

FACULTY OF ECONOMICS | UNIVERSITY OF ALGARVE

**Quality of Life and Emotional Solidarity in Residents'
Attitude towards Tourists - The case of Macau**

HIO KUAN LAI

**Dissertation for obtaining the Master Degree in
Tourism Economics and Regional Development**

Research made under the supervision of:

Prof. Pedro Miguel Guerreiro Patolea Pintassilgo

Prof. Patrícia Susana Lopes Guerrilha dos Santos Pinto

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ABSTRACT

Research on residents' attitude towards tourism development has been under way for many years. Few studies, however, have investigated the relationship between residents' perception of their quality of life (QoL) and their emotional solidarity towards tourists. The primary goal of this study was to address the hypotheses that, 1) residents' perception of tourism's impact on QoL is positively correlated to their satisfaction with QoL, and 2) such QoL construct is also positively correlated with their emotional solidarity towards tourists. The concept of social exchange theory (SET) was applied to explain the relationships. This study involved a survey of residents' attitude in Macau, a Special Administrative Region (SAR) located on the southeastern coast of China. All hypotheses were supported by the results of a correlation analysis, which revealed that residents who perceived more positive impact from tourism on QoL, were more satisfied with QoL, and had a higher degree of emotional solidarity towards tourists. The findings indicated the importance to consider QoL in examining residents' attitude towards tourists. Furthermore, both theoretical and practical implications were discussed, limitation and future research directions were also provided.

Keywords: Residents' attitude towards tourists; Residents' perception; Residents' satisfaction; Quality of life; Emotional solidarity; Social exchange theory.

RESUMO

Pesquisas sobre a atitude dos residentes em relação ao desenvolvimento do turismo decorrem há muitos anos. Poucos estudos, no entanto, investigaram uma relação entre a percepção dos residentes sobre a sua qualidade de vida (QdV) e a sua solidariedade emocional em relação aos turistas. O principal objetivo deste estudo foi testar as seguintes hipóteses: 1) a percepção dos residentes sobre o impacto do turismo na QdV está positivamente correlacionada com a sua satisfação com a QdV, e 2) o construto QdV também está positivamente correlacionado com sua solidariedade emocional em relação aos turistas. A teoria da troca social foi aplicada para explicar as relações. Este estudo envolveu a aplicação de um questionário sobre a atitude dos residentes em Macau, uma Região Administrativa Especial localizada na costa sudeste da China. Ambas as hipóteses são suportadas pelos resultados de uma análise de correlações. Esta mostrou que os residentes com uma percepção mais positiva sobre o impacto do turismo na QdV estão mais satisfeitos com a sua QdV e apresentam um maior nível de solidariedade emocional para com os turistas. Os resultados indicam a importância de se considerar a qualidade de vida na análise da atitude dos residentes em relação aos turistas. Para além disso, a dissertação apresenta implicações teóricas e práticas, assim como limitações do estudo e direcções para investigação futura.

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ABBREVIATIONS LIST

ESS	Emotional solidarity scale
SAR	Special Administrative Region
SET	Social exchange theory
QoL	Quality of life

CHAPTER 1. INTRODUCTION

Residents' attitude towards tourism has been a subject of research for several decades (Andereck & Nyaupane, 2011; Woosnam, 2012). The studies show the importance of involving community residents in tourism development. The long-term success and sustainable development of tourism will more likely be achieved when the local community is taken into account throughout the tourism planning and development (Nunkoo & Ramkissoon, 2011; Uysal, Sirgy, Woo & Kim, 2016; Woosnam, 2012). According to UNWTO, there were a total of 1,322 million international tourist arrivals in 2017 (7% growth compared to 2016). Thus, the Secretary-General of the UNWTO, Zurab Pololikashvili, emphasised the need to ensure that each member of the host community would be benefited by such growth (UNWTO, 2018). The residents of the host community are the ones mostly and directly affected by tourism development (Li & Wan, 2017). Meanwhile, they also play an important part in the quality of tourists' experiences in that community (Jennings & Nickerson, 2006). Therefore, understanding resident-tourist relationship from local residents' standpoint will help to deepen our knowledge for both long-term success and sustainable development of tourism destinations. In particular, this study aimed at the examination of residents' attitude towards tourists by employing the concept of emotional solidarity, and its relationship with the residents' quality of life (QoL).

Emotional solidarity, originated from classical sociology, can be conceptualised as "the feeling of identification a person has with another person that serves to strengthen bonds between such individuals" (Woosnam, 2012, p. 316). Research adopting emotional solidarity to interpret residents' attitude towards tourists has recently begun. Variables such as the length of residency, community attachment and resident-tourist interaction have been examined as significant predictor variables of residents' emotional solidarity towards tourists; on the other hand, researchers also revealed emotional solidarity as a significant predictor for residents' perception of tourism's impact and their social distance with tourists (Joo, Tasci, Woosnam, Maruyama, Hollas & Aleshinloye, 2018). The initial studies have shed some light to the reason why some residents would welcome tourists with open arms, while some other residents would view them with obfuscation, or even resistance. Notwithstanding the

recent growth of research related to emotional solidarity in the tourism context, its relationship with residents' QoL has yet to be studied (Joo *et al.*, 2018).

The research of QoL in the tourism context has experienced a tremendous growth since 1999, after Professor Kaye Chon's concerted efforts to address a variety of topics on both residents' and tourists' QoL issues (Uysal *et al.*, 2016). Due to such rich stream of research, Uysal *et al.*, (2016) have conducted a qualitative study to examine the existing literature. They concluded that the general understanding of residents' QoL can be described as how residents view their living conditions as a tourism destination and how such conditions affect their satisfaction in different life domains and overall life satisfaction; also, they confirmed the significant efforts from researches to proof that residents' perception of tourism's impact reciprocally interacts with their perceived QoL. Once a community turns into a tourism destination, the lives of the community residents are affected in various ways (Woo, Uysal & Sirgy, 2018), and no one can guarantee that tourism development will inevitably improve the QoL of the local residents (Long, 1996). An increase in income may improve residents' QoL, however, development that failed to address the non-economic elements may degrade residents' QoL (Jennings & Nickerson, 2006). As a result, this study adopted indicators under both material and non-material life dimensions (i.e. material, community, emotional, and health & safety life domains) to measure residents' QoL. These four life domains have been employed for QoL studies in tourism context carried out in the United States (e.g. Kim, Uysal & Sirgy, 2013; Woo, Kim & Uysal, 2015; Woo *et al.*, 2018). These studies recognise that measurement in different life domains could ease a more comprehensive representation of residents' QoL.

Additionally, Andereck and Nyaupane (2011) pointed out that most of the existing literature regarding QoL were mainly focused on how tourism's impact affects residents' QoL. Uysal *et al.* (2016) also suggested that most of the research studies are not straight forward and further research is needed, wherein the QoL construct should be examined in terms of both outcome and moderating variable, with the setting to predict residents' attitude and support. Although the potential relationship between residents' perception of QoL and emotional solidarity has not been addressed in the literature, many studies have supported that residents' satisfaction with life could be affected by their perception of tourism's impact on the community (Woo *et al.*, 2018). Meanwhile, Lai and Hitchcock (2017) and Li and Wan (2017) both examined the

significant relationship between emotional solidarity and residents' perception of tourism's impact. With these initial findings, it is natural to expect that the level of residents' perception and satisfaction with QoL exerts an influence on their emotional ties with the tourists visiting the community.

Social Exchange Theory (SET) has been served as the predominant framework in research to explain residents' attitude in the tourism context (García, Vázquez & Macía, 2015; Nunkoo & Ramkissoon, 2011; Vargas-Sánchez, Porrás-Bueno & Plaza-Mejía, 2014), which may help us to better understand the relationship between residents' QoL and emotional solidarity. When applying this theory in residents' attitude, Gursoy and Rutherford (2004) suggested that community residents are prepared to participate or be involved in an exchange with tourists if they believe that their expected benefits will likely be greater than the costs. This study employed the SET theory to test if residents are more likely to generate higher level of emotional solidarity towards tourists when benefits exceed costs (i.e. positive perception and satisfaction exceed negative's). The conceptual model of this study was built on the basis of this theoretical foundation.

In order to acquire more in-depth knowledge about residents' perception of QoL and their attitude towards tourists, and to respond to the call from Andereck and Nyaupane (2011), Joo *et al.* (2018), and Uysal *et al.* (2016), this study aimed to add to the body of knowledge by integrating emotional solidarity, the concept of residents' QoL and SET theory, which have been separately used to explain residents' attitude in the tourism context. Thus, we aimed to contribute to the literature by using these concepts together. Specifically, the setting of this study sought to strengthen the understanding of the interrelationship of residents' perception of tourism's impact on QoL and satisfaction with QoL (H1 & H2 shown in Figure 1); and more importantly, the main purpose of this study was to examine whether the aforementioned value perceived by local residents would be correlated with their emotional solidarity towards tourists (H3, H4 & H5 shown in Figure 1). This study also intended to examine the factors affecting emotional solidarity (socio-economic factors and tourism related characteristics).

This research focused on a booming tourism destination - Macau, a city that has encountered a dramatic growth of tourism in recent decades. Hence, results of this study also shed light for Macau government, tourism planners and policy makers, on

residents' perception and satisfaction with QoL, and how QoL may affect residents' attitude towards tourists.

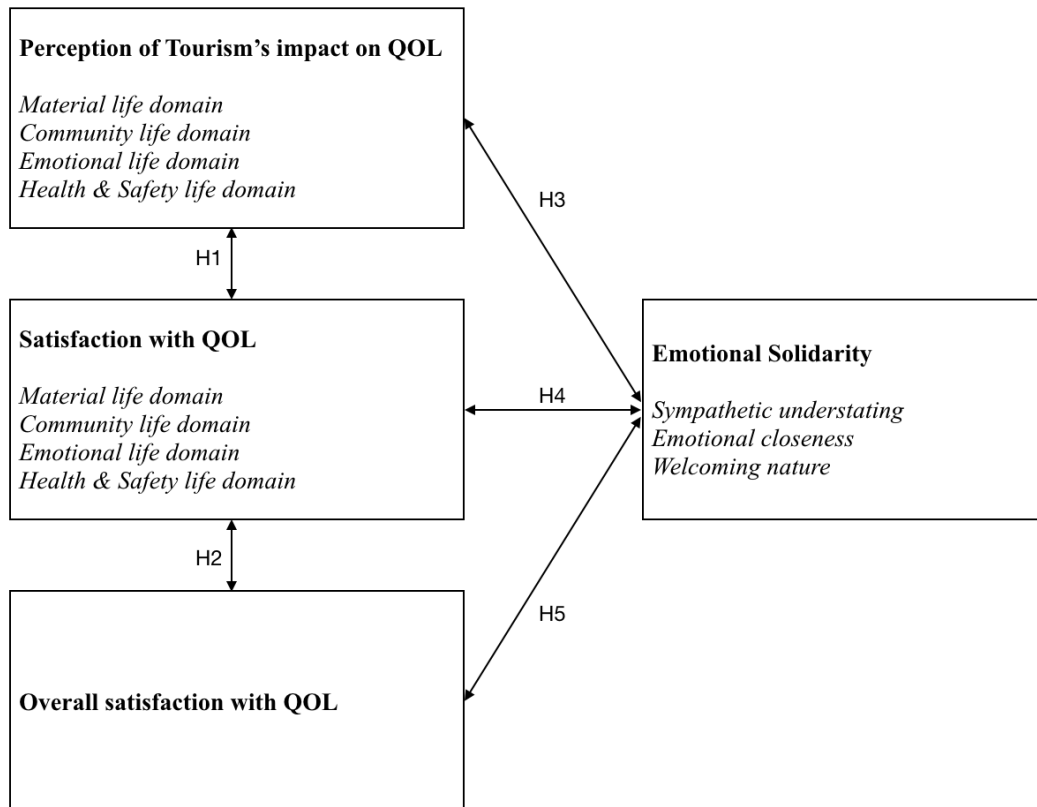


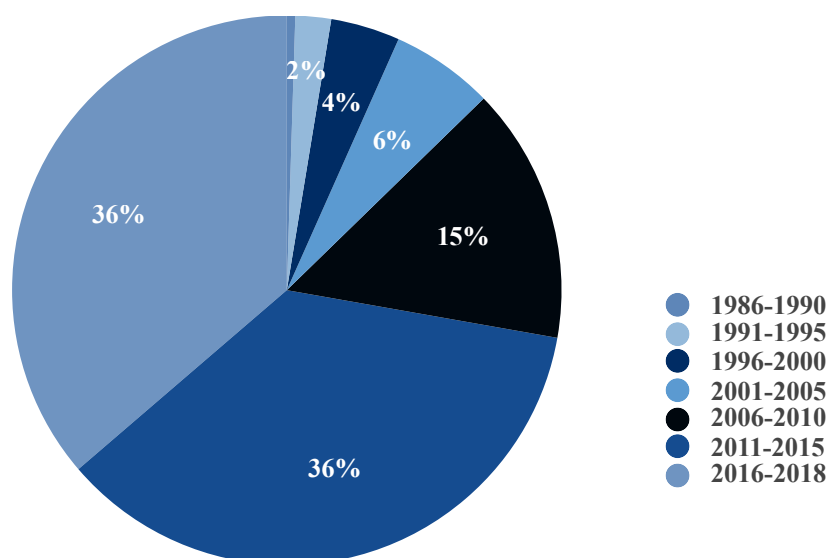
Figure 1 Conceptual model of residents' QoL and emotional solidarity.
(Source: Own elaboration based on literature review)

The next chapter reviews the literature that has examined residents' attitude, QoL studies, QoL measurement, concept of emotional solidarity and the social exchange theory in the tourism context. Chapter 3 presents the methodology, including the study site, sampling and data collection, survey instrument and measure, and data analysis method. This is followed by a discussion of the results. Finally, Chapter 5 offers some concluding remarks by theoretical implication, practical implication, study limitation and direction for future research.

CHAPTER 2. LITERATURE REVIEW

2.1 Residents' Attitude towards Tourism/Tourists

Measuring residents' attitude towards tourism development, specifically the perception of tourism's impact, has been of interest to scholars for around 40 years (Andereck & Nyaupane, 2011) and has proliferated recently due to the importance of community involvement in the tourism industry (Nunkoo, 2016; Nunkoo & Ramkissoon, 2011; Uysal *et al.*, 2016; Woosnam, 2012). According to the search based on three key words ('Residents', 'Attitude' and 'Tourism') through an online search tool for academic work (Web of Science, 2018), a total of 810 works were found. Not surprisingly, 756 of them were published after 2001 (see Graphic 1), along with the growing attention to involve community for sustainable tourism development. Though the result may not represent all the academic work on residents' attitude to tourism, it is likely to reflect the enduring and increasing prevalence on such research in recent years. Indeed, not only has the volume of research increased greatly, but more works have been done to examine residents' attitude based on theoretical foundations, after Ap's (1992) critique on the lack of theory in the growing number of related studies (Sharpley, 2014).



Graphic 1 Web of Science search result of 'Residents', 'Attitude' & 'Tourism' - Publication year (Data accessed from webofknowledge.com on 6 March, 2018)

In response to the surge in studies to explore residents' attitude in the tourism context, it is not surprisingly that a number of works have been taken place to review the progress of literature development. One of the most recent reviews has brought up some debatable arguments based on the content analysis of 62 articles published between 1980 to 2013 (Sharpley, 2014). Interestingly, Sharpley pointed out that majority of the studies was only concerned with residents' attitude to tourism development (e.g. Akis, Peristianis & Warner; 1996; Draper, Woosnam & Norman, 2011; Hao, Long & Kleckley, 2011; Li & Wan, 2013; Vargas-Sánchez *et al.*, 2014; Wang & Pfister, 2008; Woo *et al.*, 2015). Similarly, Woosnam (2012) and Sharpley (2014) also underscored that the existing literature did not consider residents' feeling and attitude towards tourists. Resident-tourist relationship was rarely addressed, from Sharpley's examination, which may account to the term 'tourism' and 'tourist' were usually interchangeably used in the studies. To fill these gaps in the literature, the present study displays the potential relationships between destination residents' perceived value on QoL and their attitude towards tourists by adopting the concept of emotional solidarity and the SET theory.

As indicated by Jennings and Nickerson (2006), attitude can be structured along three dimensions: cognitive, affective, and behavioural. Regarding the residents' attitude towards tourists, this means that residents hold beliefs about the tourism's impact, they may like or dislike such impact and thus react accordingly, and such reaction to tourists will likely depend on their perception on tourism's impacts and the effects on their well-being. Tourism can potentially affect the living standards of the local community residing in the tourism destination positively and negatively (Andereck & Nyaupane, 2011). Even though the residents may hold a negative perception on certain tourism's impact on their QoL (e.g. inflation), they may suppress such in the interests of maintaining other positive impact derived from tourism (e.g. employment opportunity). This study examines residents' perception of QoL in different life domains (i.e. material, community, emotional, and health & safety), so as to provide a more comprehensive understanding on residents' benefit-cost allocation suggested by the SET theory.

2.2 Tourism and Residents' Quality of Life (QoL)

The definition of quality of life (QoL) has been a contentious topic debated by many researchers since 1960s (Woo *et al.*, 2015), Andereck and Nyaupane (2011) even underscored that there were more than 100 definitions for QoL. Despite the numerous definitions and models, QoL is generally defined as an individual's satisfaction with life and feeling of fulfilment based on his or her experiences (Andereck & Nyaupane, 2011). Specifically, from the standpoint of residents' perspective in the tourism context, QoL can be referred as how residents view their living conditions as a tourism destination and how such conditions affect their satisfaction in different life domains and overall life satisfaction (Uysal *et al.*, 2016). Although the elements that valued as contribution to QoL may vary from culture to culture, QoL is still considered as a universal value (Andereck & Nyaupane, 2011).

The term 'quality of life' and 'well-being' are usually interchangeably used in the academic literature. The research related to QoL specifically focused on its interrelationship with residents' perception of tourism's impact has begun since 1980 (Uysal *et al.*, 2016). Numerous studies suggested that tourism can result in better QoL through perceived positive impacts (e.g. Kim *et al.*, 2013; Roehl, 1999; Yu, Chancellor & Cole, 2011), such as improving personal standard of living, generating employment opportunities, increasing revenue of local business and generating substantial tax revenue. Conversely, tourism can also degrade QoL through perceived negative impacts (e.g. Nichols, Stitt & Giacomassi, 2002), like causing traffic congestion, increasing cost of living, increasing crime and overcrowding. Given the proliferation of the research on QoL in the tourism context, Uysal *et al.* (2016) have reviewed 36 research works specified to study residents' QoL, and concluded three main observations. First, the impact of tourism development plays a significant role in residents' QoL, both positively and negatively, as noted above. Second, not all the residents have the same perception, which may differ along different personal variables. This is supported by the recent work of Woo *et al.* (2018), which indicated that residents affiliated with the tourism industry have more positive perceptions of both tourism's impact in material life and the related satisfaction level than those who are not affiliated. Third, residents'

attitude and their level of QoL are likely to depend on the stage of tourism development, with most of the benefits bringing forth in the early rather than the later stage. This is according to Doxey's Irridex model (1975), which suggests that residents' attitude towards tourism may pass through a series of stages from 'euphoria', 'apathy', 'annoyance' to 'antagonism' (Figure 2).

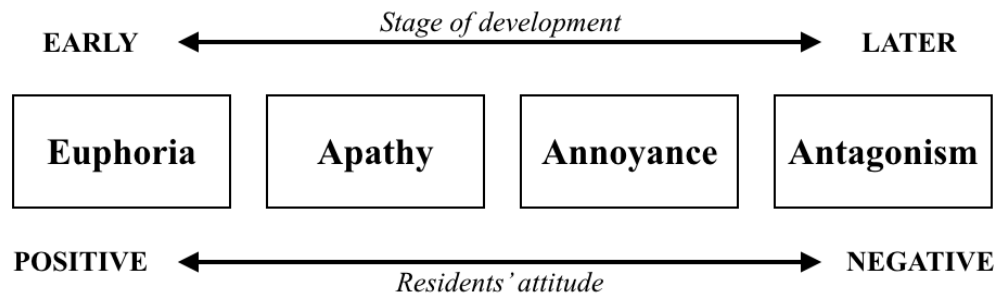


Figure 2 Doxey's Irridex model.
(Source: Doxey, 1975)

From the review of existing literature, it is empirically supported that the array of tourism's impacts and other personal factors have a significant effect on the QoL of the community residents. Jennings and Nickerson (2006) highlighted that it is particularly important for tourism development to address QoL issues because the quality of tourists' experiences depends on a receptive host population. They suggested that there is a linkage between residents' QoL and their reaction and interaction with tourists. However, it is necessary to note that the existing studies in relation to QoL have only been measuring residents' support to tourism development in general (e.g. Woo *et al.*, 2015), rather than their attitude towards tourists specifically. One may argue that, if the purpose of the research is for a long-term success and sustainable development of tourism, it makes sense to also address residents' attitude towards tourists.

2.3 QoL Measurement

The measurement of QoL customarily has two dimensions, an objective dimension which is external to an individual (e.g. household income, CO2 emissions, average life expectancy) and a subjective dimension which reflects the feeling and perception of an individual towards various aspects (Andereck & Nyaupane, 2011; Jennings & Nickerson, 2006). In a recent review of the literature, Uysal *et al.* (2016) pointed out that it may be misleading to capture QoL by using both objective and subjective indicators, due to the possible inconsistency of the result. For instance, a resident living in a community rated objectively high in QoL, could perceive the living conditions in such community as poor. Individuals have different perceptions of QoL even living in similar conditions. Thus, according to Andereck and Nyaupane (2011), QoL is best studied from individual's own perception. This conclusion led to the adoption of subjective indicators in this case study.

Regarding the subjective dimension, different indicators have been developed by different researchers to measure the QoL construct. Woo *et al.* (2015) argued that QoL can be measured in uni-dimensional perspective, by using a general question to ask how an individual feels about his or her life as a whole; or in multidimensional perspective, by considering how the overall life satisfaction is determined by various life domains of the individual. In addition, they also argued the insufficiency to simply measure residents' QoL by overall life satisfaction. It was suggested that more attention should be paid to the satisfaction with important life domains, in order to enhance the holistic understanding of residents' QoL.

Based on the review of existing literature, various life domains have been used to measure residents' QoL (e.g. Andereck & Nyaupane, 2011; Kim *et al.*, 2013; Uysal *et al.*, 2016; Woo *et al.*, 2015; Woo *et al.*, 2018; Yamada, Heo, King & Fu, 2009). For instance, Kim *et al.*'s (2013) study adopted four different life domains, namely material well-being, community well-being, emotional well-being, and health and safety well-being. Their study suggested that tourism's impact has significant influence on residents' satisfaction with all four domains. Woo *et al.* (2015) and Woo *et al.* (2018) adopted these four domains to their studies in the United States. They revealed that the

perceived value of tourism development has a predictable effect on residents' satisfaction with material life and non-material life (comprising community, emotional, and health & safety domains) (Woo *et al.*, 2015) and the satisfaction with these life domains positively influences the overall satisfaction with QoL (Woo *et al.*, 2015; Woo *et al.*, 2018). Thus, the setting of this case study employed these four domains in measuring residents' perception and satisfaction with QoL.

Material life domain is considered as one's economic and living situation, income level, standard of living, housing and socio-economic status (Cummins, 1996), and such domain is found as an undisputed domain in measuring QoL (Dolnicar, Yanamandram & Cliff, 2012). Community life domain is related to the community's public space, facilities and services (Puczko & Smith, 2011). The emotional life domain is associated with the fulfilment of one's spiritual needs, including the activities that could drive such fulfilment (Woo *et al.*, 2015). Lastly, health and safety life domain is also viewed as an uncontested element related to QoL (Dolnicar *et al.*, 2012; Woo *et al.*, 2015).

In the theoretical perspective, Sirgy and Lee (2006) posited that this domain-specific concept can be explained by the bottom-up spillover theory. That is, satisfaction with the overall QoL is at the top of the hierarchy and is influenced by the satisfaction with an array of life domains, such as material, community, emotional, health and safety domains. Moreover, Kim *et al.* (2013) found that the satisfaction with a particular life domain, in turn, is influenced by the perceived tourism's impact related to that domain. For instance, for a local resident, a positive perception of tourism's impact on a specific life domain contributes to his satisfaction with that life domain. Eventually, such perception positively affects the overall satisfaction with QoL.

From the review of previous research, there are strong interrelationships among perceived value of tourism's impact in different life domains, satisfaction with different life domains and overall satisfaction with QoL. Therefore, in our case study we set the following hypotheses regarding the interrelationships:

- H1.** Residents' perception of tourism's impact on QoL is positively correlated with their satisfaction with QoL in material, community, emotional, and health & safety life domains.

- H2.** Residents' satisfaction with QoL in material, community, emotional, and health & safety life domains is positively correlated with their overall satisfaction with QoL.

2.4 Emotional Solidarity

Emotional solidarity can be conceptualised as “the feeling of identification a person has with another person that serves to strengthen bonds between such individuals” (Woosnam, 2012, p. 316). Residents’ shared beliefs and shared behaviour can significantly predict their emotional solidarity (Li & Wan, 2017). The concept of emotional solidarity was originally derived from classical sociology (Woosnam, 2012), which has also been adopted in anthropology, psychology, and gerontology (Woosnam, Norman & Ying, 2009). The notion was first conceptualised into a theoretical framework in 1915, in a book entitled *The Elementary Forms of Religious Life* (Joo *et al.*, 2018; Li & Wan, 2017).

In an effort to extend this concept into tourism research, Woosnam *et al.* (2009) carried out focus group interviews with residents in South Carolina in the United States, and discovered that residents’ shared beliefs and shared behaviour generated significant influence on the residents’ emotional solidarity towards tourists. Furthermore, with the doubt on the single-item measurement of emotional solidarity, Woosnam and Norman (2010) developed the emotional solidarity scale (ESS) comprising 10 items under three factors: 1) welcoming nature (e.g. residents feel proud to have tourists in the destination, feel the benefits from having tourists, appreciate tourists for their contribution to the local economy, and treat tourists fairly); 2) emotional closeness (e.g. residents feel close to tourists and made friends with some of them); 3) sympathetic understanding (e.g. residents identify with tourists, have a lot in common with them, feel affection towards them, and understand them). Since the ESS was introduced, it has been adopted in most of the subsequent research to examine both residents’ and tourists’ attitude regarding emotional solidarity.

Although the research surrounding emotional solidarity within the tourism context has just recently begun, ESS has been found as a reliable psychometric measure

of emotional solidarity in various study sites: Cape Verde, Japan, Macau, Malaysia, Nigeria and the United States (Joo *et al.*, 2018). Specifically, some researchers have revealed emotional solidarity as a significant predictor of residents' perception of tourism's impact (Lai & Hitchcock, 2017; Li & Wan, 2017), residents' social distance with tourists (Joo *et al.*, 2018) and residents' attitude and support to tourism development (Hasani, Moghavvemi & Hamzah, 2016); on the other hand, several other studies have identified predictors of emotional solidarity, such as residents' length of residency (Woosnam & Aleshinloye, 2012), residents' community attachment (Li & Wan, 2017) and resident-tourist interaction (Joo *et al.*, 2018).

Based on these initial works, it would be valuable to deepen our understanding of the concept by further research to identify the factors that influence residents' emotional solidarity towards tourists. A recent study by Joo *et al.* (2018) suggested that variables internal to residents could possibly be the predictor variables of their attitude, such as life satisfaction and perception of tourism's impact, and further research was recommended. With the absence of empirical work to examine the connection between residents' QoL and emotional solidarity, this gap leads to the construct of the present study. We test if residents' perceptions of tourism's impact on QoL and satisfaction with QoL have a relationship with residents' perceived value of emotional solidarity, an indicator of their attitude towards tourists.

Albeit no previous study has attempted to establish a link between residents' QoL and emotional solidarity, both concepts have been investigated as predictors of residents' attitude and support to tourism development (e.g. Hasani *et al.*, 2016; Li & Wan, 2017; Woo *et al.*, 2015; Woosnam, 2012), and have been examined to contain a significant linkage with residents' perception of tourism's impact (e.g. Lai & Hitchcock, 2017; Li & Wan, 2017; Nunkoo & Ramkissoon, 2011; Woo *et al.*, 2018; Yu *et al.*, 2011). As a result, the current study will test the correlation between residents' QoL and their emotional solidarity towards tourists as hypothesized below:

- H3.** Residents' perception of tourism's impact on QoL in material, community, emotional, and health & safety life domains is positively correlated with their emotional solidarity towards tourists (i.e. welcoming nature, emotional closeness, and sympathetic understanding).

- H4.** Residents' satisfaction with material, community, emotional, and health & safety life domains is positively correlated with their emotional solidarity towards tourists (i.e. welcoming nature, emotional closeness, and sympathetic understanding).
- H5.** Residents' satisfaction with overall QoL is positively correlated with their emotional solidarity towards tourists (i.e. welcoming nature, emotional closeness, and sympathetic understanding).

2.5 Social Exchange Theory as a Study Framework

Social Exchange Theory (SET) has been served as the predominant framework in research to explain residents' attitude in tourism related literature (García *et al.*, 2015; Nunkoo & Ramkissoon, 2011; Vargas-Sánchez *et al.*, 2014). From a tourism perspective, SET theory can be defined as a sociological theory “concerned with understanding the exchange of resources between individuals and groups in an interaction situation” (Ap, 1992, p. 668), which assumes that residents' attitude towards tourism within their community is influenced by their evaluation of actual and perceived outcomes generated by tourism (Woo *et al.*, 2018).

A number of studies supported the theory that community residents are prepared to participate in an exchange if they perceived a positive net benefit (e.g. Gursoy & Rutherford, 2004; Woo *et al.*, 2015), including research in our study site - Macau (Li & Wan, 2013; Li & Wan, 2017). However, along with the significant contribution recognised by researchers (García *et al.*, 2015; Nunkoo, 2016), Sharpley (2014) argued that, by definition, SET theory concerns the exchange processes of two parties (i.e. local residents and tourists), while such exchange may not exist for residents who do not have contact or communication with the tourists.

From the literature review, it is generally accepted by scholars that the value of tourism no longer solely counts on the economic aspect. Jennings and Nickerson (2006), for example, argued that there is a threshold for ongoing economic growth as it

could lead to a lower QoL when the costs outweigh the benefits. It is not surprisingly that, therefore, economic, social-cultural and environmental impacts derived from tourism have been employed as predictor variables of residents' attitude. Arguably, some contradicting results have been found from different studies on residents' attitude towards the impact of tourism, specifically related to environmental impact (García *et al.*, 2015). The discrepancy may be attributed to the uniqueness of destination characteristics of the different studies.

As Woo *et al.* (2015) suggested, the value of tourism is actually moving to a more abstract value, and it is momentous to study the value from the context of improving residents' QoL, or well-being. Thus, QoL has been chosen as the variable for the framework setting based on the SET theory. Particularly, if the residents perceive a positive impact from tourism on their QoL, ultimately that may influence their decision to exchange and have stronger ties with the tourists. Conversely, at the other extreme, they may withdraw the exchange and have weaker ties with the tourists, thereby threatening the future success and sustainability of the industry. The study was built on the basis of this theoretical foundation.

CHAPTER 3. METHODOLOGY

3.1 Study Site

The city of Macau, is a Special Administrative Region (SAR) located on the southeastern coast of China, to the west of Hong Kong SAR. Macau has a long history of Portuguese rule and its cultural and legislation are distinguishable from the Mainland. The city, with the land area of just 30.5 km² (DSEC, 2017), and a population of about 653,100 people (DSEC, 2018a), has become increasingly popular among tourists. The recorded visitor arrivals have increased from 22.9 millions in 2008 to more than 32.6 millions in 2017, comprising 17.25 millions overnight visitors and



Figure 3 Map of Macau.
(Source: Globe-trotter)

15.35 millions same-day visitors (DSEC, 2018b). The majority of the visitors is from Mainland China (68.1%) and Hong Kong (18.9%) (DSEC, 2018c).

The city is known for its casino gambling industry, with its gross revenue (US\$33.02 billion, (DICJ, 2017)) surpassed Las Vegas; and famous for the rich of cultural heritage by virtue of the inscription on UNESCO World Heritage List in 2005 (UNESCO, 2005). Not surprisingly, the economy of this small city is based enormously

on tourism. According to WTTC (2018), 61.3%¹ of the city's GDP was derived from travel and tourism, which supported 213,000 jobs. With the dramatic boom and continuously growth of tourism activities, Macau residents' QoL has been highly affected by tourism development and the visiting tourists. Indeed, numerous problems have been generated among the community, such as increasing crime rate, traffic congestion, pollution, energy consumption, and land use conflicts (Wan & Li, 2013). Hence, it is important to understand Macau residents' perception on QoL and its association on their attitude to the tourists. On the other hand, with the high visitor-resident ratio² (50:1) and tourist-resident ratio³ (26:1) in the limited territory, it is almost unavoidable for Macau residents to encounter with visitors in their daily life, and vice versa. This aspect makes the city an ideal place for this study.

3.2 Sampling and Data Collection

The target population of this study is the residents in Macau. Permanent residents (i.e. with minimum residency length of 7 years) who were aged above 18 years old, were considered as the potential participants, in order to ensure familiarity with the changes resulted from tourism development. The target sample size was determined to reach 384⁴.

In western countries, systematic mail survey is a good way to apply a probability sampling method. However, due to the cultural differences, Macau residents tend not to return a mail survey as they may sense a risk to disclose their personal information linked with their residential addresses (Lai & Hitchcock, 2017). Therefore, some researchers have adopted systematic phone call sampling in Macau, by choosing the respondents from a local telephone directory (e.g. Li & Wan, 2013). However, with

¹ According to WTTC's definition, total contribution includes the direct, indirect and induced effect derived from travel and tourism.

² Visitor-resident ratio is derived from the total number of visitor arrivals to total number of residents in Macau as of 2017. The visitor arrivals comprise of overnight visitors and same-day visitors (DSEC, 2018b).

³ According to UNWTO's definition, "visitor (domestic, inbound or outbound) is classified as a tourist, if his/her trip includes an overnight stay" (UNWTO, 2008, p.13). Therefore, tourist-resident ratio is derived from the total number of overnight visitor arrivals to total number of residents in Macau as of 2017 (DSEC, 2018b).

⁴ This sample size was computed using the most conservative estimate for a sample proportion (0.5), a confidence level of 95% and a margin of error of 5%.

more household cutting their landline phone services (131,378 users as of January 2018 (DSEC, 2018d)), the representativeness of the population of 653,100 is questionable. Conversely, the usage of internet services has an increasing trend and contains 398,892 users as of January 2018 (DSEC, 2018d). As a result, in the absence of an adequate sampling frame and to be consistent with the previous resident-tourist relationship studies in Macau (Lai & Hitchcock, 2017; Li & Wan, 2017), a convenience sampling method was adopted. This survey was conducted by using an online survey tool (www.google.com/forms/about/). After the survey was established in the online platform, the survey link was then shared to high-traffic online forums and social media groups in Macau. The sampling was undertaken in April and May in 2018, and a total number of 415 questionnaires were collected. Out of these, eight were excluded as their length of residency was less than seven years and/or they were at the moment living abroad. Consequently, 407 usable questionnaires were employed for data analysis, accounting for 98.1% of the total sample.

3.3 Survey Instrument and Measure

For testing the hypotheses, a questionnaire was developed based on a review of existing literature. It was initially designed in English (See Appendix 1) and was then translated into Traditional Chinese (See Appendix 2), the language commonly used in Macau. Two bilingual individuals assisted in verifying the translation to ensure that both the English and Traditional Chinese versions were comparable. Modifications were then made to improve the consistency of the two versions. Next, the Traditional Chinese version was pilot tested using a convenience sample of five Macau residents holding a Bachelor degree of tourism related studies. After the Traditional Chinese questionnaire was finalised, it was then established in the online platform and distributed by using the aforementioned method.

The survey instrument consisted of four constructs: 1) residents' perception of tourism's impact in four life domains; 2) residents' level of satisfaction with four life domains and overall satisfaction with QoL; 3) residents' emotional solidarity towards tourists; 4) sociodemographic information.

Perception of tourism's impact on QoL and the related satisfaction level were measured with the same items under material, community, emotional, and health and safety life domains (Woo *et al.*, 2015; Woo *et al.*, 2018). However, the two dimensions were measured in different question settings, by asking "How does tourism affect your life in Macau?" and "How satisfied are you with your life?" in an array of items corresponds with the life domains. A total of 26 indicators were borrowed from Woo *et al.*'s (2018) recent study in measuring perceived QoL in the four domains, and some modifications have been conducted for better adaptation to the study site. For example, "The cost of basic necessities such as food, housing and clothing", since Macau residents have experienced an enormous surge of housing price in the recent decades, residents would be confused to generate perception together with other necessities like food and clothing. Thus, the indicator has been separated into "The cost of housing" and "The cost of basic necessities (food, clothing, transportation)". All the items were rated on a 5-point Likert scale, from "very negatively affected" to "very positively affected" and "very unsatisfied" to "very satisfied". Lastly, overall life satisfaction was measured with six items borrowed from Woo and colleagues' studies (Woo *et al.*, 2015; Woo *et al.*, 2018), and all the items were rated on a 5-point Likert scale, from "strongly disagreed" to "strongly agreed".

Residents' emotional solidarity with tourists was measured in three-factor (sympathetic understanding, emotional closeness, welcoming nature), by adopting the 10-item Emotional Solidarity Scale (ESS) developed and refined by Woosnam and colleagues (Woosnam, 2012; Woosnam & Norman, 2010). Numerous researches have adopted the measurement and repeatedly confirmed the three factor structure (Joo *et al.*, 2018). A total of 10 items were rated on a 5-point Likert scale, from "strongly disagreed" to "strongly agreed".

The last construct contains the sociodemographic information, which comprises of gender, age, place of birth, marital status, education, occupation, monthly income, residential area and length of residency. For better understanding the characteristics of the sample, some specific questions have also been placed to address how much the respondents are involved with tourism, by asking "Are you working in a job related to tourism?", "Do you have direct contact with tourists as part of your current job?", "Do

you have any immediate family member working in a job related to tourism?”, “In your opinion, approximately what percentage of your net income is derived either directly or indirectly from Macau tourists’ spending?” and “How many trips outside Macau have you taken in the last 2 years?”.

3.4 Data Analysis

The SPSS 24 statistical software was used to analyse the data. Descriptive analysis was firstly undertaken to evaluate the sample’s characteristics, followed by the reliability test to measure the internal consistency of the QoL construct (i.e. tourism’s impact on the four life domains, satisfaction with the four life domains, and overall satisfaction with QoL) and the ESS factors (i.e. welcoming nature, emotional closeness, and sympathetic understanding). In examining the research hypotheses, Pearson correlation analysis was undertaken to test the relationships among the grand means of the QoL construct and ESS factors. Lastly, the differences in sociodemographic factors and tourism related characteristics were examined by using independent sample t-test or independent sample Kruskal-Wallis test depending on the number of variables and the result of normality test⁵.

The independent sample t-test is a parametric test used to compare the means of two independent groups, so as to determine whether the difference between the groups is statistically significant (Laerd Statistics, 2018a). As the independent sample t-test can only compare the means for two groups, the one-way analysis of variance (ANOVA) is usually used to determine the differences between three or more groups (Kent State University, 2018). However, if the ANOVA’s assumptions are not met, the Kruskal-Wallis test is recommended as an alternative (STHDA, 2018). The Kruskal-Wallis test is a nonparametric test based on rank, which is also used to determine if there are statistically significant differences among groups (Laerd Statistics, 2018b). The test result should be interpreted carefully as the Kruskal-Wallis test does not show which particular groups are significantly different from each other. All the test results were considered at a critical value of 5%.

⁵ As the sample is not random, the tests’ results should be interpreted with care.

CHAPTER 4. RESULTS

4.1 Sample's Characteristics

The demographic characteristics such as gender, age, marital status, place of birth, residential area, education, occupation, and monthly income are summarised in Table 1. The sample comprises of slightly more females (62.9%) than males; 52.3% of the respondents were in the age group of 25-34, followed by the age group of 35-44 (27.3%). Around half of the respondents were single. The vast majority of the respondents was born in Macau (83%), with 11.3% born in Mainland China, 5.2% born in Hong Kong, and 0.5% others. The majority of the respondents (79.1%) lived in the area of Macau Peninsula, which is similar to the residential statistics in Macau (DSEC, 2016). In terms of length of residency, respondents had lived in Macau for 29.4 years on average. Overall, respondents were generally well-educated with at least a bachelor's degree (81.3%), were either employed by public or private sector (87.4%), and with the monthly net income of at least MOP 20,000 (72%), which is the median earnings of the employed residents in Macau (DSEC, 2018e). In comparison with the demographic statistics in Macau, the sample had a similar distribution in gender and residential area, while it tended to be younger and better educated, which resembles the studies of Li and Wan's (2017) and Woosnam, Aleshinloye and Maruyama's (2016) on residents' emotional solidarity in Macau and in Nigeria, respectively.

In terms of tourism related characteristics (Table 2), 34.9% of the respondents were working in the tourism sector, 20.4% of them had direct contact with tourists in current job, and 45.7% had a family member(s) working in tourism sector. In regard to residents' perception of tourists' contribution, on average, residents perceived 39.2% of their individual income were directly or indirectly derived from tourists' spending. In respect of traveling experiences, on average the respondents had travelled 6.89 times outside Macau in the previous two years.

Table 1 Background characteristics of the sample

Variables (<i>n</i> = 407)	<i>n</i>	Percentage (%)
Gender		
Male	151	37.1
Female	256	62.9
Age		
18-24	66	16.2
25-34	213	52.3
35-44	111	27.3
45-54	14	3.4
≥ 55	3	0.7
Marital status		
Single	203	49.9
Married / Living together	198	48.6
Divorced / Widowed	6	1.5
Place of birth		
Macau	338	83
Mainland China	46	11.3
Hong Kong	21	5.2
Others	2	0.5
Residential area		
Macau Peninsula	322	79.1
Taipa / Coloane	85	20.9
Average length of residency (years)		
	29.4	-
Highest education level		
Primary school or below	4	1
High school	35	8.6
Higher diploma	37	9.1
Bachelor degree	280	68.8
Master degree	47	11.5
Doctoral degree	4	1
Occupation		
Student	25	6.1
Public sector employee	88	21.6
Private sector employee	268	65.8
Entrepreneur	12	2.9
Others	14	3.4
Monthly individual net income		
< MOP 5,000	26	6.4
MOP 5,000 - 9,999	12	2.9
MOP 10,000 - 19,999	76	18.7
MOP 20,000 - 29,999	140	34.4
MOP 30,000 - 39,999	89	21.9
≥ MOP 40,000	64	15.7

Table 2 Tourism related characteristics of the sample

Variables (<i>n</i> = 407)	<i>n</i>	Percentage (%)
Working in tourism sector		
Yes	142	34.9
No	265	65.1
Have direct contact with tourists in current job		
Yes	83	20.4
No	324	79.6
Have family member(s) working in tourism sector		
Yes	186	45.7
No	221	54.3
Percentage of income derived from tourists' spending (mean = 39.2%; median = 40%)		
0%	77	18.9
10%	38	9.3
20%	40	9.8
30%	46	11.3
40%	25	6.1
50%	62	15.2
60%	24	5.9
70%	28	6.9
80%	35	8.6
90%	10	2.5
100%	22	5.4
Average number of trip in last 2 years	6.89	-

4.2 Reliability Test

In statistical perspective, reliability refers to the overall consistency of the measure, and the internal consistency estimates of reliability, Cronbach's alpha, was used for this study. The values of Cronbach's alpha range between 0 and 1, interpreting from "much error" to "no error", respectively. According to Nunnally (1978), Cronbach's alpha with value greater than 0.70 indicates an acceptable internal consistency in the measured dimension and hence is considered as reliable. The reliability test was conducted for the QoL construct and the ESS factors, with results ranging from 0.726 - 0.957 (Table 3). As all the alpha values are above 0.7, the measurement under each group of variables is internally consistent and has a satisfactory reliability level.

Table 3 Cronbach's alpha reliability of variables

Variables	No. of items	Cronbach's alpha
Tourism's Impact on QoL		
Material	7	0.737
Community	5	0.831
Emotional	5	0.868
Health & Safety	9	0.900
Satisfaction with QoL		
Material	7	0.837
Community	5	0.867
Emotional	5	0.898
Health & Safety	9	0.926
Overall QoL satisfaction	6	0.909
Emotional solidarity scale (ESS)		
Welcoming nature	4	0.831
Emotional closeness	2	0.726
Sympathetic understanding	4	0.851

4.3 Descriptive Analyses of QoL Construct and ESS factors

Respondents' perception of tourism's impact on QoL, was measured on the 5-point impact scale (1 = Very negatively affected and 5 = Very positively affected). As shown in Table 4, the factor grand mean of tourism's impact to material life ($M = 2.92$) is the highest, followed by emotional life ($M = 2.62$), health and safety life ($M = 2.52$) and community life ($M = 2.40$), all between neutral and negatively affected. More specifically, more positively rated items were those relevant to the material life, such as the security of their current job ($M = 3.43$), the income at their current job ($M = 3.42$), the family income ($M = 3.41$) and the benefits they get from the government ($M = 3.18$). The more negatively rated items were the public transportation ($M = 1.82$), the cost of housing ($M = 2.17$), the cost of basic necessities ($M = 2.23$) and the air quality in their community ($M = 2.23$).

In terms of respondents' level of satisfaction under the same items (Table 4), which was measured on the 5-point satisfactory scale (1 = Very unsatisfied and 5 = Very satisfied). The factor grand mean ranked uniformly as the tourism's impact score, material life satisfaction ($M = 2.75$) is the highest, followed by the to emotional life ($M = 2.68$), health and safety life ($M = 2.60$) and community life ($M = 2.57$), all between neutral and unsatisfied. Particularly, the highest rated items were the security of their

Table 4 Descriptive analysis of QoL construct

	Tourism's Impact		Satisfaction	
	Mean	SD	Mean	SD
Material life domain^{ab}	2.92^d	0.50	2.75^d	0.61
- Overall cost of living	2.60	0.87	2.66	0.88
- Cost of housing	2.17	0.90	1.92	0.91
- Cost of basic necessities (food, clothing, transportation)	2.23	0.81	2.41	0.82
- Income at your current job	3.42	0.77	2.95	0.88
- Security of your current job	3.43	0.72	3.28	0.83
- Family income	3.41	0.69	3.10	0.81
- Benefits you get from the government	3.18	0.85	2.94	0.90
Community life domain^{ab}	2.40^d	0.64	2.57^d	0.69
- Conditions of community environment (air, water, green space)	2.37	0.87	2.59	0.86
- People who live in your community	2.52	0.79	2.74	0.80
- Services and facilities you get in your community	2.69	0.80	2.71	0.84
- Overall community life	2.62	0.77	2.78	0.84
- Public transportation	1.82	0.89	2.02	0.91
Emotional life domain^{ab}	2.62^d	0.67	2.68^d	0.67
- Spare time	2.59	0.86	2.70	0.84
- Leisure life	2.48	0.88	2.66	0.85
- Leisure activity in your community	2.62	0.79	2.62	0.80
- The way culture is preserved in your community	2.64	0.88	2.62	0.83
- Spiritual/religious life in the community	2.79	0.68	2.79	0.67
Health & Safety life domain^{ab}	2.52^d	0.58	2.60^d	0.68
- Health facilities in your community	2.76	0.75	2.71	0.81
- Health service quality in your community	2.70	0.76	2.53	0.85
- Air quality in your community	2.23	0.81	2.37	0.86
- Water quality in your community	2.70	0.69	2.69	0.80
- Environmental quality in your community	2.46	0.81	2.56	0.87
- Environmental cleanliness in your community	2.32	0.82	2.52	0.90
- Safety and security in your community	2.47	0.83	2.73	0.89
- Traffic accident rate in your community	2.48	0.80	2.58	0.85
- Crime rate in your community	2.54	0.76	2.72	0.84
Overall satisfaction with QoL^c	-	-	2.76^d	0.74
- I am satisfied with my life as a whole			3.00	0.86
- The conditions of my life are excellent			2.79	0.82
- In most ways my life is close to ideal	-	-	2.65	0.91
- So far I have got the important things I want in life			2.61	0.96
- If I could live my life over, I would change almost nothing			2.41	0.95
- In general, I am a happy person			3.14	0.88

^a Each item for tourism's impact was asked on a 5-point Likert scale: 1=Very negatively affected and 5=Very positive affected.

^b Each item for satisfaction was asked on a 5-point Likert scale: 1=Very unsatisfied and 5=Very satisfied.

^c Each item was asked on a 5-point Likert scale: 1=Strongly disagreed and 5=Strongly agreed.

^d Factor grand means used for correlation analysis.

current job ($M = 3.28$) and the family income ($M = 3.10$), all other items had mean scores below three ($M < 3$). The lowest rated items were the cost of housing ($M = 1.92$), the public transportation ($M = 2.02$), the air quality in their community ($M = 2.37$) and the cost of basic necessities ($M = 2.41$). For overall life satisfaction (Table 4), the grand factor mean ($M = 2.76$) is derived from six items, on the 5-point agreement scale (1 = Strongly disagreed and 5 = Strongly agreed).

In relation to respondents' emotional solidarity towards tourists in Macau (Table 5), which was measured on the 5-point agreement scale (1 = Strongly disagreed and 5 = Strongly agreed). In general, welcoming nature ($M = 3.54$) factor had a higher grand mean score than those of emotional closeness ($M = 3.07$) and sympathetic understanding ($M = 2.88$). Not surprisingly, the highest rated items were under welcoming nature factor, stating that they treat tourists fairly ($M = 3.65$) and they feel Macau benefits from having tourists ($M = 3.65$), falling within the neutral and agreed categories. The lowest rated items were under sympathetic understanding, stating that they have a lot in common with the tourists ($M = 2.59$) and they identify with the tourists ($M = 2.73$), falling between neutral and disagreed categories.

Table 5 Descriptive analysis of ESS factors

	Mean	SD
Welcoming nature^a	3.54^b	0.66
- I treat tourists fairly	3.65	0.68
- I feel Macau benefits from having tourists	3.65	0.83
- I appreciate tourists for the contribution they make to local economy	3.52	0.85
- I am proud to have tourists come to Macau	3.33	0.85
Emotional closeness^a	3.07^b	0.81
- I have made friends with some tourists	2.82	0.94
- I feel close to some tourists I have met	3.32	0.88
Sympathetic understanding^a	2.88^b	0.73
- I understand the tourists	3.37	0.81
- I identify with the tourists	2.73	0.95
- I feel affection toward tourists	2.81	0.84
- I have a lot in common with the tourists	2.59	0.88

^a Each item was asked on a 5-point Likert scale: 1=Strongly disagreed and 5=Strongly agreed.

^b Factor grand means used for correlation analysis.

4.4 Correlations of QoL Construct and ESS factors

The Pearson R was employed to measure the correlations among the QoL construct and ESS factors in order to test the proposed hypotheses. Theoretically, the higher the absolute value of the correlation value (range from -1 to 1) between the pair of variables, the more associated they are with each other. A positive value denotes a positive association between the variables, and vice versa. The result (Table 6) reveals that the variables are all positively correlated at the significant level at 0.01 or 0.05. It implies that residents who perceived relatively more positive tourism's impact on their QoL in four life domains, were more satisfied with the four life domains and overall QoL, and were also more positive on the emotional solidarity towards tourists. The findings suggested that all the aforementioned hypotheses were supported (Table 7).

Table 6 Correlations of QoL construct and ESS factors

	TI1	TI2	TI3	TI4	S1	S2	S3	S4	OS	ES1	ES2	ES3
TI1	1											
TI2	0.496**	1										
TI3	0.486**	0.662**	1									
TI4	0.472**	0.731**	0.737**	1								
S1	0.608**	0.433**	0.474**	0.461**	1							
S2	0.447**	0.632**	0.563**	0.629**	0.609**	1						
S3	0.453**	0.574**	0.706**	0.627**	0.572**	0.754**	1					
S4	0.440**	0.585**	0.586**	0.700**	0.585**	0.802**	0.771**	1				
OS	0.494**	0.394**	0.485**	0.456**	0.684**	0.554**	0.538**	0.532**	1			
ES1	0.433**	0.180**	0.250**	0.208**	0.315**	0.291**	0.295**	0.321**	0.288**	1		
ES2	0.274**	0.126*	0.160**	0.131**	0.184**	0.239**	0.224**	0.228**	0.191**	0.507**	1	
ES3	0.411**	0.276**	0.334**	0.299**	0.321**	0.387**	0.378**	0.366**	0.364**	0.567**	0.636**	1

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Note:

The correlations under the hypotheses of this case study are shown in bold.

TI1=Tourism's impact on material life; TI2=Tourism's impact on community life; TI3=Tourism's impact on emotional life; TI4=Tourism's impact on health & safety life; S1=Satisfaction with material life; S2=Satisfaction with community life; S3=Satisfaction with emotional life; S4=Satisfaction with health & safety life; OS=Overall satisfaction; ES1=welcoming nature; ES2=emotional closeness; ES3=sympathetic understanding.

Table 7 Summary of the hypotheses testing

Correlation hypotheses		Results
H1	Tourism's impact on QoL in four life domains $\leftarrow(+)\rightarrow$ Satisfaction with QoL in corresponding life domains	Support
H2	Satisfaction with QoL in four life domains $\leftarrow(+)\rightarrow$ Satisfaction with overall QoL	Support
H3	Tourism's impact on QoL in four life domains $\leftarrow(+)\rightarrow$ Emotional solidarity towards tourists	Support
H4	Satisfaction with QoL in four life domains $\leftarrow(+)\rightarrow$ Emotional solidarity towards tourists	Support
H5	Satisfaction with overall QoL $\leftarrow(+)\rightarrow$ Emotional solidarity towards tourists	Support

4.5 Differences in Sociodemographic Factors

In order to explore if there were other factors affecting the residents' emotional solidarity towards tourists, statistical tests were conducted to examine if there were significant difference across the sociodemographic factors. Independent sample t-tests (Table 8) were performed based on respondents' gender, marital status and residential area; and independent sample Kruskal-Wallis tests (Table 9) were performed based on their age, birthplace, length of residency, education, occupation and income. A significance level of 5% was used. Thus, the null hypothesis was only rejected for p-values below this level. According to the test results, significant differences were only found across various education level on the welcoming nature factor.

Table 8 Analysis of sociodemographic difference - Independent sample t-test

Variables (<i>n</i> = 407)	<i>n</i>	Welcoming nature			Emotional closeness			Sympathetic understanding		
		<i>Mean</i>	<i>t</i>	<i>p</i>	<i>Mean</i>	<i>t</i>	<i>p</i>	<i>Mean</i>	<i>t</i>	<i>p</i>
Gender										
Male	151	3.50	-0.887	0.153	3.17	1.948	0.415	2.95	1.560	0.646
Female	256	3.56			3.01			2.83		
Marital status										
Single	203	3.54	0.116	0.608	3.12	1.203	0.102	2.83	-1.290	0.701
Married / Others	204	3.53			3.02			2.92		
Residential area										
Macau Peninsula	322	3.52	-0.710	0.166	3.05	-0.912	0.163	2.85	-1.353	0.156
Taipa / Coloane	85	3.59			3.15			2.98		

Note:

Test was undertaken with a significance level of 0.05. If $p < 0.05$, the null-hypothesis should be rejected and the difference is statistically significant.

Table 9 Analysis of sociodemographic difference - Kruskal-Wallis test

Variables (<i>n</i> = 407)	<i>n</i>	Welcoming nature		Emotional closeness		Sympathetic understanding	
		Mean Rank	<i>p</i>	Mean Rank	<i>p</i>	Mean Rank	<i>p</i>
Age							
18-24	66	210.92		215.07		225.80	
25-34	213	204.20	0.096	208.06	0.128	198.09	0.327
35-44	111	209.91		198.75		205.66	
≥ 45	17	136.06		144.47		182.62	
Place of birth (<i>n</i> = 405)							
Macau	338	204.01		207.81		201.66	
Mainland China	46	206.35	0.626	179.83	0.163	216.33	0.690
Hong Kong	21	179.45		176.36		195.43	
Length of residency							
7-10	10	260.90		235.00		247.95	
11-20	38	194.80		221.59		216.79	
21-30	234	207.39	0.221	208.88	0.281	205.79	0.556
31-40	109	201.89		189.14		193.68	
≥ 41	16	155.06		172.66		190.31	
Highest education level							
High school or below	39	144.29		187.94		197.29	
Higher diploma	37	165.34	0.001	205.81	0.227	187.86	0.773
Bachelor degree	280	215.73		210.73		205.66	
Master / Doctoral degree	51	213.30		178.02		211.74	
Occupation							
Student	25	208.08		199.22		197.20	
Public sector employee	88	203.03		213.88		217.97	
Private sector employee	268	210.38	0.052	203.93	0.688	201.94	0.705
Entrepreneur	12	141.54		173.75		182.00	
Others	14	134.21		177.75		186.64	
Monthly individual net income							
< MOP 5,000	26	194.96		194.85		185.75	
MOP 5,000 - 9,999	12	212.71		208.25		221.38	
MOP 10,000 - 19,999	76	196.90	0.446	213.92	0.934	206.51	0.845
MOP 20,000 - 29,999	140	205.96		206.58		196.83	
MOP 30,000 - 39,999	89	190.40		199.97		211.55	
≥ MOP 40,000	64	229.09		195.11		210.36	

Note:

Normality test was performed and data was not normally distributed. Therefore, non-parametric test - independent sample Kruskal-Wallis test was conducted.

Test was undertaken with a significance level of 0.05. If $p < 0.05$, the null-hypothesis should be rejected and the difference is statistically significant.

4.6 Differences in Tourism related Characteristics

Further statistical tests were also performed across the tourism related characteristics on residents' emotional solidarity towards tourists. Independent sample t-tests (Table 10) were performed for whether residents' working in tourism sector or not, whether their jobs have direct contact with tourists or not, and whether they have family

member(s) working in tourism sector or not. According to the results, no significant difference was found. Then, independent sample Kruskal-Wallis tests (Table 11) were performed for perceived percentage of income derived from tourists' spending and number of trips outside Macau in the previous two years. According to the test results, significant differences were found across perception of income derived from tourists' spending on all the three ESS factors and number of trips outside Macau in the last two years on welcoming nature and emotional closeness factors.

Table 10 Analysis of difference in tourism related characteristics - Independent sample t-test

Variables (<i>n</i> = 407)	<i>n</i>	Welcoming nature			Emotional closeness			Sympathetic understanding		
		Mean	<i>t</i>	<i>p</i>	Mean	<i>t</i>	<i>p</i>	Mean	<i>t</i>	<i>p</i>
Working in tourism sector										
Yes	142	3.69	-3.584	0.138	3.21	-2.561	0.581	2.96	-1.844	0.844
No	265	3.45			3.00			2.83		
Have direct contact with tourists in current job										
Yes	83	3.42	-1.767	0.544	3.08	0.183	0.551	2.85	-0.382	0.400
No	324	3.57			3.07			2.88		
Have family member(s) working in tourism sector										
Yes	221	3.61	1.994	0.891	3.13	1.284	0.077	2.91	0.844	0.169
No	186	3.48			3.02			2.85		

Note:

Test was undertaken with a significance level of 0.05. If $p < 0.05$, the null-hypothesis should be rejected and the difference is statistically significant.

Table 11 Analysis of difference in tourism related characteristics - Kruskal-Wallis test

Variables (<i>n</i> = 407)	<i>n</i>	Welcoming nature		Emotional closeness		Sympathetic understanding	
		Mean Rank	<i>p</i>	Mean Rank	<i>p</i>	Mean Rank	<i>p</i>
% of income derived from tourists' spending							
0-30%	201	201.59	0.000	203.02	0.006	195.00	0.021
40-70%	139	178.76		187.14		199.78	
80-100%	67	263.58		241.93		239.76	
No. of trips in last 2 years							
0-2	66	149.24		185.93		176.85	
3-7	222	212.71	0.000	203.03	0.020	208.97	0.096
8-10	85	208.42		198.30		200.09	
>10	34	242.35		259.63		234.04	

Note:

Normality test was performed and data was not normally distributed. Therefore, non-parametric test - independent sample Kruskal-Wallis test was conducted.

Test was undertaken with a significance level of 0.05. If $p < 0.05$, the null-hypothesis should be rejected and the difference is statistically significant.

CHAPTER 5. DISCUSSIONS & CONCLUSION

The concepts of QoL and emotional solidarity have been employed separately in tourism studies across different destinations. This study is the first of its kind to link these two concepts together to examine residents' attitude towards tourists. Understanding how residents' QoL associates with their emotional solidarity may provide useful insights for both long-term success and sustainable development of tourism destinations. As a result, this dissertation attempted to measure how residents of Macau perceived tourism's impact on their QoL and how they were satisfied with QoL in four domains (i.e. material, community, emotional, and health & safety). The overall satisfaction was also estimated, as well the correlations among the QoL construct and the ESS factors (i.e. welcoming nature, emotional closeness and sympathetic understanding).

The findings indicated that all proposed hypotheses were supported and all factors were positively correlated. It indicated that residents who perceived more positive tourism's impact on their QoL, were more satisfied with QoL. They were also more welcoming to tourists, felt emotionally closer with tourists and obtained better sympathetic understanding of tourists. On the contrary, residents who perceived a more negative impact, were more unsatisfied with QoL and thus had a lower level of emotional ties with the tourists. The findings support Uysal *et al.*'s (2016) conclusion, based on many studies, that the impact of tourism development plays an important role in residents' QoL. The findings also support Joo *et al.*'s (2018) assumption that the perception of tourism's impact and life satisfaction can contribute to residents' emotional solidarity.

On average, respondents perceived a slightly positive impact from tourism on their QoL in regard to their individual and family income, security of job, and benefits they can get from the government, all of them were under material domain. Conversely, they perceived negative impact for all other indicators across four domains, especially felt a vigorous negative impact on public transportation under the community domain and cost of housing under the material domain. Similar to many studies, residents tend

to perceive positive impacts on some economic items and negative impacts on the sociocultural and environmental items (García *et al.*, 2014). However, the residents of Macau also perceived negative economic impacts on the cost of living, cost of housing and cost of basic necessities, which should not be underestimated. The growing tension may catalyse anti-tourist emotions, thus dissatisfying the tourists and threatening the sustainable development of Macau as a tourism destination. For instance, an anti-tourist movement took place in Barcelona in 2017 after the tourism activities crossed the threshold of the residents' tolerance (Corderoy, 2017).

Regarding the respondents' satisfaction with QoL, they only showed modest satisfaction with security of job and family income under the material domain. They felt dissatisfied with all other indicators, with strong dissatisfaction with public transportation and cost of housing, which were also perceived as rather negatively affected by tourism. Ultimately, the value obtained for the overall satisfaction with QoL (2.76) indicated that residents were not satisfied. As suggested by Doxey's (1975) theory, residents' attitude may become more negative in a later stage of tourism development when they perceived more costs than the anticipated benefits. This is manifestly the situation in Macau, given the number of visitor arrivals increased from 22.9 millions to 32.6 millions over the last ten years (DSEC, 2018b) in a tiny territory.

Based on the supportive results of H3, H4 and H5, respondents' negative perception and dissatisfaction helped to explain the low emotional solidarity scores. Among the three ESS factors, welcoming nature factor obtained the highest mean score. This result is commonly seen in other ESS studies taken place in different tourism destinations (e.g. Hasani *et al.*, 2016; Joo *et al.*, 2018; Lai & Hitchcock, 2017; Woosnam, 2011; Woosnam *et al.*, 2016). However, it is notable that the low degree of sympathetic understanding factor (below neutral) is rarely seen in other studies measuring residents' emotional solidarity. More importantly, the mean scores of emotional closeness and sympathetic understanding factors have dropped by 4.7%⁶ and 9.6%⁷ respectively, when comparing to Lai and Hitchcock's (2017) survey measuring the same ESS items in Macau in 2015. This may due to the continuous growth of visitor

⁶ Comparison was carried out by converting scales from 1-7 to 1-5: $[3.07-(4.508*(5/7))]/(4.508*(5/7)) = 4.7\%$

⁷ Comparison was carried out by converting scales from 1-7 to 1-5: $[2.88-(4.46*(5/7))]/(4.46*(5/7)) = 9.6\%$

arrivals and insufficient efforts to minimise the negative impact perceived by the residents. As the SET theory suggests, when tourism's impact on QoL is perceived negatively (costs exceed benefits), residents may no longer show positive attitude to tourists (withdraw the exchange), thereby threatening the future success and sustainability of the industry.

Residents show welcoming nature to tourists due to the social norms to welcome guests as a host (Joo *et al.*, 2018) and, as suggested by the findings of this study, due to their awareness of the personal financial benefits derived from having the tourists, education level and travel frequency. Respondents who perceived 80-100% of their income was derived from tourists' spending, or obtained a university degree, or had higher travel frequencies, showed a higher degree of welcoming nature to tourists. The relatively low degree of emotional closeness and sympathetic understanding may be as a result of the perceived costs from having tourists being approximate to or even exceeding the perceived benefits.

Furthermore, as indicated in the following, this study has both theoretical implications for academics and practical implications for the Macau government, tourism planners and policy makers.

5.1 Theoretical Implication

The foundation of this study is based on the existing QoL and ESS scales. To the best of our knowledge, this is the first time that their relationship has been examined. This setting was developed based on the call by Jennings and Nickerson (2006) suggesting a linkage between residents' QoL to their reaction and interaction with tourists and Joo *et al.*'s (2018) assumption that perception of tourism's impact and life satisfaction could possibly demonstrate residents' emotional solidarity. The results of H1 and H2 contribute to the tourism research by emphasising the positive relationship between residents perception of tourism's impact and their satisfaction with QoL, and more importantly, H3, H4 and H5 shed light on the importance to consider QoL in examining resident-tourist relationship. Within the tourism context, there are a few studies emphasised QoL's impact on residents' attitude. For instance, Woo *et al.* (2015),

in a study carried out in the United States, found out that QoL has a positive influence on residents' support for further tourism development. This study contributes specifically to the analysis of the resident-tourist relationship, by providing evidence that QoL and residents' emotional solidarity are positively correlated. Thus, analysing the QoL of residents is relevant when examining residents' attitude towards tourists. In addition, this study also enlarges our understanding on emotional solidarity. As the research adopting emotional solidarity to interpret residents' attitude towards tourists has newly begun, this study is the first attempt to investigate the link between residents' emotional solidarity and their perception related to QoL. Thus, the findings of this study widen the knowledge on the possible factors that may affect the degree of emotional solidarity.

5.2 Practical Implication

Tourism has been growing and became a vital industry in many cities. The sustainable tourism development in these cities is conditional on the perception of the local residents. The findings of this study allow tourism planners and policy makers to better understand what factors may enhance or degrade residents' attitude to tourists, which could be from multidimensional values (i.e. material, community, emotional, and health & safety). Realising that it is nearly not possible for the tourism planners or policy makers to create residents' emotional solidarity towards tourists (Woosnam, 2011; Woosnam *et al.*, 2016), efforts can be put in helping residents to better understand how tourism may enhance their QoL (e.g. create better job opportunities, better community facilities, better infrastructure, better environmental protection, and safer neighbourhood); or in overdeveloped destinations, in helping residents to avoid perceiving tourism as contributing to the degradation of their QoL. If residents perceived more positive impacts and higher satisfaction with QoL, it may ultimately foster solidarity and translate to greater emotional ties with tourists. Thus, contributes to attain sustainable development in the tourism destinations.

Implications also exist specifically for the Macau government, tourism planners and policy makers. With residents perceived rather negative impacts from tourism,

showed dissatisfaction with their QoL, and indicated low sympathetic understanding to the tourists, there are clear signs of tension between residents and tourists in Macau. The current level of tourism development affects residents' QoL negatively. Therefore residents may no longer identify with, have affection toward, and see what they have in common with the tourists.

Although Macau was ranked the third richest territory in the world (Gregson, 2017), the residents perceived negative impacts from tourism and dissatisfaction with their material life. Additionally, the city's population density was reported as the highest in the world (Macau News, 2016), and the surge of visitor arrivals made the community further overstretched. Plausibly, that was the reason why the community life was rated the lowest score. In order to help the residents to avoid perceiving tourism as contributing to the degradation of their QoL, the Macau government may consider: 1) Being mindful when allocating resources among tourism development and public needs (e.g. land use for building hotels or public housing). 2) Putting efforts to manage the number of visitor arrivals in order to avoid passing the bottom line of the city's carrying capacity, especially before completing the construction of the public light rail system. 3) Understanding the perception of the local residents by conducting regular surveys and encouraging their involvement in tourism planning.

More notably, the visitor satisfaction recorded a decline in 2017 (Macau Daily Times, 2018). This may be caused by the negative attitude from the residents, and/or by the degradation of QoL in the destination (e.g. poor air quality and public transportation) experienced by the tourists. Therefore, it is crucial to increase residents' QoL in order to make the destination more sustainable and competitive.

5.3 Limitation and Future Research

As with all types of research, there are potential limitations associated with this study, which also provide opportunities for future research. In terms of sampling residents in Macau, the employment of an online survey instrument created somewhat an uneven sample distribution. In general, the online respondents tend to be younger, richer and better educated due to the different familiarity in using technology among

demographic groups (Yetter & Capaccioli, 2010). Future research may take note of this and put more efforts to ensure that the sample could have greater diversity in age and education level.

Moreover, as this study was conducted during a particular point of time and circumstances, the result may not be able to reflect the full picture of residents' attitude (García *et al.*, 2015). Li and Wan (2017) stressed that residents' attitude is dynamic and varies over time due to the change of government policies and different development stages of the destination. Hence, future research could consider a longitudinal approach to explore the residents' attitude overtime. Besides the time, destination characteristics should also be considered. Macau is an intensely developed destination where the residents' attitude may differ from destinations in different countries, culture, tourism type and/or development stage. The result of this study may only be useful for small sized destination with established tourism industry, especially for those seeking to have a better understanding on the residents' attitude in a mass tourism setting. Wherefore more studies on residents' attitude towards tourists should be undertaken in different destination settings, in order to allow other destinations alike to benefit from the lessons learnt.

Additionally, in respect to the data analysis method, one may argue that correlation analysis may not be able to fully explore the relationships among the variables. However, the findings from this dissertation paved the way for future study to examine the relationship between QoL and emotional solidarity. Although the linkage is logical, no one has yet tested the possible influences among these variables. With the supportive results from this study, consideration should be given to include QoL as the variable to predict residents' attitude, such as, to test the explanatory relationships by using the structural equation modelling method. In other respect, this study exclusively focused on four life domains (i.e. material, community, emotional, and health & safety) that may connect with residents' attitudes. Other life domains may also be examined in future studies. For instance, the leisure life domain, as motivated by the support from the findings that residents with higher travel frequencies generally show a higher degree of emotional solidarity towards tourists.

Lastly, aside from considering residents' emotional solidarity, future research should consider to examine how QoL associates with the emotional solidarity among

different stakeholders, such as the tourism workers' attitude towards tourists. It is conceivable that tourists' satisfaction would be directly influenced by the local guides, the servers working in restaurants, or the receptionists working in hotels. If we could obtain insight into how to enhance the tourism workers' emotional solidarity towards tourists, then a relevant contribution could be given to the sustainability of both private corporations and the destinations as a whole.

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APPENDICES

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Appendix 1. Questionnaire in English



Macau Residents' Attitude towards Tourists

Thank you for agreeing to take part in this survey measuring the relationship of Macau residents' quality of life and attitude towards tourists. This survey is for the purpose of academic research for a dissertation integrated in a Master program of Tourism Economics and Regional Development, at Universidade do Algarve in Portugal. We appreciate your time and willingness to share your perspectives, which are important for the sustainable tourism development in Macau.

Your responses are completely confidential and will only be used for group analysis and scientific research purposes.

Section 1: Tourism's impact on your quality of life

1. How does tourism affect your life in Macau? For each of the following items, please indicate the degree in which you are affected. (1 = Very negatively affected; 5 = Very positively affected)

	Very negatively affected	Negatively affected	Neutral	Positively affected	Very positively affected
The overall cost of living	1	2	3	4	5
The cost of housing	1	2	3	4	5
The cost of basic necessities (food, clothing, transportation)	1	2	3	4	5
The income at your current job	1	2	3	4	5
The security of your current job	1	2	3	4	5
The family Income	1	2	3	4	5
The benefits you get from the government	1	2	3	4	5
The conditions of your community environment (air, water, green space)	1	2	3	4	5
The people who live in your community	1	2	3	4	5
The services and facilities you get in your community	1	2	3	4	5
The overall community life	1	2	3	4	5
The public transportation	1	2	3	4	5
The spare time	1	2	3	4	5
The leisure life	1	2	3	4	5
The leisure activity in your community	1	2	3	4	5
The way culture is preserved in your community	1	2	3	4	5
The spiritual/religious life in the community	1	2	3	4	5
The health facilities in your community	1	2	3	4	5
The health service quality in your community	1	2	3	4	5

The air quality in your community	1	2	3	4	5
The water quality in your community	1	2	3	4	5
The environmental quality in your community	1	2	3	4	5
The environmental cleanliness in your community	1	2	3	4	5
The safety and security in your community	1	2	3	4	5
The traffic accident rate in your community	1	2	3	4	5
The crime rate in your community	1	2	3	4	5

Section 2: Satisfaction with your quality of life

2. How satisfied are you with your life? For each of the following items, please indicate your satisfaction level. (1 = Very unsatisfied; 5 = Very satisfied)

	Very unsatisfied	Not satisfied	Neutral	Satisfied	Very satisfied
The overall cost of living	1	2	3	4	5
The cost of housing	1	2	3	4	5
The cost of basic necessities (food, clothing, transportation)	1	2	3	4	5
The income at your current job	1	2	3	4	5
The security of your current job	1	2	3	4	5
The family Income	1	2	3	4	5
The benefits you get from the government	1	2	3	4	5
The conditions of your community environment (air, water, green space)	1	2	3	4	5
The people who live in your community	1	2	3	4	5
The services and facilities you get in your community	1	2	3	4	5
The overall community life	1	2	3	4	5
The public transportation	1	2	3	4	5
The spare time	1	2	3	4	5
The leisure life	1	2	3	4	5
The leisure activity in your community	1	2	3	4	5
The way culture is preserved in your community	1	2	3	4	5
The spiritual/religious life in the community	1	2	3	4	5
The health facilities in your community	1	2	3	4	5
The health service quality in your community	1	2	3	4	5
The air quality in your community	1	2	3	4	5
The water quality in your community	1	2	3	4	5
The environmental quality in your community	1	2	3	4	5
The environmental cleanliness in your community	1	2	3	4	5
The safety and security in your community	1	2	3	4	5
The traffic accident rate in your community	1	2	3	4	5
The crime rate in your community	1	2	3	4	5

3. How satisfied are you with your overall life in general? For each of the following items, please indicate your level of agreement. (1 = Strongly disagreed; 5 = Strongly agreed)

	Strongly disagreed	Disagreed	Neutral	Agreed	Strongly agreed
I am satisfied with my life as a whole	1	2	3	4	5
The conditions of my life are excellent	1	2	3	4	5
In most ways my life is close to ideal	1	2	3	4	5
So far I have got the important things I want in life	1	2	3	4	5
If I could live my life over, I would change almost nothing	1	2	3	4	5
In general, I am a happy person	1	2	3	4	5

4. What do you think is the most important aspect to your quality of life?

- Material Conditions
 Community Life
 Emotional Life
 Health and Safety
 Other (Please specify): _____

Section 3: Your feelings toward tourists in Macau

5. Please indicate your level of agreement with the following items concerning your feelings toward tourists in Macau. (1 = Strongly disagreed; 5 = Strongly agreed)

	Strongly disagreed	Disagreed	Neutral	Agreed	Strongly agreed
I treat tourists fairly	1	2	3	4	5
I feel Macau benefits from having tourists	1	2	3	4	5
I appreciate tourists for the contribution they make to local economy	1	2	3	4	5
I am proud to have tourists come to Macau	1	2	3	4	5
I have made friends with some tourists	1	2	3	4	5
I feel close to some tourists I have met	1	2	3	4	5
I understand the tourists	1	2	3	4	5
I identify with the tourists	1	2	3	4	5
I feel affection toward tourists	1	2	3	4	5
I have a lot in common with the tourists	1	2	3	4	5

Section 4: Background Information

6. Your gender
 - Female
 - Male

7. Your age (*Please select the age range*)
 - 18-24
 - 25-34
 - 35-44
 - 45-54
 - 55-64
 - 65 or above

8. Your place of birth
 - Macau
 - Mainland China
 - Hong Kong
 - Other (Please specify) : _____

9. Your current marital status
 - Single
 - Married / Living together
 - Divorced / Widowed

10. Your highest level of education
 - Primary school or below
 - High school
 - Higher Diploma
 - Bachelor degree
 - Master degree
 - Doctoral degree

11. Your occupation
 - Student
 - Public sector employee
 - Private sector employee
 - Entrepreneur
 - Other (Please specify) : _____

12. Are you working in a job related to tourism?
 - Yes
 - No

13. Do you have direct contact with tourists as part of your current job?
 - Yes
 - No

14. Do you have any immediate family member working in a job related to tourism?

Yes

No

15. Your individual net income (*Monthly*)

under MOP 5,000

MOP 5,000 – 9,999

MOP 10,000 – 19,999

MOP 20,000 –29,999

MOP 30,000 –39,999

MOP 40,000 or more

16. In your opinion, approximately what percentage of your net income is derived either directly or indirectly from Macau tourists' spending? (*Please choose from 0-100%*)

0 10 20 30 40 50 60 70 80 90 100

17. Your residential area

Macau Peninsula

Taipa

Coloane

Other (Please specify) : _____

18. How many years have you lived in Macau? (*Please fill in number*)

19. How many trips outside Macau have you taken in the last 2 years? (*Please fill in number*)

**Thank you again for taking your time to complete this survey,
your valuable opinions will be of great help.**

Appendix 2. Questionnaire in Traditional Chinese



澳門居民對旅客的態度調查

您好，感謝您同意參與此項問卷調查。本人是於葡萄牙阿爾加維大學(Universidade do Algarve)修讀旅遊經濟學和區域發展碩士課程的學生，此項調查是該課程的論文研究部分，目的是探討澳門居民的生活質素，以及其對旅客的態度之相關性。本次調查屬自願性質，再次感謝您抽空參與並分享您的意見，這將對澳門旅遊業的可持續發展具有重要意義。

您所提供的所有資料將完全保密，僅用於整體分析及學術研究用途。

第一部分：旅遊業對您的生活質素之影響

1. 您認為澳門的旅遊業對您的生活造成影響嗎？請針對下列項目勾選出您所認同的影響程度。
(1=非常負面的影響；5=非常正面的影響)

	非常負面的影響	負面的影響	中立	正面的影響	非常正面的影響
整體生活成本	1	2	3	4	5
住屋成本	1	2	3	4	5
生活必需品的費用 (如食品, 衣服, 交通)	1	2	3	4	5
您目前工作的收入	1	2	3	4	5
您目前工作的穩定程度	1	2	3	4	5
您的家庭收入	1	2	3	4	5
您可從政府機構所獲取之福利	1	2	3	4	5
您所住的社區內的環境狀況 (如空氣, 水質, 綠化)	1	2	3	4	5
在您社區內居住的人	1	2	3	4	5
在您社區內的服務及設施	1	2	3	4	5
整體社區生活	1	2	3	4	5
公共交通	1	2	3	4	5
空餘時間	1	2	3	4	5
閒暇生活	1	2	3	4	5
在您社區內的休閒活動	1	2	3	4	5
在您社區內的文化保育	1	2	3	4	5
社區內的心靈/宗教相關的生活	1	2	3	4	5
在您社區內的保健設施	1	2	3	4	5
在您社區內的醫護服務質素	1	2	3	4	5

在您社區內的空氣質量	1	2	3	4	5
在您社區內的水質	1	2	3	4	5
在您社區內的环境質量	1	2	3	4	5
在您社區內的环境清潔	1	2	3	4	5
在您社區內的安全及保安狀況	1	2	3	4	5
在您社區內的交通意外率	1	2	3	4	5
在您社區內的犯罪率	1	2	3	4	5

第二部分：您的生活質素滿意度

2. 您對於目前的生活感到滿意嗎？請針對下列項目勾選出您所認同的滿意程度。
(1=非常不滿意；5=非常滿意)

	非常 不滿意	不滿意	中立	滿意	非常 滿意
整體生活成本	1	2	3	4	5
住屋成本	1	2	3	4	5
生活必需品的費用（如食品, 衣服, 交通）	1	2	3	4	5
您目前工作的收入	1	2	3	4	5
您目前工作的穩定程度	1	2	3	4	5
您的家庭收入	1	2	3	4	5
您可從政府機構所獲取之福利	1	2	3	4	5
您所住的社區內的环境狀況（如空氣, 水質, 綠化）	1	2	3	4	5
在您社區內居住的人	1	2	3	4	5
在您社區內的服務及設施	1	2	3	4	5
整體社區生活	1	2	3	4	5
公共交通	1	2	3	4	5
空餘時間	1	2	3	4	5
閒暇生活	1	2	3	4	5
在您社區內的休閒活動	1	2	3	4	5
在您社區內的文化保育	1	2	3	4	5
社區內的心靈/宗教相關的生活	1	2	3	4	5
在您社區內的保健設施	1	2	3	4	5
在您社區內的醫護服務質素	1	2	3	4	5
在您社區內的空氣質量	1	2	3	4	5
在您社區內的水質	1	2	3	4	5
在您社區內的环境質量	1	2	3	4	5
在您社區內的环境清潔	1	2	3	4	5
在您社區內的安全及保安狀況	1	2	3	4	5
在您社區內的交通意外率	1	2	3	4	5
在您社區內的犯罪率	1	2	3	4	5

3. 以整體來說，您對於目前的生活感到滿意嗎？請針對下列項目勾選出您所認同的同意程度。
(1=非常不同意；5=非常同意)

	非常不同意	不同意	中立	同意	非常同意
我很滿意我的生活	1	2	3	4	5
我的生活情況非常好	1	2	3	4	5
在絕大部分情況裡，我的生活接近我的理想狀態	1	2	3	4	5
到目前為止，我已經擁有生命裡我想要的重要事物	1	2	3	4	5
若是能夠重新安排我的生活，我幾乎不想改變什麼	1	2	3	4	5
整體來說，我是一個快樂的人	1	2	3	4	5

4. 您認為以下哪項因素對您的生活質素最為重要？
- 物質因素
 - 社區因素
 - 情感因素
 - 健康及安全
 - 其他：(請註明)_____

第三部分：您對澳門旅客的感受

5. 以下是關於您對澳門旅客的感受。請按照您的感覺，針對下列項目勾選出您所認為的同意程度。
(1=非常不同意；5=非常同意)

	非常不同意	不同意	中立	同意	非常同意
我合理地對待旅客	1	2	3	4	5
我覺得澳門可從旅客中得益	1	2	3	4	5
我感謝旅客為本地經濟所作出的貢獻	1	2	3	4	5
我為有旅客來澳門感到自豪	1	2	3	4	5
我曾與一些旅客結識成為朋友	1	2	3	4	5
我曾經遇到一些讓我感到親切的旅客	1	2	3	4	5
我能夠理解旅客	1	2	3	4	5
我認同旅客是我們的一份子	1	2	3	4	5
我對旅客感到喜愛	1	2	3	4	5
我和旅客有很多共同的地方	1	2	3	4	5

第四部分：背景資料

6. 您的性別
- 女
 - 男
7. 您的年齡歲數
- 18-24歲
 - 25-34歲
 - 35-44歲
 - 45-54歲
 - 55-64歲
 - 65歲或以上
8. 您的出生地
- 澳門
 - 中國內地
 - 香港
 - 其他(請註明): _____
9. 您的婚姻狀況
- 單身
 - 已婚 / 同居
 - 離婚 / 喪偶
10. 您的教育程度
- 小學或以下
 - 中學
 - 大專
 - 學士學位
 - 碩士學位
 - 博士學位
11. 您的職業
- 學生
 - 公職人員
 - 私營公司員工
 - 公司持有人
 - 其他(請註明): _____
12. 您是否正在從事與旅遊相關的工作？
- 是
 - 不是
13. 您目前的工作需要直接跟旅客接觸嗎？
- 需要
 - 不需要

14. 您有沒有直系親屬目前正在從事與旅遊相關的工作？

- 有
- 沒有

15. 您的個人淨收入（每月）

- MOP 5,000 以下
- MOP 5,000 – 9,999
- MOP 10,000 – 19,999
- MOP 20,000 –29,999
- MOP 30,000 –39,999
- MOP 40,000 以上

16. 在您的淨收入裡，您認為當中多少個百分比是直接或間接從澳門旅客的消費中衍生？（請從 0-100%中選擇）

0 10 20 30 40 50 60 70 80 90 100

17. 您的居住地區

- 澳門半島
- 氹仔
- 路環
- 其他(請註明):_____

18. 您在澳門居住的年數（請填寫阿拉伯數字）

19. 在過去兩年內，您曾離澳出遊的次數（請填寫阿拉伯數字）

再次感謝您在百忙之中抽空完成本問卷，您的寶貴意見將是次研究帶來莫大的助益。