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# BENEFITS AND COSTS OF LEGALIZED GAMING IN PENGHU AS PERCEIVED BY TAIWANESE PEOPLE

by

Ying-Ling Ho

Bachelor of Science in Recreation Administration California State University, Chico, U.S.A. 2004

A thesis submitted in partial fulfillment of the requirements for the

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

Graduate College University of Nevada, Las Vegas August 2007 UMI Number: 1448402

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### **ABSTRACT**

# Benefits and Costs of Legalized Gaming in Penghu as Perceived by Taiwanese People

by

# Ying-Ling Ho

Dr. Zheng Gu, Examination Committee Chair Professor of Tourism and Convention University of Nevada, Las Vegas

This study evaluates attitudes and perceptions of residents in Penghu County and the main island of Taiwan regarding benefits and costs of legalized gaming in Penghu County. Surveys were conducted by using convenient sampling in both Taiwan's main island and Penghu County. Results indicate residents in Penghu and residents in Taiwanese have no significant difference in supporting legalized gaming. Residents in both locations show a positive attitude toward the legalized gaming based on the mean score from the test. Results also indicate that there are three socio-demographic groups have significantly different opinions in supporting legalized gaming. Results also point out the impacts that those three groups are concerned about regarding benefits and costs of legalized gaming. In addition, results may provide the Taiwanese Government some directions for improving residents' perceptions toward the benefits and costs of legalized gaming once the Taiwanese Government decides to use legalized gaming as a means to improve the community's economy and tourism development.

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### CHAPTER 1

#### INTRODUCTION

# Purpose of the Study

Legalizing casino gaming has been proposed as an economic engine to boost the tourism of Penghu Island of Taiwan for years (Chang 2002; Chen, 1994; Chung, 2005; Ho, 2005). Many U. S. casino companies have expressed their interest in building and operating casinos there (Ho, 2005; Hsu, 2006). However, the proposal has yet to be approved by the Legislative Yuan of the Republic of China (R.O.C.), the Taiwanese lawmaker. Although business executives, Penghu local legislators, and the Penghu Government are proponents of casino gaming on the Island (Chen, 1994), the overall opinion of the Taiwanese people, including Penghu residents, regarding the potential benefits and costs of legalizing casino gaming remains unknown. It is important for the Legislative Yuan to know the Taiwanese people's opinions and perceptions about casino gaming before they act on the proposal. To my knowledge, however, there has been no attempt made to identify the opinions and perceptions of Taiwanese residents on the casino gaming issue.

Thus, the purpose of this study is to investigate, via a survey in the proposed gaming community and a nearby metropolitan community, attitudes toward legalized casino gaming among groups with different social and demographic backgrounds on Penghu

Island and Taiwan Main Island. Furthermore, it attempts to identify differences, if any, in people's perceptions of the benefits and costs associated with casino gaming. Suggestions regarding how the government and industry may alleviate people's concerns and speed up the gaming legalization process are provided based on the findings.

# Justification of the Study

For the most part, casino gaming is considered by communities or governments who are facing financial or economic problems and are thinking about using it to solve their financial crises (Janes and Collison, 2004). The National Gaming Impact Study Commission and Rephann, Dalton, Stair, and Isserman (as cited in Janes and Collison, 2004) pointed out that communities hope that the benefits of casino gaming, such as additional jobs, increased wages, increased property values, and reduced public assistance, will stimulate local economy. For that reason, since 1993 the Taiwanese Government has considered legalized casino gaming on Penghu Island as a way to solve the fiscal problems of the Penghu County and to stimulate Penghu's local tourism (Ho, 2005).

Similar to comparable rural communities whose governments have considered legalized gaming or have legalized gaming, Penghu Island is a rural area that has limited resources such as labor, infrastructure, and foreign investment and suffers from poor economic conditions. Boger, Spears, Wolfe, and Lin (as cited in Janes and Collison, 2004) stated that rural area casinos can bring enormous business advances. Because of casino gaming activities, the community may develop additional schools, medical facilities, and infrastructure systems.

To use casino gaming as a means of enhancing community economy, there must be a decent market. The Chinese are known as risk takers and are likely to bet on everything and anything they can. Galletti (2002) stated that the Chinese are willing to gamble an outrageous amount of money as Las Vegas visitors. The Taiwanese, a part of the Chinese people, show a strong tendency for gambling. According to Quartly (2003), millions of Taiwanese play the lottery every week. However, playing only the lottery cannot satisfy the Taiwanese people. The pigeon racer, street vendor dice gaming, and illegal sports betting are some of the options for those risk takers. Quartly also quoted from U.S. gaming analysts at Bearns Stearns to demonstrate the role that the Taiwanese play in the world's gaming market: "The Asian population within a five-hour flight [from Taiwan] has the highest propensity and frequency of wagering of any demographic in the world" (para. 24). Although the Taiwanese like to gamble, gaming in Taiwan is still forbidden. Apparently, a potential gaming market is foreseeable.

Legalized gaming in Penghu has been discussed for over a decade (Ho, 2005), but the decision of the Taiwanese Government remains unknown. The Government may not only consider benefits but also costs that might be incurred by legalized gaming to both the casino host community and the non casino host community. Legislators in the Legislative Yuan of R.O.C. (Republic of China), the Taiwanese highest law making organization that represents the Taiwanese people, have debated this issue numerous times. The gaming law has to be approved by the Legislative Yuan based on a Taiwanese consensus.

Nevertheless, the Legislative Yuan has yet to discern how the Taiwanese people perceive legalized casino gaming.

To the best of my knowledge, no studies have been conducted to investigate

Taiwanese residents' opinions about the benefits and costs attached to legalized gaming.

Chen (1994) interviewed key executives of international tourist hotels in Taiwan

regarding their opinions of legalized gaming. However, these key executives may

represent the opinions of the tourism industry, but these opinions do not epitomize the

opinions of all Taiwanese residents. Consequently, this study provides a reference for the

Taiwanese Government to profile residents' opinion regarding legalized gaming.

The findings of this study will enable decision makers in the government and tourism industry to understand better how different sociodemographic groups support or oppose legalized gaming and how they have different views about its potential benefits and costs.

# Importance of the Study

# Practical Significance

The law to legalized casino gaming in Penghu needs to be passed by the Legislative Yuan of the R.O.C. This study may help the Legislative Yuan better understand how and why the residents like or dislike legalized gaming by surveying residents' attitudes toward legalized casino gaming and the perceived benefits and costs associated with it. If the government determines that legalized gaming is desirable for Penghu and intends to use it to boost Penghu's economy, this study may help the policy makers find ways to overcome barriers and promote legalizing gaming more effectively, thus speeding up the legalization process. Furthermore, a good understanding of residents' view about legalized gaming will help the government and industry set up policies and guidelines that may maximize the benefits and minimize the social costs associated with gaming

once it is legalized and in operation. Finally, because there are many places such as West Virginia (Toland, 2007), Kentucky (Hall, 2007), and Iowa (Schumacher, 2006) whose local governments have used or are considering using a referendum to determine whether to have gaming in their communities, it is very possible that the Taiwanese Government will use a referendum to make the final decision on legalizing gaming in Penghu Island. Therefore, understanding residents' perceptions of casino gaming is key to gaining support from the referendum.

# Academic Significance

Existing literature has discussed a lot about residents' perception about legalized gaming after the casino has been built (Back and Lee, 2005; Carmichael, Peppard, and Boudreau, 1996), but very few have investigated residents' perception before the casinos are actually legalized and built. Some literature examined gaming impacts as perceived and expected by community leaders and hotel executives (Chen, 1994; Janes and Collison, 2004) but disregarded the opinions of local residents. This study makes new contributions to the literature in two ways. First, it attempts to identify anticipated benefits and costs of legalized gaming to residents before the casino is legalized and built. Second, it seeks out residents' opinions about legalized gaming from a future casino host community and a non-host community.

### **Research Questions**

The future casinos will be located on Penghu Island. Residents who live on Penghu Island may be directly impacted by legalized gaming, and their perceptions of the benefit and cost impacts may differ from those of the residents of Taiwan Main Island. However,

the Legislative Yuan and the Taiwanese Government will make a decision based on the opinions of all the Taiwanese people, including those live on Taiwan Main Island and those live in the proposed casino host community. Therefore, finding out whether there are any significant differences between residents' opinions in Penghu Island (casino-host community) and Taiwan Main Island (non casino-host community) was one of the objectives of this study.

# Questions

The First Question

The first question investigated was whether there was a significant difference in residents' support of legalized gaming in Penghu, between Penghu Island and Taiwan Main Island, and among different sociodemographic groups. This research question was designed to find out how different groups of people differed in their attitudes toward legalized casino gaming.

The Second Question

The second question investigated was whether there were different perceived potential benefits and costs associated with legalized gaming among sociodemographic groups that have shown different attitudes toward legalized gaming. This question was designed to find out why those groups of people have different attitudes toward legalized gaming.

# Variables Examined

This study examines differences in support of legalized casino gaming in Penghu and perceived benefits and costs associated with gaming across different groups. Table 1 lists

the benefits and costs variables examined in this study. Table 2 presents various groups by location and social demographic backgrounds.

Table 1

Examined Variables

| Benefits           | Costs               |
|--------------------|---------------------|
| Economy            | Education           |
| Volume of Visitors | Natural Environment |
| Job opportunities  | Pollution           |
| City Development   | Crime Rate          |
| Transportation     | Prostitution        |
| Life Quality       |                     |
| Reduce Seasonality |                     |

# The Hypotheses

# Hypothesis 1

The first hypothesis to be tested is that there are no significant differences in residents' support of legalized casino gaming across groups by location, social, and demographic backgrounds.

# Hypothesis 2

The second hypothesis to be tested is that there are no significant differences in perceived potential benefits and costs associated with legalized gaming in Penghu across

groups by location, social, and demographic background that have shown different attitudes toward support of legalized casino gaming.

Table 2

Groups Examined

| Groups by Social & Demographic Features                      | Groups by Locations |  |
|--|---------------------|--|
| Gender   | Taiwan Main Island  |  |
| Age  | Penghu Island       |  |
| Education Level  |                     |  |
| Income   |                     |  |
| Political Party  |                     |  |
| Occupation   |                     |  |
| People who have experience of visiting casino and who don't  |                     |  |
| People who are aware of Penghu Outlying Island Development   |                     |  |
| Act and who didn't   |                     |  |
| People who have experience of gaming in casino and who don't |                     |  |

# Limitations

The first limitation of this study is the sample. The survey questionnaire was collected by the researcher from both Penghu Island and Taiwan Main Island. However, when the survey questionnaires were collected from Penghu Island, the survey was only collected from Makung City in the main part of Penghu Island, and the surrounding small islands of Penghu were ignored due to the difficulty in commuting. Also, when the survey

questionnaires were collected from Taiwan Main Island, the surveys were only collected from Taipei City, the capital of Taiwan Main Island with forty percent of Taiwan Main Island's population (Wikipedia, 2007a). Although the surveys that were collected from Taipei City may contain some responses from people who are from other cities, the surveys may not represent the whole population of Taiwan Main Island.

The second limitation is the study period. Because this study was a one-shot only study, we can only know the Taiwanese people's perceptions before the legalized gaming law passes. People may change their attitudes over time, but this study cannot reveal the attitudes of the Taiwanese people over a different time period, particularly the period after casinos are built.

#### Delimitation

The scope of this study is limited to the regional gaming development in the Taiwan area, including Taiwan Main Island and Penghu Island. The study was limited to adult residents who are 18 years and older and who lived on Penghu Island or Taiwan Main Island.

### **Definitions of Terms**

The following are definitions of some of the terms used in this study:

Legalized gaming: Western-style, legal casino gaming that includes table games, slot machines, and sports betting. Examples of legalized gaming are the casino resorts of Las Vegas, Nevada.

Perceived impact: The perceived impact in this study refers to residents' thoughts about different benefits and costs that might be caused by legalized gaming on Penghu Island. Residents gave a score (1 & 2 = negative impact, 3 = no impact/neutral, and 4 & 5 = positive impact) for each impact to demonstrate their perception of each.

Benefits: Effects of legalized gaming that residents might consider positive.

Costs: Effects of legalized gaming that residents might consider negative.

Legislative Yuan of R.O.C.: Similar to the U.S. Congress; the Congress of Taiwan, Republic of China.

Convenience Sampling: "Convenience sampling refers to sampling by obtaining units or people who are most conveniently available" (Zikmund, 2003, p. 380).

*Independent-Samples T Test:* "Tests the null hypothesis that the population mean of a variable is the same for two groups of cases." (Norušis, 2004, p.288).

One-Way ANOVA Test: "Tests the null hypothesis that the population mean of a variable is the same in several groups of cases." (Norušis, 2004, p. 316).

# **CHAPTER 2**

# LITERATURE REVIEW

As Hsu (2006) stated, gaming has been an integral part of everyday life in Asia for a long time. Since western-style casinos were introduced in Asia decades ago, many Asia Pacific countries have been developing casino industries. The growth and potential of the Asian casino market has also been noticed by the Las Vegas gaming conglomerate (Balfour, 2006; Gilley, 2001; Hsu, 2006; Gu and Tsai, 2005). Although gaming development has become a hot topic in Asia and all around the word, residents' perceptions regarding the benefits and costs that accompany gaming has become a crucial issue for decision makers in the government and in the tourism industry. This thesis concentrates on residents' perceptions of legalized gaming in Penghu Island and Taiwan Main Island.

# Gaming and Tourism Development

Considering the economic benefit that casino gaming can bring to a community, more and more countries consider casino gaming as a vehicle to drive their economies, to reestablish their tourism industry, and to gain control of taxes lost to illegal and underground gambling (Back and Lee, 2005; Carmichael, Peppard and Boudreau, 1996; Felsenstein and Freeman, 1998; Gu and Heung, 1999; Hong and Jang, 2004; Janes and

Collison, 2004; Stitt, Nichols and Giacopassi, 2005). Felsenstein and Freeman (1998) declared that gambling is part of the tourism package and provides a higher priority economic goal for advocating tourism. They also affirmed that gambling is a leisure activity that supports tourism and correlates with many other similar industries. Using casino gaming to stimulate the local economy and develop tourism has been common in the United States and in many countries in the Asian Pacific Region. Some of the successful cases of communities using casino gaming to bolster the local economy and tourism development in the Asian Pacific Region are discussed in the following sections.

#### Масаи

Macau is a small special administrative region located on the southeast coast of China, which is near to the western bank of the Pearl River Delta. Bordering on Guangdong Province, Macau is 60 kilometers from Hong Kong and 145 km from Guangzhou city (Macau Government Tourist Office, 2006). Macau was considered a rural area in China a century ago, and it adopted gaming to bring in revenue for its colonizer, the Portuguese, from 1851 to 1863. Macau could not have afforded that revenue burden without gaming revenue (Gunn, cited in McCartney, 2006).

Since gaming was adopted by the Macau Government, the industry has become the major tourist attraction for the region and almost every tourist visits the casino (Gu and Heung, 1998). In 2006, about 22 million tourists visited Macau (The Statistics and Census Service, 2007). During the past decades of gaming development, Macau's gaming tax increased from around \$373,000 USD in 1961 to more than \$747,000 USD in 2001, an increase of more than 20% per year (Fong and Ozorio, 2005). In addition, Macau's gross gaming revenue is almost at the same level of the gambler's Mecca, Las Vegas.

According to Federal Information and News Dispatch (2006), Macau's gross gaming revenue was about \$5.6 billion, and Las Vegas' gross gaming revenue was about \$6 billion in 2005. In the same report, Mary Ellen Olson, an analyst from Hong Kong, predicted that Macau's annual gaming revenue could possibly exceed \$10 billion within the next 5 years.

#### Korea

In 1961, the first legislation regarding gambling in South Korea was passed to prohibit gambling activities. However, in 1962 the Korean government decided to legalize gambling for foreign travelers only, with the purpose of generating more tourism income from foreign travelers. Therefore, there was a rule that allowed foreign tourists to gamble at casinos in some limited foreign tourism facilities. There were six casinos built in different tourist destinations in the 1970s, and another eight casinos were built on Jeju Island, one of the most famous tourist destinations in South Korea in the 1990s (Back and Lee, 2006).

In 1995, the Korean government legalized gaming in the Kangwon Province for domestic customers in order to alleviate various economic pressures in several ruined coal mining towns. The domestic customer based Kangwon Land Casino opened in October 2000 (Lee, Kim, and Kang, 2003). Today, 17 casinos are operated in Korea (Korea Casino Association, 2007), and those casinos have brought not only a large volume of visitors, but also the income from those visitors. According to the Korea Casino Association (as cited in Back and Lee, 2006), the number of casino visitors increased from 343,843 in 1988 to 647,722 in 2001 and the amount of receipts increased from \$58,015 USD in 1988 to \$296,355 USD in 2001, about a five-fold increase in a

decade. Although the Korean government has used restriction of domestic gambling as a policy in many casino communities to prevent a negative social impact, the gaming industry still brings a respectable amount of income to the casino host community in Korea.

# Gaming in Chinese Culture and Taiwanese Society Gaming in Chinese Culture

The Chinese have been known as risk-takers for over a thousand years. According to Galletti (2002), the Chinese have a tradition of gaming and superstitions. They consider gambling to be an acceptable practice at home and at social events, and youths even gamble with their relatives for money (Glionna, 2006). In Galletti's report researchers stated that the Chinese people hope for a miracle, good luck, and a big win because a large portion of the Chinese population has been poor throughout Chinese history. Today the Chinese people are not as poor as they were decades ago, but they still enjoy their tradition of gambling. According to ABC News (as cited in Galletti, 2002), 85% of high rollers in Las Vegas come from China, Taiwan, and Japan. Galletti also mentioned that the willingness of the Chinese people to gamble is much higher than that of the Japanese people, even though the volume of Japanese tourists visiting Las Vegas is larger than the volume of Chinese tourists. In addition to the statistic from Las Vegas, we can also see the potential of Chinese gambling from the statistics in Australia. According to the Victorian Casino and Gambling Authority (2000) in The Impact of Gaming on Specific Cultural Groups, the Chinese community has the highest percentage (10.7%) of problem gamblers and the highest outlay (\$10 per week) of gaming dollars of all other cultural

groups. According to Casino City (2002), the strong potential of the Chinese gaming market makes the management of the gaming industry pay more attention and catering to Chinese gamblers. Galletti even mentioned that Chinese customers have the potential to make the casino bottom line; therefore, casino management should appreciate its Chinese customers. An example of casino management appreciating its Chinese customers is celebrating the Chinese New Year in Las Vegas. Based on Glionna, "The Chinese New Year is a time of heightened wagering, when bad luck of the old year is ushered out by the good luck of the new" (p. B1) As a result, thousands of Chinese celebrate their Chinese New Year and gamble in Las Vegas (Vegas style, 2000, as cite in Galletti, 2002). Today, more and more Las Vegas casino resorts decorate their gaming areas in Chinese styles in order to attract more Chinese customers. An example is that Wynn casino resort decorates its hallway with Chinese style lanterns and plays Chinese style music in its manmade garden.

# Gaming in Taiwanese Society

The Taiwanese, part of the Chinese people, also show the strong tendency to get involved in gaming activities. However, gaming in Taiwanese society has been considered an immoral and unethical activity, and the Taiwanese government still forbids legalized gaming in its society. Therefore, the Taiwanese get involved in many underground illegal gaming activities such as pigeon racer, street vendor dice gaming, and sports betting (Quartly, 2003). Blandford (cited in Quartly, 2003) mentioned that the U.S. based sports betting operation company makes \$500 million USD a year from Taiwanese customers on major U.S. sports alone. Besides those international betting organizations, the Taiwanese also place their wagers on their popular domestic

professional baseball games. In 1996, Taiwanese illegal betting on professional baseball games even caused a scandal: gangsters got involved in the game to threaten, kidnap, and pistol whip players. Illegal gaming almost resulted in the death of the Taiwanese Professional Baseball League (Quartly, 2003).

The Taiwanese Government forbids gambling in an effort to prevent people from developing problem gambling and increasing the social costs associated with gambling. However, the Taiwanese have figured out that if they cannot gamble in Taiwan, they can still gamble in other places such as Macau and Las Vegas (Quartly, 2003). According to the Macau Statistics and Census Service (2006), the volume of Taiwanese visitors that visited Macau in 2004 and 2005 was 1,286,949 and 1,482,483 respectively. Las Vegas has 85,000 Taiwanese visitors annually (Quartly, 2003). Apparently, the law forbidding gambling cannot stop Taiwanese gambling. As Eyton (2002) stated, the Taiwanese government reconsidered loosening the gambling law by legalizing the lottery in 2002, because the previous Patriotic Lottery had to be shut down in 1988. This new lottery is the only legalized gaming activity that is allowed in Taiwan. The Taiwanese government passed the law of lottery, or so-called lotto in Taiwan, in order to provide employment opportunities to disadvantaged groups, such as the physically challenged, aboriginals, single-parent families, and those with a low income as ticket vendors. The Taiwanese government tries to retain about 26% of the money earned to fund social-welfare programs (Eyton, 2002). Since the Taiwanese government legalized the lotto in January 2002, the Taiwan Lotto has attracted \$4.4 billion USD of revenue in its first 2 years of operation, and it has also become one of the most popular gaming activities in Taiwan (Lin and Lai, 2006).

# Potential Market in Taiwan

It is not hard to recognize the potential gaming market in Taiwan. According to SDonline.com (as cited in Gu and Tsai, 2005), one Taiwanese gambler was reported owing \$100 million USD gaming debt to different Las Vegas gaming operators. Another Taiwanese businessman lost \$18 million USD in just one trip to a Las Vegas casino (Dowei News, as cited in Gu and Tsai, 2005). In addition the individual cases, a report from The Statistics and Census Service of Macau (as cited in Gu and Tsai, 2005) indicates that Taiwanese players' contribution to Macau's gaming revenue was approximately \$1.5 billion USD from 1998 to 2002. In addition to the Taiwanese players' wager in foreign countries, domestic wagers were estimated to total over \$1 billion USD if underground gambling were replaced by legalized casino gaming (Gu and Tsai, 2005). As a result, many Las Vegas gaming operators such as the MGM Mirage and the Mandalay Resort Group have branch offices in Taiwan to host their lucrative clients (Gu and Tsai). More over, Sheldon Adelson, a legendary gaming operator from Las Vegas, visited Taiwan in 2000 to discuss the possible investment of an \$800 million casino and a \$2.5 billion tourism development plan in Penghu Island, an island located in the Taiwan Strait between Taiwan Main Island and Mainland China (Las Vegas Review Journal, cited in Gu and Tsai, 2005; Mure, 2001). Other leading gaming operators in Las Vegas, Atlantic City, and Australia such as the MGM MIRAGE Inc., Mandalay Resort Group, Park Place Entertainment Corp., Donald Trump, and Crown Casino also expressed interest in investing in casinos on Penghu Island (Gambling Magazine, cited in Gu, 2005).

Furthermore, the release of travel restrictions in Mainland China might also provide considerable visitors. According to Federal Information and News Dispatch (2006), more than 10 million mainland Chinese visited Macau in 2005 and provide Macau with one of the largest sources of potential gambling customers from around the world. Penghu might become next destination for those mainland Chinese gambling customers if casino gaming is legalized.

# Tourism Development in Penghu

Penghu Island is one of the Taiwanese counties located on the Taiwan Strait between Taiwan Main Island and Mainland China. With a total of 90 scattered islands and over 400 kilometers of coastline (Penghu County Government, 2006), this old fishing island has rich ocean resources such as coral, shellfish, and other natural landscapes. According to Ho (2005), Penghu County is a location that relies highly on the tourism industry. A 35- to 55-minute flight from Kaohsiung city and Taipei city, the two largest cities in Taiwan Main Island, respectively (Magong Airport, 2006), Penghu Island was once one of the popular tourism destinations for Taiwanese travelers in the 1980s.

However, the law that allows the Taiwanese people to visit Mainland China, the development of tourism industries in other Southeast Asian countries, highly similar tourism activities on Taiwan Main Island, a strong monsoon season during autumn and winter in Penghu, and the lack of large private investment in Penghu have caused Penghu's tourism industry to suffer (Ho, 2005). Among those artificial or natural impacts, the strong monsoons during the winter season have dramatically affected Penghu's tourist industry. According to Magong Airport (2006), the highest volume of visitors during the

winter season (October to March) is 65,398 per month, and the highest volume of visitors during the summer season (April to September) is 121,655 per month. The volume of visitors in the summer season is almost twice the volume of visitors in the winter season, creating high unemployment in the winter season. Gu and Tsai (2005) pointed out that from the early 1980s through the early 1990s, many young residents migrated to Taiwan Main Island for a better education and job opportunities. Therefore, an inadequate supply of labor has slowed down Penghu's tourism development. The Outdoor Recreation Association of R.O.C. (cited in Ho, 2005) mentioned that in the past decade, the number of visitors to Penghu ranged from 400,000 to 500,000 per year, and the visitors' average spending on a trip to Penghu was about \$83.45 USD per day for group travelers and \$63.02 USD per day for individual travelers. After deducting the air ticket price from the overall trip expenditure, the travelers' spending in Penghu Island was limited.

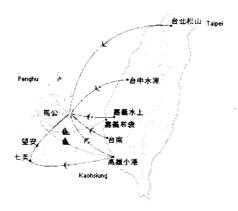


Figure 1. Penghu's location relative to Taiwan Main Island.

From "Taiwan←→Penghu Transportation: Air Transportation," by Penghu National Scenic Area, 2006. Retrieved April 6, 2007, from http://www.penghu-nsa.gov.tw/02-english/travel/view/tool/tool.htm

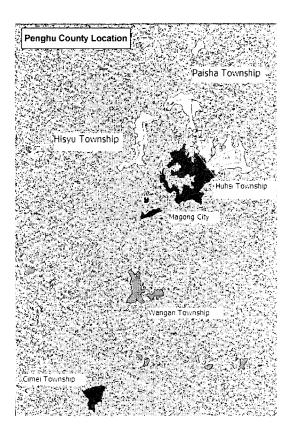


Figure 2. Penghu County location.

From "Penghu County Location," by the Penghu County Government, 2007. Retrieved April 6, 2007, from http://www.penghu.gov.tw/english\_version/location/location.asp

A statistical report from the Ministry of Interior (as cited in Ho, 2005) showed that in the first half year of 2003 in Taiwan, Penghu ranked lowest in income but had the highest ratio of elder residents, generating the lowest average household income, and holding the lowest ratio of educated residents. Therefore, Penghu County ranked as the number one county needing the central government's support.

To improve Penghu's economic activity and ease the tourism seasonality, the

Taiwanese Central Government and the Penghu County Government have considered

legalizing casino gaming as an alternative. Chen (1994) mentioned that most key executives of international tourist hotels in Taiwan have a positive attitude toward casino gaming, and 73% of them are willing to invest in casinos in Taiwan if the gaming law is passed. Those hotel executives also thought that Taiwan has excellent potential for casino investments as a result of the potential high returns on investment and high profitability of casino operations.

Liao (as cited in Ho, 2005) estimated the tax income after the Taiwanese government legalizes the casino gaming in Penghu, based on a minimum of 400,000 visitors and a maximum of 3,000,000 visitors per year: the average tax income will be about \$33,330,000 USD per year. Liao also estimated license income, which should be at least \$30,906,000 USD per year after the government legalizes casino gaming in Penghu. Legalized casino gaming seems to be a good solution for stimulating Penghu's economic and tourism development.

Residents' Perceptions of Tourism Development and Social Exchange Theory

\*Residents' Perceptions\*

Although numerous countries around the world use casino gaming to stimulate the local economy and increase tourism (Stitt et al. 2005), several researchers have started to pay attention to residents' perceptions of casino gaming and tourism development in communities (Andereck and Vogt, 2000; Back and Lee, 2005; Brown, Roseman, and Ham, 2003; Carmichael et al., 1996; Hsu, 2000; Janes and Collison, 2004; Korça, 1998; Kwan and Mccartney, 2005; Perdue, Long, and Kang, 1995; Roehl, 1999; Spears and Boger, 2002; Stitt et al., 2005). Menning (1995) stated that tourism development in a

community need to meet product demand and local acceptability. Considering what residents think and want is an important issue in regard to getting residents' support for tourism development (Richardson and Long, 1991). The literature points out that residents' attitudes have a strong impact on creating hospitable environment for tourists (Coccossis and Parpairis, cited in Korça, 1998) and will affect tourists' decisions about destination choice (Hoffman and Low, 1981). Cooke (1982) supported the literature by arguing that tourism planning should be supported by local residents' participation, and the marketing of tourism attraction should be supported by local residents. Furthermore, understanding residents' opinions on the multitudinous impacts of tourism development can not only incorporate community reaction into the development, but also provide precious information for measuring local carrying capacity (Liu and Var, 1986). The literature also mentions other benefits of assessing the social impact of tourism development as perceived by residents. Loukissas (1983), Marsh and Henshall (1987), and Ritchie (1988) pointed out that the community can maintain local control, quality of life, and the value system by measuring social impact. Moreover, residents' support of tourism is a key component of high quality visitor experiences (Fick and Ritchie, 1991; LeBlanc, 1992; Ostrowski, O'Brien, and Gordon, 1993). Roehl (1999) stated that legalized gambling is similar to other attractions of mass tourism, and previous tourism studies may help the preparation of legalized gaming. As we consider about legalized gaming as a means of tourism development, the importance of residents' opinion has become more significant. Stitt, Nichols and Giacopassi (2000) emphasized that community perceptions are the key to a successful referendum vote to support legalized gaming.

# Perceived Benefits and Costs

When talking about residents' perceptions, one needs to understand what concerns residents have. Previous studies mentioned that residents considered that casino and tourism development will bring both benefits and costs to their society (Carmichael et al., 1996; Hsu, 2000; Kwan and Mccartney, 2005; Roehl, 1999; Spears and Boger, 2002; Stitt et al., 2005). As far as benefits are concerned, different positive impacts are being studied, such as job opportunities, easing tourism seasonality, tax revenue generation, availability of recreational facilities, public service, and so forth (Carmichael et al., 1996; Deccio and Baloglu, 2002; Hsu, 2000; Perdue et al., 1995). When society benefits from the gaming/tourism development, many social/economic costs will also accompany with the development. Some of the costs mentioned in the literature are crime, prostitution, living costs, traffic congestion, pollution, environmental costs, and so forth (Andereck and Vogt, 2000; Janes and Collison, 2004; Korça, 1998; Kwan and Mccartney, 2005; Roehl, 1999; Stitt et al., 2000). Using studies of benefits and costs that attach to tourism/gaming development, researchers recommended social exchange theory as an ideal theory to predict the relationship between residents' support of tourism/gaming development and their perception of benefits and costs (Andereck and Vogt, 2000; Ap, 1990; Back and Lee, 2005; Carmichael et al., 1996; Korça, 1998).

# Social Exchange Theory

Ap (1990) stated that social exchange theory is a theory to understand and to predict individuals' behavior through understanding their interpersonal concerns. Andereck and Vogt (2000) further explain the theory and stated that individuals evaluate the personal benefits and costs that correlate with exchange. In other words, from a gaming

perspective, residents who perceive that the personal benefits of gaming development are higher than the personal costs will support gaming development (Jurowski, Uysal, and Williams, 1997). This theory also leads to the assumption that people who benefit from tourism/gaming development perceive a larger positive impact and a smaller negative impact than people who do not benefit (Getz, 1994). From previous studies that relate to social exchange theory and tourism development, the most consistent finding from previous studies has been the positive relationship between residents' opinion of tourism and their economic relationship with tourism (Ahmed, 1986; Back and Lee, 2003, 2005; Bastias-Perez and Var, 1995; Haralambopoulos and Pizam, 1996; Jurowski, 1994; Jurowski et al., 1997; Lindberg and Johnson, 1997; Liu and Var, 1986; Murphy, 1983; Pizam, 1978; Schluter and Var, 1988; Sheldon and Var, 1984).

Other findings from social exchange theory are the following: only social cost has a negative effect on residents' support level; the economic cost does not significantly affect residents' support level (Back and Lee, 2005); residents from rural areas with low levels of economic activity and tourism development felt more positively toward tourism development (Allen, Hafer, Long, and Perdue, 1993); residents who live closer to the tourist area have more positive opinions toward tourists (Belisle and Hoy, 1980); people who have higher incomes and live close to the major tourism attractions show negative attitudes toward tourism development (Carmicheal et al., 1996); well-educated residents have more negative attitudes toward tourism development than less educated residents (Andriotis and Vaughan, 2003); the more often residents visit the casino, the more positive their attitude toward casino development (Hsu, 1998); people who have experience visiting casinos have more positive perceptions regarding the casino impact

on their community (Hsu, 1998); local governments and entertainment operators have more positive attitudes toward tourism development than local residents (Murphy, 1983); and female residents have more negative perceptions of gaming than male residents do (Eadington, 1986).

One interesting finding from Korça (1998) and Lin (1999), which contradicts Belisle and Hoy's finding, illustrated that residents' level of support regarding tourism expansion increases as the distance between their residences and tourism areas increases. Therefore, we may not draw any conclusions about the relationship between residency distance and tourism development because different locations/communities may have different perceptions toward benefits and costs regarding tourism development. This study investigates this issue between Penghu Island and Taiwan Main Island in a later chapter.

#### **CHAPTER 3**

#### RESEARCH METHODOLOGY

Several studies have been done on residents' perceptions of tourism/gaming development around the world. However, to the best of my knowledge, studies based on survey of Taiwan residents' opinion on Penghu's casino gaming cannot be found. Smith (1980) suggested that the impact of tourism is felt more in host communities than non-host communities. Given that, this thesis attempts to broaden the understanding of residents' perceptions regarding benefits and costs that attach to future legalized gaming via a survey questionnaire method to identify residents' perceptions between Penghu Island, the host community, and Taiwan Main Island, the non-host community.

# Sampling

This study took place in two locations: Taipei City in Taiwan Main Island and Makung City in Penghu County. Makung, the capital city of Penghu County, was chosen because of its location in the center of Penghu Island and its population, which represent over 50% of Penghu Country (Penghu County Government, 2007). More importantly, casinos, if legalized, are more likely to be built in Makung due to city's better accessibility than other towns' on the island. Taipei, the capital city of Taiwan Main Island, with its nearby cities has about 40% of the total population of Taiwan Main Island (Wikipedia, 2007a). The reason for choosing Taipei city was because many people from

nearby cities are employed in Taipei; therefore, the study could cover not only residents in Taipei, but also people from nearby cities.

The target population of this study was adult residents 18 years and older in both Penghu County and Taiwan Main Island. This study focused on residents' perceptions in two locations: a casino host community and a non casino host community. Information from both locations was necessary. In addition, adults have the right to vote in referenda regarding legalized gaming; therefore, their opinions are more relevant than those of younger people. The sample population was selected by using a convenience sampling method of randomly selecting people on the street in Makung City and Taipei City. The reason for using the convenience sampling method was that Taiwanese people distrust telephone interviews, and there is a low response rate for mail surveys. There is much telephone fraud in Taiwan, and sometimes people even pretend to be government organizations in order to get people's information for their illegal activities (Ministry of Economic Affairs R.O.C., 2007).

#### **Data Collection**

The survey was conducted between December 20<sup>th</sup> of 2006 and January 10<sup>th</sup> of 2007. The survey location in Taipei City was on Zhongxiao E. Rd. The reason for choosing this location was because Zhongxiao E. Rd. is one of the busiest streets in Taipei city. Along this street there are five department stores, several subway stations, several five-star hotels, one university, hundreds of shops and restaurants, and countless businesses (Wikipedia, 2007b). The survey location in Penghu was on Jhongyang Street, Magong City. This street is the busiest street in Penghu County, with many tourism

related activities and businesses such as traditional souvenir shops, restaurants, hotels, and snack shops. The researcher approached the people who were walking on the street and people who were working in shops and asked for their participation in this study. The researcher explained to people the reason they should participate in this study and how they could participate. Participants received a survey questionnaire right after the researcher explained the purpose of the study. The total number of surveys collected from Makung City was 311, and the total number of surveys collected from Taipei City was 292. After filtering out surveys with missing data, 211 survey questionnaires from Makung City were valid, and 242 survey questionnaires from Taipei City were valid. The response rate was 43.7% from Makung City in which 311 out of 712 people willing to participate the survey and 33.1% from Taipei City in which 211 out of 638 people willing to participate the survey.

# Survey Instrument

Survey questions were designed based on a review of previous studies on residents' perceptions regarding gaming and tourism development (Brown, Roseman and Ham, 2003; Carmichael, Peppard and Boudreau, 1996; Deccio and Baloglu, 2002; Hsu, 2000; Korça, 1998; Kwan and Mccartney, 2005; Perdue et al., 1995; Spears and Boger, 2002; Stitt et al., 2000; Stitt et al., 2005). Roehl (1994) stated that perceptions of residents from gaming communities are similar to perceptions of residents from mass tourism communities. Thus, for this study, considering the impacts found in previous tourism studies is as important as considering the impacts found in previous gaming studies. A

pretest was conducted in Taipei City to verify the content validity of the instrument. Some modifications were made to fit the situation of this study.

The questionnaire that shows in Appendix B contains three sets of questions. The first part has three questions that focus on participants' experiences with casino gaming and their recognition of the Taiwanese Government's Outlying Island Development Act.

The second part of the questionnaire assesses residents' perceptions regarding benefits and costs that are attached to gaming and their opinions on supporting legalized gaming in Penghu Island. A 5-point scale (with 1 = strongly negative, 2 = negative, 3 = neutral, 4 = positive, and 5 = strongly positive) was used to identify residents' perceptions about benefits and costs. Benefit and cost impacts include the economy, crime rate, volume of visitors, job opportunities, city development, natural environment, pollution, education, transportation, life quality, prostitution, and reducing seasonality. A Yes/No question was included to distinguish residents' attitudes on supporting or not supporting legalized gaming.

Finally, the third part of questionnaire assessed residents' socio and demographic information, including gender, age, location of residency, education level, income level, occupation, and political party affiliation.

# Method of Data Analysis

In the data analysis process of this research, the original data from survey questionnaires were input into an SPSS 14.0 database. Then data was filtered to fit my research. The filtering process was used to eliminate surveys with missing data; only surveys with complete data were selected.

After the data was filtered, the independent-samples *t* test and the One-Way ANOVA test were used to examine the two main research questions. The first step in the independent-samples *t* test and ANOVA analysis was to find any significant differences in residents' opinions about supporting legalized gaming in Penghu between Penghu Island and Taiwan Main Island and among different location, social, and demographic groups. The second step of the independent-samples *t* test and ANOVA analysis was to assess any significant differences in residents' perceptions among those groups that have significantly different opinions about supporting gaming.

# **CHAPTER 4**

#### FINDINGS AND ANALYSIS

This chapter exhibits findings from the data analysis to illustrate Taiwanese residents' opinions regarding support of legalized gaming in Penghu Island between residents in Penghu County and residents on Taiwan Main Island. In addition, the analysis reviews sociodemographic groups that have shown different attitudes toward legalized gaming on Penghu Island. A discussion on what benefits and costs those sociodemographic groups are concerned about, and an examination of whether this study confirms or differs from the results of previous studies, is included in this chapter.

# Findings from the Survey

Findings About the Support of Legalized Gaming by Location

The results for the first research question are displayed in Table 3. Table 3 shows that 72.6% of the residents in Penghu County and 64.9% of the residents on Taiwan Main Island support legalized gaming in Penghu.

Table 4 shows that Penghu Island has a mean score of 1.73, and Taiwan Main Island has a mean score of 1.65 (1 = no, 2 = yes).

Table 3
Support for Legalized Gaming by Location Groups

|                    | Support Count for Legalized Gaming |     |     |  |
|--------------------|------------------------------------|-----|-----|--|
| Location           | -                                  | Yes | No  |  |
| Penghu Island      |                                    | 153 | 58  |  |
| Taiwan Main Island |                                    | 157 | 85  |  |
|                    | Total                              | 310 | 143 |  |

According to an independent-samples t test of attitudes of different location groups toward support of legalized gaming (Table 4), the significance level is 0.08, which is greater than  $\alpha = 0.05$ ; thus there is not enough evidence to reject the null hypothesis that residents in Penghu Island and residents in Taiwan Main Island have the same opinions about supporting legalized gaming on Penghu Island.

Table 4
Support of Legalized Gaming by Location Groups

|                          | Location           | N   | M    | SD   | Sig. (2-tailed) |
|--------------------------|--------------------|-----|------|------|-----------------|
| Support legalized gaming | Penghu             | 211 | 1.73 | 0.45 | 0.08            |
|                          | Taiwan Main Island | 242 | 1.65 | 0.48 |                 |

*Note.* M score was based on participant's answer No = 1 and Yes = 2.

M = Mean Score; SD = Standard Deviation.

Because the analysis shows that the two locations have no statistically significant difference in their opinion of supporting legalized gaming and both locations have a mean score over 1.5, both residents in Penghu County and residents on Taiwan Main Island have an overall positive attitude toward supporting legalized gaming.

Findings About Support of Legalized Gaming Among Sociodemographic Groups

Table 5 shows residents' opinions about support of legalized gaming among different sociodemographic groups. Only groups that have shown significant differences in the attitudes of supporting legalized gaming are listed in Table 5 (See APPENDIX C for detail results). From the percentages shown in Table 5, it is easy to identify different sociodemographic groups' attitudes toward supporting legalized gaming.

According to the results of the independent-samples *t* test and the One-Way ANOVA test, groups that are set up by gender, experience with casino gaming (Attended Casino Gaming before), awareness of the Outlying Island Development Act (Development Act), age, and occupation are the groups that have shown significantly different attitudes toward supporting legalized gaming.

However, the age group and the occupation group should be eliminated from groups that have shown a significant difference in the attitude of supporting legalized gaming because the subgroup that includes ages 20 years and younger and the subgroup that includes occupations of precision production, craft, and repair do not have a large enough sample to represent each subgroup. There are only two persons in both the group of 20-year-olds and the group of occupation in precision production, craft, and repair area. Therefore, even if both subgroups show 100% support of legalized gaming, the results from those two subgroups should not be considered to be representative of the group.

Table 5

Taiwanese Residents' Opinions on Supporting Legalized Gaming by Sociodemographic

Groups

| ∕₀ on  |   |
|--------|---|
| ıpport | N   |
| 79.1   | 244   |
| 56     | 209   |
| 75.5   | 98  |
|        |   |
| 36.4   | 22  |
|        |   |
| 73.4   | 342   |
| 53.2   | 111   |
| 100    | 2   |
| 67.7   | 217   |
| 67.3   | 104   |
| 69.2   | 78  |
| 70.2   | 47  |
| 80     | 5   |
| 61.2   | 67  |
|        |   |
| 69     | 116   |
|        | 100<br>67.7<br>67.3<br>69.2<br>70.2<br>80<br>61.2 |

Table 5 (Continued)

Taiwanese Residents' Opinions on Supporting Legalized Gaming by Sociodemographic

Groups

| Occupation | Service                                    | 66.5 | 188 |
|------------|--|------|-----|
| •          | Farming, Forest, and Fishing               | 75.0 | 8   |
|            | Precision Production, Craft, and Repair*** | 100  | 2   |
|            | Operation, Fabrication, and General Labor  | 77.8 | 72  |

*Note*. Significant on supporting legalized gaming within the group by independent-samples t test and One-Way ANOVA test at  $\alpha = .05$ . \*\*\*p < .001.

Only groups that have shown significant differences in attitudes of supporting legalized gaming are listed.

As a result, only three sociodemographic groups have shown significant differences in attitudes toward supporting legalized gaming in this study: the group set up by gender, the group set up by gaming experience, and the group set up by awareness of the Outlying Island Development Act.

Among the sociodemographic groups mentioned previously that have shown significant differences in attitudes toward supporting casino gaming, the male group shows a strong positive attitude (79.1%), whereas the female group shows itself to be about 56% in support.

Comparing people who had a casino gaming experience and those who did not, the two groups show opposing attitudes toward legalized gaming. People who had a casino gaming experience support it by 75.5%, whereas people who did not have a casino

gaming experience only show a support rate of 36.4%. Comparing the group that was aware of the Outlying Island Development Act and the group that was not, the group that was aware of the Act shows a higher percentage in support of legalized gaming (73.4%) than the group that was not aware of the Act (53.2%).

Findings about Perceived Benefits and Costs among Sociodemographic Groups that have

Shown Different Attitudes Toward Supporting Legalized Gaming

According to the independent-samples *t* test and One-Way ANOVA test in the previous section, this study identifies groups classified by three social demographic features that have shown significant differences in attitudes toward supporting legalized gaming. These groups are classified by prior experience of participating in casino gaming, awareness of Outlying Island Development Act, and gender. Therefore, this section further investigates those three groups' perceptions toward benefits and costs of legalized gaming in order to understand the reasons behind the differences in their attitudes toward support of legalized gaming.

Groups Set Up by Prior Experience of Casino Gaming

Table 6 shows people who have prior experience of casino gaming and their perceptions of benefits and costs regarding legalized gaming. The results were extracted from people who had the experience of visiting any casino city around the world. People who did not have any experience of visiting a casino city did not have a chance to participate in any casino gaming activity. The results of the independent-samples *t* test are also shown in Table 6. The groups set up by experience of casino gaming have significantly different attitudes toward the impact of volume of visitors, job opportunities, natural environment, pollution, education, life quality, and reducing seasonality.

Table 6

Perceived Benefits and Costs by Groups based on Prior Gaming Experience

|                      | Drian Camina |    | · · · · · · · · · · · · · · · · · · · |        | Sig (2   |
|----------------------|--------------|----|---------------------------------------|--------|----------|
|                      | Prior Gaming |    |                                       |        | Sig. (2- |
|                      | Experience   | N  |                                       | SD     | tailed)  |
| Economy              | Yes          | 98 | 4.10                                  | 0.68   | .824     |
|                      | No           | 22 | 4.05                                  | 1.13   | .024     |
| Volume of visitors   | Yes          | 98 | 4.53                                  | 0.54   | 001**    |
|                      | No           | 22 | 4.00                                  | 0.98   | .001**   |
| Job opportunities    | Yes          | 98 | 4.41                                  | 0.67   | 006**    |
|                      | No           | 22 | 3.95 0.79                             | .006** |          |
| City development     | Yes          | 98 | 4.30                                  | 0.69   | 077      |
|                      | No           | 22 | 4.00                                  | 0.76   | .077     |
| Transportation       | Yes          | 98 | 4.12                                  | 0.85   | 071      |
|                      | No           | 22 | 3.77                                  | 0.61   | .071     |
| Reducing seasonality | Yes          | 98 | 4.02                                  | 0.98   | 02.4*    |
|                      | No           | 22 | 3.50                                  | 1.22   | .034*    |
| Life quality         | Yes          | 98 | 3.28                                  | 1.08   | 00244    |
|                      | No           | 22 | 2.50                                  | 0.86   | .002**   |
| Crime rate           | Yes          | 98 | 2.47                                  | 1.03   | 0.5.5    |
|                      | No           | 22 | 2.00                                  | 1.02   | .055     |
| Natural environment  | Yes          | 98 | 2.84                                  | 1.09   | 00244    |
|                      | No           | 22 | 2.05                                  | 1.05   | .002**   |

Table 6 (Continued)

Perceived Benefits and Costs by Groups based on Prior Gaming Experience

|              | Prior Gaming | Sig. (2- |      |      |         |
|--------------|--------------|----------|------|------|---------|
|              | Experience   | N        | M    | SD   | tailed) |
| Pollution    | Yes          | 98       | 2.44 | 0.91 | 2271    |
|              | No           | 22       | 1.95 | 1.17 | .035*   |
| Prostitution | Yes          | 98       | 2.19 | 1.04 |         |
|              | No           | 22       | 1.77 | 0.92 | .083    |
| Education    | Yes          | 98       | 3.10 | 1.08 |         |
|              | No           | 22       | 2.50 | 0.91 | .017*   |

*Note.* M = Mean Score; SD = Standard Deviation.

M score was based on 1= very negative to 5 = very positive

Significant differences between the group that had casino gaming experience and the group that did not have casino gaming experience by independent-samples t test at  $\alpha = .05$ . \*p< .05. \*p< .01.

The group that had a casino gaming experience shows a more positive attitude toward all impacts mentioned than the group that did not have a casino gaming experience. The impact on natural environment and pollution are the only two impacts that the group that had a casino gaming experience perceived negatively. On the other hand, the group that did not have a gaming experience shows negative perceptions toward the impact on natural environment, pollution, education, and life quality.

Both groups show a positive attitude toward the impact of volume of visitors, job opportunities, and reducing seasonality, but the group that had a casino gaming experience has a stronger positive attitude toward those three impacts than the group that did not have a casino gaming experience.

In addition, both groups have a negative attitude toward the impact on the natural environment and pollution, but the group that did not have a casino gaming experience has a more negative attitude toward those two impacts. Furthermore, both groups have opposing opinions about the impact on life quality. The group that had a casino gaming experience shows a positive attitude (M = 3.28), whereas the group that did not have a casino gaming experience shows a negative attitude (M = 2.50) toward the impact. *Groups Set Up by Awareness of the Outlying Island Development Act* 

Table 7 shows the perceived benefits and costs from people who were in the groups set up by awareness of the Outlying Island Development Act.

The result of the independent-samples *t* test in Table 7 shows that groups set up by awareness of the Outlying Island Development Act have significantly different attitudes toward the impact on economy, crime rate, volume of visitors, job opportunities, natural environment, city development, education, life quality, and seasonality.

Based on Table 7, the group that was aware of the Outlying Island Development Act and the group that was not aware of the Act both have positive attitudes toward the impact on crime rate, natural environment, and education.

Table 7

Perceived Benefits and Costs by Groups based on Awareness of Outlying Island

Development Act

|                    |                 |     |      |      | <del></del> |
|--------------------|-----------------|-----|------|------|-------------|
|                    | Aware of        |     |      |      | Sig. (2-    |
|                    | Development Act | N   | М    | SD   | tailed)     |
| Economy            | Yes             | 342 | 4.21 | 0.74 | .001**      |
|                    | No              | 111 | 3.94 | 0.90 | .001        |
| Volume of visitors | Yes             | 342 | 4.43 | 0.67 | 022*        |
|                    | No              | 111 | 4.27 | 0.66 | .032*       |
| Job opportunities  | Yes             | 342 | 4.35 | 0.68 | 000444      |
|                    | No              | 111 | 3.99 | 0.84 | .000***     |
| City development   | Yes             | 342 | 4.16 | 0.78 | 000444      |
|                    | No              | 111 | 3.79 | 0.85 | .000***     |
| Transportation     | Yes             | 342 | 4.03 | 0.77 | 100         |
|                    | No              | 111 | 3.90 | 0.85 | .128        |
| Reduce seasonality | Yes             | 342 | 3.86 | 0.99 |             |
|                    | No              | 111 | 3.32 | 1.24 | .000***     |
| Life quality       | Yes             | 342 | 3.12 | 1.11 | 001**       |
|                    | No              | 111 | 2.69 | 1.11 | .001**      |
| Crime rate         | Yes             | 342 | 2.53 | 1.08 | 0414        |
|                    | No              | 111 | 2.29 | 1.06 | .041*       |
|                    |                 |     |      |      |             |

Table 7 (Continued)

Perceived Benefits and Costs by Groups based on Awareness of Outlying Island

Development Act

| · · · · · · · · · · · · · · · · · · · | Heard of        |     |      |      |         |  |
|---------------------------------------|-----------------|-----|------|------|---------|--|
|                                       | Development Act | N   | M    | SD   | tailed) |  |
| Natural environment                   | Yes             | 342 | 2.63 | 1.18 | 0.42*   |  |
|                                       | No              | 111 | 2.39 | 1.07 | .043*   |  |
| Pollution                             | Yes             | 342 | 2.10 | 0.91 |         |  |
|                                       | No              | 111 | 2.13 | 0.93 | .767    |  |
| Prostitution                          | Yes             | 342 | 2.00 | 0.93 |         |  |
|                                       | No              | 111 | 1.92 | 0.95 | .425    |  |
| Education                             | Yes             | 342 | 2.60 | 1.08 |         |  |
|                                       | No              | 111 | 2.37 | 0.96 | .035*   |  |

*Note.* M = Mean Score; SD = Standard Deviation.

Significant differences between the group that was aware of the Outlying Island Development Act and the group that was not aware of the Act by independent-samples t test at  $\alpha = .05$ . \*p < .05. \*\*p < .01. \*\*\*p < .001

However, the group that was not aware of the Act shows a more negative attitude toward those impacts than the group that was aware of the Act. In addition, both groups show a positive attitude toward the impact on economy, volume of visitors, job opportunities, city development, and reducing seasonality. The group that was aware of the Act shows a more positive attitude toward those impacts than the group that was not

aware of the Act. Furthermore, the two groups show contrasting attitudes toward the impact on life quality. The group that was aware of the Act shows a positive attitude (M = 3.12) toward life quality, whereas the group that was not aware of the Act shows a negative attitude (M = 2.69) toward life quality.

Groups Set Up by Gender

Table 8 shows people's perceptions of the benefits and costs from groups by gender. According to the independent-samples t test, the two gender groups have significantly different perceptions toward the impact on crime rate, job opportunities, city development, natural environment, pollution, education, life quality, prostitution, and reducing seasonality. Of these impacts, both males and females have a negative attitude toward the impact on crime rate, the natural environment, pollution, education, and prostitution. The females show a more negative attitude toward those impacts than the males. In addition, both groups show a positive attitude toward the impact on job opportunities, city development, and reducing seasonality. Although the two groups have a common attitude toward these impacts, the males show a more positive attitude than the females. Furthermore, the males and females have opposing views about the impact on life quality. The females show a negative attitude (M = 2.84), and the males show a positive attitude (M = 3.16) toward this impact.

Table 8

Perceived Benefits and Costs by Groups based on Gender

| Volume of visitors male female  Job opportunities male female  City development male female  Transportation male female  Reduce seasonality male female  Life quality male female  Crime rate male |     |      |      |                 |  |
|--|-----|------|------|-----------------|--|
| Volume of visitors male female  Job opportunities male female  City development male female  Transportation male female  Reduce seasonality male female  Crime rate male                           | N   | M    | SD   | Sig. (2-tailed) |  |
| Volume of visitors male female  Job opportunities male female  City development male female  Transportation male female  Reduce seasonality male female  Crime rate male                           | 244 | 4.19 | 0.76 |                 |  |
| female  Job opportunities  male female  City development  male female  Transportation  male female  Reduce seasonality  male female  Crime rate  male  male  | 209 | 4.09 | 0.82 | .190            |  |
| Job opportunities male female  City development male female  Transportation male female  Reduce seasonality male female  Crime rate male   | 244 | 4.41 | 0.65 | 464             |  |
| City development male female  Transportation male female Reduce seasonality male female  Crime rate male   | 209 | 4.36 | 0.69 | .464            |  |
| City development male female  Transportation male female  Reduce seasonality male  female  Life quality male  female  Crime rate male  | 244 | 4.34 | 0.70 | 01/4            |  |
| female  Transportation male female  Reduce seasonality male female  Life quality male female  Crime rate male  | 209 | 4.17 | 0.77 | .016*           |  |
| Transportation male female  Reduce seasonality male female  Life quality male female  Crime rate male  | 244 | 4.16 | 0.82 | 01.4*           |  |
| Reduce seasonality male female Life quality male female Crime rate male  | 209 | 3.97 | 0.80 | .014*           |  |
| Reduce seasonality male female  Life quality male female  Crime rate male  | 244 | 4.06 | 0.76 | .073            |  |
| female  Life quality male  female  Crime rate male   | 209 | 3.93 | 0.81 | .073            |  |
| Life quality male female  Crime rate male  | 244 | 3.88 | 1.03 | 002**           |  |
| female Crime rate male   | 209 | 3.56 | 1.12 | .002**          |  |
| Crime rate male  | 244 | 3.16 | 1.14 | 0.00            |  |
|  | 209 | 2.84 | 1.09 | .003**          |  |
| female   | 244 | 2.66 | 1.08 | 000***          |  |
|  | 209 | 2.25 | 1.04 | .000***         |  |
| Natural environment male   | 244 | 2.75 | 1.21 | .000***         |  |
| female   | 209 | 2.36 | 1.06 | .000***         |  |

Table 8 (Continued)

Perceived Benefits and Costs by Groups based on Gender

|              | •      |                    |       |      |                 |  |
|--------------|--------|--------------------|-------|------|-----------------|--|
|              | Gender | N                  | M     | SD   | Sig. (2-tailed) |  |
| Pollution    | male   | 244                | 2.23  | 0.97 | 00044           |  |
|              | female | 209                | 1.96  | 0.82 | .002**          |  |
| Prostitution | male   | 244                | 2.08  | 1.00 |                 |  |
|              | female | 209                | 1.87  | 0.83 | .014*           |  |
| Education    | male   | 244                | 2.64  | 1.08 | 0.2 64          |  |
|              | female | nale 209 2.43 1.03 | .036* |      |                 |  |

*Note.* M = Mean Score; SD = Standard Deviation.

Significant differences between the male group and the female group by independent-samples t test at  $\alpha = .05$ . \*p < .05. \*\*p < .01. \*\*\*p < .001.

# Analysis of the Findings

Analysis of Supporting Legalized Gaming Between Locations

According to the independent-samples *t* test, people from Penghu County and Taiwan Main Island have no significant differences in attitude regarding support of legalized gaming. Therefore, the results of this study do not support the Belisle and Hoy (1980) study that shows residents who live close to a tourism area have a more positive attitude toward tourism development. Nor do the results support Korça's (1998) or Lin's (1999) studies that state residents' support of tourism development will increase in association with the increase in distance between a residency area and a tourism area. The results of

this study indicate that the location has no statistically significant effect on the attitude toward supporting legalized gaming. A possible reason that residents in Taiwan Main Island have the same attitude toward support of legalized gaming is likely due to the fact that residents in Taiwan Main Island are relatively more aware of the Outlying Island Development Act, although they are not the direct beneficiary of legalized gaming in Penghu. Table 9 shows that residents of Taiwan Main Island were significantly more aware of the Act.

Table 9

Awareness of Outlying Island Development Act by Location

|          |                    | Aware o | f the Act |                 |  |
|----------|--------------------|---------|-----------|-----------------|--|
|          |                    | No      | Yes       | Sig. (2-tailed) |  |
| Location | Penghu Island      | 90%     | 10%       | 000444          |  |
|          | Taiwan Main Island | 62.80%  | 37.20%    | .000***         |  |

Note. Significant difference between locations by independent-samples t test at  $\alpha = .05$ .

\*\*\*p< .001

The Outlying Island Development Act (Laws and Regulations Database of The Republic of China, 2002, Article 1) states that the Act is "enacted to promote exploitation and construction of isolated islands, complete industrial development, maintain the natural ecology, preserve cultural characteristics, improve life quality, and increase the residents' welfare." The Taiwanese government is considering legalizing gaming on Penghu Island to improve the Penghu community by increasing job opportunities and

promoting all-season tourism. A good awareness of the Act should help people better perceive the benefits obtained through legalized gaming as well as the government's intent to develop the community. A lower awareness of the Act may cause people to fail to understand the Government's goal to use legalized gaming as leverage to stimulate local economy and social development, and thus underestimate the potential benefits associated with casino gaming.

Based on our survey results (see Table 9), 10% of the residents on Penghu Island are aware of the Outlying Island Development Act, whereas 37.2% of the residents on Taiwan Main Island are aware of the Act. This significant difference of the awareness of the Outlying Island Development Act between residents on Penghu Island and residents on Taiwan Main Island may cause residents in Taiwan to be more aware of the potential benefits on job opportunities and possible reduction in seasonality that are brought about by legalized gaming. Therefore, awareness of the Outlying Island Development Act may have caused the residents in Taiwan Main Island to have the same attitude toward supporting legalized gaming as residents in Penghu Island regardless of its location further from the tourism area.

From an economic standpoint, the distance from the travel destination is positively related to the trip cost. The further distance a person needs to travel, the more money a person needs to spend. It is also possible that residents of Taiwan Main Island think the trip costs to Penghu Island are the same as the trip costs to other tourism destinations in Taiwan Main Island. Therefore, the residents' perceptions of trip cost may cause residents in Taiwan Main Island to have the same attitudes as residents in Penghu Island toward support of legalized gaming in Penghu Island. However, whether the trip cost will

affect residents' attitudes toward support of legalized gaming in this case is not tested. Future research on this topic is necessary.

Significantly Different Attitudes Toward Support of Legalized Gaming

As discussed earlier, this study has found that sociodemographic subgroups by gender, prior experience in participating casino gaming, and awareness of the Outlying Island Development Act have significant differences in their attitudes toward support of legalized gaming. The following sections discuss each sociodemographic group regarding

Analysis of Benefits and Costs Among Demographic Groups that Have Shown

Groups Set Up by Gender

its perceived benefits and costs.

Findings from this study support those of Carmichael, Peppard, and Boudreau (1996) that stated that gender is one of the important variables that will explain residents' negative attitudes toward casino gaming. The results also partially confirm Milman and Pizam's (1988) study, which states that most sociodemographic characteristics do not affect residents' opinions about support of legalized gaming, with the exception of gender and residents' occupations. My results indicate that females do not show a strong desire to support legalized gaming, whereas males show a strong desire to support it. Females have a more negative perception of the impact on crime rate, the natural environment, pollution, life quality, and prostitution than do males. According to Burt and Estep (1981), Gustafson (1998), LaGrange and Ferraro (1989), and Stanko (1995), women express a higher level of fear of physical harm by criminal violence, especially rape and other sexual assaults. The fear of those sexual assaults may also influence women's

perceptions of other risks. Warr (1985) stated that women's fear of sexual violence will cause them to worry about several other less serious criminal activities.

Mohai (1992) mentioned that women are concerned about the natural environment more than men. Therefore, possible damage to the natural environment that might be brought about by casino gaming is undesirable to females. Undoubtedly, although females are concerned about preserving the natural environment, they will also be concerned about the probable pollution that might be caused by tourists. As a result, when the government decides to build a casino in the community, the female group will perceive the possible consequences on overall life quality negatively.

When a casino becomes an attraction to tourists, it may aggravate the existing prostitution problem of that city, and this sometimes includes trafficking. Examples are prostitution in Las Vegas and Macau. Both locations have problems associated with prostitution. According to Leco (2006), thousands of visitors to Las Vegas are robbed, cheated, or assaulted by dishonest prostitutes. In Macau, prostitution has become another form of human trafficking and modern-day slavery (U.S. Department of State, 2006). According to the U.S. Department of State, organized crime includes bringing women to Macau from Russia, Eastern Europe, Thailand, and Vietnam. Some of these women are victims of trafficking. Moreover, prostitution is a form of gender discrimination. Hughes and Roche (1999) pointed out that prostitution not only restricts women's freedom and their citizen's rights but also regards women as second-class citizens. Based on these previous studies, it is easy to understand why women have a more negative attitude toward those impacts.

Both genders show positive attitudes toward the impact on job opportunities, city development, and reducing seasonality. However, the findings still show that the female group has significantly lower positive perceptions about those benefits in comparison with the male group. Their relatively lower positive perceptions about potential gaming benefits might be the reason that the female group's support of legalizing casino gaming is not as strong as that of the male group.

Groups Set Up by Different Experience in Participating in Casino Gaming

Results in Table 6 shows that people who have experience with casino gaming report a positive attitude toward the impact on economy, volume of visitors, job opportunities, city development, education, transportation, life quality, and reducing seasonality.

Hsu (1998) stated that people who have visited a casino will often have a more positive perception about the impacts of casino development. Stitt, Nichols, and Giacopassi (2005) also mentioned that gamblers who receive entertainment benefits from casinos will perceive a less negative influence from casino development. Although this study does not show the frequency of people visiting a casino, this study supports Hsu's (1998) study by showing that people with casino gaming experience have a strong positive attitude toward legalized gaming. There might be other reasons that people who have experience participating in casino gaming show a positive perception toward impacts mentioned previously. Because the Taiwanese people like to gamble in Las Vegas and Macau, as mentioned in chapter 2, those who have experience with casino gaming might have actually seen benefits regarding the impact on economy, volume of visitors, job opportunities, city development and transportation in Las Vegas or Macau. Because of the perceived benefits that accompanied their gaming experiences at the

casino they visited, they may consequently have positive attitudes about the impact of casino gaming.

Most of the people from both groups, those with and without casino gaming experience, have a negative attitude toward the impact on crime rate, natural environment, pollution, and prostitution. People without casino gaming experience show a more negative attitude toward these impacts. This result states that people who have no casino gaming experience show that they are short on confidence in the government's ability to eliminate crime, preserve and control the natural environment, and regulate the prostitution problem.

Finally, both groups have opposing attitudes toward the impact on life quality. According to Roehl (1999), quality of life is correlated with environmental amenities. People who have no casino gaming experience have more negative thoughts about environmental factors that include crime rate, natural environment, pollution, and prostitution. As a result, people who have no casino gaming experience have negative perceptions of the impact on life quality, whereas people who have casino gaming experience perceive the same impact positively.

Groups Set Up by Awareness of the Outlying Island Development Act

According to the independent-samples *t* test shown in Table 7, the group that was aware of the Outlying Island Development Act and the group that was not aware of the Act have significantly different perceptions of many of the impacts of legalized casino gaming. The group that was aware of the Act shows a more positive or a less negative perception of those impacts than the group that was not aware of the Act (see Table 7). The Outlying Island Development Act includes not only tourism development but also

the development of education, culture, transportation, police force, medicine, and social welfare. Furthermore, the Act also provides regulation of natural disaster control, overdevelopment control, and other social costs control (Penghu County Government, 2002). Those social cost-control ordinances can help reduce and ease residents' negative perceptions of legalized gaming. Consequently, people who are aware of the Act believe that government has a well-prepared project to increase overall community welfare and have a positive attitude toward benefits and costs that accompany legalized gaming. *Cross-Comparison Among Three Groups* 

Table 10 shows the comparison of perceived benefits and costs among the group set up by gender, the group set up by casino gaming experience, and the group set up by awareness of the Outlying Island Development Act. Subgroups within the three groups that are shown in Table 10 indicate significantly different perceptions toward the impact on job opportunities, natural environment, education, life quality, and reducing seasonality.

With regard to the impact on the economy, only the group set up by awareness of the Outlying Island Development Act shows a different perception between its subgroups.

Therefore, the results show that awareness of the Outlying Island Development Act can reinforce people's positive perceptions about the impact on the economy.

When looking at each impact individually that is mentioned between the groups,

Table 11 shows the results of this study that identify a group in which females without

casino gaming experience and no awareness of the Outlying Island Development Act

perceived the impacts either negatively or less positively. As a result, this specific group

might have the ability to affect populations' attitudes about supporting legalized gaming.

Table 10

Perceptions of the Benefits and Costs among Groups That Have Shown Significant

Differences in Attitude toward Support for Gaming

|                    |           | By Prior casino   | By Awareness of Outlying |
|--------------------|-----------|-------------------|--------------------------|
| Benefits & Costs   | By Gender | gaming experience | Island Development Act   |
| Economy            |           |                   | X                        |
| Crime Rate         | X         |                   | X                        |
| Volume of Visitors |           | X                 | X                        |
| Job Opportunities* | X         | X                 | X                        |
| City Development   | X         |                   | X                        |
| Natural            | X         | X                 | X                        |
| environment*       |           |                   |                          |
| Pollution          | X         | X                 |                          |
| Education*         | X         | X                 | X                        |
| Transportation     |           |                   |                          |
| Life Quality*      | X         | X                 | X                        |
| Prostitution       | X         |                   |                          |
| Reducing           | X         | X                 | X                        |
| Seasonality*       |           |                   |                          |

*Note.* \*Significant differences in all three sociodemographic groups at  $\alpha = .05$  by Independent-samples t test

X = Sociodemographic group has significant difference regarding the impact.

Table 11

Comparison of Groups That Have Shown Significantly Different Perceptions Regarding

Benefits and Costs

|                   |               |        | Groups of Different Background |                  |  |
|-------------------|---------------|--------|--------------------------------|------------------|--|
|                   |               |        | Casino gaming                  | Awareness of the |  |
| Benefits & Costs  | Status        | Gender | experience                     | Act              |  |
| Job opportunities | More positive | Male   | With experience                | Aware of the Act |  |
|                   | Less positive | Female | W/out experience               | Unaware of Act   |  |
| Natural           | More negative | Female | W/out experience               | Unaware of Act   |  |
| environment       |               |        |                                |                  |  |
|                   | Less negative | Male   | With experience                | Aware of the Act |  |
| Education         | More negative | Female | W/out experience               | Unaware of Act   |  |
|                   | Less negative | Male   | With experience                | Aware of the Act |  |
| Life quality      | Positive      | Male   | With experience                | Aware of the Act |  |
|                   | Negative      | Female | W/out experience               | Unaware of Act   |  |
| Reducing          | More positive | Male   | With experience                | Aware of the Act |  |
| seasonality       |               |        |                                |                  |  |
|                   | Less positive | Female | W/out experience               | Unaware of Act   |  |

#### CHAPTER 5

#### CONCLUSIONS AND RECOMMENDATIONS

With Singapore deciding to legalize casino gaming, U. S. gaming operators investing in Macau, and China opening up its travel policy, the Asian Pacific Region became the next recreation and gaming center in the world. In 2006, Macau's gaming revenue surpassed that of Las Vegas for the first time (Stutz, 2007). Obviously, governments accept casino gaming because they think the rapid improvement in gaming revenue can boost community development. Also, the potential market in the Asian Pacific Region attracts more casino operators to invest in and build more casino resorts in the region.

The Taiwanese Government has been talking about legalized gaming on Penghu

Island for over 20 years. Even now, opinions in support of and against the issue still exist in the Taiwanese Government. The literature discussed the possibility of legalized gaming on Penghu Island by mentioning the casino models in other countries, the effect of tourism development, and perceptions from community leaders and hotel executives, but it rarely touched on the perceptions of local residents. This study analyzed the benefits and costs attached to legalized gaming, as perceived by Taiwanese residents from different sociodemographic perspectives, and provided clear target groups for the Taiwanese Government and the gaming operators to reconsider their promotional strategies once the Taiwanese Government decides to legalize casino gaming in Penghu Island.

#### Conclusions

The findings from the survey indicate that residents' opinions on supporting legalized gaming in Penghu County were not affected by the distances between Penghu County, the casino host community, and Taiwan Main Island, the non casino host community.

Residents from Penghu County and Taiwan Main Island have no significant differences in their opinions about supporting legalized gaming, and the residents from both locations show positive attitudes toward legalized gaming (see Table 4).

This study indicates that groups set up by gender, by casino gaming experience, and by awareness of the Outlying Island Development Act are the three sociodemographic groups that have shown significantly different opinions about supporting legalized gaming (see Table 5). In comparing the three groups, results show that the subgroups within those three groups have shown significantly different outlooks on the impact on job opportunities, natural environment, education, life quality, and reducing seasonality (see Table 10).

Finally, based on the information from the data analysis, this study identifies the specific group of females with no casino gaming experience and no awareness of the Outlying Island Development Act as perceiving the benefits and costs of legalized gaming either negatively or less positively (see Table 11).

Recommendations to the Taiwanese Government and Gaming Proponents

This study provides some analysis that would enable the Taiwanese Government and gaming proponents to better understand different sociodemographic groups' opinions about legalized casino gaming and perceptions regarding the benefits and costs of casino

gaming. The analysis should help the Government promote legalized gaming as a means of stimulating Penghu County's economy and tourism development once it is approved by the legislature. The Taiwanese Government should revise old ordinances or create new regulations for the Outlying Island Development Act thereby making the Act more beneficial to local people when the casino is legalized. Taiwanese lawmakers can consider requiring future casino operators to support local education and fund city development. Penghu local government should also use gaming taxes to improve residents' life quality. According to Stratton (2007), residents in Nevada do not need to pay income tax for state government because gaming operators already contribute about half the state's tax revenues. With regard to environmental protection, the Taiwanese Government may require future casino operators to build green hotel resorts instead of the traditional hotel. Green Hotels Association (2005) stated that "green' hotels are properties whose managers are eager to institute programs that save water, save energy and reduce solid waste" (para. 1). Meanwhile, it is necessary to educate the community in order to improve their awareness of the Act, which may result in residents having a more positive perception of the benefits and costs of legalized gaming.

In addition, this study shows that people who have prior casino gaming experience will be more likely to have positive expectations about the impact of casino gaming. With more casinos opening to the public in Macau and other Asia Pacific regions, more and more Taiwanese will travel to gaming destinations and become experienced with casino gaming. Their positive perceptions of the benefits of legalized casino gaming are likely to increase and perceptions about its negative effects may weaken over time. Support for legalizing gaming may thus grow stronger.

The growing trend of legalizing gaming in the Asia Pacific region may provide a good opportunity for the Taiwanese Government to capitalize on the growing support to legalize casino gaming on the island earlier rather than later in order to realize economic and other types of benefits. According to Korça (1998), the most positive impacts of tourism development are providing more job opportunities, preserving an historical site, and providing valuable education. Because the three groups previously mentioned have significantly different thoughts about the impact on job opportunities and education, the Taiwanese Government, the Penghu Government, and the proponents of legalized gaming should consider making people more aware of how legalized gaming will increase job opportunities by showing examples of other gaming destinations. They should make people aware of how legalized gaming can help the Penghu Government provide funds for increasing the quality of education for the local people and for the subgroups that have a negative attitude toward those impacts.

Finally, this study shows that the female group has a more negative opinion about those impacts and is more concerned about crimes associated with casino gaming.

Previous studies have shown that women have a higher level of fear of physical harm by criminal violence, especially rape and other sexual assaults (Burt and Estep, 1981;

Gustafson, 1998; LaGrange and Ferraro, 1989; Stanko, 1995). The gaming proponents can educate females on how legalized gaming can be regulated to minimize gaming related crimes, if any. Women's negative perceptions can be decreased by making females aware of regulation of legalized gaming and revising existing laws to enhance females' safety. According to Laws and Regulations Database of Republic of China (2002), one of the objectives of the Taiwanese Government in developing Penghu and

other isolated islands is the construction of police administration. Making females aware of this objective may decrease their negative perception of legalized gaming. In addition, gaming proponents can educate the female group on how legalized gaming can provide job opportunities for women, as well as reduce seasonality in the service and tourism industries by providing examples from other casino destinations around the world.

#### Recommendations for Future Research

Because this study is a one-shot only study and the data was collected before passing the law and building the casino, future research can focus on how residents' perceptions change over time and compare residents' perceptions before and after the gaming law is passed and the casino is built. Hsu (2000) mentioned that the impacts of casino or tourism development are unique to individual communities; therefore, future research can also compare different countries in the Asia Pacific Region in order to determine whether people from different cultures in the same region have different perceptions about the benefits and costs of legalized gaming. In addition, future researchers can include in their sample residents from other major cities on Taiwan Main Island, people of different religion, and people with different marital statuses in order to increase the variety of the sample and the accuracy of the results. Furthermore, whether the expenditure of the trip, which relates to the distance from the tourism destination, will affect residents' opinions about supporting legalized gaming should also be examined to verify one of the assumptions that was mentioned in the previous section.

#### APPENDIX A



# Social/Behavioral IRB – Full Board Review Approval Notice

#### NOTICE TO ALL RESEARCHERS:

Please be aware that a protocol violation (e.g., failure to submit a modification for <u>any</u> change) of an IRB approved protocol may result in mandatory remedial education, additional audits, re-consenting subjects, researcher probation suspension of any research protocol at issue, suspension of additional existing research protocols, invalidation of all research conducted under the research protocol at issue, and further appropriate consequences as determined by the IRB and the Institutional Officer.

DATE: November 16, 2006

TO: Dr. Zheng Gu, Management

FROM: Office for the Protection of Research Subjects

RE: Notification of IRB Action

Protocol Title: Benefits and Costs of Legalized Gaming in Penghu as Perceived by Taiwanese People

Protocol #: 0609-2083

This memorandum is notification that the project referenced above has been reviewed by the UNLV Social/Behavioral Institutional Review Board (IRB) as indicated in Federal regulatory statutes 45CFR46. The protocol has been reviewed and approved.

The protocol is approved for a period of one year from the date of IRB approval. The expiration date of this protocol is October 19, 2007. Work on the project may begin as soon as you receive written notification from the Office for the Protection of Research Subjects (OPRS).

#### PLEASE NOTE:

Attached to this approval notice is the **official Informed Consent/Assent (IC/IA) Form** for this study. The IC/IA contains an official approval stamp. Only copies of this official IC/IA form may be used when obtaining consent. Please keep the original for your records.

Should there be *any* change to the protocol, it will be necessary to submit a **Modification Form** through OPRS. No changes may be made to the existing protocol until modifications have been approved by the IRB.

Should the use of human subjects described in this protocol continue beyond October 19, 2007, it would be necessary to submit a **Continuing Review Request Form** 60 days before the expiration date.

If you have questions or require any assistance, please contact the Office for the Protection of Research Subjects at OPRSHumanSubjects@unlv.edu or call 895-2794.

# APPENDIX B

# SURVEY QUESTIONNAIRE

- 1) Have you ever visited any legalized casino? (Ex. Las Vegas' casino, Macau's casino, Atlantic City's casino...)
   □ Yes (If Yes, please answer Q 2)
   □ No (If NO, please skip Q 2)
- 2) Do you play any game when you visit the casino? Yes
- Have you every heard about "Outlying Islands Development Act" for Penghu Island?
   □ Yes
   □ No
- 4) In your opinion, how legalized casino gaming will affect Penghu's (Please circle one most applicable answer)

|                      | Strongly |          |         |          | Strongly |
|----------------------|----------|----------|---------|----------|----------|
|                      | Negative | Negative | Neutral | Positive | Postive  |
|                      |          |          |         |          |          |
| Economy              | 1        | 2        | 3       | 4        | 5        |
| Crime rate           | 1        | 2        | 3       | 4        | 5        |
| Volume of visitors   | 1        | 2        | 3       | 4        | 5        |
| Job opportunity      | 1        | 2        | 3       | 4        | 5        |
| City development     | 1        | 2        | 3       | 4        | 5        |
| Nature Environment   | 1        | 2        | 3       | 4        | 5        |
| Pollution            | 1        | 2        | 3       | 4        | 5        |
| Education            | 1        | 2        | 3       | 4        | 5        |
| Transportation       | 1        | 2        | 3       | 4        | 5        |
| Life Quality         | 1        | 2        | 3       | 4        | 5        |
| Prostitution problem | 1        | 2        | 3       | 4        | 5        |

| 5)  | high<br>the s | ne situation right now, tourism industry in Penghu has severe seasonality between a season and low season. In your opinion, how casino gaming would help reduce seasonality of tourism in Penghu?  Very negative (strongly increase the seasonality)  Negative (increase the seasonality)  Neutral  Positive (can reduce some of the seasonality)  Very positive (can reduce the seasonality effectively) |
|-----|---------------|---|
| 6)  |               | you support legalized gaming in Penghu?   |
|     |               | Yes<br>No   |
| 7)  | Wha           | nt is your gender Male  |
|     |               | Female  |
| 8)  |               | hat year did you born?  |
|     | I wa          | s born in 19  |
| 9)  |               | at is your age?   |
|     |               | 20 years old and under  |
|     |               | 21 years old to 30 years old  |
|     |               | 31 years old to 40 years old  |
|     |               | 41 years old to 50 years old  |
|     |               | 51 years old to 60 years old  |
|     |               | 61 years old and older  |
| 10) | In w          | what county do you live?  |
| 11) | ) Wha         | at is your Education level?   |
|     |               | Below high school   |
|     |               | High school graduate  |
|     |               | Some college  |
|     |               | Bachelor degree   |
|     |               | Master degree or higher   |
| 12) | Wha           | at is your income level?  |
|     |               | Below NT \$20,000   |
|     |               | NT \$20,001 to \$30,000   |
|     |               | NT \$30,001 to \$40,000   |
|     |               | NT \$40,001 to \$50,000   |
|     |               | NT \$50 001 and above   |

| 14) Which political party do you belong to or support?   |
|--|
| □ Kuomintang   |
| □ Democratic progressive   |
| □ People-first   |
| □ Other  |
| 15) Any other comment about legalized gaming/casino in Penghu Island. (Please write it down if any.) Thank you again for your participation and have a nice day! |

13) Your occupation

# APPENDIX C

# ATTITUDE ON SUPPORTING LEGALIZED GAMING BY SOCIODEMOGRAPHIC **GROUPS**

Taiwanese Residents' Attitude on Supporting Legalized Gaming by Sociodemographic

Group and Background

|   |   |            | % on         |
|---|---|------------|--------------|
|   | Sociodemographic groups & backgrounds                         | N          | Support      |
| Location  | Penghu Island   | 211        | 72.5         |
|   | Taiwan Main Island  | 242        | 64.9         |
| Gender  | Male  | 244        | 79.1         |
|   | Female  | 209        | 56.0         |
| Experience Visiting a casino city Participated in casino gaming | Visited casino city before Did not visit casino city before   | 120<br>333 | 68.3<br>68.5 |
|   | Had experience attending gaming in casino                     | 98         | 75.5         |
|   | Didn't have experience of casino gaming                       | 22         | 36.4         |
| Heard about<br>Development<br>Act                               | Heard about Development Act Didn't hear about Development Act | 342<br>111 | 73.4<br>53.2 |
| Age   | 20 yrs & younger  | 2          | 100.0        |
|   | 21 to 30 yrs  | 214        | 67.7         |
|   | 31 to 40 yrs  | 104        | 67.3         |
|   | 41 to 50 yrs  | 78         | 69.2         |
|   | 51 to 60 yrs  | 47         | 70.2         |
| Educ. Level   | 61 yrs & older<br>Under high school                           | 5<br>26    | 80.0<br>80.8 |
|   | High school graduate  | 150        | 72.7         |
|   | Some college  | 133        | 63.2         |
|   | Bachelor  | 131        | 64.9         |

Taiwanese Residents' Attitude on Supporting Legalized Gaming by Sociodemographic Group and Background (continued)

|                            | 8 / /  |     |       |
|----------------------------|--|-----|-------|
|                            | Master or above  | 13  | 84.6  |
| Income Level               | \$20,000 NTD & under   | 28  | 78.6  |
|                            | \$20,001 to 30,000 NTD   | 198 | 63.6  |
| Occupation Political Party | \$30,001 to 40,000 NTD   | 89  | 68.5  |
|                            | \$40,001 to 50,000 NTD   | 48  | 77.1  |
|                            | \$50,001 NTD & above   | 90  | 71.1  |
|                            | Managerial and Professional Specialty Technical, Sales, and Administrative | 67  | 61.2  |
|                            | Support  | 116 | 69.0  |
|                            | Service  | 188 | 66.5  |
|                            | Farming, Forest, and Fishing   | 8   | 75.0  |
|                            | Precision Production, Craft, and Repair                                    | 2   | 100.0 |
|                            | Operation, Fabrication, and General Labor                                  | 72  | 77.8  |
|                            | Republic   | 175 | 71.4  |
|                            | Democratic   | 49  | 73.5  |
|                            | People First   | 20  | 70.0  |
|                            | Other  | 453 | 64.6  |

## **REFERENCES**

- Ahmed, S. A. (1986). Understanding residents' reaction to tourism marketing strategies. *Journal of Travel Research*, 25(2), 13-18.
- Allen, L. R., Hafer, H. R., Long, P. T., & Perdue, R. R. (1993). Rural residents' attitude toward recreation and tourism development. *Journal of Travel Research*, 31(4), 27-33.
- Andereck, K. L., & Vogt, C. A. (2000). The relationship between residents' attitudes toward tourism and tourism development options. *Journal of Travel Research*, 39, 27-36.
- Andriotis, K., & Vaughan, R. (2003). Urban residents' attitudes toward tourism development: The case of Crete. *Journal of Travel Research*, 42(2), 172-185.
- Ap, J. (1990). Residents' perceptions research on the social impacts of tourism. *Annals of Tourism Research*, 17(4), 610-616.
- Back, K. J., & Lee, C. K. (2003). Pre-and post-casino impact of residents' perception.

  Annals of Tourism Management, 30, 868-885.
- Back, K. J., & Lee, C. K. (2005). Residents' perceptions of casino development in Korea: The Kangwon Land Casino case. *UNLV Gaming Research & Review Journal*, 9(2), 45-53.
- Back, K. J., & Lee, C. K. (2006). History, development, and legalization of Korean casino gaming. In C.H.C. Hsu (Ed.), *Casino industry in Asia Pacific: Development, operation, and impact* (pp. 21-35). New York: An Imprint of The Haworth Press, Inc.

- Balfour, F. (2006, March). Macau gaming: Shady past, rosy future. *Business Week Online*.

  Retrieved February 27, 2007 from http://www.businessweek.com/globalbiz/content/
  mar2006/gb20060313\_111978.htm
- Bastias-Perez, P., & Var, T. (1995). Perceived impacts of tourism by residents. *Annals of Tourism Research*, 22(1), 208-209.
- Belisle, F. J., & Hoy, D. R. (1980). The perceived impact of tourism by residents: A case study in Santa Maria, Columbia. *Annals of Tourism Research*, 7(1), 83-101.
- Brown, D. O., Roseman, M. G., & Ham, S. (2003). Perceptions of a bible belt states' proposed casino gaming legislation by religious affiliation: The case of Kentucky residents. *UNLV Gaming Research & Review Journal*, 7(1), 49-58.
- Burt, M. R., & Estep, R. E. (1981). Apprehension and fear: Learning a sense of sexual vulnerability. *Sex Roles*, 7, 511-522.
- Carmichael, B. A., Peppard, D. M., & Boudreau, F. A. (1996). Megaresort on my doorstep: Local resident attitudes toward Foxwoods Casino and casino gambling on nearby Indian reservation land. *Journal of Travel Research*, *34*(3), 9-16.
- Casino City. (2002). Macau bets future on China: Asian high rollers. *Casino City*Newsletter, 3(86), 2. Retrieved March 15, 2007 from http://newsletter.casinocity.com/
  issue86/Page2.htm
- Chang, Y. C. (2002). A study of gambling industry with an aspect to the development of tourism industries in Green Island. Unpublished master's thesis, National Dong Hwa University, Shoufeng, Hualien, Taiwan.

- Chen, S. L. (1994). The attitudes of key executives of international tourist hotels in Taiwan toward casino investments in Taiwan. Unpublished master's thesis, University of Nevada, Las Vegas.
- Chung, C. I. (2005). Study on the development of casino industry at Penghu. Unpublished master's thesis, Leader University, Tainan, Taiwan.
- Cooke, K. (1982). Guidelines for socially appropriate tourism development in British Columbia. *Journal of Travel Research*, 21(1), 22-28.
- Deccio C., & Baloglu, S. (2002). Nonhost community resident reactions to the 2002 Winter Olympics: The spillover impacts. *Journal of Travel Research*, 41, 46-56.
- Eadington, W. R. (1986). Impact of casino gambling on the community: Comment on Pizam and Pokela. *Annals of Tourism Research*, 13(1), 279-285.
- Eyton, L. (2002). Taiwan in a lottery bind—you can bet on it. *Asia Times*. Retrieved February 7, 2007, from http://www.atimes.com/china/DB26Ad01.html
- Federal Information and News Dispatch. (2006, June 20). Macau could soon replace Las Vegas as world's largest gaming market. *Voice of America News*. Retrieved July 4, 2006, from http://www.voanews.com/english/archive/2006-06/2006-06-20-voa5.cfm
- Felsenstein, D., & Freeman, D. (1998). Simulating the impacts of gambling in a tourist location: Some evidence from Israel. *Journal of Travel Research*, 37(2), 145-155.
- Fick, G. R., & Ritchie, J. R. B. (1991). Measuring service quality in the travel and tourism industry. *Journal of travel Research*, 30(2), 2-9.
- Fong, D. K. C., & Ozorio, B. (2005). Gambling participation and prevalence estimates of pathological gambling in a far-east gambling city: Macao. *UNLV Gaming Research & Review Journal*, 9(2), 15-28.

- Galletti, S. (2002, October 5). Chinese cultures and casino customer service. Retrieved

  January 28, 2007, from http://www.urbino.net/bright.cfm?specificBright=

  CHINESE%20CULTURE%20AND%20CASINO%20CUSTOMER%20SERVICE
- Getz, D. (1994). Resident attitudes toward tourism: A longitudinal study of the Spey Valley, Scotland. *Tourism Management*, 15(4), 247-258.
- Gilley, B. (2001). Asia's casino boom. Far Eastern Economic Review, 164(3), 44-47.
- Glionna, J. M. (2006, January 16). Gambling seen as no-win situation for some Asians.

  Los Angeles Times, p. B1.
- Green Hotels Association. (2005). What are "green" hotels? *What are "green" hotels?*Retrieved June 3, 2007, from: http://www.greenhotels.com/whatare.htm
- Gu, Z. (2005). Product differentiation: Key to Macau's gaming revenue growth. *Journal of Revenue and Pricing Management*, 4(4), 382-388.
- Gu, Z., & Heung, V. C. S. (1998). 1999: Impact on Macau's gaming industry and opportunities for other gaming destinations in Asia Pacific. *Pacific Tourism Review*, 1(3), 225-237.
- Gu, Z., & Tsai, H. (2005). Penghu gambling legalization: A viable alternative for Taiwan.

  Gaming Law Review, 9(2), 136-143.
- Gustafson, P. E. (1998). Gender difference in risk perception: Theoretical and methodological perspective. *Risk Analysis*, 18(6), 805-811.
- Hall, G. A. (2007). Views on gambling referendum mostly follow party lines. *Courier-Journal*. Retrieved June 13, 2007, from http://www.courier-journal.com/apps/pbcs.dll/article?AID=/20070512/NEWS0106/705120430/0/NEWS01

- Haralambopoulos, N., & Pizam, A. (1996). Perceived impacts of tourism: The case of Samos. *Annals of Tourism Research*, 23(3), 503-526.
- Ho, M. H., (2005). Analysis of framework of integrated public affair and administration strategy for Ponghu county's striving of subsidiary gaming industry in tourism special zone. Unpublished master's thesis, National Sun Yat-Sen University, Kaohsiung, Taiwan.
- Hoffman, D. L., & Low, S. A. (1981). An application of the profit transformation to tourism survey data. *Journal of Travel Research*, 20(2), 35-38.
- Hong, S. K., & Jang, H. (2004). Segmentation of early casino markets: An exploratory study. *Tourism Management*, 25, 801-805.
- Hsu, C. H. C. (1998). Impacts of riverboat gaming on community quality. *Journal of Hospitality & Tourism Research*, 22(4), 323-337.
- Hsu, C. H. C. (2000). Residents' support for legalized gaming and perceived impacts of riverboat casinos: Changes in five years. *Journal of Travel Research*, *38*, 390-395.
- Hsu, C. H. C. (2006). Casino Industry in Asia Pacific: Development, Operation, and Impact. New York: The Haworth Press, Inc.
- Hughes, D. M., & Roche C. M. (1999). Legalizing prostitution will not stop the harm. In
  C. M. Roche (Ed.), *The coalition against trafficking in women*. Retrieved March 27,
  2007, from http://www.uri.edu/artsci/wms/hughes/mhylegal.htm
- Janes, P. L., & Collison, J. (2004). Community leader perceptions of the social and economic impacts of Indian gaming. *UNLV Gaming Research & Review Journal*, 8(1), 13-30.

- Jurowski, C. (1994). The interplay of elements affecting host community resident attitudes toward tourism: A path analytic approach. Unpublished doctoral dissertation, Virginia Polytechnic Institute & State University, Blacksburg.
- Jurowski, C., Uysal, M., & Williams, D. R. (1997). A theoretical analysis of host community resident reactions to tourism. *Journal of Travel Research*, 34(2), 3-11.
- Korça, P. (1998). Resident perceptions of tourism in a resort town. *Leisure Sciences*, 20, 193-212.
- Korea Casino Association. (2007). *Membership*. Retrived January 29, 2007, from http://koreacasino.or.kr/english/sub.php?loc=partner&file\_view=partner/general.html
- Kwan, A. V. C., & Mccartney, G. (2005). Mapping resident perceptions of gaming impact. *Journal of Travel Research*, 44, 177-187.
- LaGrange, R. L., & Ferraro, K. F. (1989). Assessing age and gender differences in perceived risk and fear of crime. *Criminology*, 27, 697-718.
- Laws and Regulations Database of The Republic of China. (2002). Isolated Islands

  Construction Act. Retrieved June 1, 2007 from <a href="http://law.moj.gov.tw/Eng/Fnews/">http://law.moj.gov.tw/Eng/Fnews/</a>

  FnewsContent.asp?msgid=1066&msgType=en&keyword=%C2%F7%AEq%AB%D8

  %B3%5D
- LeBlanc, G. (1992). Factors affecting customer evaluation of service quality in travel agencies: An investigation of customer perceptions. *Journal of Travel Research*, 30(4), 10-16.
- Leco, M. (2006). Sex in Las Vegas. *USAtourist.com*. Retrieved March 27, 2007, from http://www.usatourist.com/english/places/lasvegas/sex.html

- Lee, C. K., Kim, S. S., & Kang, S. Y. (2003). Perceptions of casino impacts: A Korean longitudinal study. *Tourism Management*, 24(1), 45-55.
- Lin, L. (1999). Analysis of resident perceptions and attitudes toward gambling development in Kansas City. Unpublished doctoral dissertation, Kansas State University, Manhattan.
- Lin, C. T, & Lai, C. H. (2006). Substitute effects between lotto and big lotto in Taiwan. *Economic Letters*, 13, 655-658
- Lindberg, K., & Johnson, R. L. (1997). Modeling resident attitudes toward tourism.

  Annals of Tourism Research, 24(2), 402-424.
- Liu, C. J., & Var, T. (1986). Resident attitudes toward tourism impacts in Hawaii. *Annals of Tourism Research*, 13(2), 193-214.
- Loukissas, P. J. (1983). Public participation in community tourism planning: A gaming simulation approach. *Journal of Travel Research*, 12(1), 18-23.
- Macau Government Tourist Office. (2006). *General information-location & area*.

  Retrieved July 4, 2006, from http://www.macautourism.gov.mo/en/info/info.php
- Macau Statistics and Census Service. (2006). *Visitor arrivals by place of residence*.

  Retrieved January 21, 2007, from http://www.dsec.gov.mo/english/pub/pdf/eturpub2005y.pdf
- Magong Airport. (2006). *Airport timetable*. Retrieved July 4, 2006, from http://www.mkport.gov.tw/index.asp
- Marsh, N. R., & Henshall, B. D. (1987). Planning better tourism: The strategic importance of tourist-resident expectations and interactions. *Tourism Recreation Research*, 12(2), 47-54.

- McCartney, G. (2006). Casino gambling in Macao: Through legalization to liberalization.

  In C. H. C. Hsu (Ed.), *Casino industry in Asia Pacific: Development, operation, and impact* (pp. 201-230). New York: The Haworth Press, Inc.
- Menning, N. L. (1995). Traffic and tourism in the bitterroot: Tourism promotion, development, and management. *Montana Business Quarterly*, 33(2), 2-7.
- Milman, A., & Pizam, A. (1988). Social impacts of tourism on central Florida. *Annals of Tourism Research*, 15(2), 191-204.
- Ministry of Economic Affairs R.O.C. (2007). *Headline news*. Retrieved March 10, 2007, from http://w2kdmz1.moea.gov.tw/user/news/detail-1.asp?kind=1&id=12519
- Mohai, P. (1992). Men, women, and the environment: An examination of the gender gap in environmental concern and activism. *Social and Natural Resource*, 5(1), 1-19.
- Mure, D. (2001, March 9). Taiwan may end gambling ban with casino. *Financial Times*, pp. 11.
- Murphy, E. P. (1983). Perception and attitudes of decisionmaking groups in tourism centers. *Journal of Travel Research*, 21(3), 8-12.
- Norušis, M. J. (2004). SPSS 12.0 Guide to Data Analysis. New Jersey: Prentice Hall.
- Ostrowski, P. L., O'Brien, T. V., & Gordon, G. L. (1993). Service quality and customer loyalty in the commercial airline industry. *Journal of Travel Research*, 32(2), 16-24.
- Penghu County Government. (2002). Outlying island development act. Retrieved March 15, 2007, from http://www.penghu.gov.tw/report/download/02\_1.pdf
- Penghu County Government. (2006). *County anthem*. Retrieved December 9, 2006, from http://www.penghu.gov.tw/english\_version/profile/profile.asp

- Penghu County Government. (2007). Population. Retrieved March 9, 2007, from http://www.penghu.gov.tw/english\_version/profile/profile03.asp
- Perdue, R. R., Long, P. T., & Kang, Y. S. (1995). Resident support for gambling as a tourism development strategy. *Journal of Travel Research*, *34*, 3-11.
- Pizam, A. (1978). Tourism's impacts: The social costs to the destination community as perceived by its residents. *Journal of Travel Research*, 16(4), 8-12.
- Quartly, J. (2003). Facing up to a gambling problem. *Taipei Times*. Retrieved January 24, 2007, from http://www.taipeitimes.com/News/feat/archives/2003/03/09/197395
- Richardson, S. L., & Long, P.T. (1991). Recreation, tourism, and quality of life in small winter cities: Five keys to success. *Winter Cities*, 9(1), 22-25.
- Ritchie, J. R. B. (1988). Consensus policy formulation in tourism: Measuring resident views via survey research. *Tourism Management*, 9(3), 199-212.
- Roehl, W. S. (1994). Gambling as a tourist attraction. In A. V. Seaton (Ed.), *Tourism: The State of the Art* (pp. 156-168). New York: Wiley & Sons.
- Roehl, W. S. (1999). Quality of life issues in a casino destination. *Journal of Business Research*, 44, 223-229.
- Schluter, R., & Var, T. (1988). Residents attitudes toward tourism in Argentina. *Annals of Tourism Research*, 15(3), 442-445.
- Schumacher, J. (2006). Friday is the deadline for Tama County gambling petition. *Radio Iowa*. Retrieved June 13, 2007, from http://www.radioiowa.com/gestalt/go.cfm?objectid=EE1CB97A-A9B5-4534-A98F701B13E4BDAE

- Sheldon, P. J., & Var, T. (1984). Resident attitudes to tourism in North Wales. *Tourism Management*, 5(1), 40-47.
- Smith, V. L. (1980). Anthropology and tourism: A science industry evaluation. *Annals of Tourism Research*, 7(1), 13-33.
- Spears, D. L., & Boger, C. A., Jr. (2002). Residents' perceptions and attitudes toward native American gaming in Kansas: Proximity and number of trips to NAG activity.

  UNLV Gaming Research & Review Journal, 6(2), 13-27
- Stanko, E. A. (1995). Women, crime, and fear. Annals, AAPSS, 539, 46-58.
- The Statistics and Census Service. (2007). *Visitor arrivals by place of residence*.

  Retrieved February 15, 2007, from http://www.dsec.gov.mo/index.asp?src=/english/indicator/e\_tur\_indicator.html
- Stitt, B. G., Nichols, M., & Giacopassi, D. (2000). Perceptions of the extent of problem gambling within new casino communities. *Journal of Gambling Studies*, *16*(4), 433-451.
- Stitt, B. G., Nichols, M., & Giacopassi, D. (2005). Perception of casinos as disruptive influences in USA communities. *International Journal of Tourism Research*, 7, 187-200.
- Stratton, D. (2007). Las Vegas area overview: Economy on a roll. *Insider's Guide*.

  Retrieved June 3, 2007 from: http://www.insiders.com/lasvegas/main-overviews2.htm
- Stutz, H. (2007). Gambling beyond Nevada: Macau's gaming win swells. *Las Vegas Review-Journal*. Retrieved May 29, 2007, from http://www.reviewjournal.com/lvrj\_home/2007/Jan-24-Wed-2007/business/12148633.html

- Toland, B. (2007). W.Va. table game referendum delayed three weeks. *Post-Gazette*. Retrieved June 13, 2007, from http://www.post-gazette.com/pg/07146/789193-336.stm
- U.S. Department of State. (2006). Trafficking in person report. *U.S. Department of State*2006 Report. Retrieved March 27, 2007, from http://www.state.gov/documents/
  organization/66086.pdf
- Victorian Casino and Gambling Authority. (2000, February). *The Impact of Gaming on Specific Cultural Groups*. Retrieved February 6, 2007, from https://www.vcgr.vic.gov.au/CA256F800017E8D4/Statistics/F21B3D250CAA1468CA25701F002C87A9?Open
- Warr, M. (1985). Fear of rape among urban women. Social Problems, 32(3), 238-250.
- Wikipedia. (2007a). *Taipei*. Retrieved February 15, 2007, from http://zh.wikipedia.org/wiki/%E5%8F%B0%E5%8C%97%E5%B8%82
- Wikipedia. (2007b). Zhongxiao E. Rd. Retrieved March 10, 2007, from http://zh.wikipedia.org/wiki/%E5%BF%A0%E5%AD%9D%E6%9D%B1%E8%B7 %AF
- Zikmund, W. G. (2003). Business research methods. Singapore: South-Western.

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