their respective factors. The standardized factor loadings of the CFA model ranged from 0.567 to 0.907, and all *t*-values were statistically significant. The lowest loading obtained was 0.567, linking one item ("increased tax revenue") to perceived positive economic effect (see Appendix 1).

Table 2 displays the zero-order correlations among the latent constructs along with their composite reliability and average variance extracted (AVE) values. The AVE estimates ranged from 0.57 to 0.76. All values exceeded the 0.5 threshold, indicating that a good proportion of the variance in the constructs was explained by the latent constructs. The results indicated that the convergent validity of the measurement model was acceptable. In terms of discriminant validity, the AVE for each factor was

greater than its square of the inter-construct correlation, indicating that the seven factors were conceptually distinct; hence, discriminant validity was supported.

TABLE 2 HERE

Structural Model

Based on the CFA results and the consensus of the conceptual framework developed from the literature review, the initial structural models were developed to include one endogenous latent variable and six exogenous variables, as Figure 1 shows. Prior to testing the hypothesized model, two data analysis procedures were conducted. First, common method bias (CMB) was tested using the single-factor method. The results revealed that $\chi^2/df = 11.95$, which is greater than the 2.0 threshold. We further diagnosed CMB through the marker variable approach (Richardson, Simmering, & Sturman, 2009) by using a six-item gaming behavior scale as a surrogate for the method variable and to partial out the variance shared between this variable and the predictors. Inclusion of the marker variable did not affect the proposed relationships, indicating that CMB was not a major limitation to the study. Second, multicollinearity was diagnosed by variance inflation factor (VIF). The results showed that VIFs were below 2.0, indicating that collinearity was not a problem with regard to the reliability of the results.

To examine the hypotheses, structural equation modeling was conducted. The parameter estimation for the proposed model showed that the model did not fit the data well, with fit indices such as CFI and GFI falling below the acceptable level of 0.9 (Table 3). This result suggests that this preliminary structural model was a poor fit

for the data. Estimation results suggested that several path coefficients, such as H_1, H_2, H_4, H_{5b}, H_{5d}, H_{6b}, and H_{6d}, were not statistically significant at the 0.05 level.

TABLE 3 HERE

(Chou & Huh, 2012) suggest that if the fit of the model being evaluated is considered inadequate, modification becomes a viable option. Post-hoc model-fitting procedures were conducted to identify parsimonious models that would yield a better fit to the data(Chou & Bentler, 1990). To simplify the model and obtain better goodness-of-fit indices, an adjusted model using information suggested by the modification indices (MI) was proposed. This involved discarding perceived positive economic impacts and negative environmental impacts. The deletion of constructs related to positive economic and negative environmental impacts could be theoretically justified by the inclusive characteristic of social exchange theory (Blau, 1964), which posits that the norms of the theory can be narrowed to a certain context. Social exchanges entail both perceived positive impacts (benefits) and perceived negative impacts (costs), but the type of social exchange outcome (i.e., perceived impact on an actors' attitudes) varies across situational contexts(Zhang & Epley, 2009). When this study focused on leisure gaming, the economic and environmental elements were not as effective in predicting support for gaming development as they were for other forms of gaming(Wan, 2012; Wu & Chen, 2015).

Furthermore, the expected cross-validation index (ECVI) was examined while comparing a series of models in the quest to obtain a model that fit the data well. Using the smallest ECVI, the model was re-specified to include estimation of a path

leading from social influence to support level. Substantively, this path appeared to be rather intuitive, suggesting that in China, residents' social influence directly affects their support for gaming development. This relation is particularly apparent because Chinese residents have witnessed the growth of Macao's gaming industry. This finding is consistent with the results of Liao, So, and Lam (2016) and Kayat, Sharif, and Karnchanan (2013). Liao et al. (2016) concludes that perceived social influence on local institutions is an important predictor of their overall attitude toward the community. Kayat et al. (2013) also suggest that residents with stronger social influence have favorable perceptions and are supportive of future tourism development. Finally, estimation of the revised models yielded an overall $\chi^2_{(196)}$ value of 434.415, with the following fit statistics: χ^2/df = 2.216, GFI = 0.945; CFI = 0.963; TLI = 0.956; RMSEA = 0.043.

The Sobel test was employed to assess whether perceived positive impacts and perceived negative impacts significantly mediate the relationship leading from social influence and community attachment to support for gaming development. The Z values for the Sobel test of social influence and community attachment through perceived positive impacts are 4.96 ($p < 0.001$) and 4.42 ($p < 0.001$), respectively, revealing that the indirect impacts are significant (See Figure 2).

FIGURE 2 HERE

Table 4 summarizes the parameter estimates of the model, including the estimated direct and indirect impacts among the constructs and the total effect. Perceived positive social impacts revealed the strongest positive effect on support for gaming development, with a significant path coefficient (β = 0.377, $p < 0.001$); whereas no

direct effect of perceived negative social impacts on support for gaming development was observed. Social influence had a direct (β = 0.225, $p < 0.001$) and an indirect effect (0.082, $p < 0.001$) on support for gaming development; however, this finding was mediated by perceived positive social impacts, resulting in a total effect of 0.307 ($p < 0.001$). Community attachment had only an indirect effect on support for gaming development, mediated by perceived positive social impacts (0.131, $p < 0.001$).

TABLE 4 HERE

Hypothesis 1, proposing a positive relationship between positive social impacts and support for gaming development, was supported. Moreover, the hypotheses proposing a positive relationship between community attachment (H5a), social influence (H6a) and perceived positive social impacts were both supported. Social influence had a significant effect on perceived positive social impacts. This finding suggests that high levels of social influence render residents more likely to perceive gaming impacts optimistically, and furthermore, that such perceptions greatly enhance their support for gaming. The study found that some community factors such as community attachment play different but significant roles in determining residents' overall support. A novel finding of this study stems from the direct and indirect impacts of social influence on gaming development (see Table 4); the finding suggests that residents in general perceive their ability to influence decisions regarding further development of the gaming industry. Therefore, apart from the direct link between social influence and support noted by Nunkoo and So (2016), this relationship is mediated also through the perceived positive social impacts of leisure

gaming.

DISCUSSION AND CONCLUSIONS

Results of this study confirm that benefits from gaming are internalized by residents of China. Although gambling has been largely prohibited by the Chinese government—a policy which results in lost social, leisure, and business opportunities—this study suggests that Chinese residents still relish this leisure activity and perceive that it has an important positive function in providing entertainment and leisure options. An important potential impact of gaming is the possibility of a significant improvement in community development through the welfare it brings to the society. In support of this fact, the fast growth of China's economy after the economic reform program has encouraged society to become more entertainment- and pleasure-oriented, particularly among the younger generation (Wong & Rosenbaum, 2012). People's taste for games of chance is growing stronger as the nation becomes wealthier. Lotteries, for example, offer people a hope of winning a jackpot, which can be considered as another strong motivation to participate. Generally speaking, gambling extends the range of recreational options for local residents.

In respect to the impacts of gambling on communities, several studies have shown that it can improve quality of life because increased government revenue usually leads to better public services (Roehl, 1999). Gambling money may be specifically designated for improving certain educational programs and community renderings. The government should continue to provide leisure and recreational gaming

opportunities by making good use of gaming revenues. That said, this research offers several theoretical and practical implications, as detailed below.

Theoretical Implications

First, previous research on gaming impacts examined casino gaming communities and emphasized the negative factors of gaming (Gu, Li, Chang, & Guo, 2017; Lee, et al., 2010b; Wu & Chen, 2015). This article examines gaming from a different perspective and explores the underlying factors of the potential gaming travelers' perceptions of this activity. Our findings present insights into the interrelation between the development of support for gaming and factors that predispose residents to partake in this activity. Therefore, this article contributes to previous gaming research by identifying positive social impacts, social influences, and the sense of community attachment, factors around which potential gaming travelers' opinions are conceptualized.

More importantly, findings of this study indicate that social influence is a significant predictor of opinions on the impact of gaming development—a conclusion which implies that socialist ideology still affects residents' perceptions. In China, Maoist laws prohibited all types of gaming for over thirty years (Ye, Gao, Wang, & Luo, 2012) and gaming has always raised controversial issues. Many Chinese residents still consider gaming to be a symbol of capitalism, which is not necessarily conducive to social harmony (Li, et al., 2012a). The public is always likely to be concerned about the possible downsides or costs society will face as a result of gambling. In such a context, our research contributes new insights to the literature on

how gaming in a socialist society could thrive through the dual (positive and negative) impacts of social influence.

Second, with reference to Smith and Lee's (2010) taxonomy of theories, the theoretical contributions of the present research are associated with complex social phenomena associated with gaming support and the effect of gaming in a conservative society such as China. As such, this study enriches the social exchange theory by delineating a process leading from social influence and community attachment to support of leisure development through both perceived positive and negative impacts. This study extends the literature (Kang, et al., 2008; Perdue, et al., 1999) by providing a different perspective on Chinese consumers' opinions of leisure gaming. It also extends social exchange theory in the tourism and hospitality field (Ward & Berno, 2011) by examining social influence in a context where the gaming activity of interest is commonly considered to be a nuisance to society.

Third, this study has also demonstrated how respondents' sense of community attachment affects their response to gaming impacts and their support for its development, while limited research has examined this issue in leisure gambling contexts. The findings show how a strong sense of rootedness and belonging to a community can inform individual responses to gaming, especially when the activity has been embedded in the community for a long time but has been depressed by political and regulatory forces. This finding echoes the work of Stokowski and Park (2012) who claim that a community's sense of place and residents' social cohesion and ability to identify meaningful aspects of local life are key issues in managing and

planning development processes in communities that host casino gaming venues. They found that attachment-related concepts can be used to enhance our understanding of leisure gaming in the Chinese context. Hence, this research also highlights the important role of community attachment, which can be used to effectively assess support for gaming development while the residents consider gaming as a leisure activity. The study can facilitate acceptance and better promotion of gaming as a needed leisure option through the lens of social support (Huang, Chen McCain, & Tie, 2008). Importantly, such support emanating from community stakeholders goes beyond the conventional view of residents' attitudes, to render a rather implicit transfer of experience sought from the gaming destination to the origin market. To this end, we believe that this study opens a new research agenda in investigating gaming development through the lens of gaming traveler.

Practical Implications

The findings of this study also have substantial implications for leisure and tourism decision-makers who wish to prepare and monitor policies and strategies relating to the gaming industry. In recent years, mainland China has witnessed an unprecedented trend of legalizing leisure gaming. For example, the Chinese government planned to develop Hainan Island into an international free-trade zone and tourist destination by opening a sports lottery and horse racing facilities. Results of this study provide a reference point for the future development of the gaming industry by highlighting the importance of embracing local residents' preferences and adopting appropriate gaming strategies. This study suggests that as the social benefits of leisure gaming

were more important, revenue of this kind of gaming should be used to improve residents' wellbeing. Dedication to welfare services in this case is what originally stimulated the development of the lottery industry. More efforts should be made to create a viable gaming industry that prioritizes community participation and addresses citizens' concerns regarding quality of life.

From a different perspective, because positive perceptions among residents are directly associated with community gaming support, administrators should communicate the benefits of gaming through different marketing techniques and channels in order to secure citizens' collaboration and support. The future of leisure gaming rests on the ability of its administrators to capture revenue and use it to support facilities in the host community, which will benefit industry participants. In addition, the Chinese government could open more leisure gaming options in order to depress and regulate illegal gambling in mainland China; as our study found that Chinese residents are far more tolerant about gambling now than formerly. Macau's casino-style gaming is shrinking, and more reforms such as opening other forms of gaming—a lottery or even horse racing—can be a possible policy adopted in the territory of mainland China in the future.

Chinese residents are familiar with gaming, as legalized lotteries have been part of their life for decades, and daily contact with the industry is common among residents. Hence, gambling is not a novel behavior for most citizens, who may have formed their own attitudes to gambling from a young age. Nationwide, China's total annual lottery sales have grown to approximately 400 billion Yuan (Ministry of

Finance of the People's Republic of China, 2016). The betting shops of the sport and welfare lotteries are not just outlets for gambling, but are regarded by many people as ordinary entertainment venues; and for others they are a means of employment. Yet, the limited legalized gambling options in China have largely restricted the development of this leisure activity; hence, Chinese are eager to sojourn to gaming destinations such as Macao, Singapore, South Korea, and Las Vegas to fulfill their gambling needs (Wong & Rosenbaum, 2012).

This study has identified gambling's potential for growth as a leisure option in China. Beyond the lottery, other forms of gambling, such as online poker, bingo, and betting on sporting events in the public domain, could further enrich the entertainment options for Chinese residents. Our findings further suggest that residents with high community attachment are more likely to accept gaming activities. Such findings are encouraging, as China represents over a quarter of the world's population, a huge market potential for the country if it internalizes gaming as a mainstream leisure activity.

From a different perspective, the negative impacts of leisure gambling presented in the current study are less tourist-oriented compared with the impacts of casino gaming. In the proposed model of this study, the items addressing social problems (increases in loan sharking/usury, crime, and gambling addiction) were the most relevant indicators of perceived negative impact. Nearly all of the negative consequences arise from the regular operation of the industry or the nature of gaming as an unproductive and even irrational activity. Even though gambling can be

considered entertaining and sociable, problematic and pathological gambling still exist as prevalent issues. Communities may be confronted with gambling addiction, which is likely to have negative consequences. Gambling addiction has been frequently reported by the mass media in mainland China, stimulating public attention and concern(Li, et al., 2012b) . In Western countries, compulsive behavior is less likely to be associated with the lottery than with harder forms of gambling such as slot machines or betting (Gainsbury & Russell, 2015; Hing, Lamont, Vitartas, & Fink, 2015). However, the situation in mainland China may be different, given that the only legal gambling product on offer is the lottery. This situation may explain why, in the current study, respondents were inclined to focus on the long-term problems such as loan sharking/usury, crime, and gambling addiction.

Limitations and Future Research

A number of limitations must be acknowledged in this study. First, cross-sectional data were collected in only one Chinese city, which limits the generalizability of the study. Second, the current study examines only the direct and indirect impacts of the variables of interest. Future research should explore other factors such as leisure motivation, past experience, social norms, and negotiation, which could be included to extend the current research and explore the direct or conditioning impacts of these factors. This study is an early attempt to assess mainland Chinese residents' support for the further development of gaming. Future research is encouraged to investigate the perceived impacts of and support for gaming using a longitudinal approach to better understand the changes and rate of change of the proposed relation. Because

gaming participation has spread to young people via the Internet, which was also confirmed in our study, more research should examine the attitudes of the younger mainland generation toward gaming.

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Figure 1. Proposed Conceptual Model

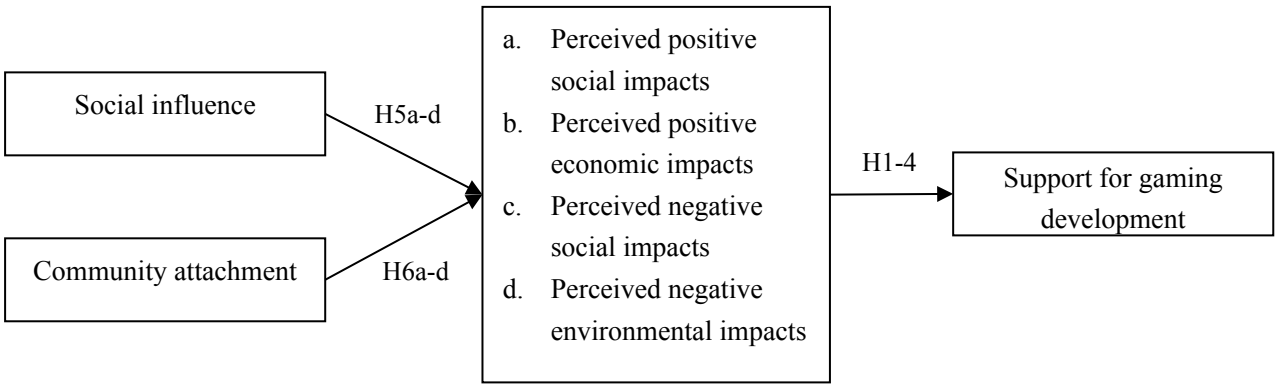
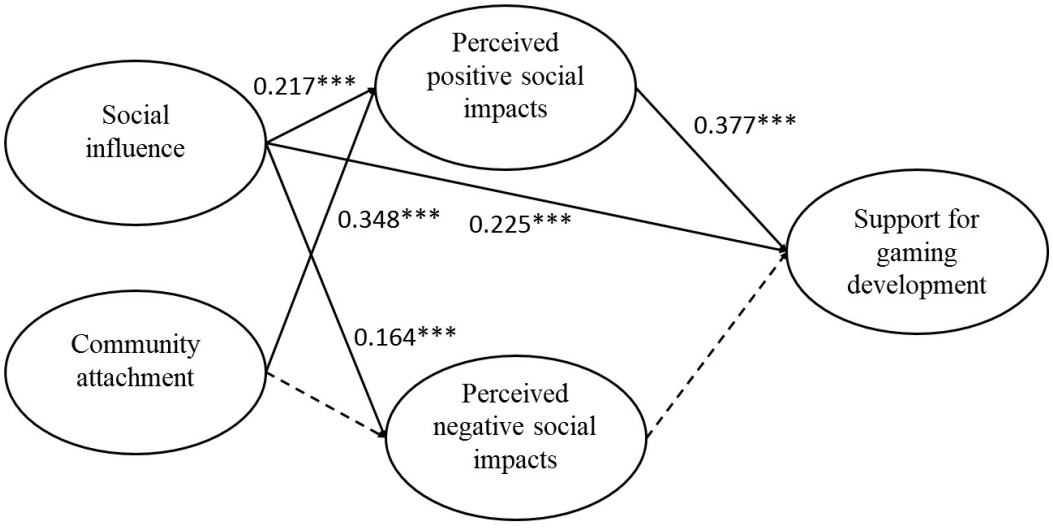


Figure 2. Results of Structural Model



Note: Standardized path coefficients; the dashed line denotes a non-significant path coefficient; *** denotes a significant path coefficient at the 0.001 level

Table 1. Measurement Scales

Constructs	Operational definition	Numbers of items	Sources
Support for gaming development	Residents' opinions on gaming development	7	Lee, Kang, Long, & Regisinger, 2010; Nunkoo & Ramkissoon, 2011
Perceived positive social impacts	Residents' perceptions of the positive social impacts of gaming	5	Hsu, 2000; Lee et al., 2010; Tam, Tsai & Chen, 2013
Perceived positive economic impacts	Residents' perceptions of the positive economic impacts of gaming	3	Hsu, 2000; Lee et al., 2010; Tam, Tsai & Chen, 2013
Perceived negative social impacts	Residents' perceptions of the negative social impacts of gaming	5	Lee et al., 2010;Vong, 2008
Perceived negative environmental impacts	Residents' perceptions of the negative environmental impacts of gaming	3	Lee et al., 2010;Vong, 2008
Community attachment	Resident's social participation and integration into community life	7	McCool & Martin, 1994; Gursoy et al., 2002
Social influence	Residents' ability to influence community development	2	Nunkoo &Ramkissoon, 2011; Kayat, 2002

Table 2. The Validity and Reliability of the Measurement Model

	SGD	NSI	NEI	PEI	PSI	SI	CA
SGD	1.00						
NSI	0.51	1.00					
NEI	0.41	0.53	1.00				
PEI	0.32	0.34	0.52	1.00			
PSI	0.54	0.35	0.41	0.47	1.00		
SI	0.47	0.49	0.50	0.49	0.47	1.00	
CA	0.33	0.44	0.57	0.48	0.34	0.41	1.00
Cronbach's alpha	0.879	0.851	0.842	0.801	0.798	0.864	0.873
AVE	0.68	0.70	0.76	0.60	0.76	0.57	0.67

Note: SGD = support for gaming development, NSI = Negative social impacts, NEI = Negative environmental impacts, PEI = Positive economic impacts, PSI = Positive social impacts, SI = Social influence, CA = Community attachment, and AVE = Average variance extracted.

Table 3. Parameter Estimates and Goodness-of-fit Indexes for the Initial Model

	Parameter Estimate	p		Parameter Estimate	p		Parameter Estimate	p
H_1	0.050	N.S.	H_{5a}	0.263	<0.001	H_{6a}	0.189	0.011
H_2	0.041	N.S.	H_{5b}	0.081	N.S.	H_{6b}	0.113	N.S.
H_3	0.104	0.002	H_{5c}	0.212	<0.001	H_{6c}	-0.159	0.008
H_4	0.014	N.S.	H_{5d}	0.213	N.S.	H_{6d}	-0.137	N.S.
Model Fit indices: $\chi 2/df = 2.926$, GFI = 0.890, CFI = 0.896, TLI = 0.917, RMSEA = 0.917								

Note: N.S. = non-significant.

Table 4. Path Estimate of the Structural Model

Path	Standardized regression coefficient		
	Direct	**Indirect**	**Total**
POI → SGD	0.377***	N.S.	0.377***
PNI → SGD	N.S.	N.S.	N.S.
Social influence → SGD	0.225***	0.082***	0.307***
Community attachment → SGD	N.S.	0.131***	0.131***
Model Fit indices:$\chi 2/df = 2.216$, GFI=0.945, CFI=0.963, TLI=0.956, RMSEA=0.043			

Note: *** $p < 0.001$;
POI = perceived positive impacts, PNI = perceived negative impacts, SGD = support for gaming development, N.S. = non-significant.

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