

**Title: THE EFFECTS OF TOURISM IMPACTS UPON QUALITY OF LIFE AMONGST  
EXPATRIATES IN MACAU.**

**Authors:** Jaeyeon Choe, Michael O' Regan

**Affiliations:** Institute for Tourism Studies, Macao

**Key words:** Quality of Life, Cross-cultural study, Macau, China, Casino development,  
Expatriates

**Introduction:**

Macau's emergence as a tourism destination, owing much to its geographic location, history and culture as well as activities such as gambling has long supported economic growth and development in this special administrative region of the People's Republic of China (Tong and Yuen, 2008; 2009). Whilst Macau successfully became a gaming mecca prior to the handover from Portugal to China in 1999, the liberalization of the casino industry in 2002 accelerated growth and expansion in nearly every facet of society. The average income per capita increased from below MOP5,000 in 1999 to MOP13,000 in 2014. The unemployment rate decreased significantly, from 6.8 percent in 2000 to 1.7 percent in 2014. The Gross Domestic Product (GDP) registered an annual growth of 12 percent between 2000 and 2013, with Macau's per

capita wealth stands fourth in the world. Tourist arrivals, 11.9 million visitors in 2003 grew to 31.5 million visitors in 2014; with mainland visitors accounting for 70% of total arrivals. While less than 3 per cent the geographic size of Hong Kong, over 80,000 tourists cross into Macau each day.

The economies reliance on gambling and the growth and intensity of visitor numbers has created question as to the sustainable development of tourism in Macau. With the completion of the Guangzhou-Zhuhai Intercity Railway expansion, the completion of the Hong Kong-Zhuhai-Macau Bridge in 2017, and a wave of new casino megaresorts that are expected to open from mid-2015; concerns questions about the quality of life (QOL) have increased. From newspaper commentary to informal conversations, there are concerns that rapid tourism development may not lead to a true and sustainable quality of life as defined by the World Health Organization.

While Macau's population of 430,000 residents in 1999 increased to 631,000 by 2014, with non-resident workers multiplying. In 2014, Macau hosted approximately 155,000 foreign workers, in 2015; nearly a quarter of its population. Various estimates indicate that up to 50,000 workers (Barclays) will be required for the operation of the new casino resorts opening in the next three years (2015-2017). Given the low unemployment rate, local manpower is not enough to fill these positions, with most locals demanding dealer's positions, where wages are highest, skill requirements low and rigid labor regulations prohibiting foreigners from working at the gaming

tables. Despite strict quota approval system that facilitates the overseas hiring process, foreign workers will be required to fill non-dealer roles. The global financial crisis has also intensified that pull to Macau as Westerners, disenchanted with the turmoil in their home countries and lured by rapid economic growth, moved east for employment opportunities and new experiences. The growth in the gaming and hospitality industries means Macau is becoming more reliant on foreign workers, with over 35,000 expected to join the labor force over the next three years. Macau's ability to attract and retain skilled foreign workers is of paramount importance, since their inability to cope could ultimately lead a drop in tourist arrivals. In particular, skilled expatriate workers are of primary importance to Macau.

Thus, the purposes of this study are: (1) collect qualitative data to discuss underlying concepts (2) to explore how expatriates in Macau perceive Quality of Life (QOL) (3) to critically analyze their interpretation and understanding of QOL (4), and understand how expatriates cope with the unexpected problems that had arisen during an era of unparalleled tourism growth. Making use of ethnographic data generated from in-depth interviews with expatriates (N = 15), this study aims to explore how expatriates in Macau perceive QOL, with a view to re-conceptualizing our understanding and measurement of the QOL based on cross-cultural interpretations. This study attempts to explore the meaning of QOL among expatriates; and

suggest recommendations to the government and business sectors for their future planning, development and marketing of Macau.

## **Literature Review:**

### *Quality of life and Tourism Development*

The WHO defines 'Quality of Life' as "the individuals' perceptions of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns." It includes the concern for "physical health, psychological state, personal beliefs, social relationships and their relationship to salient features of their environment" (WHOQOL Group, 1994). The WHOQOL group notes that QOL should be measured not only by self-reported evaluations ("am satisfied with") but also by self-reported functions (e.g. "can do"). As such, quality of life is a concept that should be associated with perceived mental, social, emotional and physical health and wellbeing.

While material, emotional and psychological well-being are seen as important elements for QOL (Schalock, 1997), there is a growing interest toward a more complex understanding of QOL and, in particular, its relationship to tourism development (e.g., Andereck et al. 2005; Andereck & Nyaupane, 2011; Dogan 1989; Jordan et al, 2015; Kim, Uysal, & Sirgy, 2013). Andereck and Nyaupane (2010) note that "an improved QOL can also be seen through a higher

personal standard of living through job creation and increased tax revenues” (p. 249). While tourism is widely perceived as a potential economic base, providing elements that may improve QOL, tourism can also negatively affect QOL through overcrowding, traffic bottlenecks and parking problems, increased crime, increased cost of living, tensions and conflict between tourists and residents, and changes in residents’ way of life (e.g., Ap and Crompton 1993; McCool and Martin 1994). Therefore, this study looks beyond material well-being, to envelop perception of tourism impacts (economic, social, cultural, and environmental) and its impact on QOL. We argue that QOL indicators need to measure “perceptions with somewhat more clarity than existing resident attitude research” (Andereck & Nyaupane 2010, p. 258).

### *Tourism Development and Quality of Life in Macau*

As a civilization and as a country, the Chinese have believed in a close spiritual connection to nature and demonstrated that connection through holistic wellness based on Taoism, Confucianism and Buddhism. Due to rapid tourism development and other external variables in Macau, that connection or at least its visible manifestation by way of exercises, meditation and a simple lifestyle seems to have become strained and even eclipsed by the demand for material wellbeing. Recent research and commendatory suggests that the spiritual, emotional and social wellbeing no longer function as important indicators or aspects of QOL.

This paradigm shift argument is supported by government officials, academics and casino management in Macau, who suggest that the construction of casinos and the infrastructural development to support them will increase median wages, add to employment and are now the primary contributors to QOL.

However, the rapid changes in Macau since the handover has increased concern that, along with increased house prices, pollution and other problems, QOL indicators are being misread through the application of 'objective' surveys, which excludes the role of perceptions, i.e. cognitive and emotional evaluations of QOL. As Macau has altered through international tourism development; improving standards of living, education, infrastructure and technology, casinos development, the main tourism driver, have reshaped the landscape, with resorts often a jarring contrast to the city's European-style architecture. As the tourism industry continues to expand, primarily through new casino development and the hiring of foreign workers; the government and casino developers have sought to expand the hiring of skilled expatriates. However, their interpretation of QOL may mean these short term measures are ineffective in retaining such staff.

Given that "Perception of one's quality of life is not just a reflection of an immediate effect or a mental state, but also a reflection of the social environmental surrounding the person" (Tong and Yuen, 2008, p. 30), the gambling industry-driven economic boom that largely been

designed around political expediency, with a political focus looking at how subjective well-being can be improved in Macau. In Macau's case, less-educated people, expatriates and new immigrants on domestic and non-skilled visas may not get the benefit from economic development, even though well-being is subjective.

### **Research Methods**

The authors collected 15 one hour long in-depth interview over five months on perceived QOL among expatriates (N = 15) in fall 2014 and spring 2015. They also gathered demographic data including age, gender, education, income, marital status, and occupational status. Content analysis of the interview transcripts and triangulation with the data were carried out. Most of informants from western countries include the U.S., U.K., Belgium, and Cypress working in multinational casino groups such as Wynn, Sands, MGM and Melco Crown. One informant is South Korean, and moved from Hong Kong. While, the majority all were skilled non-resident workers with work permits, two were recently married to local residents. In accordance with Law 21/2009 (amended by Law 4/2013), skilled workers are separated in the quotas system from non-skilled and domestic workers. They were granted for one or two-year periods, which can be renewed subject to reassessment and a renewal process. Skilled workers are defined as having academic qualifications; technical skills; and relevant professional experience. To request a

quota to hire a skilled worker, an employer must prove that the worker has special qualifications or skills for a specific position and that it is impossible to hire a person with equal qualifications locally. Approval is always individual and on a case-by-case basis. Therefore, the informants were, by and large in high paying jobs and working at a high level, such as middle management and professor level. Additionally, we collected 91 surveys to gain more a generalized view of QOL among skilled expatriates in Macau. Derived from QOL indicators (WHOQOL), the literature review and qualitative interview transcripts; 26 items were selected and adapted fo the survey questionnaire. We used SPSS version 21 to analyze the data.

### **Results:**

Based on the interview transcripts, the fifteen skilled expatriates (N = 15) expressed job satisfaction, as well as security and safety satisfaction. They were highly satisfied with salary levels and career development opportunities. However, they noted transportation and housing cost difficulties as incomes remain static. They believe overcrowding is getting worse, and the cost of living is rising. Interestingly, most of them expressed a lack of sense of community and communication difficulties; with most of their friends also short term contract expatriates. They believe they can't communicate with local people due to language and cultural differences. A minority of informants, married to local residents had more positive attitudes towards local people and communication issues. These informants had and have lived more than 5 years, and

had normalizing their residence permits. The following are some key quotes from the interview transcripts.

***Theme 1: Job Satisfaction***

*“We are lucky in Macau for having less than 2 percent unemployment so I had this exact same position seven or eight years ago and I left and took a similar job in the US...In the US over the past few years it has been a lot harder to find work. And then the actual work, with the major companies that are here now, it is international standard. It is just like you are working in Las Vegas or Hong Kong or Singapore you can find equivalent level of positions here.”*

*“I am totally satisfied with my job, I love the work atmosphere. I work together with a mix of cultures (Taiwan, Portugal, America, etc.), which makes everything really interesting and you can see things from a different perspective. We work along pretty well, and also do things besides work, like going out for lunch, go bowling, and more.”*

***Theme 2: Transportation:***

In a territory of less than 30 square kilometers, there are serious transportation issues. For example, there are about twice the number of vehicles (237,500) than in 1999. This growth is tied to public transportation, and the perceptions of crowding and poor service.

*“The transportation sucks. I mean the country is small, traffic jammed, and the people are not educated. I mean it is not about whether they study at the University or not. I mean the personal education is weak, so what happens when you go to a bus station they don't queue up, it is like a jungle. It is not the first come will first take the bus, it is like the jungle rule, if I am more shameless than you then I'll get first into the bus. And that really disturbs me...long story short, it is bad.”*

*“The buses are congested to go slow. There are 1000 taxis in the city, 1000 taxi licenses. At any one day there are over 100,000 tourists here. So the taxi per capita is like ten times lower than Singapore and Hong Kong. We had a yellow taxi service that supposed to be on call, you would call them, they would say that they would come, but they would never come. And because of those complaints the government recently cancelled this service. So, the buses are full and the taxis are too few. Therefore, you’re only solution is to go by car but there is nowhere to park... You’re only other choice is to walk. It is bad now, I can’t imagine how it is going to be in ten years.”*

*“The management of the buses is really a problem. Especially when you know there are times that all the routes will be busy, so if the bus comes in twenty minutes or so, it comes and it’s full, and the same for the next bus, always crowded...”*

*“The problem with the taxi is that you basically have to know where you’re going, and say it in Cantonese or show something on your phone that shows where you are going, but it is really difficult. And most of the taxi drivers do not really want to go short distances, so taking a taxi is difficult. So, in the end the buses are still the most preferred, even though they are crowded. Because basically you don’t have any option...”*

*“Basically there is no more room in the streets...the car sales continues to increase. Already all parking spots are full and free parking spots are impossible to find. Like my neighborhood in Barra even my own building there is no parking spots available. Around ten years ago you used to be able to buy a parking spot for only 2000 or 3000 MOP, now you have to pay three million. So, there is an exponential rise in the cost for parking.”*

### ***Theme 3: Overcrowding:***

Macau is stretching the limit on the both number of tourists and full time residents it can cope with. The findings of a 2015 government sponsored study by the Institute for Tourism Studies suggest residents have grown to grow weary of the effects of continuous tourism growth on important quality-of-life issues, such as perceived crowding in the streets. However, with over

\$20 billion of capital being invested and over 10,000 hotel rooms likely to come online in the next three years, as well as foreign staff required to staff them, the issue of over crowding will remain

*“The crowding is really out of control, even four or five years ago you could walk in the center and the main tourist districts...I used to go to ‘saint malo’ every week, shop and eat. But now I won’t even go near there ever for any reason. It doesn’t seem like it is very well planned, just the amount the more the better, but there is no thought put in where will they go.”*

*“All the people coming in across the land boarder from Zhuhai into Macau have to take buses through the entire city to go to Cotai. And **the government doesn’t seem to notice that all the streets are full.** And you hear people who live in the neighborhood saying that in the morning the buses are completely full with construction workers trying to get to Cotai.”*

*“That stuff is like a pressure cooker, all of those issues and I think they are just building building building. And it seems to get worse over the past year...I think enough is enough... I think the government can do something about it, but I don’t think they will.”*

#### **Theme 4: Housing:**

*“Accommodation here is so expensive, that is one of the reasons of dissatisfaction, a huge part of my salary goes to housing. And afterwards to have quality of life. I am aware of all the things going on, but you need money to do these things. Yeah... in Macau it is difficult...”*

*“My concern is that the rent is going up and whether I am able to afford the housing and if I have remain in the current situation. Because currently I share my house with two and sometimes three other people, but I prefer to have some more private space in the future...I don’t like to stay for that long in my room because occasionally I get claustrophobic, I need to be out.”*

### ***Theme 5: No Sense of Community:***

*“Local people here don’t hang out, they have their own thing, they don’t talk much, and they don’t socialize. Their social life is eating outside, but my perception about socializing is maybe going having BBQ together, going to karaoke together, going to drink and chat, and the locals don’t do that much. I don’t have many friends, mainly I have foreigner friends. I believe this ... is cultural I don’t think it is personal. But with colleagues I don’t have much communication, and when I go out I mainly socialize with foreigners.”*

*“When you say hi to someone you don’t really know what they think, and people really care what other people think, that’s why they pretend. Many of them want to go out, but don’t go out, because they don’t want to be perceived wrong...And pretty much there is nothing you can talk about...I like to talk about ‘deeper’ things in life. So that’s another problem why I cannot socialize here, apart from culture we have different interests. When I talk to locals, it is like talking to a child, they don’t understand me anyways. It is not about language, we really look to the world from a different perspective.”*

*“Here you have to do a little more work to find it...it is not like living back home with your friends from your childhood and all your family around...In the US I would probably do it on my own or with my family my brothers, but here you have to make an effort... maybe losing your family structure, is for lot of foreign people, has been more of the toughest things. So you have to double down on the friendship and connection with the community, because you don’t have any easy friends or family to fall back to.”*

*“Mine (back in Europe) is a drinking and BBQ culture. People are not homophobic...But the similarities I can say people gather as a group enjoy things together especially eating, here same, there same. People are cohesive in my country, and here they are cohesive in their own group.”*

In addition to in-depth qualitative interviews, 91 self-administered surveys were gathered, so as to gain more a generalized view of QOL among skilled expatriates. Table 1 details descriptive results for selected variables.

**Table 1. Descriptive Results for Selected Variables**

		<b>Frequency</b>	<b>Percent</b>
Gender	Female	39	42.9
	Male	52	57.1
Age	20-29	47	51.6
	30-39	25	27.5
	40-49	15	16.5
	50-59	2	2.2
	60 and above	2	2.2
Education	Primary	5	5.5
	Secondary	24	26.4
	University	47	51.6
	Postgraduate	15	16.5
Marital Status	Single	55	60.4
	Married	28	30.8
	Living as Married	2	2.2
	Separated	3	3.3

	Divorced	2	2.2
	Widowed	1	1.1
Nationality	Portugal	2	2.2
	South East Asia	2	2.2
	East Asia	20	22
	Australia/New Zealand	5	5.5
	USA/Canada	5	5.5
	Other European Countries	22	24.2
	Other Countries	17	18.7
	Mainland China	18	19.8
Length of stay	Less than 1 year	23	25.3
	1 – 5 years	45	49.5
	6 – 10 years	16	17.6
	11 – 15 years	2	2.2
	16 – 20 years	2.2	2.2
	21 years and more	3	3.3

**Table 2. Collapsed percentages of perceived quality of life among expatriates in Macau**

How much do you agree or disagree with each statement?	Strongly agree + Agree	Neutral	Strongly disagree + Disagree
	Percent (%)	Percent (%)	Percent (%)
1.How satisfied are you with the quality of your life?	59.4	29.7	11
2.How satisfied are you with your health?	61.6	25.3	13.2
3.How satisfied are you with your sleep?	42.9	25.3	31.9
4.How satisfied are you with your personal relationships?	62.7	25.3	12.1
5.How satisfied are you with your sex life?	34.1	35.2	29.7
6.How satisfied are you with the support you get from your family?	75.9	15.4	8.8
7.How satisfied are you with the support you get from your friends?	77	15.4	7.7
8.How satisfied are you with your ability to provide for or support others?	71.4	24.2	4.4
9.How satisfied are you with your physical safety and security?	77	17.6	5.5
10.How satisfied are you with the conditions of your living place?	52.8	25.3	22
11.How satisfied are you with your financial situation?	46.2	33	20.9

12.How satisfied are you with your access to health services?	41.8	39.6	18.7
13.How satisfied are you with the social care services?	36.3	37.4	25.3
14.How satisfied are you with your physical environment (e.g. pollution, noise, attractiveness)?	33	34.1	33
15.How satisfied are you with the climate of the place where you live?	41.8	34.1	24.2
16.How satisfied are you with the way you spend your free/leisure time and activities?	45.1	27.5	27.5
17.To what extent do you feel accepted by your community?	35.2	47.3	14.3
18.How much do you feel accepted from those around you?	57.2	25.3	15.4
19.How much are you able to relax and enjoy yourself?	60.5	27.5	9.9
20.How healthy is your physical environment?	46.2	39.6	14.3
21.How positive do you feel about the future?	72.6	19.8	7.7
22.How much confidence do you have in yourself?	80.2	18.7	1.1
23. How alone do you feel in your life?	38.5	25.3	36.3
24. How concerned are you with the noise in the area you live in?	49.5	27.5	23.1
25.To what extent do you have problems with transport?	53.9	25.3	20.9
26. How much do difficulties with transport restrict your life?	47.3	24.2	28.6

**Table 3. Descriptive Statistics of Variables Measured at the Ratio Level**

	<b>Mean</b>	<b>Std. Deviation</b>
QOL	3.64	0.95
Health	3.64	0.94
Sleeping Quality	3.20	1.21
Social Relationship	3.71	1.00
Sex Life	2.99	1.27
Family Support	4.10	1.03
Friends Support	4.01	0.96
Ability to Support Others	3.87	0.78
Safety and Security	4.04	0.89
Living Condition	3.44	1.17
Financial Situation	3.32	1.11
Health Service	3.31	1.04
Social Care Services	3.12	1.10
Physical Environment (pollution, noise, attractiveness)	2.96	1.10
Climate	3.20	1.01
Free/Leisure Time and Activities	3.32	1.10
Feel Accepted by Your Community	3.18	0.95
Feel Accepted Around	3.45	1.11
Relax and Enjoy Yourself	3.49	1.08

Healthy Physical Environment	3.41	1.02
Feel Positive about the Future	3.87	0.96
Confidence in Yourself	4.02	0.73
Feel Alone in Your Life	3.00	1.19
Concern with the Noise	3.38	1.20
Problems with Transport	3.47	1.25
Difficulties with Transport Restricting Your Life	3.24	1.27

## Findings

As indicated in Table 1, there were more male informants (57.1%) than female informants (42.9%). The majority of the informants were between 20 and 29 years old (51.6%), and 30 and 39 (27.5%). Most had university degrees (51.6%), and were single (60.4%). A quarter of respondents were from European countries (26.6%), and East Asia (22%) such as Hong Kong, South Korea, and Taiwan. The majority of them have had stayed in Macau between 1 year and 5 years (49.5%). A quarter of respondents were in Macau less than one year (25.3%). The respondents are highly satisfied with family support (75.9%), friends' support (77%), and are very confident in them (80.2%).

However, respondents are somewhat dissatisfied with sex life (35.2% neutral), social care services (37.4% neutral), physical environment including pollution, noise, and attractiveness (34.1%), accepted by your community (47.3%, neutral), and feeling alone in life (38.5%, agreeing and strongly agreeing). Based on mean scores, respondents are dissatisfied with feeling accepted by their community, physical environment (pollution, noise, and attractiveness), and sex life. These statistical results support the qualitative part of the study; with both research phases indicating that skilled foreign residents are generally satisfied with their lives in Macau. They both indicate that expatriates were especially satisfied with salary level, safety and security but dissatisfied with public transportation, housing, sense of community and communication with locals.

## **Discussion**

In 2015, the Chief Executive of Macau, Dr. Fernando Chui Sai On in his annual policy address pledged that he will do his best to make Macau a livable city as part of the government's aim of turning the city into a global tourism and leisure hub. However, the Macau government "is committed to the advancement of policies that will improve the quality of life of its residents, rather than foreign workers. The government sees imported labor as temporary, and subject to regulation. Given they control the permit system, they feel they cannot discriminate towards

expatriates, given it might affect the social stability of the territory, as a result of foreigners taking jobs from locals.

However, he failed to outline any specific measures for with local residents or foreign workers, who make up a quarter of the cities working population. The daily problem of expatriate (housing, medical, transportation, and social security) living has not been addressed by either government or the multinational corporations operating in Macau. As Macau will have to add around tens of thousands of foreign workers to the existing cohort, will be a major challenge for residents, employers and government, as well as for the city's infrastructure.

With Macau at virtually a full employment, growth is highly dependent upon the ability of both public and private employers to retain hire and retain foreign manpower in the labor-intensive gaming and hospitality industries. With five integrated-resorts set to open on the Cotai strip in the next few years, employers and government will need to focus on immigration and the QOL of skilled expatriates. While Macau will continue to be a promised land for foreign casino groups and expatriate employees eager to capitalize on the country's 45 billion-plus gambling revenue turnover, there are warning signs. A 2014 study by UniGroup Relocation, which moves over 260,000 families per year worldwide for work, suggests twice as many people moved out of China than into the country in 2014. The outflow, they note could be associated with rising costs of living, a desire to reengage with the home office, pollution, slower growth,

corporations moving to Malaysia and Vietnam. Hong Kong also saw more corporate employees leave than arrive because of high rents, school fees and pollution. Given that Macau lacks modern infrastructure, good education and health systems, and a general understanding of English-means government and employers will have to work harder to attract and retain expatriates.

This study found that in Macau, the political atmosphere, business uncertainty about the central government view of gambling and business disruptions stemming from President Xi Jinping's anti-corruption campaign were not major factors. This may be because of the short contract nature of many skilled staff. While there are no indications that there are more skilled expatriates leaving than arriving in Macau, the informants spoke favorably about new casino developments in Japan, Singapore and Malaysia. The informants also spoke of decisions that could improve QOL, such as 24-hour border crossing at the Gongbei border gate and at the border connecting Macau to Hengqin. They also mentioned the lack of environmental protection policies, the lack of any policies promoting electric vehicles and recharge stations, local language training and cultural education to both Macau and the mainland.

## **Conclusion**

While QOL research in tourism has gained much momentum over the last two decades; it has focused primarily on research in relation to travelers/tourists, and research in relation to the residents of tourism communities; little research has focused on expatriates and their perceptions of QOL. Based on the survey and interview data, the study found that skilled expatriates drawn to the economic opportunities generated by rapid tourism development in Macau recognize the job opportunities but also negative social and environmental impacts such as noise and water pollution, littering, traffic jams, crowding, crime, housing costs, and disruption from tourists when they use public facilities. While they perceive job satisfaction very highly, they were dissatisfied with a lack of sense of community and communication. They are satisfied with family support, safety and security, and confidence in them. However, they are dissatisfied with feeling accepted by their community, physical environment (pollution, noise, and attractiveness), and sex life.

This study attempts to explore the perception and meaning of QOL among expatriates in Macau during the era of unparalleled tourism development; to suggest recommendations to the government and business sectors for their future planning. We argue they will need support from both local residents and expatriates for long-term sustainable development of the territory as tourism numbers and casino development expands. This study also conceptually contribute to the

QOL literature by providing a cross-cultural definition of QOL by filling the gaps in existing research on this topic by using a bottom-up approach. The approach identifies the need for QOL indicators to monitor tourism development and related policy implementation. We recommend future planning incorporate more 'subjective' perceived QOL indicators that emerge from below. This is of growing importance since it is unclear as to whether the quality of life construct is transferable from one cultural context to another; since ways to assess the construct can be sensitive to different cultures.

**Limitations:**

While we conducted qualitative interviews with expatriates on skilled visas from developed areas, we did not interview skilled expatriates from developing countries extensively. We did however distribute the questionnaires to a mixed group of expatriates.

## References:

- Andereck, K. L., & Nyaupane, G. P. (2011). Exploring the nature of tourism and quality of life perceptions among residents. *Journal of Travel Research, 50*(3), 248-260.
- Andereck, K. L., & Nyaupane, G. P. (2010). Exploring the nature of tourism and quality of life perceptions among residents, *Journal of Travel Research, 50* (3): 248-260.
- Andereck, K., K. Valentine, R. Knopf, and C. Vogt. (2005). "Residents Perceptions of Community Tourism Impacts." *Annals of Tourism Research, 32* (4): 1056-76.
- Ap, J. & Crompton. J. L. (1993). Residents' strategies for responding to tourism impacts. *Journal of Travel Research, 32* (1), 47-50.
- Berno, T., & Ward, C. (2005). Innocence abroad: a pocket guide to psychological research on tourism. *American Psychologist, 60*(6), 593-600.
- Dogan, H. (1989). "Forms of Adjustment: Sociocultural Impacts of Tourism." *Annals of Tourism Research, 16* (2): 216-36.
- Flint, W. (1999). *Sustainable development* [Online]. Available: <http://205.157.137.10/~sustainrwf/ee00002.htm>
- Jordan, E.J., Vogt, C. A., Deshon, R. P. (2015). A stress and coping framework for understanding resident responses to tourism development, *Tourism Management, 48*, 500-512.
- Kim, K., Uysal, M., & Sirgy, M. J. (2013). How does tourism in a community impact the quality of life of community residents? *Tourism Management, 36*, 527-540.
- Macau quality of life report (2007-2008), by Macau inter-university institute, vol 1-5  
<[http://www.iiu.edu.mo/index.php?option=com\\_content&task=view&id=618&Itemid=1518](http://www.iiu.edu.mo/index.php?option=com_content&task=view&id=618&Itemid=1518)> [Accessed on 20 March 2014]

McCool, S., and S. Martin. (1994). "Community Attachment and Attitudes towards Tourism Development." *Journal of Travel Research*, 32 (3): 29-34.

Morrison Institute for Public Policy (1997). *What Matters in Greater Phoenix: 1997 Indicators of Our Quality of Life*. Tempe, AZ: Arizona State University.

Schalock, R. L. (1997). Quality of life: Application to persons with disabilities. AAMR.

Tong, K. K. and S. M. Yuen (2008). Quality of Life in Macao: Who is happy and satisfy. *Journal of Psychology in Chinese Societies*, 9, 29-47.

Tong, K. K. and S. M. Yuen (2009). Gambling industry and quality of life. In K. Y. Wong, S. L. Wong, P. S. Wan and Victor Cheng (Eds.). *The New Faces of Macao: Achievements and Challenges*. Hong Kong: Hong Kong Institute of Asia-Pacific Studies The Chinese University of Hong Kong. [in Chinese]

WHOQOL Group (1994). Development of the WHOQOL: Rationale and current status. *International Journal of Mental Health*, 24, 24-56.