Perceived Impacts of Gambling: Integration of Two Theories

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Abstract

This study explores the race and educational attainment variations on resident perceptions and support for a proposed casino development. In addition, it investigates the influence of perceived benefits and costs on casino gambling support. The findings indicate that residents who are likely to receive personal benefits from gambling development tend to believe that its socioeconomic benefits outweigh the associated costs. Respondents' race is found to exercise a significant influence on their perceptions of benefits and costs, and casino development support. This study integrates two separate research streams of social exchange theory and social representation theory, and in doing so makes a major theoretical contribution in tourism and gaming literature.

Keywords: Casino gambling, social exchange theory, social representation theory, local residents

Introduction

Gaming has grown in popularity over the last several years and has been characterized as the most significant occurrence affecting the tourism industry of the United States (Dense & Borrow, 2003; Eadington, 1996; Gabe, et al. 1996; Gazel, 1997; Hing & Breen, 2001; Nicholas, et al., 2002; Piscitelli & Albanese, 2000; Stitt, et al., 2003). As the number of gaming casinos has increased, studies examining the social and economic impacts of gaming have also shown a rapid increase (Dimanche & Speyrer, 1996; Rose, 1998). As stated by Ham, Brown and Jang (2004), many local governments have taken a favorable view of casinos in the context of economic benefits. However, many have stated that the reputation of gambling as a magic mantra for prosperity is overstated (Jinkner-Lloyd, 1996; Stokowski, 1996). Literature has often proposed two polarized views to explain gambling effects. The first supports the "economic boosterism" model, which suggests that gambling stimulates the local economy overshadowing the negative effects (Stokowski, 1996). The second hypothesis states that gambling brings social disruption (Tosun, 2002). It produces an extensive negative change in the social fabric of the community in terms of crime, bankruptcy, and social pathologies.

Much of the literature has classified residents' attitudes toward casino gaming in three main benefit and cost domains: economic, sociocultural, and environmental (Dimanche and Speyrer, 1996; Ham, Brown and Jang, 2004; Perdue, Long and Kang, 1999; Stokowski, 1996; Tosun, 2002). Most of these studies have shown that these domains are the key factors that influence locals' support and/or opposition for casino gaming in their community. Most of them examined the residents' attitudes in the context of the Social Exchange Theory (SET), which suggests that residents are likely to support development as long as the perceived benefits exceed the perceived costs. However, literature has also indicated the likely presence of residents' characteristics on perceived impacts of gaming development. This study suggests that examining residents' attitudes

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toward gaming in the context of SET alone does not suffice to explain resident support for tourism. Social representations such as race, educational attainment, and annual household income are important predictors that are likely to influence support. The aforementioned predictors are grouped under SRT (Social Representation Theory) for the purpose of this study.

This study attempts to examine the residents' attitudes and their opposition/support for a casino gaming development prior to the development of a casino in the Black Hawk County of Iowa (United States) utilizing both SET and SRT. The population of Black Hawk County was estimated to be 123,300. The majority of the county's population resides in the Waterloo-Cedar Falls metro area. Waterloo is the county seat and provides an ideal location to capture gambling spending in Iowa. Currently, Iowa has seventeen casinos, four of which belong to the tribal Indians. Two of the non-tribal casinos have racetracks which were levied a higher tax rate as compared to the riverboats. Recently, a Supreme Court (Iowa) ruling stated that an unequal tax rate levied by the State of Iowa was in violation of the law. This resulted in the reduction of tax rate for the racetracks from 32% to 20% with the State owing $40 million to the race tracks. The Iowa Gaming Association suggested casino expansion as a way to recapture the lost dollars (Iowa Gaming & Racing Commission, 2004). After the 2003 referendum, which resulted in several counties voting for excursion boat expansion, Iowa Legislative Council instructed the Iowa Racing and Gaming Association to lift the moratorium issued in 1998. Consequently, four new licenses were approved. Waterloo in Black Hawk County was the recipient of one of the licenses.

Even though the impacts of casino gaming have been examined by previous studies, this study distinguishes itself in two ways: it is one of the few studies that looks at the impact perceptions while exploring race variations in casino gambling support; and it further provides empirical support to the SET and SRT frameworks. The focus of this study is the African Americans and the White Americans and the educational attainment of the residents who live in the Black Hawk County of Iowa.

Resident Support Theories and Gambling

Socioeconomic Impact Theories

Most of the studies that examined residents' support for any form of tourism development have used SET as a predominant theoretical base (Andriotis & Vaughan, 2003; Gursoy & Rutherford, 2004; Gursoy, et al., 2002; Jurowski, et al., 1997; Sirakaya, et al., 2002). Basic tenet of the SET is that locals are likely to participate in an exchange if they believe that they are likely to gain benefits without incurring unacceptable costs. If locals perceive that the benefits are greater than the costs, they are inclined to be involved in the exchange and, thus endorse future development in their community (Gursoy & Rutherford, 2004). Thus, SET suggests that people analyze and review an exchange based on the benefits and costs derived from the change. "Residents who perceive themselves as benefiting from tourism are likely to view it positively, while residents who perceive themselves as incurring costs are likely to view tourism as negatively (McGhee & Andereck, 2004: 134). However, Gursoy & Rutherford (2004) suggest that these benefits and cost perceptions of impacts are not mutually exclusive. A change in perceptions of one type of impact is likely to influence the perceptions of other types. If residents perceive one impact factor as more important than others, it is likely that the perception of that impact factor will influence the perceptions of other impact factors. For example, if one has a very strong perception of economic benefits, this is likely to influence his/her perceptions of social and cultural impacts. In other words, the most salient perceived impact is likely to influence the perception of all other impacts.

Residents who perceive themselves as benefiting from tourism are likely to view it positively.

SRT is concerned with "describing and understanding how and what people think

in their ongoing everyday experiences and how a wider social reality influences these thoughts. Social representations can be seen as incorporating the stock of common knowledge" (Pearce, et al., 1996, p. 36). Social representations can be described as myths, knowledge, images, ideas, and thoughts about something that is a matter of social interest in tourism (Moscovici, 1981). According to Fredline & Faulkner (2000), representations are homogenous across people within a group even though all groups might not be constant and adhesive. Community groups need to be identified to understand their perceptions. This study uses race and educational attainment to identify community sub-groups. Previous studies suggest that racial characteristics (Faulkner & Tideswell, 1997) and educational attainment of community members (Hsu, 1998; Perdue, et al., 1995) can have a significant influence on local perceptions of impacts and on their support/opposition for any form of tourism development.

Theoretical frameworks in the context of casino gambling impacts

A review of literature suggests three commonly used theoretical frameworks explaining resident perceptions toward impacts of casino gaming: namely, social disruption theory, social carrying capacity, and SET. Social disruption hypothesis "postulates that boomtown communities initially enter into a period of generalized crisis, resulting from the transitional stress of sudden, dramatic increase in demand for public services and community infrastructure" as a result of casino introduction (Perdue, et al., 1999: 166). In due course of time residents adapt by increasing public services and making necessary infrastructure improvements. In other words, the social disruption theory envisages an initial decline in the resident quality of life followed by improvement and adaptation (Perdue, et al., 1999; Lee, et al., 2003). Hsu (2000) indicated time lapse to be the significant predictor of perceptions and discovered it to have a positive influence on perceptions. Before and after casino development time influence was also reported by Lee, et al., (2003). The perceived impacts were found to be more negative before the casino's opening but their negativity diluted at later stages (post-casino opening).The social carrying capacity theory, on the other hand, stipulates that residents demonstrate positive attitudes during the initial stages of casino development. However, these attitudes reverse when the change exceeds the carrying capacity of the community (Lee, et al., 2003; Perdue, et al., 1999). Next, SET derives its premise from benefit exchange. It postulates that "those that benefit most from the casino should show the greatest support for it" (Stitt, et al., 2003: 189).

Several studies have provided support for the aforementioned theories. Perdue, et al., (1999) reported support for the social disruption hypothesis. Their study of eight communities in Colorado showed that the initial period of crisis transformed into adaptation and harvesting of economic benefits. Confirming the social carrying capacity theory, Allen, et al. (1998) reported that resident perceptions took a downward trend with the unprecedented increase in casino gaming opportunities. Long, et al. (1990) also reported a decline in the favorable attitude of residents with increasing levels of tourism development. Similar results were reported by Carmichael, et al. (1996).

While social disruption and social carrying capacity theories have provided explanations for resident perceptions and attitudes, SET has been advocated as the most appropriate framework for explaining residents' perceptions on the impact of gambling tourism (Giacopassi & Stitt, 1993; Ham, et al., 2004; Jurowski, et al., 1997; Lee & Back, 2006; Pizam & Pokela, 1985; Stitt, et al., 2003). Perdue, et al. (1999) in their study, revealed a correlation between employment benefits generated by the casinos and positive perceptions of quality of life. Similar results were supported by Roehl's study (1994) that compared resident perceptions over two time periods (1975 and 1992) and reported positive perceptions based on employment benefits accrued. However, this influence has not been consistent across all studies. A non-significant employment opportunities effect was reported by Perdue, et al. (1999) on perceived quality of life. Lee & Back (2006) postulated the influence of SET by showing benefits to be the most important indicator

in resident's support for casino development in South Korea. The casino's positive economic impact was reported as the most significant predictor of resident positive support level. Caneday & Zeiger (1991) findings provided further support by reporting that residents' perceptions of social and economic impacts of gaming and their support were likely to be influenced by the fact whether they received personal benefits from it.

Conversely, literature shows that lack of benefit perceptions has generated less support. Pizam & Pokela (1985) reported a lack a support for casino gaming when they examined the attitudes of all residents. Residents' lack of support was argued to be based on the fact that they did not believe that jobs created by the casinos would improve their standard of living (Ham, et al., 2004). Similar concerns were reported by Giacopassi & Stitt (1993). Long, et al. (1994) indicated positive attitude of residents toward gambling but these did not suffice to garner support for further expansion. In other words, the residents were uncertain about a better environment in terms of living. Literature thus provides mixed support for SET.

In addition, several factors have been reported to act as mediating influences on SET. According to Andereck, et al. (2005: 1073), "while social exchange theory may be a potentially useful framework, alternatively it may be an incomplete structure for understanding response to tourism phenomena." This calls for the need to identify mediating factors to fully explain the dynamism of resident perceptions. For example, literature has indicated that local residents' education level and their length of residency were likely to mediate their perception of casino gaming and influence the level of support (Hsu, 1998; Perdue, et al., 1995). Education was found to have a positive correlation with gambling support (Hsu 1998). In a follow up study, Hsu (2000) investigated the influence of declined perceptions on the casino gambling impact and reported a non-significant influence of demographic variables.

The casino's positive economic impact was reported as the most significant predictor of resident positive support level.

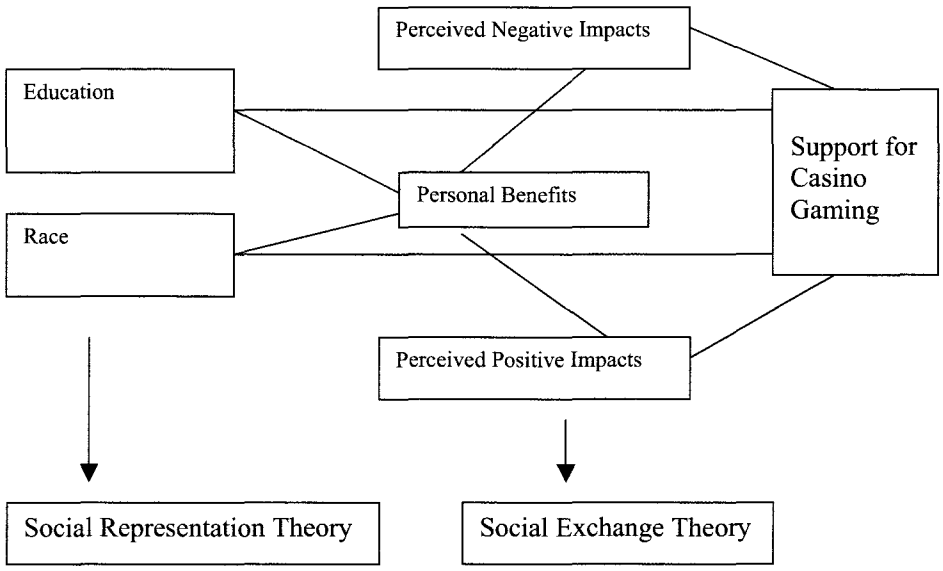
Various resident characteristic influences were explored by Perdue, et al. (1995) and Ham, et al. (2004). Ham et al. (2004) tested the proposition of the influence of demographics and socioeconomic characteristics on resident's support for casino gaming. The authors found that education, employment status, and religion exercised a significant influence on residents' tendency to support casino gaming. Religion was presented as a variable with three categories: Catholic, Baptist, and other Christian. The results of their logistic regression model indicated that Catholics were most likely to be casino gaming proponents.

In summary, several factors have been investigated for their likely influence on the SET framework ranging from education, time influence (post-casino and pre-casino periods), length of residency, employment opportunities, and residents' demographic and socioeconomic characteristics. However, no consistent results have been reported across different studies. Generally, no coherent relationships have appeared when testing the connection between demographic variables and perceptions and support (Andereck, et al., 2005). The disparity in results indicates that the mediating influences between resident perceptions and support or opposition towards casino gaming are not universal. This could be because of lack of assessment over time to determine the influence of social disruption and social carrying capacity theories. In addition, as appropriately stated by Hsu (2000: 391), "impacts are unique to individual communities due to their history, economic structure, population composition, preexisting infrastructure, and tourism/ planning development patterns." Furthermore, except for Ham, et al. (2004), none of the aforementioned studies explored the influence of ethnicity or religion. The influence of race and ethnicity in their role as mediating factors merits research.

In summary, SET in itself does suffice to provide a complete picture of the underlying relationships among perceived impacts, personal benefits, and support. The need to combine various mediating effects to provide a complete picture of causality shows the impetus for this study. This study proposes a gambling tourism support model

(GTSM) (Figure 1). The proposed model suggests that the level of residents' positive and negative perceptions is likely to influence their support/opposition for gaming development. However, their perceptions are likely to be mediated by the expected personal benefits. The model also proposes that personal characteristics and race are likely to influence residents' perceptions and are also likely to have a direct impact on support or opposition. In the proposed model, residents' positive and negative perceptions and the expected benefits from the development represent the SET and resident demographic (age and gender), socioeconomic (education and annual household income), and race characteristics represent the SRT. The proposed model is tested utilizing regression analysis to measure the influences of various factors on perceptions, and the subsequent influence of both the personal characteristics and perceptions on support for proposed gaming development.

Figure 1: Gambling Tourism Support Model (GTSM)



Methodology

A self-administered survey questionnaire was used to collect data. A preliminary list of measurement items was initially gleaned from literature review pertaining to residents' perception of casino impacts. To ameliorate validity and ensure wording clarity, the list was reviewed by a panel of academics with expertise in tourism impacts and local residents. Feedback on appropriateness of items was obtained and the comments were incorporated. The list of items was further polished by pilot testing it on a small sample of local residents intercepted at two geographically dispersed public parks. Thirty-two items of resident perceptions were finally selected. The items were posed both in positive and negative voices and the residents were asked to agree or disagree with the items. The levels of agreement were indicated on a 5-point Likert-type scale ranging from 5= strongly agree and 1= strongly disagree. Factor analysis procedure was used to examine their dimensional validity and inter-correlation (Lee, et al. 2003).

Data were collected in the Fall of 2004 through a multiple sampling technique, which involved brief intercepts with self-administered questionnaires. Only the head of the households and residents who had lived for a minimum of 5 years were interviewed and locations were public areas and the respondents' homes. During the contact, each member of the sample was informed of the study purpose and assured anonymity.

The snow-ball method was used to locate additional subjects. The work locations and the church were targeted for this technique. Several respondents were requested to

pass the survey on to their colleagues at work and at the church. A self-addressed stamped envelope was provided. A total of 511 surveys were distributed. A total of 408 surveys were collected and the response rate was 79.8%. Approximately 60% of the surveys were obtained by intercepts at public parks, 30% were collected from home, and 10% from the snowballing technique. The survey was equally distributed among the African American and White American population groups.

Data were analyzed using multiple methods. Univariate analysis provided descriptive statistics for all the variables. To detect scale dimensionality, an exploratory factor analysis (EFA) with a principal component method with varimax rotation was used. The negative worded item scores were reversed before factor analysis. The appropriateness of factor analysis is determined by examining the Kaiser-Meyer-Olkin measure of sampling adequacy and the Bartlett's test of sphericity. A value of .60 or above from the Kaier-Meyer-Olkin measure of sampling adequacy test indicates that the data are adequate for exploratory factor analysis (Tabachnick & Fidel, 1989). A significant Bartlett's test of sphericity is also required. Reliability analysis of the items was performed in two stages. The first stage was directed at the Cronbach alpha coefficient and the second stage focused on the evaluation of item-to-item correlation scores of the items in each scale (factor analysis).

Multiple regressions were used to examine the effect of variables used in the study on support for casino development while controlling for age, gender, income, and number of children in the household. Social representation was represented by the educational attainment and the race variables. The race variable was dichotomous with African Americans = 1 and White Americans = 0. The education variable was a polytomous variable because it had more than two categories. Grad school was a dummy variable with grad school =1 and the rest of the education categories = 0, secondary school was a dummy variable with secondary school =1 and the rest =0, high school diploma was a dummy variable with high school diploma=1 and the rest =0, bachelor's degree was a dummy variable with bachelors degree= 1 and the rest =0, and masters or doctorate degree was a dummy variable with masters or doctorate degree = 1 and the rest of the education categories = 0.

SET was represented by the following scales: social benefits, social costs, economic benefits, economic costs, infrastructure benefits, infrastructure costs, and environment costs. The casino development was a Likert scale item stating "I am glad we are going to have a casino on our area." Some of the controlled variables were dummy variables. Gender was a dummy variable with male=1 and female=0, less than $50,000 income was a dummy variable with less than $50,000=1 and the rest =0, between $50,000 and $99,999 was a dummy variable with between $50,000 and $99,999 =1 and the rest =0, between $100,000 and $149,999 was a dummy variable with between $100,000 and $149,999=1 and the rest=0, and above $150,000 was a dummy variable with above $150,000 =1 and the rest =0. Age and number of children in the household were continuous variables.

Results

Examination of the demographic characteristics of the respondents indicated that there were more female respondents among the White Americans (56%) than the African Americans (52%). The annual household income of majority of the African Americans was less than $50,000 while the majority of the White Americans earned an annual household income between $50,000 and $99,999. Approximately 18% of the White Americans were in the above $100,000 category compared to the African Americans (6%). Children per household and household size were approximately similar for both the population groups.

Thirty-two variables represented perceptions of the respondents. Table 1 provides average rating of these perceptions by each population group. The results indicate that the African Americans in general agreed more with the benefits and disagreed more with the

costs than the White Americans. One way ANOVA tests were conducted to determine the differences on individual impact perceptions between the two race groups. Statistically significant differences were noted between the two groups on traffic congestion ($F= 8.56$; $p\leq .01$) and driving hazards ($F= 5.68$; $p\leq .05$). Significant differences were also observed between the two race groups on three social cost items: borrowing money to gamble ($F= 4.56$; $p\leq .05$), divorce rates ($F=8.72$; $p\leq .01$), and assumed bankruptcies resulting from gambling ($F=6.78$; $p\leq .01$). The ANOVA tests indicated that the White Americans were more concerned about the aforementioned issues than the African Americans.

Table 1: Respondent Perceptions (Average Rating)

	African Americans	White Americans
Local residents will borrow money to gamble	2.6 (N=199)	3.2 (N=207)
Local residents will loose interest in their work	2.3 (N=200)	2.6 (N=206)
Alcoholism will increase	2.4 (N=200)	2.8 (N=207)
Divorce rates will increase	2.3 (N=200)	3.0 (N=207)
Losing and quitting jobs will become frequent	2.5 (N=200)	2.8 (N=207)
Bankruptcies will result	2.6 (N=199)	3.4 (N=206)
Prostitution will result	2.0 (N=199)	2.4 (N=207)
Negative thoughts of life will result	3.0 (N=200)	3.5 (N=206)
Local residents will engage in illegal activities	3.2 (N=200)	2.8 (N=207)
Attendance will decrease in other entertainment centers	2.1 (N=197)	3.4 (N=206)
Traffic congestion will result	2.5 (N=200)	3.1 (N=207)
Driving hazards will increase	2.4 (N=200)	3.1 (N=207)
Noise levels will increase	2.5 (N=199)	2.9 (N=204)
Price of real estate will increase	2.4 (N=200)	2.9 (N=207)
Prices of goods and services will increase	2.6 (N=200)	2.6 (N=207)
Size of crowds will reduce my enjoyment	2.5 (N=198)	2.6 (N=206)
Crime will increase	2.7 (N=200)	2.5 (N=206)
Construction of facilities will negatively affect the environment	3.2 (N=197)	2.7 (N=207)
Vandalism will increase	2.3 (N=197)	2.6 (N=207)
New and improved facilities will be built	3.3 (N=200)	3.3 (N=207)
More investment will be attracted	3.7 (N=200)	3.7 (N=207)
Roads and public facilities would be kept at a high standard	3.2 (N=200)	3.2 (N=206)
More opportunities for cultural exchange	3.1 (N=197)	3.1 (N=205)
More opportunities to meet new people	3.4 (N=200)	3.1 (N=206)
Quality of recreation opportunity will increase	3.5 (N=200)	3.3 (N=206)
Residents' pride will increase	3.7 (N=198)	2.9 (N=206)
Tax base will increase	3.7 (N=200)	4.0 (N=206)
Tourism related businesses will receive an economic boost	4.0 (N=200)	4.1 (N=206)
Employment opportunities will increase	4.3 (N=200)	4.0 (N=206)
It will be a waste of tax payers money	2.0 (N=200)	2.1 (N=207)
Area businesses will be negatively affected	2.1 (N=199)	2.3 (N=207)
High spending visitors will negatively affect our standard of living	2.3 (N=200)	2.2 (N=207)

Before conducting an exploratory factor analysis, the results of the Kaier-Meyer-Olkin measure of sampling adequacy and the Bartlett's test of sphericity were examined. Both tests indicated that it was appropriate to perform a factor analysis on 32 perception items. Four criteria (eigenvalue, variance, scree plot, and residuals) were used to determine the number of dimensions (factors).

The result of the principle component factor analysis with varimax rotation indicated that there were seven underlying dimensions (factors). In order to make sure that each factor identified by EFA has only one dimension and each attribute loads only on one factor, attributes that had factor loadings of lower than .50 and attributes loading on more than one factor with a loading score of equal to or greater than .50 on each factor are eliminated from the analysis (Hattie, 1985). This procedure resulted in the elimination of three items (crime will increase, vandalism will increase, and size of crowds will reduce my enjoyment). All the remaining loadings were positive. As presented in Table 2, the first factor was named "social costs", the second factor was named "infrastructure costs", the third factor was named "social benefits", the fourth factor was named "infrastructure benefits", the fifth factor was named "economic costs", the sixth factor was named

"environment costs", and the seventh factor was named "economic benefits". The Cronbach alpha coefficients were within the recommended level of .60 and .71 (Nunnally & Bernstein, 1994). Scale and their alphas were as follows: economic benefits (.71), economic costs (.70), social benefits (.68), social costs (.70), infrastructure benefits (.69), and infrastructure costs (.67). Alphas within the range of .60 and .70 have been reported by several studies. Lee, et al. (2003) in their study considered all factors with a reliability level above .60 acceptable. Perdue, et al. (1999) reported alpha values of above .70 for all factors with the exception of community involvement scale (.68).

Table 2: Factor Analysis of Perception Items

Factor		Factor Loading	Variance Explained
Social Costs	More family quarrels will result	.670	31.7%
	Frequent losing/quitting of jobs will happen	.666	
	Local residents will borrow money to gamble	.658	
	Local residents will engage in illegal activities	.731	
	Local residents will lose interest in their work	.720	
	Alcoholism will increase	.748	
	Prostitution will result	.655	
	Divorce rates will increase	.749	
	Bankruptcies will result	.690	
Infrastructure Costs	Driving hazards will increase	.676	8.7%
	Noise levels will increase	.694	
	Traffic congestion will increase	.589	
Social Benefits	Cultural exchange opportunities will be there	.707	6.7%
	Local residents' pride will increase	.699	
	Quality of recreation opportunities will increase		
	Opportunity will be there to meet new people	.503	
Infrastructure Benefits	More investment will result	.762	5.8%
	Roads and public facilities will be kept at a high standard	.571	
	New and improved recreation facilities will be built	.726	
Economic Costs	High spending visitors will create a negative effect on local standard of living	.503	4.4%
	Negative effect on area businesses will happen	.762	
	Local taxpayers money will be wasted	.601	
Environment Costs	Natural environment will be destroyed	.560	4.3%
Economic Benefits	Tax base will increase	.581	3.6%
	Local tourism businesses will receive an economic boost	.571	
	Employment opportunities will increase	.554	

Influence of perceived personal social and economic benefits on the seven dimensions (factors) were examined using bivariate regression analyses. All the models were found to be significant a $p \leq .05$. The results revealed that perceived personal benefits significantly influence residents' attitudes towards general socioeconomic benefits. In addition, they also reduced the perceptions of costs associated with gambling. Next, influence of race on these perceptions was examined. The results are presented in Table 3. Race was regressed on all seven-perception categories that represented benefits and costs while controlling for age, gender, and annual household income. Three out of seven regression models were significant. The African Americans disagreed more than the Whites on social costs while no racial differences were observed on perceptions of economic benefits and costs and infrastructure benefits. The African Americans perceived infrastructure costs to be less than the Whites. However, no differences were observed between the two population groups with regard to environment costs. In other words, the African Americans and White Americans perceived similar benefits with regard to the economy and infrastructure. Both the groups also perceived similar environment costs.

The African Americans disagreed more than the Whites on social costs while no racial differences were observed on perceptions of economic benefits and costs and infrastructure benefits.

Table 3: Influence of Race on Perceptions

	Average Rating	F value	Significance	R squared
Economic Benefits	4.01	.544	.801	.013
Economic Costs	2.18	1.235	.283	.029
Social Benefits	3.26	3.562	.001	.080
Social Costs	2.76	5.256	.000	.113
Infrastructure Benefits	3.39	1.235	.283	.029
Infrastructure Costs	2.73	2.377	.022	.055
Environment Costs	2.93	.322	.939	.008

Finally, nine multiple regression models were used to determine the influence of benefits, costs, race, and socioeconomic characteristics on the support for a proposed casino in Black Hawk County while controlling for age, gender, and annual household income. Findings (presented in Table 4) indicated that all models, except the environment costs model, were highly significant at $p \leq .05$. Respondents who disagreed more with the social costs supported the proposition while controlling for age, gender, and income. The social cost model also revealed that respondents with an annual household income between $100,000 and $150,000 differed in their support for the proposed casino while controlling for social costs. The first income group had a tendency to show higher support. Conversely, respondents who agreed more with the benefits tended to support the casino while controlling for demographics. However, support for the casino was equally divided among the proponents and opponents of environmental costs. With regard to race, African Americans agreed more with the statement that they were glad that their area would have a casino while controlling for age, gender, and annual household income. No differences in proposed casino support were observed among the respondents with different education levels while controlling for demographic variables.

Table 4: Influence of SET and SRT on Support for the Proposed Casino

	F value	Significance	R squared
SET Influence on Support			
Economic Benefits	7.483	.000	.153
Economic Costs	10.181	.000	.197
Social Benefits	16.065	.000	.279
Social Costs	27.335	.000	.397
Infrastructure Benefits	5.939	.000	.125
Infrastructure Costs	6.970	.000	.144
Environment Costs	.361	.924	.009
SRT Influence on Support			
Ethnicity	4.980	.000	.109
Education Level	.500	.889	.017

Discussion

As discussed earlier, most of the studies examined residents' attitudes toward casino gaming development using the Social Exchange Theory as the theoretical framework. Findings of these studies suggested that perceptions of cost factors and benefit factors are the antecedents of locals' support and/or opposition for casino gaming development in their community, and local residents are likely to support development as long as the perceived benefits exceed the perceived costs. As suggested by the conventional wisdom approach (Samli, 1995), this approach, using aggregated costs and benefits perceptions of residents, assumes homogeneity within the residents perceptions of cost and benefit factors and focuses on perceptual differences at macro level. However, Samli (1995) suggest that conventional wisdom approach may not yield an accurate picture of locals' perceptions because it focuses on macro level indicators. He argues that using an unconventional wisdom approach may yield better results, which is more likely to provide a clearer picture of local residents' perceptions of cost and benefit factors and

their support and/or opposition for casino gaming in their community. Unconventional wisdom approach acknowledges the existence of within community differences in perceptions, attitudes and behaviors, and emphasizes differences and commonalities in micro-level values, perceptions and resulting behaviors. This view is further supported by studies that suggest residents' characteristics are likely to influence perceived impacts of gaming development (Perdue, et al., 1999; Lee, et al., 2003; Lee & Back, 2006; Stitt, et al., 2003). Therefore, this study suggests that examining residents' attitudes toward gaming in the context of SET (using the conventional wisdom approach) alone may not yield a clear portrayal of residents perceptions of impacts and their support for gaming development. In order to address issues raised by the unconventional wisdom approach, this study utilizes social representation variables, as suggested by the Social Representation Theory, such as race, educational attainment, and annual household income to further divide local resident population into micro segments. Micro segmentation of the local community using some of the variables suggested by the Social Representation Theory is likely to result in a better understanding of local residents' attitudes toward gaming development in their community.

One of the major theoretical contributions of this study is the integration of both SET and SRT in a single model to address the issues raised by the conventional wisdom approach in order to better understand local residents support for gambling development. In addition to examining overall residents' perceptions of costs and benefits factors and their impact on overall support for casino development, this study divided the local community into smaller segments using local residents' race, education levels and expected personal and general benefits from casino development as segmentation variables.

This study identified seven perceived costs and benefit factors. However, findings indicated that the perceptions of cost and benefit factors and their impact on overall support are likely to be influenced by local residents' race, education levels and expected personal and general benefits from casino development. Overall the model suggested that cost factors are likely to negatively influence overall support while benefit factors are likely to show positive impact. This is consistent with the finding of most of the previous studies, which suggest that locals are likely to participate in an exchange as long as they believe that the expected benefits outweigh the expected costs as suggested by the SET (Ham, et al., 2004; Giacopassi & Stitt, 1993; Hsu, 2000; Stitt, et al., 2003). However, when the community is segmented using the suggested segmentation variables, perceptions of cost and benefit factors were altered. Furthermore, the impacts of perceived cost and benefit factors on the support were changed when the SRT variables were introduced to the model. For example, findings suggested that residents who expect to receive personal benefits from gambling development are more likely to place more importance on socioeconomic benefits of gambling development than the associated costs compared to others. This finding suggests that residents who expect to receive personal benefits from the development are more likely to be strong supporters of the development. This finding is also consistent with the previous studies, which suggest the higher the personal benefits, the higher the support. In order to get a clearer picture of the influence of personal benefits from tourism on local resident perceptions of impacts and their support for development, it is important to control for demographic effects of other variables such as age, gender etc. Controlling the effects of other demographic variables further advances the understanding of the impact of personal benefits and provides further support for the applicability of the segmentation variables suggested by the SET.

This study also divided the community into smaller segments using the respondents' race and their education level as the segmentation bases in order to better understand the influence of race and education level of locals on their perceptions of cost and benefit factors and on their support. Findings suggested that while respondents' race significantly influences their perceptions and their support, their education level is likely to have no significant impact. Respondents' race is found to have significant influences on their perceptions of sociocultural impacts (positive and negative) and infrastructure costs.

Findings suggested that while there were no differences between the perceptions of benefits between African Americans and White Americans, African Americans tend to view social and infrastructure costs associated with the gambling development as less important. This may be explained by the fact that African Americans believe that they are more likely to receive personal benefits from the development as suggested by the findings, which further suggests that respondents' race has significant impact on their perceptions of personal benefits. Differences in perceptions of costs between two groups examined may also be explained by the differences in income levels of those two groups. As discussed earlier, African Americans' income level is relatively lower than White Americans. Thus, they may believe that gambling development in the area may provide opportunities for them to improve their standard of living by providing personal benefits such as jobs that are likely to increase their income level.

Overall, findings of this study suggest that utilizing a conventional approach is likely to yield an overall picture of locals' perceptions of cost and benefit factors, and their influences on overall support. However, this may not be good enough for community leaders and developers if they truly want to understand the perceptions of locals and their support. Dividing the community into smaller segments using the variables discussed in this study and/or using other variables may enable community leaders and developers to have a better understanding of locals' attitudes toward casino gaming development.

Implications

Proliferation of legal gambling has been a subject of study for several decades. Legal gambling as an alternative form of recreation has been the most significant phenomenon affecting the tourism industry in the United States (Diamanche and Speyrer, 1996). The major motivation behind gambling expansion has been economic need. According to Perdue, Long and Kang (1995), the current wave of fiscal constraints at the state and local level has led to the current wave of pro-gambling sentiment. Several studies have shown that gambling can be highly profitable (Hsu, 2000; Perdue, et al., 1995; Pizam and Pokela, 1985; Roehl, 1994). However, several studies have also highlighted the repercussions of gambling (Caneday and Zeiger, 1991; Hsu, 2000; Stokowski, 1996). Thus, communities and organizations seeking to develop or increase gambling tourism should realize that the issue of local residents support for gambling is very complex. In order to generate community wide acceptance, community leaders and developers should encourage community participation from the beginning planning stage. Residents' participation in the planning and development process is essential and it is a fundamental necessity for sustainability of the development. Therefore, residents should be the focal point in the development (Choi and Sirakaya, 2005). However, hosts are frequently excluded from "decision–making and management of projects" (Teye, Sonmez and Sirakaya, 2002, p.670).

The first step in understanding the perceptions and attitudes of locals towards gambling tourism impacts is determining the areas of support and their concerns, impact of those areas on support and the factors that are likely to influence those perceptions and attitudes. However, as suggested by the findings of this study, while a group of residents may support the development, others may appose it. Therefore, understanding the attitudes of specific community segments toward casino development may be crucial for community leaders and developers if they want to find out which groups/ segments are likely to oppose or support the proposed development. Once these groups are identified, planners and developers can develop communication strategies to address the issues raised by each group individually.

Findings also suggest that residents who expect to receive personal benefits from the development and African American residents are more likely to support the development if the potential for economic gain is considerable. Identification of residents in those segments may help planners and developers in convincing others about the benefits of development. Developers and planners can utilize those in their internal marketing

efforts to change the opinion of others who feel that they have little to gain from casino development in their community by promoting the positive economic benefits on one-to-one and face-to-face bases.

This study also demonstrated that both positive and negative impacts should be examined to better understand host community's attitudes. While most of members of the community were found to be concerned about economic benefits, others were more concerned about specific benefit and cost factors. For example, White Americans are found to be more concerned about the costs of the proposed development than African Americans and respondents with high incomes are found to be less likely to support the proposed development. Planners and developers can utilize these findings to develop communication strategies that deal with specific issues raised by each group. This may help them gain a larger support and may increase the chance of success of the proposed development.

The results of this study can be valuable to local planners, policy makers and business operators as they consider the type, size and complexity of gambling tourism development. Findings of this study can easily be used to further understand the genesis of perceived positive and/or genitive impact perceptions of gaming development and how different segments of a local community perceive various cost and benefits factors, how those perceptions are likely to influence their support for casino development. Developers and planners can use this information to address the issues that are likely to be raised by each community segment. In addition, having the information about various community segments' concerns may help guide developments more consistently congruent with local attitudes.

This study was subject to several limitations. One limitation of the study is that the study was directed at only the residents of Black Hawk community. It is possible that if the study was conducted on the residents of other counties and states, the magnitude and direction of the relationship in the model may be different. Therefore, other counties, states, and geographic regions should be explored and additional studies should be conducted.

Respondents were not asked how much gambling tourism development they perceived to be acceptable. They were only asked to indicate whether they would oppose or support gambling tourism development. It is possible that the specification of the level of development may alter the magnitude and direction of the relationship in the model. Future studies should include how much gambling development is likely to be supported by local residents.

This study only examined residents' reactions toward gambling tourism developments. It is possible that examination of the support for other type of tourism development may produce different results. Therefore, future studies should also examine residents' support for other type of tourism developments.

Conclusions

Several conclusions can be derived from the research results in relative and absolute terms. The main purpose of this study was to use the SET and the SRT frameworks to examine perceived impacts and factors that are likely to exercise influence on those perceptions. This study integrates two separate research streams and in doing so makes a major theoretical contribution in tourism literature by demonstrating how race and educational representation affect each of the seven impact perceptions and support for proposed casino development separately. In addition, a multiple item scale with adequate psychometric properties was used and the reliability scores were high. It is critical that the SRT theory be tested in both rural and non-rural settings to postulate its significant influence on support for tourism development. Resident attitudes of tourism are not homogenous. These findings lend credence to earlier findings that support the SET. However, the extent to which local residents accept or reject changes caused by tourism does not depend solely on resident perceptions of how it affects their own personal welfare or community welfare, as residents' ways of thinking based upon social groups also influence support for tourism development to a great extent.

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