Understanding Host Community Attitudes towards Tourism and Resident-Tourist Interaction: A Socio-Behavioural Study of Melbourne’s Urban-Rural Fringe

A thesis submitted in fulfillment of the requirements for the degree of

Doctor of Philosophy

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Declaration

I certify that except where due acknowledgement has been made, the work is that of the author alone; the work has not been submitted previously, in whole or in part, to qualify for any other academic award; the content of the thesis is the result of work which has been carried out since the official commencement date of the approved research program; and, any editorial work, paid or unpaid, carried out by a third party is acknowledged.

______________________________
Jiaying Zhang

Date:
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Glossary of Acronyms

AA = Affective Attitude

ANOVA = Analysis of Variance

DF = Degree of Freedom

FC = Facilitating Conditions

FFM = Five Factor Model of personality

GDP = Gross Domestic Products

GSP = Gross State Products

IA = Instrumental Attitude

NB = Normative Beliefs

OCEAN = Openness to experience, Conscientiousness, Extraversion, Agreeableness and Neuroticism (the five personality traits defined by the FFM)

PBC = Perceived Behavioural Control

PC = Perceived Consequences

PNB = Personal Normative Beliefs

PSN = Perceived Social Norms

RB = Role Beliefs

R-T = Resident-Tourist

SARS = Severe Acute Respiratory Syndrome

SET = Social Exchange Theory

SI = Self Identity
SN = Subjective Norm

SPSS = Statistical Package for the Social Sciences

TAFE = Technical and Further Education

TIB = Theory of Interpersonal Behaviour

TPB = Theory of Planned Behaviour

TRA = Theory of Reasoned Action

TSA = Tourism Satellite Account

UNWTO = World Tourism Organization of the United Nations. To distinguish from the World Trade Organization (WTO), UNTWO was used in the present study to represent the World Tourism Organization.

WTTC = World Travel and Tourism Council
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UNDERSTANDING COMMUNITY ATTITUDES TOWARDS TOURISM AND RESIDENT-TOURIST INTERACTION: A SOCIO-BEHAVIOURAL STUDY OF MELBOURNE’S URBAN-RURAL FRINGE
As an important component of tourism, the host community has been given increasing research attention to its role in tourism development. It has come to common agreement that without a supporting host environment, it is difficult to sustain the long-term and successful development of the tourism industry.

Within the considerable body of knowledge, host community attitudes towards tourism have been extensively studied through measuring the impacts of tourism perceived by community members. It has been found that the fast development of the tourism industry has created both positive and negative impacts on host communities. Such impacts are exhibited in a wide range from the change of economic structure to social, cultural and environmental issues. Reacting to these impacts, host residents hold various attitudes towards the development of the tourism industry. To explain the antecedents of such variations, a large number of studies have investigated the influence of socio-demographics and occupational connection with tourism. Nevertheless, there are still a few research gaps and deficiencies within the existing literature.

First, the influence of psychological factors (personality) on attitudes towards tourism is somewhat neglected. According to the generally accepted definition, attitude is a psychological tendency. Thus it is hypothesized in the present study that personality should also play a role in community attitudes towards tourism.

Second, when examining the relationship between community attitudes towards tourism and socio-demographic factors, the majority of previous studies did not distinguish the orthogonal dimensions of attitudes (such as positive dimension and negative dimension). Thus, when these studies concluded that a specific factor has an influence on host residents’ attitudes towards tourism, they did not investigate whether such influences were on all the dimensions of attitudes or just on one dimension.
Third, the existing literature has not addressed the issue of whether specific attitudes towards tourism will lead to a corresponding behaviour when interacting with tourists, and what other factors are influential in this host-guest interactive behaviour. Such a research gap can be explained by the lack of a sound theoretical framework in modeling this behaviour.

These research gaps and deficiencies comprised the rationale of the present study and were addressed in depth. A quantitative approach was employed for the entire project. A self-administered questionnaire survey was used to collect primary data. A total of 878 useful questionnaires were returned for analyses. Stratification sampling methods were utilized in communities where population database was accessible, while random sampling methods were used in other communities. The combination of these methods provided a good representation of the population.

The empirical findings confirmed two major hypotheses of the present study in terms of community attitudes towards tourism. First, it was found that there was a significant relationship between an individual’s personality and his/her attitudes towards tourism. Residents being high on Openness, Conscientiousness, Extraversion and Agreeableness traits and low on the Neuroticism trait tended to be more positive and less negative towards tourism than their counterparts. Second, while some factors were found to be influential on both positive and negative dimensions of attitudes towards tourism, some other factors only demonstrated influences on one dimension. This finding highlighted the necessity to recognize the orthogonal dimensions of attitudes when investigating the influence of a potential factor.

The Resident-Tourist Interaction Model developed in this study was valid and reliable for the data. Drawing on the evaluation results of three leading behavioural theories – the TRA, TPB and TIB, the R-T Interaction Model identified attitudinal, volitional, social, motivating and habitual factors for the prediction of resident-tourist interactive behaviour. Among which, motivating factor (intention) was the critical and immediate element for action, which, in turn, was best predicted by social supports (Subjective Norms). Examination of the moderating
effects of external factors (gender, age and personality traits) suggested that such external factors only moderated the predictive power of the Model by less than two percent. Thus, it was concluded that, when internal factors are included, external factors did not help the prediction of resident-tourist interactive behaviours.

The present study contributed to the body of knowledge by providing a theoretical framework in modelling and predicting host residents’ interactive behaviour towards tourists, and a comprehensive understanding of the roles that psychologic, demographic and socio-graphic factors plays in the different directions of community attitudes towards tourism. It also provided tourism authorities with practical recommendations and implications in terms of tourism planning and a harmonious relationship between the host residents and tourists.
Chapter 1

INTRODUCTION

1.1 Background and overview of the present study

With decades of booming development, tourism has arguably become the largest industry in the world. According to the World Tourism Organization (UNWTO, 2007), international tourism receipts totalled US$733 billion and international tourist arrivals totalled 846 million in 2006. During the period of 1950-2006, international tourist arrivals gained an average of 6.5% annual growth (UNWTO 2007). Along with such rapid development, tourism industry has exhibited stronger and wider impacts on host communities, ranging from economy and social structure to culture and environment. Reacting to these impacts, community residents have formed various attitudes toward tourism and tourists. It has come to the common agreement that, to keep a sustainable and healthy development of tourism industry, the host community’s attitudes towards tourism and their interaction with tourists must be studied.

Within the considerable body of knowledge, host community attitudes towards tourism have been extensively studied through measuring residents’ perceptions of the impacts of tourism. In order to identify the antecedents of such attitudes, several theories and models have been proposed or adapted from other disciplines. Popular examples include Doxey’s (1975) Irridex Model, Butler’s (1980) Tourism Destination Lifecycle Model, Ap’s (1992) adaptation of the Social Exchange Theory and Moscovici’s (1984) expansion of Social Representations. The first two models attempt to explain community attitudes towards tourism by examining the influence of the extrinsic factor (level and density of tourism development in a particular destination). They are commonly referred to the stage based models. In contrast, the later two theories focus on the influences of intrinsic factors on community attitudes towards tourism. A large number of empirical studies have investigated the relationship between attitudes and the socio-demographics of residents (such as gender, age, education, income level and social status) and their connection with tourism (such as income dependence on the tourism industry
and knowledge about tourism). However, many of these findings are not consistent, indicating the complexity of community attitudes towards tourism. On the other hand, there still exist few important research gaps and deficiencies in the context of influential factors on community attitudes towards tourism and host-tourist interaction. For example, when examining the relationship between community attitudes towards tourism and influential factors, the majority of previous studies did not distinguish the orthogonal dimensions of attitudes. Thus, when it was concluded that a specific factor influenced host residents’ attitude, researchers were not sure whether such influences were on all orthogonal dimensions of attitudes or just on one dimension. Next, despite the considerable amount of research examining the influence of socio-demographics on community attitudes, the influence of psychological factors (such as personality traits) on such attitudes has been somewhat neglected.

The sustainable development of tourism industry not only requires a harmonious relationship between the host residents and the industry, but also between the residents (hosts) and tourists (guests). Therefore, the interaction between host residents and visiting tourists has drawn more research attentions. However, most of the previous studies looked into this issue from tourists’ point of view, their feeling and their need (Ap 1990; Carmichael 2000; Murphy 1985), without addressing the conditions under which host residents would interact with tourists. Within the limited literature focusing on host-tourist interaction, it has been suggested that a positive attitude (towards tourism) held by a host resident would most probably lead to an interaction with tourists. However, empirical studies (such as Carmichael 2000) found that attitude by itself was not sufficient to predict the host residents’ action. There should be some other factors affecting their interaction with tourists. However, there was no well-established theoretical framework to model the antecedents of host residents’ interactive behaviour with tourists.

Aiming to address these research gaps and deficiencies, the present study had two components. The first component related to community attitudes towards tourism. Focusing on the major economic, social and cultural impacts perceived by host community residents,
the orthogonal dimensions of community attitudes towards tourism were extracted. The potential influence of socio-demographics, connection with tourism and personality (measured by the Five Factor Model of personality) on each dimension of attitudes was then examined. Community residents were also segmented into groups in order to identify which segment was the most inclined or declined towards tourism and what the characteristics of each segment were.

The second component linked host residents’ attitudes with their interactive behaviour with tourists. It aimed to develop a theoretical model that could be used to understand the antecedents (including attitudes) of resident-tourist interaction so that this behaviour could be predicted through those antecedent conditions. In doing so, the present study employed three leading behavioural models developed in the discipline of social psychology, i.e. Fishbein & Ajzen’s (1975) Theory of Reasoned Action (TRA), Ajzen’s (1985) Theory of Planned Behaviour (TPB) and Triandis’s (1977) Theory of Interpersonal Behaviour (TIB). After evaluating each model’s predictive power within the context of resident-tourist interaction, an original model capturing internal factors was first developed. Following this step, the moderating effects of external factors were examined within the framework of the original model. Such external factors included gender, age and personality traits that have been frequently reported to be influential on a wide range of behaviours. A final model was eventually developed to predict host’s interactive behaviour with tourists, which was named the Resident-tourist Interaction Model.

1.2 Aim and Objectives

The present study aimed to provide a comprehensive understanding of the influences of socio-demographic and psychological factors on community attitudes towards tourism and develop a theoretical model for the prediction of host residents’ interactive behaviour with tourists. This research aim was sub-defined into the following objectives.
1. To identify urban-rural fringe community attitudes towards tourism and the key influential factors on such attitudes
   1) To investigate community residents’ attitudes toward tourism and identify the orthogonal dimensions of their attitudes
   2) To identify the influence of socio-demographic factors on each orthogonal dimension of community attitudes toward tourism
   3) To test the impacts of personality on each orthogonal dimension of community attitudes toward tourism
   4) To provide more recognizable community segment profiles with linkage to attitudes towards tourism

2. To develop a theoretical model that can be used to predict host residents’ interactive behaviour with tourists
   1) To evaluate the predictive power of the original TRA, TPB and TIB models in explaining resident’s behaviour towards tourists
   2) To develop a model best predicting both “behaviour” and “intention”
   3) To examine the moderating effects of external factors on “behaviour” and “intention”
   4) To finalize a behavioural model suitable in understanding the antecedents of resident-tourist interaction and predicting this behaviour

1.3 Research questions

In order to achieve the aims and objectives, a set of research questions was proposed and to be answered by the present study:

1) What is the general attitude towards tourism held by host residents residing in Melbourne’s urban-rural fringe?
2) How many orthogonal dimensions do hosts’ attitudes towards tourism have?
3) Which demographic and socio-graphic factors affect community attitudes towards
tourism? And on each dimension of the attitudes?

4) Is personality an influential factor on residents’ attitude toward tourism? If yes, which traits are the most influential?

5) What are the most recognizable profiles (socio-demographic characteristics) of community segments in terms of their positive and negative attitudes towards tourism?

6) How valid are the TRA, TPB and TIB in understanding and predicting host residents’ interactive behaviour with tourists and the intention to perform the behaviour?

7) Based on the evaluation results of the TRA, TPB and TIB, which internal factors should be eventually encompassed in the new model to be developed in the present study, so that the final model could explain the most variance in hosts’ interactive behaviour with tourists and their intention to perform that behaviour?

8) Do external factors (age, gender and personality) contribute to the understanding and prediction of hosts’ interactive behaviour with tourists? How do these external factors moderate the linear relationship within the framework of the new model developed in the present study?

9) What is the relationship between community attitudes towards general tourism and their interaction with tourists? Is the former a good predictor for the later within the framework of the new model?

10) What recommendations could be made to the local governments for future tourism planning and intervention efforts on resident-tourist interaction?

1.4 Significance of the present study

By addressing the existing research gaps and deficiencies in the field of community attitudes towards tourism and host-tourist interaction (which comprised the rationale of the present study), the outcomes of this study contributed to the body of knowledge in the following aspects:

First, it advanced resident-tourist interactive behavioural study by establishing a theoretical
framework rooted on sound psychological theories. To the best knowledge of the author, there seemed to be no published paper that has directly examined the resident-tourist interactive behaviour using a well-established behavioural theoretical framework. Such a gap in research has greatly constrained the understanding of the antecedents of such behaviour and prediction of the occurrences of such behaviour. However, tourism literature has suggested to look into this research gap (Carmichael 2000; Inbakaran & Jackson 2003) and argued that studying the antecedents of host-tourist interaction would help to maintain a harmonious relationship between the hosts and tourists, which is vital for the sustainable and long-term development of tourism industry (Ap 1990; Williams & Lawson 2001). The R-T Interaction Model developed in the present study addressed this research gap by providing a comprehensive theoretical framework in understanding and predicting such behaviours. It encompassed attitudinal, social, motivational and habitual factors associated with the occurrence of host-tourist interactive behaviour. All these factors were drawn from well-established leading theories, i.e. the TRA, TPB and TIB which have been widely applied and supported by empirical studies focusing on a wide range of behaviours, such as consumer behaviour, eating behaviour, crime activity, driver behaviour, smoking behaviour, sex behaviour and so on. Moreover, the moderating effects of external factors (age, gender and personality) that have been frequently reported to be influential on a wide range of behaviours were also examined within the framework of the R-T Interaction Model. This further step resulted in a more comprehensive framework in understanding and predicting hosts’ interactive behaviour with tourists.

Second, the present study consolidated the body of knowledge in the context of community attitudes towards tourism. It was one of the first attempts to investigate the role of personality traits in host residents’ attitudes towards tourism, and the first to examine the influences of socio-demographic and psychological factors on different orthogonal dimensions of community attitudes towards tourism. The outcomes suggested that a specific factor might not necessarily influence all the orthogonal dimensions of community attitudes towards tourism. While some factors demonstrated influences on both (positive and negative) dimensions, others were only influential on one dimension. This study also found that personality, as an
important psychological characteristic of an individual, played an important role in the formation of both positive and negative attitudes towards tourism. These findings provided a comprehensive understanding of the antecedents of host community reactions towards tourism.

Third, it strengthened tourism attitude study in urban-rural fringe. The majority of previous studies focused on either rural or urban areas. Research into urban-rural fringe (an area that does not clearly fit into the neat categories of either “urban” or “rural”) was limited (Weaver & Lawton 2001). Given the rapid tourism development in urban-rural fringes and the fast-changing character in this landscape, there was an urgent need to look into the issues caused by tourism development in urban-rural fringe areas and hosts’ perception of tourism impacts. The present study addressed this need by choosing Melbourne’s urban-rural fringe as the study area. Consequently, study results from this research project would consolidate our understanding of tourism’s impacts perceived by residents living in urban-rural fringe areas.

Despite the theoretical contribution, the present study also had its practical significances. First, it provided tourism authorities a “bottom-up” approach for tourism planning. By utilizing residents’ attitudes towards tourism reported in the present study, the local governments would be able to consider the perceived impacts of tourism in their planning procedures, so that positive impacts could be maximized while negative impacts minimized. Next, the present study provided recognizable profiles of community segments that enabled tourism authorities to easily identify the key people with positive, negative or neutral attitudes towards tourism. Finally, the R-T Interaction model developed in the present study provided the local governments with useful implications in terms of appropriate interventions in encouraging local people’s interaction with visiting tourists. Utilizing the framework in practice could help maintain a harmonious relationship between the host residents and tourists.

1.5 Research methodology

The present study took the quantitative approach for the entire project as it best fulfilled the
aim and objectives and was in line with the majority of relevant literature. Accordingly, sampling design, choice of instrument, data collection and analytical techniques all followed the requirements of this approach.

The sample of the present study was targeted at residents residing in the study area and being at least 18 years of age. The ideal sampling frame would be a comprehensive database of all residents in the study area so that a stratification sampling method can be utilized. However, direct access to these databases was limited due to the legal restrictions in Australia. Several local councils provided significant help within the permissibility of relevant legal regulations, such as selecting residents by the stratification criterion provided by the author and directly distributing questionnaires and collecting data from these residents by the council. Thus, a stratification sampling method was used in communities where it was possible. Random sampling was used in other communities where stratification was not available.

A questionnaire survey was utilized as the instrument for primary data collection. The questionnaire was designed in closed-question format. Revisions were made according to the results of the pilot test. The final questionnaire contained a total of 69 items categorized in five sections. Approximately 6,000 questionnaires with pre-paid and self-addressed envelopes were distributed to potential respondents and 955 questionnaires were returned, representing a response rate of 15.92%. A total of 878 useful questionnaires were retained for analyses.

A series of analytical techniques were performed on the collected data. The choice of a statistical technique considered its ability to achieve a specific research objective or answer a specific research question and its suitability for the level of measurement of involving variables. The major statistical techniques included bivariate correlation analysis, independent sample t-test, one way ANOVA, chi-square analysis, factor analysis, cluster analysis and multiple regression analysis. Among which, multiple regression was the major tool for model development and model evaluations. The important assumptions associated with multiple regression were tested before analyses. All the analyses were performed using Statistical Package for the Social Sciences (SPSS) for Windows 11.0.1 (SPSS Inc. 2001).
Microsoft Excel (Microsoft Inc. 2003) was used to produce tables and figures. Please refer to Chapter 3 for more information about research methods.

1.6 Study area

To address the research deficiency in urban-rural fringes, the present study was conducted in Melbourne’s urban-rural fringe. Melbourne (capital city of the State of Victoria) is Australia’s second largest city and one of Australia’s most popular attractions for both domestic and international tourists. Its destination status is mature in terms of level of investment, visitor numbers, breadth, depth and scale of accommodation, attractions and services. According to Tourism Victoria (2004a), the State received 17.8 million domestic and 1.3 million international overnight visitors for the year ending June 2004. Residents of Melbourne demonstrate huge varieties in terms of ethnicity and culture. Brought by four main waves of migration, there are approximately 3.5 million residents from more than 140 nations living side by side in Melbourne (Ozdream 2004).

The scale and nature of urban-rural fringes varied across nations due to the different standard used. In Australia, the urban-rural fringe around cities could extend up to 100 kilometres around the mainland capital cities (McKenzie 1996). According to Burnley & Murphy (1995), the scale of Australian urban-rural fringe was subject to a degree of planning control. Following this suggestion, the present study defined Melbourne’s urban-rural fringe according to the criteria set in “Melbourne 2030- Planning for sustainable growth” (The Victorian Government Department of Sustainability and Environment 2002). The plan outlined Melbourne’s urban growth boundary as shown in Figure 1.1. Communities located closely to the boundary do not fit into the neat category of either urban or rural areas, and thus, were defined as Melbourne’s urban-rural fringe in the present study. The five new urban growth areas (Wyndham, Hume, Whittlesea, Casey-Cardinia, Melton-Caroline Springs) identified in the plan formed the major part of the study area. Moreover, another two areas (Yarra Ranges Shire Council and Murrindindi Shire Council) were also included in this study considering their proximity (just outside the growth boundary line) and potential growth of tourism. The
combination of these communities provided a good representation of Melbourne’s urban-rural fringe. These seven areas had a total population of 707,774 (calculations based on Australian Bureau of Statistics 2001).

Figure 1.1 Map of Melbourne’s Urban Growth Boundary

Source: “Melbourne 2030” (The Victorian Government Department of Sustainability and Environment 2002)

1.7 Thesis structure

This thesis consisted of six chapters.

Chapter 1 provided an overview of the present study, including background information, aim and objectives, research questions, significance, study area, research methodology and thesis structure.
Chapter 2 presented reviews of literature relevant to the present study. It covered four major research fields, i.e. community attitudes toward tourism, host-guest interaction, the TRA, TPB and TIB and the Five Factor Model of personality. The chapter also highlighted the research gaps and deficiencies existing in the current body of knowledge and to be addressed in the present study.

Chapter 3 discussed research methods including research design, sampling design, questionnaire design, pilot test, data collection, choice of statistical techniques for data analyses and model development basis and procedures.

Chapter 4 presented procedures and results of data analyses and the major findings of the present study. It provided answers to all of the research questions including the establishment of a theoretical model in understanding the antecedents of and predicting host resident’s interactive behaviour with tourists.

Chapter 5 provided interpretation and discussions about the major findings of the present study, comparison and contrast of such findings with existing literature, and implications of such findings to the local governments.

Chapter 6 outlined conclusions and limitations of the present study, and implications for future research.
Chapter 2

LITERATURE REVIEW

2.1 Introduction

This chapter presented the review of literature relevant to the present study. It covered four major topics: community’s attitudes towards tourism, host-guest interaction, the TRA, TPB and TIB and the Five Factor Model (FFM). The review sought to answer the following questions:

- What gaps and deficiencies exist in the current body of knowledge regarding community attitudes toward tourism and resident-tourist interactive behaviour?
- What are the leading theories in understanding community attitudes towards tourism? How do they explain such attitudes?
- What major impacts of tourism have been perceived by host communities?
- Which factors are important determinants of community attitudes toward tourism and host residents’ interaction with tourists?
- How community residents are segmented in terms of attitudes towards tourism?
- What factors are captured by the TRA, TPB and TIB? Are they valid and reliable in predicting different types of behaviours?
- Is FFM an appropriate and efficient model to capture an individual’s personality trait?

2.2 Community’s attitudes toward tourism

Tourism researchers have primarily focused on travellers, their needs, behaviours and motivations up until the 1980s (Lankford 1994). Much research has been conducted for the convenience of tourists whereas local communities’ perceptions and attitudes toward the industry have been less of a priority (Murphy 1985). Supporting this, Krippendorf (1987) also argued that the psychology and sociology of tourism had been largely concerned with
travelers’ reviews and behaviour.

Tourism is a socio-cultural event for both the guest and host (Murphy 1985). Ignorance of hosts’ opinion would lead to many problems in the development of tourism. Murphy (1985, p. 133) argued that “if tourism is to merit its pseudonym of being ‘the hospitality industry’, it must look beyond its own doors and employees to consider the social and cultural impacts it is having on the host community at large”. It has now become widely recognized that planners and entrepreneurs must take the views of the host community into account if the industry is to be sustainable in the long term (Allen et al. 1988; Ap & Crompton 1993). Without an auspicious local community, it is very hard for tourism industry to keep sustainable development (Inbakaran & Jackson 2003). Williams & Lawson (2001) argued that studying community attitudes towards tourism would help tourism planners to select those developments that could minimize the negative impacts and maximize the positive impacts of tourism. By doing so, quality of life for residents could be maintained or enhanced on one hand and the impacts of tourism in the community would be expected on the other hand. Realizing the importance of host community’s attitudes towards tourism, a large number of studies focusing on the issue have been conducted in the past two decades and it is still a growing research area today.

2.2.1 Theoretical foundations in the research field

Within the considerable body of work, attempts to model community residents’ attitudes toward tourism development were relatively simplistic up to date (Faulkner & Tideswell 1997). Liu & Var (1986, p. 196) summarized the weakness of the theoretical foundation in this research area as “the absence of a comprehensive tourism theory, a dearth of proven methodologies to measure non-economic impacts, and a lack of strong empirical foundation upon which to base policy decisions”. Faulkner & Tideswell (1997) also argued that the existing theories were fragmented and needed to be integrated into a more general framework. Furthermore, such theories so far have remained at the level of a series of assertions and need to be further tested in a systematic way.
Among these fragmented theories, there were widespread references to what was known as the stage or step based models. Perhaps the most commonly referred were Doxey’s (1975) Irridex Model and Butler’s (1980) Tourism Destination Life Cycle Model (Faulkner & Tideswell 1997).

Doxey’s (1975) Irridex model recognized four stages of host community reaction towards tourism development: Euphoria (delight in the contact), Apathy (increasing indifference with larger numbers), Annoyance (concern and annoyance over negative impacts of tourism such as price increase, crime, culture dilution etc) and Antagonism (aggression to tourists). It suggested residents’ attitudes towards tourism and tourists would pass through the sequence of the four stages with an increase in the number of tourist arrivals and development of tourism resorts.

Butler’s (1980) Tourism Destination Lifecycle Model identified tourism development in a destination in six stages, namely Exploration, Involvement, Development, Consolidation, Stagnation and then either Decline or Rejuvenation. Each specific stage was determined by a set of relevant factors, such as number of visitations, capacity of a destination, economy’s dependence on tourism and level of contact between residents and tourists. In essence, the model suggested that the impacts of tourism on the host community were different over the stages. Thus, host community attitudes towards tourism and tourists would change over different tourism development stages. When tourism activities led to high-volume mass tourism, impacts might eventually reach a level that would annoy local community residents. The destination then either became a tourism slum or a new resource by establishing a dramatic change. Although a given destination might not follow these stages precisely, many tourism researchers concluded that the general trends held (Tooman 1997).

These two models were valuable as they highlighted the importance of host community attitudes towards tourism development and provided theoretical frameworks in explaining the changes of host attitudes caused by tourism development. The two models have been successfully referenced by early studies to explain the growing irritation in some destinations.
(such as De Kadt 1979; Pizam 1978; Tooman 1997). However, they were not able to explain the various attitudes held by residents living in the same community. This incapability was attributed to a certain degree of homogenous and unidirectional assumptions about community residents by both models (Faulkner & Tideswell 1997). Realistically, heterogeneity between community residents did widely exist in terms of socio-demographics and psychographics. Recognizing this, social exchange theory stood out and perhaps had the most valuable contribution to the progress of theoretical analysis of various attitudes toward tourism within a community (Faulkner & Tideswell 1997).

Originally a relationship maintenance theory, the Social Exchange Theory (SET) posited a matrix system of measuring outcomes, taking into account the actions of others, rewards and costs, comparing results, dependence and control, prediction, and transformations (Skidmore 1975). In essence, it suggested that an individual was most probably willing to select exchanges if the outcome was rewarding and valuable, and the negative results did not outweigh the benefits (Skidmore 1975). The SET has been adapted into tourism attitude research since 1990s (Gursoy, Jurowski & Uysal 2002; Perdue, Long & Allen 1990) and became popular after Ap’s (1992) adaptation. In the tourism context, the SET viewed residents’ attitudes toward tourism as a trade off between the benefits and costs of tourism perceived by the host residents. Residents were more likely to be supportive if they perceived more positive impacts (benefits) than negative impacts (costs) from tourism. Given the psychological feature of such an evaluation process, all influential factors on psychology were inherent in the SET. These influential factors constituted part of the heterogeneity between community residents.

Another notable approach was the employment of social representations into tourism attitude studies. The concept of social representations was originally used by Durkheim and expanded by Moscovici (1984; 1988). “Representation” referred to the mechanisms that people utilize to understand objects around them. The “social” element referred to the fact that these representations were shared by groups within a society and helped facilitate communication. Based on this concept, people sharing similar representations of an object would have similar
opinions about it. A number of segmentation studies supported the concept by identifying between-cluster differences on attitudes towards tourism and within-cluster similarities in terms of socio-demographics. Moscovici (1984) argued that social representations were more than public attitudes towards a certain object, but like theories or systems of knowledge which included values, ideas, and guides for behaviour. In the tourism context, sources of social representations could be divided into three groups: direct experience, social interaction (such as interaction with tourists, family, friends, colleagues, strangers etc) and media (Fredline & Faulkner 2000).

2.2.2 Impacts of tourism perceived by community residents

In mainstream literature, studies focusing on community attitude toward tourism were most commonly assessed through measuring tourism’s impacts perceived by community residents. The history of tourism impact studies could be traced back to the 1960s when positive impacts of tourism were given priority. Studies in the 1970s focused more on the negative side. Research work came to a balanced-period in the 1980s highlighting both positive and negative impacts on host communities (Inbakaran & Jackson 2004; Lankford 1994). Tourism impact studies continued in the new century to cope with the fast growth of the tourism industry, lifestyle changes and the emergence of new characteristics in tourism development. Tourism research has found that the tourism development affected both the community’s social structure and individual lifestyles (Eadington & Redman 1991; Gartner 1996) and such impacts were exhibited in a broad way from economic, social and cultural aspects to an environmental and psychological spectrum. The present study focused on the economic, social and cultural impacts of tourism on host communities.

2.2.2.1 Economic impacts of the tourism industry

Tourism’s economic impacts on destinations have been given priority in tourism literature (Pizam 1978). Although there existed debates on evaluating tourism’s economic contribution (Dwyer, Forsyth & Spurr 2004), it seemed highly consistent in the literature that there was a
positive relationship between the perceived economic benefits of tourism and the host community’s attitudes towards the industry. Based on the SET, these findings reflected that host residents treated such economic impacts as benefits. Long, Perdue & Allen (1990) argued that tourism provided a wide rage of benefits to the local economy from increased employment opportunities to economic diversity. Reviews of early studies revealed that tourism contributed to the economy in the following aspects:

- Stimulating infrastructure construction
- Stimulating tourism supply industries such as transportation, hotel, restaurant and retailing
- Attracting foreign investment
- Creating job and business opportunities
- Stabilizing the local economy
- Stimulating export

It has always been a complex task to measure tourism’s economic contribution due to its non-traditional attributes. Unlike traditional industries classified in accordance with goods and services, tourism depended on the status of the customer and took place over a number of industry sectors such as accommodation, food and beverage, transport and retail trade. Different countries have adopted various methodology and definitions in examining tourism’s contribution to the national economy. Such diverse approaches have caused debate on how to precisely measure the economic contribution of the tourism industry (Dwyer, Forsyth & Spurr 2004) and problems for consistent measurement and comparison. To overcome such shortcomings, Tourism Satellite Account (TSA) was introduced in the late 1990s. Compared with the traditional methods, TSA was more consistent, measurable and systematic, and has been adopted as the best framework in measuring tourism’s economic contribution by many organizations including the United Nations (UN), World Tourism Organization (UNWTO), World Travel and Tourism Council (WTTC) and most nations.
A review of statistics using TSA data demonstrated that the tourism industry was a strong stimulator of the world’s, Australia’s and Victoria’s economy growth. According to WTTC (2004a), world travel & tourism generated US$5,490 billion of economic activity in 2004 and was expected to grow to US$9,557 billion by 2014, representing a 4.5% growth per annum. The tourism industry was expected to directly supply 87.45 million jobs or 2.9% of the total by 2014. When taking indirect employment into consideration, the tourism industry would be responsible for 259.93 million jobs or 8.6% of total employment by 2014. In other words, one out of every 11.6 people would be working directly or indirectly in the tourism industry {WTTC 2004a}.

Domestically, tourism in Australia directly contributed AU$37.6 billion, 3.9% to Gross Domestic Product (GDP) in 2005-2006 and was directly responsible for 4.6% of the total national employment (Australian Bureau of Statistics 2007). As per WTTC’s (2004b) estimation, Australia Travel & Tourism would generate AU$282.4 billion (US$164.9 billion) of economic activity and provide directly and indirectly 1,453,840 jobs (13.3% of the total employment) by 2014.

In the State of Victoria, tourism was worth a total of AU$10.6 billion to the state’s economy in 2002-2003, contributing 5.5% to Victoria’s Gross State product (GSP) and representing an increase of 45% from 1997-1998 (Tourism Victoria 2004b). The industry directly employed 156,000 people in 2002-2003, accounting for 6.7% of total employment in Victoria. According to Tourism Victoria (2004b), tourism directly contributed more to the Victorian economy than many traditional industries, including agriculture, mining, electricity, gas and water supply, and government administration. Drawing on the Social Representations, such economic contributions of tourism should be reflected by host communities in their attitudes towards the industry. In the majority of studies focusing on the impacts of tourism, economic contribution has been treated as the benefits of the industry perceived by residents, although several researchers were opposed to this treatment (Dwyer, Forsyth & Spurr 2004).
2.2.2.2 Social and cultural impacts of tourism

The social and cultural impacts of tourism have gained more research attention since the 1980s and have been extensively examined by a considerable amount of research. Literature in this field acknowledged that rapid development of tourism had affected host communities both positively and negatively. From a social perspective, positive impacts included, for example, an increase in recreational facilities and entertainment, improved police and fire protection, better community image and a sense of pride (Ap 1992; Lankford, Williams & Lankford 1997; Williams & Lawson 2001). Negative impacts included an increase in crime rate, pollution, traffic congestion (Davis, Allen & Cosenza 1988), and undesirable changes in family values (Ap & Crompton 1993; Johnson, Slepenger & Akis 1994). On top of such direct impacts, some other researchers have found deeper social impacts of tourism on host communities. For instance, Krippendorf (1987) argued that tourism had colonialist characteristics by robbing local residents from autonomous decision-making; Crompton & Sanderson (1990) found that employment in the tourism industry disintegrated gender segregation by requiring flexible working patterns; Sharpley (1994) noted that presence of visitors and employment opportunities had driven younger people to more developed tourism areas and thus changed the structure of the population’s age in less developed tourism areas.

From a cultural perspective, tourism development and the appearance of tourists could cause a series of changes in host communities, such as increased pride and identity, cohesion, exchange of ideas and increased knowledge about cultures (Stein & Anderson 1999). Other changes included assimilation, conflict and xenophobia as well as artificial reconstruction (Besculides, Lee & McCormick 2002) and adapted cultural practices to suit the needs of tourists (Ap & Crompton 1993). Relevant literature acknowledged that perceptions of host communities on such impacts were ambivalent. To some, the cultural changes caused by tourism “threatens to destroy traditional cultures and societies” (Brunt & Courtney 1999, p. 495) and to others it represented “an opportunity for peace, understanding and greater knowledge” (Brunt & Courtney 1999, p. 495). Nevertheless, it was sure that with the expansion of international tourism, contacts between hosts and guests would be increased.
Such an increase would deepen the cultural impacts of tourism on host communities. In an extreme situation, the host communities could become culturally dependent on the tourism generating country (Sharpley 1994).

In many cases, such socio-cultural impacts of tourism were more like a two-edge sword. It could either contribute to the socio-cultural structure of the host community or cause misunderstanding and offense. From a destination management point of view, social and cultural impacts of tourism should be considered throughout the planning process so that benefits could be maximized and problems minimized (Brunt & Courtney 1999).

Given that numerous studies have investigated the economic and socio-cultural impacts of tourism on host communities, this study did not aim to document such impacts or identify how exactly each of such impacts were perceived by the subjects. However, following the examination of their general perception of such impacts of tourism, the study aimed to form the orthogonal dimensions of attitudes towards tourism and identify what factors could influence each dimension.

### 2.2.3 Major influential factors on host residents’ attitudes toward tourism

To understand the antecedents of host communities’ perception of tourism’s impacts, extensive literature has attempted to examine the influences of socio-demographics on attitudes, such as gender (Ritchie 1988; Weaver & Lawton 2001), age (Brougham & Butler 1981; Fredline & Faulkner 2000; Madrigal 1995; Weaver & Lawton 2001), ethnicity (Var, Kendall & Tarakcioglu 1985), proximity to resort (Jurowski & Gursoy 2004; Madrigal 1995; Weaver & Lawton 2001), length of residency (Allen et al. 1988; Liu & Var 1986), native born status (Canan & Hennessy 1989; Davis, Allen & Cosenza 1988) and political position in the society (Mansfeld 1992). In spite of such socio-demographic factors, some other studies also found that income dependence on tourism (Ap & Crompton 1993; Johnson, Snepenger & Akis 1994), level of contact with tourists (Akis, Peristianis & Warner 1996; Davis, Allen & Cosenza 1988) and knowledge about tourism (Davis, Allen & Cosenza 1988; Hillery et al.
Inbakaran & Jackson (2004) summarized tourism attitude literature and pointed out that people who were inclined toward tourism were more likely to be female, employed, living in an urban area, higher income earners, with a higher education level and higher position in society. However, it was widely believed that most of the influential factors were not universal across communities. An influential factor in one community might be non-influential for another community or, still be influential but in an opposite direction. Therefore, Williams & Lawson (2001) pointed out that while it was possible to conclude that some factors might affect residents’ attitude toward tourism, it was important to realize that these findings related to different measures of the subject and therefore could not be simply generalized outside of the sampling frame and methodology to which they related. A review of different findings of some most frequently examined variables was summarized below.

2.2.3.1 Frequently examined factors

Gender and Age: As the most two recognizable demographics, gender and age have been extensively examined in terms of their influence on community attitudes towards tourism. While a number of studies concluded that gender did not have influence on attitudes toward tourism, such as Davis et al.’s (1988) study in Florida USA and Ryan & Montgomery’s (Ryan & Montgomery 1994) study in Bakewell UK, some others reported a significant relationship between attitude and gender indicating that females were more likely to be supportive than males (such as Martin 1995). In like manner, the literature exhibited a mixed result of the influence of age on community attitudes with some studies rejecting such influence (such as Ryan & Montgomery 1994; Tomljenovic & Faulkner 2000) and some others supporting such influences (such as Fredline & Faulkner 2000; Weaver & Lawton 2001). In the later case, it has been frequently reported that there is a positive relationship between age and community attitudes towards tourism.
Education level: Again, inconsistent results in terms of education’s influence on community attitudes towards tourism were found in the literature. Haralambopoulos & Pizam (1996) reported in the context of Samos, Greece that well-educated people were more correlated with positive tourism attitudes. In contrast, Weaver & Lawton’s (2001) study in Australia revealed that residents with college education qualifications did not display any significant difference in terms of anti-tourism or pro-tourism tendencies compared with their counterparts.

Proximity: Many early studies found that residents who lived close to tourist resorts were more favourable towards tourism development (Mansfeld 1992; Sheldon & Var 1984). However, there were other studies reporting the exact opposite results, indicating that people living close to tourism attractions held less positive attitudes (Juwowski & Gursoy 2004; Madrigal 1993; Tyrell & Spaulding 1984). Tyrell & Spaulding (1984) found that such unfavourable attitudes from closer residents were due to frequent exposure to problems, such as traffic congestion and litter. There were also studies reporting non-significant relationship between the residential distance (from home to a major tourist attraction) and attitudes toward tourism (Weaver & Lawton 2001). In understanding such variations, Gursoy (2004) argued that residents evaluated both the benefits and disadvantages of living close or far from tourist attractions and the evaluation results would reflect their attitudes towards tourism development.

Length of residency was another frequently examined variable relating to residential status. Earlier studies (Mansfeld 1992; Ryan & Montgomery 1994) found that long-term residents in comparison with new residents tended to be more negative toward tourism. Their assertion was corroborated by Weaver & Lawton’s (2001) study in Tamborine Mountain, Australia. However, a study of ten rural towns in Colorado by Allen et al. (1993) indicated that length of residence had no significant effect on resident attitudes towards tourism.

Dependence on the tourism industry: Research findings regarding this seemed to be comparatively consistent in the literature. A large number of studies (Haralambopoulos & Pizam 1996; Johnson, Snepenger & Akis 1994; Weaver & Lawton 2001) reported a
significant relationship between attitudes and economic dependency on the industry suggesting that residents deriving more economic benefits from tourism were more favourable to the industry. The Social Exchange Theory (SET) has been dominant in explaining such a relationship. Drawing on SET, people working in the tourism industry would favour tourism development because they could benefit from it.

In conclusion, there are inconsistent findings among the literature, and therefore all the factors reviewed above would be examined in the present study in terms of their influence on community attitudes towards tourism within the scope of this study. While doing so, the present study would also address the following research gaps.

2.2.3.2 Research gaps and deficiencies

In spite of the great progress in understanding community attitudes towards tourism, there seemed to be research gaps and deficiencies relating to the treatment of attitude dimensions and the influence of psychological factors on community attitude towards tourism.

2.2.3.2.1 Orthogonal dimensions of attitudes towards tourism

Within the considerable body of research investigating the antecedents of community attitudes towards tourism, the majority treated attitude as uni-dimensional in their analyses. Although both positive and negative attitude statements were included in survey instruments, they were not distinguished when being treated as dependent variables in analyses. In other words, negative items were often reverse-coded and then joined to positive statements as a composite representation of attitudes. The influences of potential factors were then examined on such composite variables. In some cases, a specific factor might not simultaneously influence both positive and negative impacts perceived by host residents. For example, Pizam (1978) found that while people relying on tourism as a major income resource were more positive than those without such reliance, they did not differ from each other on negative attitude statements. This finding indicated that when a factor was influential on attitude
towards tourism, such influence did not necessarily occur simultaneously on both positive and negative directions. Therefore, there was a need to recognize the orthogonal dimensions of attitudes when examining the relationship between attitude and a specific factor of interest. The present study addressed this research gap. In doing so, factor analysis was used to derive the dimensions of attitudes. The influences of the factors reviewed above were then examined on each dimension.

### 2.2.3.2.2 Influence of personality on attitude

Another noteworthy research gap was the lack of work investigating the influence of personality on attitude towards tourism. Because attitude, in essence, was a “psychological tendency” (Eagly & Chaiken 1993, p. 1), it was logical and reasonable to hypothesize that personality, as a psychological factor, would have influence on attitudes. For example, a person showing a strong “Neuroticism” personality trait (a dimension of the Five Factor model (FFM) of personality) might be nervous and anxious in the presence of large numbers of tourists. As a consequence, this person would be less willing to see tourism development that would result in the emergence of mass tourists. Similarly, it might also be hypothesized that a resident with a high degree of “Openness to experience” (another dimension of the FFM) might be more open-minded to future tourism development and consequently hold a pro-tourism attitude compared with those being low on “Openness to new experience”. To the best knowledge of the author, no published research has been found in testing these hypotheses. To investigate this research gap, the present study would employ the Five Factor Model (FFM) as the framework to measure each respondent’s personality traits. The underlining relationship between attitudes and such traits would then be examined. A review of literature regarding the FFM and its utilization and validity was given separately in section 2.5.

### 2.2.3.2.3 Urban-rural fringe

From a geographic point of view, tourism impacts on rural communities and islands have been
given priority since 1970s (Gilbert & Clark 1997). Studies performed in urban areas (such as Davis, Allen & Cosenza 1988; Gunce 2003; Milman & Pizam 1987) were more recent but with an increasing trend. In comparison, studies focusing on tourism’s impacts on the urban-rural fringes were very limited in the mainstream literature. A noteworthy exception was Weaver and Lawton’s (2001) work in Tamborine Mountain located within the urban–rural fringe of Australia’s Gold Coast. They found that both extrinsic factors (such as stage of tourism development, tourist ratio) and intrinsic factors (such as residential proximity, period of residence and involvement in tourism) had influences on attitudes towards tourism in urban-rural fringe communities. Realizing the lack of work and the increased impacts from tourism development on urban-rural fringe communities, they called for more investigations of community attitudes in a broader array of urban-rural fringes. Unfortunately, no published paper seemed to have appeared in the mainstream literature since their study. The lack of work in urban-rural fringe areas was partially due to the international variation in defining the extent of this region. In Australia, the size of the urban-rural fringe extended up to 100 km around the mainland capital cities (McKenzie 1996) and was subject to a degree of planning control (Burnley & Murphy 1995). Following these assertions, the present study defined the urban-rural fringe of Melbourne according to the “Urban Growth Boundary Plan One” released in 2002 along with “Melbourne 2030” (The Victorian Government Department of Sustainability and Environment 2002).

2.2.4 Community segments

In order to explicitly demonstrate the homogeneous attitudes towards tourism among community members and to provide a clear representation of such variation, a large number of segmentation studies were conducted since the 1980s (Williams & Lawson 2001).

Davis, Allen & Cosenza’s (1988) work was one of the first attempts to segment community residents based on their attitudes, interests and opinions towards tourism (Williams & Lawson 2001). They developed five cluster profiles, namely “lovers” (20%), “haters” (16%), “cautious romantics” (21%), “in-betweeners” (18%) and “love ‘em for a reason” (26%). Tests
for different demographic variables such as age and gender between clusters did not show statistically significant inter-group differences. Later on, more segmentation studies have been performed across different communities. Table 2.1 summarized the segmentation studies existing in the mainstream literature.

Table 2.1 Summary of Studies Segmenting Host Residents*

<table>
<thead>
<tr>
<th>Segmentation study</th>
<th>Country</th>
<th>Number of clusters</th>
<th>Most positive cluster</th>
<th>Moderate clusters</th>
<th>Most negative cluster</th>
</tr>
</thead>
<tbody>
<tr>
<td>Davis, Allen &amp; Cosenza (1988)</td>
<td>USA</td>
<td>5</td>
<td>Lovers (20%)</td>
<td>Love 'em for a reason (26%)</td>
<td>In-betweeners (18%)</td>
</tr>
<tr>
<td>Ryan &amp; Montgomery (1994)</td>
<td>UK</td>
<td>3</td>
<td>Enthusiast (22%)</td>
<td>Middle-of-the-roaders (54%)</td>
<td>Somewhat irritated (24%)</td>
</tr>
<tr>
<td>Madrigal (1995)</td>
<td>UK and USA</td>
<td>4</td>
<td>Lovers (13%)</td>
<td>Realists (56%)</td>
<td>Haters (31%)</td>
</tr>
<tr>
<td>Fredline &amp; Faulkner (2000)</td>
<td>Australia</td>
<td>5</td>
<td>Lovers (23%)</td>
<td>Concerned for a reason (9%)</td>
<td>Realists (24%)</td>
</tr>
<tr>
<td>Williams &amp; Lawson (2001)</td>
<td>New Zealand</td>
<td>4</td>
<td>Lovers (44%)</td>
<td>The taxpers (25%)</td>
<td>Innocents (20%)</td>
</tr>
</tbody>
</table>

*Adapted from Inbakaran & Jackson (2006)

A review of these studies revealed several commonalities among them.

First, almost all of the studies segmented host community members based on their attitudes towards tourism. Such a segmentation base provided a clear segment of community members by maximizing between-group variation and minimizing within-group variation in terms of attitudes towards tourism. The inter-group differences were examined in terms of socio-demographics in most of the studies. An exception was Inbakaran & Jackson’s (2006) work in which socio-demographics and “connection with tourism” variables were used as the clustering base. The between-cluster differences in terms of attitudes towards tourism were then examined. Inbakaran & Jackson’s (2006) argued that a socio-demographic approach, in
comparison with traditional attitude approach, could provide recognizable cluster profiles which enabled tourism planners to easily identify the group of residents of interest.

Second, in spite of the difference in cluster labelling, all of the studies identified two extreme groups in terms of attitudes towards tourism, i.e. a most positive cluster where respondents were pro-tourism and/or expressed support for the growth of the industry, such as “lovers” or “enthusiastic”; and a most negative cluster where respondents exhibited strong sentiments against tourism and its growth, such as “haters”, “somewhat irritated” or “cynics” (Inbakaran & Jackson 2006). Clusters with moderate attitudes were also identified. However, the degree of moderation of those clusters was different across studies given the different instruments and measurement of attitudes.

Nevertheless, as shown in Table 2.1, previous studies adopted different cluster solutions. Given that the choice of the number of clusters usually depended on the researcher’s perspective of whether such a choice could provide good separation, acceptable cluster sizes and understandable interpretation, it was reasonable to see such difference, although these differences created difficulties in making parallel comparisons. Nevertheless, it seemed that the three, four and five-cluster approach was dominant in the literature. Fredline & Faulkner (2000) pointed out that comparisons between studies with the same cluster solution should also be cautious due to the variations in the instruments used in each study and different descriptive statistics reported in each case.

Davis et al. (1988) argued that segmentation studies provided more generalized information on community attitudes which enabled tourism planning and managing authorities to effectively take remedial actions to counteract the negative impacts of tourism. Supporting this, Fredline & Faulkner (2000) pointed out that examining cluster tendencies within communities could provide an insight into the structure of community reactions to tourism and thus “provides a powerful tool for investigating the generality of these responses” (p. 765). Given these, host community members were segmented in the present study. Set apart from the traditional segmentation studies (using attitudes as clustering base), the present study used
socio-demographics as the cluster base. The purpose of doing so was to provide more recognizable cluster profiles that could be utilized in practice.

2.3 Host-guest interactive behaviour

According to Williams & Lawson, tourism might “be regarded as consisting of tourists, a business, and an environment of community in which this industry operates” (2001, p. 269). To keep a sustainable and long-term development of tourism, the interrelationship between various elements in the system must be studied. The interaction between host residents and tourists was one of these interrelationships.

Pizam et al. (2000) through their study among 388 working tourists in Israel found that the social relationship between hosts and working tourists could affect tourists feeling, satisfaction and attitude toward the destination. Their study demonstrated that the higher the intensity of the social relationship between hosts and working tourists, the more favourable the tourists' feelings were towards their hosts, and the more positive the changes in attitudes were towards hosts and the destination. This finding indicated that a destination where residents have no or little interaction with tourists would most likely reduce its attraction for such tourists’ revisitation. As a subsequent result, the destination must continually attract new customers. However, efforts for attracting new tourists, such as repositioning of the tourism product and remarketing for new tourist market segments are more risky and expensive than continuos targeting to a satisfactory market (Reisinger & Turner 1998).

While Pizam et al’s (2000) study highlighted the impact of tourist-host interaction on tourists’ feeling and satisfaction, it did not explain the condition under which such desirable interaction would occur. Carmichael (2000), citing Ap (1990), pointed out the lack of work in this research area, suggesting that despite the numerous studies focusing on host residents’ attitudes toward tourism, there was a very limited understanding of resident responses to the impacts of tourism, and under what conditions residents would react to those impacts. Such research limitation might be partially explained by the assumption of a consistent relationship
between attitudes and behaviour. In other words, it was commonly assumed that positive attitudes towards tourism would lead to a corresponding positive reaction or behaviour towards tourism and negative attitudes would lead to a corresponding negative reaction or behaviour. This assumption was supported by several empirical works, for example, Carmichael (2000), in the context of a casino project, found a causal relationship between the residents’ positive attitudes and their supportive behaviours towards the casino development, as well as a causal relationship between the negative attitudes and their behaviours against the project. However, Carmichael (2000) suggested that this finding should be treated with cautiousness because she also found that many residents holding strong opinions actually did not act upon them. This indicated that, for some people, strong attitude by itself was not enough to initiate an action. There should be some other influential factors or conditions. Unfortunately, no published research works have been found to identify such factors using well-established theoretical models.

A review of literature indicated that theoretical frameworks in modeling host resident’s behaviour remained very simplistic. Realizing such simplicity, Carmichael (2000) employed a modified version of Abler et al.’s (1975) matrix model developed in the geographical literature to model the host residents’ behaviour. However, this model only incorporated attitude as the predictor of behaviour without recognizing other possible predictors, such as “social norms, motivation and group compliant behaviour as in the Ajzen and Fishbein more complex expectancy value models which involve the theory of reasoned action” (Carmichael 2000, p. 605).

Theoretical frameworks modeling host-guest interactive behaviour was even rarer to see. Given the importance of the social interaction between hosts and tourists, there was an urgent need to develop a theoretical framework to model and predict under what conditions residents would interact with tourists. In order to address this research gap, the present study aimed to develop such a theoretical model by employing sound behavioural models that had been widely tested in other contexts. Aside from the Theory of Reasoned Action (TRA, Fishbein & Ajzen 1975) as suggested by Carmichael (2000), the present study would also employ another
two leading behavioural theories: the Theory of Planned Behaviour (TPB, Ajzen 1985) and the Theory of Interpersonal Behaviour (TIB, Triandis 1977). The later two models encompassed all the expectancy value constructs in the TRA, but also incorporated behavioural control elements and interpersonal elements, such as “perceived behavioural control” in the TPB and “Facilitating Conditions”, “Self Identity” etc in the TIB.

A review of literature focusing on tourists’ behaviour indicated that personal characteristics such as personality traits, gender and age could influence tourists’ behaviour and leisure activities. For example, early studies (Allen 1982; Howard 1976; Plog 1990) showed that tourists with different types of personality were different in leisure interests and behaviours. Frew & Shaw (1999) also found that there was a significant association between the respondents’ personality types, their gender and some of their tourism behaviour.

Given the influence of such factors (gender, age and personality) on tourists’ behaviour, it was hypothesized in the present study that such factors would also influence hosts’ behaviour in interacting with tourists. Therefore, the present study would consider the potential influences of gender, age and personality traits on hosts’ interactive behaviour with tourists. They would be considered as extra predictors if they could significantly improve the model’s predictive power. The researcher hoped this further step could bring a more comprehensive theoretical framework suitable to model hosts’ interactive behaviour with tourists. The reasonability of doing so was sourced from Fishbein (1967), one of the proposers of the TRA, who argued that variables not included in the TRA, such as demographic variables and personality traits, might affect intention and consequently, behaviour. It was also supported by empirical studies using the TRA, TPB or the TIB and examining the effects of such personal factors on non-tourism behaviours. For example, Rhodes et al. (2002; 2005) found that the lower-order of personality traits defined by the FFM moderated the TPB in predicting exercise behaviours. Godin et al. (1996) examined the influence of gender and age on condom use within the framework of the TRA, TPB and TIB and found that the intention to use a condom predicted by the models were different between men and women. Examining the moderating effects of these personal factors would help to explain the biased linear coefficients within the model and the remained
Given the importance of the TRA, TPB and TIB in the model development in the present study, a review of the three theories was given separately in the following section.

### 2.4 The TRA, TPB and TIB

This section provided a review of Fishbein & Ajzen’s (1975) Theory of Reasoned Action (TRA), Ajzen’s (1985) Theory of Planned Behaviour (TPB) and Triandis’s (1977; 1980) Theory of Interpersonal Behaviour (TIB). The review focused on the theorization of each model, the conceptualization of each model’s constructs and empirical utilization of these three models in predicting a variety of behaviours.

#### 2.4.1 The TRA and TPB

The Theory of Reasoned Action was first introduced in 1967 stemming from Vroom’s (1964) expectancy theory (Felton, Dimnik & Northey 1995). The theory was revised, expanded and finalized by Fishbein & Ajzen (1975) attempting to establish a relationship among beliefs, attitudes, subjective norms, intentions, and behaviours. According to the theory (Fishbein & Ajzen 1975), the immediate determinant of a specific “behaviour” was the performer’s “intention” to perform the behaviour, while “intention” was, in turn, determined by his/her “attitude” and “subjective norm” that he/she believed or received towards the behaviour. The flowchart of the theory was demonstrated in Figure 2.1.

![Figure 2.1 Flowchart of the Theory of Reasoned Action*](image-url)

* Adapted from Fishbein & Ajzen (1975)
“Attitude” referred to the opinion that a person had, positively or negatively, toward a specific behaviour. According to Ajzen & Fishbein (1980), “attitude” was determined by behavioural beliefs and evaluation of behavioural outcomes. So, a person who strongly believed that positive outcomes would result from performing a particular behaviour would have positive attitudes towards that behaviour. Similarly, if a person strongly believed that a particular behaviour would result in negative outcomes, he/she would have negative attitudes towards that behaviour.

“Subjective norm” (SN) referred to an individual’s normative beliefs about how important others think about the specific behaviour and whether such important others would approve or disapprove of a given behaviour. Depending on the behaviour to be studied, the important others differed. In most social behavioural studies, the important others included families and friends whose opinions were valued by the performer of a given behaviour. While in some other cases, such as a health-related behaviour, professionals (doctors) should also be included as important referents.

“Intention” referred to the probability, as rated by the subject, that the person would perform the behaviour. It was the central factor to predict “Behaviour”.

As a general rule, the TRA suggested that the stronger the positive attitudes towards the behaviour and the more the support from important others, the stronger the person’s intention to perform the behaviour should be and the more actual actions should be expected. Fishbein & Ajzen operationalized this relationship with the following equation:

$$\text{Intention} = \text{Attitude}_w \times \text{Attitude}_w + \text{Subjective Norm}_\text{sn} \times \text{Subjective Norm}_\text{sn}$$ (equation 1)

$W_a$ and $W_{sn}$ represented the weights of respective construct. “The relative contribution of attitude and subjective norm in predicting intention (and eventually behaviour) is usually determined by multiple regression” (Trafimow & Finlay 2001, p. 630).

The Theory of Planned Behaviour (TPB, Ajzen 1985) was an extension of the TRA. As the
Chapter 2 Literature review

TRA began to be popular in social behavioural studies, Ajzen and other researchers realized the inadequacies and limitations of the TRA. One of the greatest limitations was with people who had little power over their behaviours (Gatch & Kendzierski 1990). In other words, the TRA did not capture the non-volitional factors as availability of requisite opportunities and resources (Ajzen 1991). For example, a person with strong positive attitudes and social support towards gym exercise and consequently with strong intention may not join a gym due to lack of control, such as time constraints or lack of money. Ajzen (1985) described the aspects of behaviour and attitudes as being on a continuum from one of little control to one of great control. To balance these observations, Ajzen (1985) added a third element – “Perceived Behavioural Control” (PBC) to the original TRA. The addition of this element resulted in the new theory known as the Theory of Planned Behaviour (TPB).

In conceptualizing the role of “Perceived Behavioural Control”, the TPB placed the construct “within a more general framework of the relations among beliefs, attitudes, intentions, and behavior” (Ajzen 1991, p. 184). On one hand, the PBC could, jointly with “attitude” and “subjective norm”, be used to predict “intention”; while on the other hand, PBC, together with “intention”, could directly predict “behaviour”. In the former case, the relationships could be expressed in equation (2):

\[
\text{Intention} = \text{Attitude}_{wa} + \text{Subjective Norm}_{wsn} + \text{PBC}_{wpbc} \quad (\text{equation 2})
\]

While in the later case, the prediction of “intention” was exactly the same as the TRA (equation 1), whereas “behaviour” had an extra predictor (PBC) which could be conceptualized in equation (3):

\[
\text{Behaviour} = \text{Intention}_{wi} + \text{PBC}_{wpbc} \quad (\text{equation 3})
\]

A comprehensive flowchart of the Theory of Planned Behaviour was demonstrated in Figure 2.2.
Both the TRA and TPB have gained research attentions after their launching. They are now probably the most applied theories in social psychology (Sutton 1998; Sutton, McVey & Glanz 1999; Trafimow & Finlay 2001). Empirical applications of the two theories have shown that the TRA and TPB were useful in explaining and predicting a wide range of different types of behaviours, such as technology adoption (Lynne et al. 1995), exercise activities (Courneya et al. 1999), condom use (Albarracin et al. 2001; Bryan, Fisher & Fisher 2002; Godin et al. 1996; Sutton, McVey & Glanz 1999), dietary behaviour (Conner et al. 2001; Conner, Norman & Bell 2002), decision-making (Davis et al. 2002), career-choosing behaviours (Millar & Shevlin 2003), smoking and alcohol behaviours (Hu & Lanese 1998; Norman, Conner & Bell 1999), driver’s behaviour (Elliott, Armitage & Baughan 2003), pedestrians’ behaviour (Diaz 2002), consumer behaviours (Berg, Jonsson & Conner 2000; Bogers et al. 2004), recycling behaviour (Tonglet, Phillips & Read 2004) and physician and nurses’ behaviour (Dwyer & Mosel Williams 2002; Millstein 1996).

Armitage & Conner (2001), through a meta-analysis of 185 independent studies investigating the predictive power of the TPB for a variety of health-related behaviours, reported an average of 27% and 39% of the variance in behaviour and intention respectively explained by the TPB. While such explained variances are not very high, it is important to realize the complexity of health-related behaviours covered in these studies (Bogers et al. 2004). For
example, some studies in Armitage & Conner’s (2001) meta-analysis focused on “fruit consumption” behaviour, which, in reality, consisted of many other separate behaviours, e.g. buying and preparing. Such separate behaviours might have their own determinants (Bogers et al. 2004). Moreover, respondents’ misconception regarding the behaviour in question might also reduce the predictive power of the TPB. For example, Lechner, Brug & De Vries (1997) found that many people, who did not eat the recommended amounts of fruits and vegetables, thought they had actually met the recommendations. Should such misconception be removed, a higher predictive power of the TPB would be expected (Ajzen 1991; Bogers et al. 2004).

Empirical studies applying the TRA and TPB suggested that the measurement of “attitudes” towards a given behaviour should cover both instrumental (such as good-bad, beneficial-disbeneficial) and affective (such as enjoyable-boring, pleasant-unpleasant) dimensions (Ajzen 2002). Following this suggestion, the present study recognized and measured the two dimensions of attitudes separately.

2.4.2 The TIB

Triandis’s (1977; 1980) Theory of Interpersonal Behaviour (TIB) encompassed many of the behavioural determinants found in other models such as the TRA and the TPB. It also considered cultural, social, and moral factors that were not accounted for in the TRA and TPB (Gagnon et al. 2003).

According to the TIB, behaviour was determined by three dimensions: “Intention”, “Facilitating Conditions” (FC), and “Habit”. FC represented objective factors that could make or constrain the realization of a given behaviour. “Habit” constituted the frequency of occurrence of the behaviour. “Intention”, similar to its conceptualization in the TRA and TPB, referred to an individual’s motivation regarding the performance of a given behaviour. In predicting “intention”, the TIB included five constructs: “Affect”, “Perceived Consequences” (PC), “Perceived Social Norms” (PSN), “Personal Normative Belief” (PNB) and “Self Identity” (SI). According to Triandis (1977; 1980), “Affect” represented an individual’s
emotional responses to the performance of a given behaviour, which was the same as the affective attitude dimension conceptualized by Ajzen (2002). PC referred to the cognitive evaluation of the probable consequences of the behaviour. “Perceived Social Norms” consisted of normative and role beliefs. The former - Normative Beliefs (NB), referred to an individual’s perception of important referents’ opinions about the performance of the behaviour, which was similar with its conceptualization in the TRA and TPB; whereas the later component - Role Beliefs (RB), reflected an individual’s thoughts about whether someone of his/her role (such as age, gender, religion, and social position) should perform the behaviour. “Personal Normative Belief” (PNB) was another normative dimension in the TIB model. Different from “Perceived Social Norms”, the PNB reflected an individual’s feeling of personal obligation regarding the performance or non-performance of a certain behaviour. It had nothing to do with other’s opinions. SI referred to the degree of congruence between an individual’s perceptions of his/her characteristics and the realization of the behaviour. In other words, it reflected the person’s thoughts about whether he/she possessed certain characteristics for the performance of the behaviour. A comprehensive flowchart of the TIB was presented in Figure 2.3.

Figure 2.3 Flowchart of the Theory of Interpersonal Behaviour*

*Adapted from Triandis (1980)
The explanations of “Behaviour” and “Intention” were conceptualized in equation (4) and (5) separately.

\[
\text{Behaviour} = \text{Intention}_{Wt} + \text{Habit}_{Wt} + \text{Facilitating Conditions}_{Wfc} \quad \text{(equation 4)}
\]

\[
\text{Intention} = \text{Affect}_{Wa} + \text{PC}_{Wpc} + \text{RB}_{Wrb} + \text{NB}_{Wnb} + \text{PNB}_{Wpnb} + \text{SI}_{Wsi} \quad \text{(equation 5)}
\]

Since a few initial applications in the 1970s (such as Jaccard & Davidson 1975; Seibold & Roper 1979), the TIB has received little attention, “with the TRA and TPB taking the forefront in research” (Godin et al. 1996, p. 1563). However, the TIB has gained popularity since the late 1980s (Godin et al. 1996). Applications of the TIB nowadays could be found in a wide-range of behavioural studies such as smoking behaviour (Boissonneault & Godin 1990), condom use (Boyd & Wandersman 1991; Godin et al. 1996), technology adoption (Bergeron et al. 1995; Gagnon et al. 2003), driving behaviours (Parker, Manstead & Stradling 1995) and exercising behaviours (Valois, Desharnais & Godin 1988).

Among the literature applying the TIB, several studies also incorporated the TRA and TPB for comparisons. For example, Godin et al. (1996) tested the validity of the TRA, TPB and TIB in predicting condom use among different ethnic groups. In general, the TIB and TPB yielded significantly higher explained variances in “intention” to use a condom across all the three ethnic groups than the TRA. Moreover, the predictive power of the TPB and TIB were very similar, with less than two percent difference of explained variance in each case. However, Godin et al.’s (1996) work only evaluated the three models in predicting “intention”, without addressing their predictive power of actual behaviour.

In summary, the TRA, TPB and TIB were all well-established theories belonging to the school of cognition. Their validity and reliability have been extensively tested in and widely supported by a wide-range of behavioural studies over the last two decades. They constituted the theoretical foundation of the model to be developed in the present study.
2.5 The Five Factor Model of personality

Given that the present study would employ the Five Factor Model (FFM, McCrae & Costa 1996) to measure the respondents’ personality dimensions and subsequently examine the influence of personality on hosts’ attitudes towards tourism and interactive behaviours with tourists, a review of the FFM was presented in this section.

The FFM (McCrae & Costa 1996) was not a new theory (Caruso & Cliff 1997), but derived from factor analyses of a large number of reports (self and peer) on personality-relevant adjectives and questionnaire items. In essence, the FFM suggested that a person’s personality could be captured by five major dimensions which were commonly referred to as OCEAN, i.e. “Openness to experience”, “Conscientiousness”, “Extraversion”, “Agreeableness”, and “Neuroticism”. These dimensions referred to the higher-order of personality and each covered a set of lower-order traits (Costa & McCrae 1992). Only the higher-order traits were measured in the present study.

According to the commonly referenced and generally accepted interpretations, “Openness to experience” referred to a person’s curiosity, sophistication and the tendency to seek and appreciate new experiences; “Conscientiousness” represented the degree of a person’s accomplishment, responsibility, persistence and motivation in goal-directed behaviour; “Extraversion” was the dimension marking a person’s sociability, assertiveness and excitability; “Agreeableness” referred to interpersonal characteristics in manifestation, such as compassion, generosity, being soft-hearted, trusting and gullible; and “Neuroticism” referred to the tendency to experience emotional distress such as anxiety, hostility and depression (Costa & McCrae 1992; Costa, McCrae & Dye 1991; Digman 1989; McCrae & Costa 1996; Miller 1991). Among the five traits, “Extraversion” and “Neuroticism” were believed to be the major two dimensions (Caruso & Cliff 1997).

Despite the debate over interpretations of the five factors, the FFM has been used effectively in the integration of the vast array of personality traits studied in various fields, such as gender,
temperament, health psychology, and even animal species (Widiger 2005). Studies supporting the ability of the FFM could be easily found in mainstream literature, such as Feingold (1994), Funder (2001), and Shiner & Caspi (2003).

Given the FFM’s reliability and reputation, a large number of studies investigating the relationship between personality and topic of interest (such as attitude and behaviour) employed the FFM as the guidelines for personality measurement. Such studies could be found in a variety of research domains, such as exercise behaviour (Rhodes, Courneya & Jones 2002, 2004 & 2005), career success (Seibert & Kraimer 2001), job performance (Salgado 1997), and anxiety sensitivity (Cox et al. 1999). Ross suggested that there could be “no more appropriate or useful study than personality as it illuminates tourist behavior” (1994, p. 31). Nevertheless, to the author’s best knowledge, the FFM has not been applied in studying the relationship between personality and host residents’ attitudes towards tourism and interactive behaviour with tourists.

2.6 Research hypotheses

Based on the literature review and the key research questions of the present study, the following research hypotheses have been established and to be tested in this study.

Hypothesis 1: Community attitudes towards tourism can be deconstructed into at least two orthogonal dimensions.

Hypothesis 2: Personality is an influential factor on community attitudes towards tourism.

Hypothesis 3: Factors being influential on community attitudes towards tourism do not necessarily influence all orthogonal dimensions of the attitudes.

Hypothesis 4: The TRA, TPB and TIB are valid in predicting host residents’ interactive behaviour with tourists and their intention to interact with tourists.
Hypothesis 5: “Intention” to interact with tourists is the best predictor for hosts' actual interaction with tourists (“behaviour”) within the framework of the TRA, TPB and TIB.

Hypothesis 6: “Intention” to interact with tourists is the best predictor for hosts' actual interaction with tourists (“behaviour”) within the framework of the model to be developed in this study.

Hypothesis 7: Age, gender and personality can moderate hosts’ interaction with tourists.

Hypothesis 8: Host residents’ attitudes towards general tourism can influence their interactive behaviour with tourists, but with lower predictive power than specific attitudes.

2.7 Summary

This chapter provided reviews of literature relevant to the present study and highlighted the major research gaps and deficiencies within the current context. The review provided the basis of the entire research design at both the macro level (such as selecting appropriate theoretical foundations and proposing research questions and hypotheses) and the micro level (such as which individual variables need to be included in the present study). Furthermore, the review results would be brought into the Discussion chapter to compare the findings of the present study with the existing literature.
Chapter 3

METHODOLOGY

3.1 Introduction

This chapter presented the methodology adopted in the current study. It covered information on research approach, instrument, sampling design, data collection, analytical techniques and model development.

3.2 Research approach: Quantitative VS qualitative

The research approach related to the way of knowledge production. The choice of an appropriate approach was vital for the success of a research project because it would determine where the research began; how the research proceeded and what kinds of research techniques were appropriate (Blaikie 1993). Bearing this in mind, research approach, in terms of quantitative or qualitative, was carefully designed according to the research objectives and questions as well as the advantages and disadvantages associated with each approach. A quantitative approach was eventually determined considering the following issues:

First, the majority of the research questions in the present study required an examination of differences between subjects or correlations and dependence relationship between variables. The quantitative approach was suitable to answer such research questions given its structural design and statistical focus (Veal 2005).

Second, the model development procedures in the present study involved evaluation of the Theory of Reasoned Action (Fishbein & Ajzen 1975), the Theory of Planned Behaviour (Ajzen 1985) and the Theory of Interpersonal Behaviour (Triandis 1977). All the three theories assumed a linear relationship between dependent and independent variables, which required quantitative analysis of the data.
Third, the quantitative approach was advantageous in dealing with large sample size. Thus it could provide a better representation of population and comparatively higher degree of generalisation (Veal 2005). On the contrary, a qualitative approach usually involved such small sample size that “generalizations about the population at large cannot be made” (Brunt 1997, p. 18).

Finally, a review of literature showed that the quantitative approach was dominant in the research fields of community attitudes towards tourism, community segmentations studies, personality studies using the FFM and behavioural studies using the TRA, TPB and TIB.

### 3.3 Research instrument

Following the quantitative research approach, a questionnaire survey was determined as the instrument for primary data collection. As one of the most popular methods of gathering quantitative data, the questionnaire survey allows for a large number of respondents and was less biased and less intrusive than other methods (Brunt 1997). It is also “cheaper and quicker” (Veal 1998, p. 146). The questionnaire survey also suited the present study since the method could assure the anonymity of the participants easily (Brunt 1997).

A review of tourism attitude literature showed that a questionnaire survey was the most commonly used instrument in measuring community attitudes towards tourism. This instrument was also suggested by the proposers of the TRA, TPB and TIB to be the most suitable method for the measurement of each model’s constructs (Ajzen 2002). As a consequence, almost all of the existing behavioural studies utilizing the TRA, TPB and TIB collected data through questionnaire surveys. Review of personality literature using FFM found that self-completed questionnaire survey was an appropriate and dominant method to measure OCEAN traits as defined in FFM. Considering this, a self-administered questionnaire was designed to obtain relevant data. The final questionnaire contained 69 closed-questions belonging to the following five sections (see Appendix B for details).
Section One contained ten attitudinal statements measuring residents’ perception of impacts of tourism. As suggested by Madrigal (1993), both positive and negative statements were included in the current study with five of each. To avoid bias in respondents’ evaluations, the wording and physical placement of positive and negative statements were varied and random. Despite the item measuring respondent’s attitude towards the spread of disease caused by the arrival of tourists, all other items were drawn from the literature and covered the major economic, social and cultural impacts of tourism.

Section Two involved a collection of information about the respondents’ tourism behaviours. Three kinds of behaviours were assessed: 1) visitation to local attractions; 2) participation in local community’s tourism meetings and promotional events, and 3) the past and current behaviours in interacting with tourists visiting their local communities. All the behaviours were measured by multiple items.

Section Three was designed to gather information needed by the TRA, TPB and TIB. A total of 30 items were included to measure all the constructs encompassed by the theories. As suggested by Ajzen (2002), each latent construct was measured by multiple manifest indicators. Details about the measurement of each construct were provided in section 3.7.2.

Section Four consisted of ten statements designed to capture the five dimensions (OCEAN) of personality. Each dimension (trait) was measured by two items. Details about the measurement of OCEAN were provided in section 3.7.3.

Finally Section Five comprised ten items to obtain respondent’s demographic and socio-graphic characteristics. They were age, gender, level of education, household type, distance from major resort, length of residence, place of birth, occupational connection with the tourism industry and voluntary involvement with local tourism promotional activities. Respondents were asked to tick the cell which best described their situation.
For the majority of the statements in section one to four, respondents were asked to indicate their degree of agreement to each statement measured on a 5-point Likert scale ranging from “strongly disagree” (1 point) to “strongly agree” (5 points). Likert scale was used because it was credible in measuring people’s attitude (Davis, Allen & Cosenza 1988) and could “improve levels of measurement in social research” through the standardized response categories (Babbie 1992, p. 65). It was also a popular and reliable scale used by the majority of behavioural studies applying the TRA, TPB and TIB. A five-point scale was used because it captured the range of opinion on most issues and could discriminate individuals effectively with minimum categories (Aaker & Day 1990).

Considering the possible low responses to the questionnaire survey (Veal 1998), efforts have been made during the questionnaire design process in order to attract more responses. Such efforts included keeping the questions simple and easy to understand; controlling the number of questions to a minimum but sufficient level. Moreover, a cover letter was enclosed to encourage participations. The letter highlighted the guarantee of participants’ anonymity, the freedom to withdraw at any time, the rationale of the project and other industrial marketing research and the potential benefits they might get from the outcomes of the present study.

3.4 Pilot test

As suggested by Oppenheim (1992) and Zikmund (1994) who argued the significance of pre-test in a questionnaire survey, a pilot survey was conducted using a group of convenient samples during the 7th and 11th of September 2004. This was aimed at detecting problems in the questionnaire design. Twenty questionnaires were distributed to 20 convenient samples comprising of research fellows, friends and neighbours who lived in Melbourne as permanent residents. Fifteen questionnaires were returned representing a 75% response rate.

In general, the pilot samples gave very positive feedback, such as an easy-to-follow layout, clear instruction, understandable statements, ease of answering and comfortable time (averaging 12 minutes) to complete the questionnaire. At the same time, the respondents also
proposed several constructive suggestions for further improvement, which resulted in the following changes to the final version of the questionnaire:

- ‘Year of birth’ in section 5 was replaced by “age group”. This change was made to avoid the possible offence caused by asking their exact age.
- A deadline of return was inserted in the cover letter to make sure that the data collection could be finished in time.
- Two statements regarding the residents’ interactive behaviour towards tourists were reworded to keep consistency with other questions.
- A few wording problems were corrected.

The collected data was entered into the SPSS for preliminary analysis. The results indicated the sufficiency and factorability of attitudinal statements. It also showed satisfactory internal consistency of the manifest items measuring OCEAN and each latent construct of the TRA, TPB and TIB. Given the small sample size of the pilot test, complicated analyses, such as multiple regression, were not performed at this stage.

3.5 Sampling design and data collection

The target sample of this study were residents living in Melbourne’s urban-rural fringe who were 18 years of age or older. The ideal sampling frame would have been a comprehensive database of all residents in the study area. However, direct access to these databases by the author was restricted by legal regulations in Australia. Therefore, the present study used two sampling methods: Stratification sampling in areas where local councils agreed to select sample based on the stratification criteria provided by the author; and random sampling in other areas where stratification was impossible. The combination of these provided a relatively comprehensive representation of the population of the study areas.

The stratification sampling method was eventually applied in three local council areas thanks to the invaluable cooperation of the councils. Without allowing the researcher direct access to
Chapter 3 Methodology

the database, Murrindindi Shire Council provided extraordinary assistance by selecting samples from the Council’s database according to the stratification criteria (gender and age group) provided by the researcher. Questionnaires were posted to and collected from the selected residents directly by the Council. Returned questionnaires were then transferred to the author. Whittlesea City Council provided considerable assistance by providing a database containing a list of addresses selected according to the same stratification criteria mentioned above. In line with the legal issues, the council’s database only contained addresses of residents without their names or other private information. Questionnaires were hand delivered to these addresses by the researcher during fieldwork. Wyndham City Council also provided great help in targeting sample residents, distributing the questionnaires and collecting the returned questionnaires. In all other areas, samples were randomly selected from the telephone directories. Questionnaires with prepaid and pre-addressed return envelopes were hand-delivered by the researcher.

Approximately 6,000 questionnaires were distributed by the above councils and the researcher during November and December, 2004. Completed questionnaires were returned between November 2004 and mid-January 2005. In total, 931 questionnaires were returned, representing a response rate of 15.51%. Among which, 410 questionnaires were received from stratified sampling communities and 521 from random sampling areas. Each returned questionnaire was checked for legibility and usability. Fifty-Three questionnaires were incomplete on important statements and were eliminated from analysis considering the large sample size. A total of 878 useful questionnaires remained and were transferred to computer using SPSS for Windows 11.0.1 for analysis. The computer data was double checked with the originals to ensure the accuracy of data entry.

3.6 Method of data analysis

Following the quantitative approach, a series of statistical techniques were utilized for data analysis. The choice of an appropriate technique was determined by its ability to answer a
specific research question or achieve a specific research objective and its suitability for the level of the measurement of relevant variables (continuous Vs categorical).

3.6.1 Level of measurement of variables

Most textbooks distinguished between nominal, ordinal, interval, and ratio scales based on a classification system developed by Stevens (1946). Although there was a longstanding debate about how to classify the level of measurements and its guidance on data analysis type (e.g. Borgatta & Boarnstedt 1980; Townsend & Ashby 1984), choice of the statistical analyses in the social sciences was typically based on a more general or cruder classification of measures into “categorical” and “continuous” (Johnson & Creech 1993; Newsom 2006). Under such classification, ordinal scales with only few (usually less than five) categories and nominal measures were often classified as categorical whereas ordinal scales with many categories (five or more), interval, and ratio, were usually classified as continuous. These two general classes of measurement related to two general classes of statistical tests—parametric and non-parametric test (Zumbo & Zimmerman 1993). Following this classification criterion, this study recognized the following socio-demographic variables as categorical variable: gender, household type, birth place, occupation connection with tourism and language spoken at home; and the other socio-demographic variables as continuous variable, which included age, education level, distance from home to a major tourist site and length of residence.

Given that most variables (excluding socio-demographics) in the present study were measured on a five-point Likert scale, special considerations were given to this type of variables in terms of the level of measurement. Although Likert-type scales were technically ordinal scales, most researchers treated them as continuous variables and it was quite common practice to use parametric analysis with them. When there were five or more categories there was relatively little harm in doing this (Johnson & Creech 1993; Zumbo & Zimmerman 1993). Thus, all the items measured on a five-point Likert scale in the present study were treated as continuous variables. Such items included those measuring attitudes towards tourism, personality traits (OCEAN) and constructs encompassed by the TRA, TPB
and TIB. Composite variables created by summing or multiplying such items were also treated as continuous variables. A review of relevant literature showed that this treatment was popular and appropriate in studies investigating attitudes towards tourism (e.g. Madrigal 1995; Upchurch & Teivane 2000; Williams & Lawson 2001), personality traits (e.g. Cox et al. 1999; Rhodes, Courneya & Jones 2005) and behaviour antecedents using the TRA, TPB and TIB (e.g. Gagnon et al. 2003; Godin et al. 1996; Holland & Hill 2007).

3.6.2. Statistical analysis method

Following the above methods of variable treatment, a series of statistic analyses were performed to answer research questions or achieve the objectives of the present study. Table 3.1 summarized the major statistical techniques employed in the present study and the corresponding objectives that each technique fulfilled. SPSS for Window 11.0.1 (SPSS Inc. 2001) was used as the major software package for statistical analysis. Microsoft Office Excel (Microsoft Inc. 2003) was used to reorganize the output from SPSS and to produce tables and figures.

<table>
<thead>
<tr>
<th>Objective</th>
<th>Corresponding statistical technique</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample profile</td>
<td>Descriptive analysis</td>
</tr>
<tr>
<td>Community attitudes towards tourism</td>
<td>Descriptive analysis</td>
</tr>
</tbody>
</table>
| Influence of socio-demographics and personality traits on community attitudes towards tourism (dependent variable: attitude) | a) Pearson’s bivariate correlation: when independent variable was continuous  
   b) Between-subjects t-test (2 categories) and one way ANOVA (3 or more categories): when dependent variable was categorical |
| Orthogonal dimensions of attitudes                                        | Exploratory factor analysis         |
| Segmenting community residents                                            | K-means cluster analysis            |
| Between-cluster differences on socio-demographics, attitudes and behavior (independent variable: clusters)  | a) One way ANOVA: for continuous dependent variable  
   b) Chi-square: for categorical dependent variable |
| evaluation of the TRA, TPB and TIB                                         | Standard multiple regression        |
| Validity test of the new model                                            | Standard multiple regression        |
| Reliability test of the new model                                         | Split sample standard multiple regression |
| Test of the effect of moderators within the framework of the new model     | Split sample standard multiple regression: for non-parametric moderator  
   Pearson’s correlation and stepwise multiple regression: for parametric moderator |
The following general rules were applied in data analysis:

First, where dependent-independent relations were involved, the choice of an appropriate analytical technique between parametric or non-parametric was determined by the level of measurement of the involving independent and the dependent variables (Table 3.2).

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Categorical Dependent Variable</th>
<th>Continuous Dependent Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Categorical</td>
<td>Non-parametric analysis (Chi square)</td>
<td>Parametric analysis (t-test, one way ANOVA)</td>
</tr>
<tr>
<td>Continuous</td>
<td>Not involved in the present study</td>
<td>Parametric analysis (Correlation, Regression)</td>
</tr>
</tbody>
</table>

Second, where bivariate correlation analysis was involved, a two-tailed significance test was used for non-directional hypothesis, whereas a one-tailed significance test was used for directional hypothesis.

Third, where independent sample t-test was involved, Levene’s test was used to determine the equality of variances. Equal variance was assumed if Levene’s test was not significant (p>.05) and vice versa (Coakes & Steed 2003; Foster 2001).

Next, multiple regression technique was used to evaluate the TRA, TPB and TIB and to develop the new model. This technique satisfied the conceptualization of the interrelationships between the model constructs and was a popular method in the considerable literature. Adjusted R Square, other than R Square, was utilized as the representation of the explained variance in dependent variable for all regression analyses. This was because the model development involved comparisons of the predictive power of the TRA, TPB and TIB and Adjusted R Square was more suitable for comparative purpose (Coakes & Steed 2003).

Finally, the major assumptions associated with multiple regression were tested for each regression analysis. The details of assumption tests were presented in section 4.5.1.
3.7 Model development and measurement of model constructs

The major objective of this study was to develop a model that could predict host residents’ interaction with tourists by identifying the influential factors on the performance of the behaviour. This section presented the methods of model development in terms of procedures, defining and measuring model constructs and analytical techniques for model testing.

3.7.1 Model development procedures

Given the lack of established theoretical framework to model the above behaviour in tourism literature, tourism researchers have suggested borrowing established models from other relevant disciplines into this study area (Carmichael 2000). Following this suggestion and a thorough review of relevant literature, the model development procedure in the present study first involved the employment and evaluation of three leading theories developed in socio-psychology literature: the TRA, TPB and TIB. Given that “intention” to perform the behaviour was theorized as the immediate determinant of “behaviour” in all three models, the predictive power of each model was examined on both “behaviour” and “intention”. A new model was then developed based on comparisons of the evaluation results. Moderating effects of external factors were finally examined within the framework of the new model. An external factor would be included as an additional construct should it 1) significantly increased the predictive power of the model, and 2) had a theoretical significance in explaining resident-tourist interactive behaviour. A final model was eventually developed based on the above results. The model development process was presented in Figure 3.1.
3.7.2 Defining and measuring the model constructs

As suggested by Ajzen (1985), the behaviour to be examined by TRA and TPB should not be
general, but be precise in terms of its Target, Action, Context, and Time (TACT). Thus the behaviour examined in this study was defined as “I have interacted with tourists visiting my community in the past month”, where “interacting with” stood for Action, “tourists” for Target, “visiting my community” for Context and “in the past month” for Time. In order to make the respondents have a clear understanding of the interactive behaviour with tourists, the scope of interaction was clarified as any friendly behaviours initiated by the respondent towards visiting tourists, such as greeting tourists, talking to tourists and providing help to tourists.

All the model constructs were measured by multiple items on a five-point Likert scale unless otherwise specified. Internal consistency between the items was tested by checking Cronbach’s alpha value. A composite variable was created to represent each construct by summing the scores of relevant measuring items.

3.7.2.1 Measurement of behaviour and intention

Behaviour and Intention to perform the behaviour are both encompassed in the TRA, TPB and TIB models. Given the identical theorization of Behaviour and Intention in the three models, these two constructs were measured using the same items as below:

According to the above definition, Behaviour was measured by the following three interactive behaviours: 1) “Greeting tourists visiting my community; 2) “Talking to tourists visiting my community” and 3) “Offering help to tourists visiting my community”. Respondents were asked to indicate the frequency of performance of such behaviours “in the past month” on a five-point scale. Internal consistency of the three items was acceptable (alpha= .81).

Intention referred to the respondent’s willingness and motivation to interact with visiting tourists. The construct was assessed by three items as follows: “I intend to interact with tourists visiting my community in the coming year”; “I would try to interact with tourists visiting my community as much as I can in the coming year” and “I estimate that I have many chances to
interact with tourists visiting my community in the coming year”. Respondents were asked to indicate their level of agreement to each item on a five-point Likert-scale ranging from “Strongly disagree” to “Strongly agree”. Internal consistency of the three items was acceptable (alpha = .85). The same measurement scale (five-point Likert scale) was applied for all the following items.

3.7.2.2 Measurement of the model constructs belonging to the TRA and TPB

The following variables belonged to the TRA and TPB. The TRA constructs were not separately measured since they were all captured in the TPB model.

To define the Attitude construct in the TRA and TPB, the present study recognized two components of attitude: instrumental and affective. Such a treatment was in line with Ajzen’s (2002) suggestion.

Instrumental Attitude (IA) towards the behaviour referred to a respondent’s cognitive evaluation of the outcomes of interacting with tourists. It was measured by five items. They were “Interacting with tourists visiting my community would be: (1) valuable in promoting local tourism; (2) impressive to tourists; (3) positive for the image of my community; (4) be a waste of time and (5) be a good opportunity for me to know other people or culture”. Item (4) was reverse-coded due to its negative wording. Reliability test showed that deleting item (4) could marginally increase the internal consistency of the scale. Thus it was deleted and IA was finally measured by the rest four items with an alpha value of .86.

Affective Attitude (AA) referred to a respondent’s emotional responses to interacting with tourists. It was measured by four items. Respondents were asked to indicate their degree of agreement to the statement “For me, to interact with tourists visiting my community is” on four adjectives (1) pleasant; (2) enjoyable; (3) stressful and (4) boring. After reverse-coding the last two items, the total scale had an acceptable internal consistency (alpha = .81).
Subjective Norm (SN) reflected a respondent’s beliefs about whether important referents would approve or disapprove his/her interaction with tourists. Because important referents generally approved desirable behaviours and disapproved undesirable behaviours, low variability in responses was often found in empirical studies (Ajzen 2002). To alleviate this problem, Ajzen (2002) has recommended to include descriptive norms in the measurement of SN, i.e. whether the important referents themselves perform the given behaviour. Thus, SN was assessed by two items in the present study: 1) “My family/friends, whose opinion I value, would approve me to interact with tourists visiting my community” (injunctive norm); and 2) “My family/friends, whose opinion I value, interact with tourists visiting their communities” (descriptive norm). Internal consistency of the two items was acceptable (alpha = .88).

Perceived Behavioural Control (PBC), a variable specific to the TPB, referred to the actual control over the behaviour of interacting with tourists. It was measured by two statements: “For me, to interact with tourists visiting my community in the coming year would be easy and possible” and “Interacting with tourists visiting my community in the coming year is completely up to me”. Internal consistency was acceptable at a grudging level (alpha= .66).

3.7.2.3 Measurement of the model constructs unique to the TIB

Among the constructs of the TIB, Perceived Consequence (PC), Affect and Normative Beliefs (NB) were assessed by the same items measuring IA, AA and SN in the TPB model. This was because they were similarly theorized by both models. Other constructs unique to the TIB were measured as follows:

Facilitating Condition (FC) represented the objective factors that could make or constrain the realization of interacting with tourists. The construct was measured by four items. Respondents were asked to indicate to what extent that (1) time constraint; (2) shyness (3) bad emotion and (4) language barrier “could impede my interaction with tourists visiting my community”. All the four items were reverse-coded due to negative wording. After deleting item (1), the rest of the items had an acceptable internal consistency (alpha= .73).
Chapter 3 Methodology

*Habit* constituted the frequency of a respondent’s interaction with tourists in the past. To distinguish the construct from *behaviour* which also involved the measurement of frequency, *habit* was measured for a five-year time frame. Respondents were asked to indicate their level of agreement to the following two items: 1) “I often talked to tourists visiting my community in the past five years” and 2) “I always provide my assistance to tourists who need help in the past five years”. The two items were highly internal-consistent (alpha = .90).

*Role Beliefs (RB)* reflected the extent to which a respondent thought someone of his/her situation should or should not interact with visiting tourists. It was measured by four items: “I consider that people should interact with tourists if they are in the following situations: (1) having the same religion as mine (including non-religious); (2) at my age; (3) with the same gender and (4) living in the same community”. The internal consistency of the four items was acceptable with alpha value of .72.

*Personal Normative Beliefs (PNB)* represented the feeling of personal obligation regarding the interaction with tourists. It was measured by two items: “Interacting with tourists would be in my principles”, and “I would feel guilty if I did not interact with tourists visiting my community”. The Cronbach’s alpha coefficient was .68.

*Self Identity (SI)* referred to the degree of congruence between the individual’s perception of himself/herself and the characteristics he/she associates with the interaction with tourists. The construct was measured by expectancy – value formulation. The expectancy was measured by two items: “Interaction with tourists is a proof of an individual’s friendliness” and “A person who interacts with tourists shows his/her communicative characteristic”. Respondents were also asked to indicate to what extent they valued themselves to be “friendly” and “communicative” on a five-point Likert scale. Each expectancy score was multiplied by its corresponding value score. The two composite variables were then summed up to represent SI given the acceptable internal consistency between them (alpha = .80).
3.7.3 Measurement of personality traits

Empirical studies using the TRA, TPB or TIB have found that personality played an important role in the action of a variety of specific behaviours, for example, exercising behaviours. To examine the role of personality in the current context, the present study measured the respondent’s personality using the Five Factor Model (FFM) based on McCrae & Costa’s (1996) study. The five personality traits captured by the FFM were commonly referred to as OCEAN, i.e. Openness to Experience (O), Conscientiousness (C), Extraversion (E), Agreeableness (A), and Neuroticism (N). Each trait was measured by two items on a five-point Likert scale ranging from “Strongly disagree” to “Strongly agree”. Efforts have been made to put the measuring statements in tourism context.

*Openness to experience* was measured by “I look forward to visiting new tourist developments in my community” and “I am open-minded about future tourism development in my community”. The internal consistency between the two items was acceptable (alpha = .72).

*Conscientiousness* was measured by “My ability to be organized allows me to complete things on time” and “People can depend on me to get things done”. Reliability test yielded an alpha value of .77.

Extraversion was measured by “I would prefer to learn about different cultures by talking to overseas tourists” and “I like to be friendly to tourists and make them feel welcome”. The internal consistency between the two items was accepted at a grudging level (alpha= .64).

*Agreeableness* was measured by “I am happy to provide directions for tourists who are lost” and “I get annoyed by congestion caused by increased tourists”. The second item was reverse-coded due to the negative wording. Reliability test indicated a poor internal consistency (alpha = .46) between the two items, therefore, only the second item was retained to represent the Agreeableness trait.
Finally, *Neuroticism* was measured by “I am worried about the impact of future tourism development in my community” and “I am anxious when large numbers of tourists visit my community”. The two items had an acceptable internal consistency with an alpha value of .76.

**3.8 Summary**

This chapter provided a description of the research methods employed in the present study. The quantitative approach was implemented due to its suitability to the present study and its popularity in attitude and behaviour studies. A questionnaire survey was conducted for primary data collection. A variety of statistical analyses were determined based on the objectives of the present study and the level of measurement of relevant variables. Sourced from the suggestion of tourism literature, the modeling of host-guest interactive behaviour drew on the evaluation results of the three leading behavioural models (the TRA, TPB and TIB). Bivariate correlation and multiple regression technique were used for model testing.
Chapter 4

ANALYSIS AND RESULTS

4.1 Introduction

To answer the research questions (No.1 – No. 9) of the present study, a series of statistical analyses were performed on the data. This chapter provided details of data analysis and results. First, a summary of sample profile was given (section 4.2). Next, community attitudes towards tourism, the orthogonal dimensions of attitudes and influences of socio-demographics on attitudes were examined (section 4.3). Section 4.4 segmented the respondents through cluster analysis. Inter-group differences were examined in terms of socio-demographic characteristics, attitudes towards tourism, tourism-related behaviour and personality traits. Finally, section 4.5 and 4.6 constituted the key objective of the present study. They involved modelling host resident’s interactive behaviour with tourists. A theoretical model was eventually developed to predict this behaviour based on the Theory of Planned Behaviour (Ajzen 1985) and the Theory of Interpersonal Behaviour (Triandis 1977).

4.2 Sample Profile

Using descriptive statistics, this section provided an overall profile of the sample in terms of demographic characteristics and residential status.

4.2.1 Demographic characteristics of the respondents

The sample had an average age of 44.20 years. The largest age group was found within the category of 30-39 years of age, accounting for 31.82% of the total sample, while the smallest age groups was 18-24 years of age, accounting for 3.88% of the total sample. Compared with the population of the seven surveyed areas, the sample represented the population age structure considerably well, with an exception of the youngest age group (Figure 4.1).
Other demographic characteristics of the sample were summarized in Table 4.1. In summary, the sample had a male: female ratio of 45:55. Over 98% of the total sample claimed secondary school as their lowest education level and nearly half had completed tertiary education. With regard to household type, 42.60% claimed to be a couple with either dependent or adult children. Australian-born respondents comprised the majority (80.52%) of the sample. Consistent with this characteristic, 80.64% of the sample only spoke English at home.

Table 4.1 Frequency Analysis of Respondents Demographic Characteristics

<table>
<thead>
<tr>
<th>Demographic variable</th>
<th>Category</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender (N=878)</td>
<td>Male</td>
<td>389</td>
<td>44.30</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>489</td>
<td>55.70</td>
</tr>
<tr>
<td>Highest Education (N=878)</td>
<td>Primary and below</td>
<td>17</td>
<td>1.94</td>
</tr>
<tr>
<td></td>
<td>Secondary</td>
<td>268</td>
<td>30.52</td>
</tr>
<tr>
<td></td>
<td>TAFE*</td>
<td>158</td>
<td>18.00</td>
</tr>
<tr>
<td></td>
<td>Tertiary</td>
<td>435</td>
<td>49.54</td>
</tr>
<tr>
<td>Household type (N=878)</td>
<td>Single</td>
<td>162</td>
<td>18.45</td>
</tr>
<tr>
<td></td>
<td>Couple family with children</td>
<td>374</td>
<td>42.60</td>
</tr>
<tr>
<td></td>
<td>Couple family without children</td>
<td>231</td>
<td>26.31</td>
</tr>
<tr>
<td></td>
<td>One parent family</td>
<td>48</td>
<td>5.47</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>63</td>
<td>7.18</td>
</tr>
<tr>
<td>Country of birth (N=878)</td>
<td>Australia</td>
<td>707</td>
<td>80.52</td>
</tr>
<tr>
<td></td>
<td>Other countries</td>
<td>171</td>
<td>19.48</td>
</tr>
<tr>
<td>Language spoken at home (N=878)</td>
<td>English only</td>
<td>708</td>
<td>80.64</td>
</tr>
<tr>
<td></td>
<td>Speaking a second language</td>
<td>97</td>
<td>11.05</td>
</tr>
<tr>
<td></td>
<td>No response</td>
<td>73</td>
<td>8.31</td>
</tr>
</tbody>
</table>

* TAFE: Technical and Further Education
4.2.2 Residential status of the respondents

The residential status of the respondents was measured by two items: the distance (from home to a major local tourist attraction) and the length of residence.

The respondents lived quite close to a major local tourist attraction, with an average distance of 10.3 kilometres. The majority (70.84%) of the sample lived within ten kilometres from a major tourist attraction and 47.95% lived within five kilometres. As shown in Figure 4.2, the further the residential distance from a tourist site, the less the number of respondents is.

![Figure 4.2 Sample Profile on Residential Distance](image)

On average, the respondents have been living in the current community for 13.73 years. The category of 0-5 years included the largest number of respondents and accounted for 28.36% of the total sample. The smallest group was that of 5-10 years, accounting for 13.33% of the sample. Generally, the total sample demonstrated a bi-modal distribution in terms of living periods (Figure 4.3). The first mode (0-5 years) was contributed by new residents who moved from urban areas, while the second mode (10-20 years) was accounted for the old rural residents.
Community attitudes towards tourism were examined through measuring residents’ perception of economic, social and cultural impacts of tourism. Other than identifying idiographic impacts perceived by community, which have been extensively examined in previous studies, this study investigated the orthogonal dimensions of community attitudes towards tourism by capturing the major positive and negative impacts of tourism on community residents. Based on this, the effect of socio-demographic, residential and personality characteristics on various dimensions of attitudes were examined.

4.3.1 Overall community attitudes towards tourism

A total of ten statements were utilized to capture respondents’ perception of the impacts of tourism development in their community, with five measuring the theoretically positive impacts and five measuring the theoretically negative impacts. The respondents’ rating on all the attitudinal statements was summarised in Table 4.2.
Table 4.2 Descriptive Analysis of Community Attitudes Statements

<table>
<thead>
<tr>
<th>Attitudinal Statements</th>
<th>Item No.</th>
<th>Attitude Statement</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive statement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(N=878)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Improved quality of life</td>
<td>3.39</td>
<td>0.963</td>
<td>1</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Better world perspective</td>
<td>3.21</td>
<td>0.953</td>
<td>1</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Improved local economy</td>
<td>3.65</td>
<td>0.916</td>
<td>1</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Most residents benefit</td>
<td>3.32</td>
<td>1.009</td>
<td>1</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Regional dull without tourism</td>
<td>3.24</td>
<td>1.152</td>
<td>1</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>Overall mean of positive statement</strong></td>
<td></td>
<td></td>
<td><strong>3.36</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative statement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(N=878)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Local communities offside</td>
<td>2.44</td>
<td>0.929</td>
<td>1</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Tourists pay more for local resources</td>
<td>1.94</td>
<td>0.964</td>
<td>1</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Interfere with culture/heritage</td>
<td>2.11</td>
<td>0.918</td>
<td>1</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Tourists increase costs</td>
<td>2.60</td>
<td>1.003</td>
<td>1</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Tourism spreads disease</td>
<td>1.85</td>
<td>0.900</td>
<td>1</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>Overall mean of negative statement</strong></td>
<td></td>
<td></td>
<td><strong>2.19</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As shown in Table 4.2, all positive statements generated mean scores higher than the theoretical mean (3.00), with overall mean of 3.36, while all negative statements had mean score lower than 3.00 with overall mean of 2.19. All these suggest the respondents have rather positive attitudes toward tourism development in their community. Meanwhile differences among respondents were also observed. All the ten attitudinal items had the max range from the minimum (1 point) to maximum (5 points), indicating a wide variation of individual respondents’ perceptions of tourism impacts. The size of the standard deviations of the ten statements also indicated a moderate spread around the theoretical mean. This finding suggested that there were different segments among community residents in terms of their attitudes towards tourism. A detailed segmenting analysis was given in section 4.4 of this thesis. Moreover, the notable difference of mean scores between positive statements and negative statements indicated possible dimensions of attitudes, which was addressed in the next section.

4.3.2 Attitude dimensions

Previous research (Long, Perdue & Allen 1990; Madrigal 1993) had suggested that items measuring community attitudes toward tourism might be better represented by two underlying
dimensions (positive and negative) rather than a single bi-polar dimension. Given the notable difference between the mean score of the theoretical positive and negative statements, two orthogonal dimensions on attitudes were expected. An examination of the correlation matrix of all items showed that all theoretically positive statements were positively correlated to each other and negatively correlated to all theoretical negative items. On the other hand, the theoretical negative statements were all positively correlated to each other and negatively correlated to all the theoretical positive statements. Thus, attitude might also form a single dimension only, with all positive statements at one end, and all the negative statements at the other end. A factor analysis was performed in order to evaluate which of the above predictions was correct.

Before factoring, a further examination of the correlation matrix of all the statements was made to ensure the factorability. Over 35% of the total 90 correlations were found to have a value > .30, indicating the matrix was suitable for factoring (Coakes & Steed 2003). The factorability was also ensured by the results of the Bartlett test of sphericity, which was large and significant \((p<.001)\). The Kaiser-Meyer-Olkin Measure of Sampling Adequacy (.833) was far greater than the minimum acceptable value (.60). Inspection of the anti-image correlation matrix revealed that all the measures of sampling adequacy (MSA) were well above the acceptable level of .50 (Coakes & Steed 2003), with the minimum level of .759. Combining all these test results, the appropriateness of factorability was solidly ensured.

Given the sound factorability, a principle components factor analysis with varimax rotation was computed. The number of factors was not specified in the analysis in order to test the prediction. Eigen-value greater than 1 was used as the factoring criterion. Varimax rotation was applied because it suited the present study by its orthogonal rotation feature, but also provided easier interpretation by simplifying the correlations between factors (Joseph et al. 1995). The analysis generated two factors, which jointly explained 52.32% of the total variance of attitudes towards tourism. This result confirmed the research Hypothesis 1 that community attitudes towards tourism can be represented by at least two orthogonal dimensions.
Factor 1 comprised five theoretically positive statements as listed in Table 4.3. The factor loadings for the five items ranged from .828 to .690 and none of them loaded greater than .30 on Factor 2. In contrast, Factor 2 comprised five items belonging to the theoretically negative statements, with factor loadings ranging from .721 to .485. All five items loaded less than .30 on factor 1.

Table 4.3 Rotated Component Matrix*

<table>
<thead>
<tr>
<th>Item</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Theoretically Positive Statement</td>
<td></td>
</tr>
<tr>
<td>Most residents benefit</td>
<td>0.828</td>
</tr>
<tr>
<td>Tourism improve economy</td>
<td>0.789</td>
</tr>
<tr>
<td>Improved quality of life</td>
<td>0.781</td>
</tr>
<tr>
<td>Regional dull without tourism</td>
<td>0.720</td>
</tr>
<tr>
<td>Better world perspective</td>
<td>0.690</td>
</tr>
<tr>
<td>Theoretically Negative Statement</td>
<td></td>
</tr>
<tr>
<td>Interfere with culture/heritage</td>
<td>-0.241</td>
</tr>
<tr>
<td>Tourists increase costs</td>
<td>0.031</td>
</tr>
<tr>
<td>Tourism spreads disease</td>
<td>-0.108</td>
</tr>
<tr>
<td>Tourists pay more for local resources</td>
<td>0.022</td>
</tr>
<tr>
<td>Local communities offside</td>
<td>-0.287</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
*Rotation converged in 3 iterations.

Cronbach’s alpha was used to test the internal consistency of the items comprising these two factors. The alpha value for Factor 1 (.83) was sufficiently high, indicating a reliable internal consistency. The alpha value for Factor 2 was .69 which was just above the conventionally lenient cut-off point (.60) and close to the adequate level of .70 (McGraw & Wong 1996). Examination of “Alpha if item deleted” indicated that the alpha value of the overall scale did not marginally increase by deleting any of the items. Thus all five items were kept in Factor 2. Two new variables were created based on the results of this factor analysis and were named “Positive Attitudes” and “Negative Attitudes”. The former was computed by summing the scores of the five variables comprising factor 1; and the later was computed by summing the scores of all the five items comprising factor 2. These two composite variables were used respectively to represent the positive dimension and negative dimension of respondents’ attitudes towards tourism.
4.3.3 Influential factors on attitudes

A large amount of previous research has demonstrated that community resident attitudes towards tourism varies with socio-demographic characteristics (Jurowski & Gursoy 2004; Williams & Lawson 2001), level of contact with tourists (Akis, Peristianis & Warner 1996; Brougham & Butler 1981), economic dependence on tourism industry (Haralambopoulos & Pizam 1996; Weaver & Lawton 2001) and level of usage of recreation resources (Lankford, Williams & Lankford 1997). However, the influence of most of these factors was not universal as studies conducted in different communities often reported divergent results. There is a need to examine the influence of these factors within the present study area. In addition, the impact of the psychological factor (personality) was also examined. This was a noteworthy attempt as, to the best knowledge of the author, there were only a few studies examining the effect of personality in the context of community attitudes towards tourism and none of them used the Five Factor Model (FFM, McCrae & Costa 1996). In relation to statistical techniques, parametric significance tests were utilized in the present study given that attitudinal items were treated as continuous variables and there was a large sample size. Pearson’s correlation was used to examine the relationship between attitudes and continuous variables of interest; while independent sample t-test or one way ANOVA were used for categorical variables. Given the various assertions about socio-demographics’ influence on attitude existing in the literature, and the exploratory feature of the present study in identification of orthogonal dimensions of attitudes, this study did not make any directional hypotheses of the relationship between attitudes and variables to be examined. Two-detailed tests of significance were suitable for this situation (Foster 2001), and therefore were adopted here.

4.3.3.1 Socio-demographics

Age: The two-tailed Pearson’s correlation results showed a significant positive relationship between Positive Attitudes and age ($r = .103$, $p = .002$, $N=877$), indicating that the older the respondents, the more positive their attitudes were towards tourism. However, the correlation
between age and Negative Attitudes was non-significant, indicating that respondents of different ages did not significantly differ on negative attitudes towards tourism. A graphic examination (Figure 4.4) revealed that the positive correlation between age and Positive Attitudes were concentrated around people between 25 and 59 years of age, while the extreme age groups did not seem to follow this pattern exactly. This might explain why the correlation analysis generated significant probability, but with a rather low correlation coefficient just over .10.

![Figure 4.4 Community Attitudes towards Tourism Grouped by Age Groups](image)

**Gender:** The gender influence on attitudes was assessed by examining the mean differences of males and females in terms of Positive Attitudes and Negative Attitudes. Independent sample t-test with 95% confidence interval (the same for all the following t-tests in this study) was used to examine these differences. Equal variances were assumed for Negative Attitudes because Levene’s test for equality of variances generated a probability of .072 (greater than the cut-off vale of .05). However, this was not assumed for Positive Attitudes, given that Levene’s test had a probability of .005 (less than .05). The two-tailed significance for Positive Attitudes (\(p=.170, t=1.37, df=784\)) and Negative Attitudes (\(p=.676, t=.418, df=876\)) were both greater than .05, indicating non-significant differences. Thus it was concluded that male respondents and female respondents did not differ from each other on either Positive Attitudes or Negative Attitudes. In other words, community attitudes towards tourism did not
differ on gender in this study. This could also be seen from Table 4.4. Nevertheless, males seemed to vary more than females on both dimensions.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Positive Attitudes</th>
<th>Negative Attitudes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Std. Deviation</td>
</tr>
<tr>
<td>Male (n=389)</td>
<td>16.61</td>
<td>4.09</td>
</tr>
<tr>
<td>Female (n=489)</td>
<td>16.97</td>
<td>3.65</td>
</tr>
</tbody>
</table>

*Education level:* Pearson’s correlation showed that education level had a non-significant correlation with Positive Attitudes. However, it was significantly negatively correlated to Negative Attitudes ($r=-.075$, $p<.05$). These results suggested that respondents of different education level did not differ in terms of positive attitudes towards tourism. In contrast, they did differ in terms of negative attitudes: The higher the education level of the respondents, the less negative were their attitudes towards tourism. However, this correlation was quite weak, as demonstrated in Figure 4.5

*Household type:* One way ANOVA was performed to examine whether attitudes differ in terms of household types. The analysis generated non-significant between-group differences for both Positive Attitudes and Negative Attitudes. Thus it was concluded that the
respondents belonging to various household types did not differ in their attitudes towards tourism. The mean scores of attitudes rated by all household types were demonstrated in the bar chart below (Figure 4.6). There was no doubt that different types of households held very similar attitudes towards tourism on both dimensions.

![Figure 4.6 Community Attitudes towards Tourism Grouped by Household Type](image)

*Country of birth and the second language spoken at home:* An independent sample t-test was performed on attitudes grouped by these two variables separately. Equal variances were assumed in all cases given that all probabilities of Levene’s test for equality of variances were greater than .05. The t-test of Equality of Means yielded non-significant results on both Positive Attitudes and Negative Attitudes in terms of birthplace. Thus, it was concluded that respondents who were Australian-born did not differ from overseas-born respondents in regards to their attitudes towards tourism. As for the second language spoken at home, respondents who reported speaking a second language at home did not differ from those speaking English only in terms of Positive Attitudes. However, they did differ in terms of Negative Attitude ($t=2.312, \text{df=}803, p=.021$).

Table 4.5 summarized the mean scores of Positive attitudes and Negative attitudes rated by the respondents belonging to different cultural background (birthplace and language spoken at home). It was obvious that the respondents held similar attitudes towards the positive
impacts of tourism, regardless of their birthplace and languages spoken at home. However, second language speakers had a more negative attitude towards tourism than English speakers (with a mean difference of .78). Although residents born outside Australia seemed to be more negative than the Australian born, this difference was not significant according to the t-test results.

Table 4.5 Community Attitudes towards Tourism Grouped by Birthplace and Language Spoken at Home

<table>
<thead>
<tr>
<th>Grouping variable</th>
<th>Category</th>
<th>Positive Attitudes</th>
<th>Negative Attitudes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>Std. Deviation</td>
</tr>
<tr>
<td>Birth place</td>
<td>Australi</td>
<td>16.81</td>
<td>3.82</td>
</tr>
<tr>
<td></td>
<td>Other countries</td>
<td>16.82</td>
<td>4.00</td>
</tr>
<tr>
<td>Language spoken at home</td>
<td>English only</td>
<td>16.92</td>
<td>3.83</td>
</tr>
<tr>
<td></td>
<td>A second language</td>
<td>16.70</td>
<td>4.11</td>
</tr>
</tbody>
</table>

Distance (from home and a major local tourist site): Pearson’s correlation showed that distance had a significantly negative relationship with Positive Attitudes ($r$=-.158, $p<.001$), and a significantly positive relationship with Negative Attitudes ($r$=.133, $p<.001$). This result implied that the further away the respondents lived from a major tourist attraction, the less positive and the more negative their attitudes were towards tourism (Figure 4.7).
**Length of residence:** Pearson’s correlation test yielded a significantly negative correlation between the length of residence and Positive Attitudes ($r = -0.79$, $p < 0.05$), but a non-significant correlation with Negative Attitudes. It seemed that respondents who had lived longer in the community tended to have a less positive attitude towards tourism than those who had lived for shorter periods. However, they did not differ from each other in terms of negative attitudes (Figure 4.8).

4.3.3.2 **Income dependence on tourism**

The respondent’s income dependence on tourism was measured by asking whether they worked in the tourism industry or in a tourism-related industry (defined as hotels, restaurants, transportation, souvenir shops and any other sector where tourists contribute to the main turnover of their working place). The dependence was assumed if a respondent answered “yes” to the above question. An independent sample t-test was applied to examine whether dependence on tourism affected respondents’ attitudes towards tourism. Equal variances were assumed in all the cases since Levene’s test for equality of variances was greater than .05. The t-test reported significant differences in Positive Attitudes in terms of occupation ($t = 3.979$, $df = 876$, $p < 0.001$), suggesting that respondents working in tourism or tourism-related industries held a more positive attitude towards tourism than their counterparts. However, they did not
differ from each other in terms of negative attitudes ($r=-.79$, $df=876$, non-significant). Table 4.6 summarized the mean scores grouped by occupational connections with tourism.

Table 4.6 Community Attitudes towards Tourism Grouped by Occupational Dependence on Tourism

<table>
<thead>
<tr>
<th>Occupation connection</th>
<th>Positive Attitudes</th>
<th>Negative Attitudes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connected with tourism (n=198)</td>
<td>17.76</td>
<td>10.79</td>
</tr>
<tr>
<td>Not connected with tourism (n=680)</td>
<td>16.54</td>
<td>10.99</td>
</tr>
</tbody>
</table>

4.3.3.3 Usage of local recreation resources

This variable was measured by asking the respondents to indicate the frequency of their visitation to local recreation attractions. The two-tailed Pearson’s correlation reported that the frequency of using local recreation resources was positively correlated with Positive Attitudes ($r= .318$, $p<.001$), and negatively correlated with Negative Attitudes ($r= -.123$, $p<.001$). This result suggested that the frequency of using local tourist resources influenced attitudes: the more frequent the use, the more positive and the less negative were their attitudes towards tourism (Figure 4.9).

Figure 4.9 Community Attitudes towards Tourism in Terms of Frequency of Using Local Recreation Resources

![Figure 4.9](image-url)
4.3.3.4 Voluntary participation in local tourism activities

Two kinds of Respondent’s voluntary involvement in local tourism activities were examined: Voluntary assistance in local tourism promotional events, and attendance at community meetings focusing on tourism. Respondents were asked to indicate their level of agreement on a 5-point Likert scale.

Pearson’s correlation test showed that both items were positively correlated to Positive Attitudes ($r_1=.365, p_1<.001; r_2=.286, p_2<.001$) and negatively correlated to Negative Attitudes ($r_1=-.105, p_1<.01; r_2=-.101, p_2<.01$). The results indicated that voluntary involvement in local tourism activities affected the respondent’s attitudes towards tourism: the more frequently they were involved, the more positive and the less negative attitudes were towards tourism. These trends were graphically demonstrated in Figure 4.10.

![Figure 4.10 Community Attitudes towards Tourism in Terms of Frequency of Voluntary Involvement in Local Tourism Activities](image)

4.3.3.5 Personality

The relationship between attitudes and personality traits (OCEAN) was analysed using
two-tailed Pearson’s correlation. The results were summarised in Table 4.7.

<table>
<thead>
<tr>
<th></th>
<th>Openness</th>
<th>Conscientiousness</th>
<th>Extraversion</th>
<th>Agreeableness</th>
<th>Neuroticism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Attitudes Pearson Correlation</td>
<td>0.491</td>
<td>0.116</td>
<td>0.380</td>
<td>0.273</td>
<td>-0.335</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.000</td>
<td>0.001</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>N</td>
<td>878</td>
<td>876</td>
<td>878</td>
<td>877</td>
<td>877</td>
</tr>
<tr>
<td>Negative Attitudes Pearson Correlation</td>
<td>-0.340</td>
<td>-0.148</td>
<td>-0.268</td>
<td>-0.413</td>
<td>0.446</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>N</td>
<td>878</td>
<td>876</td>
<td>878</td>
<td>877</td>
<td>877</td>
</tr>
</tbody>
</table>

It was found that Positive Attitudes and Negative Attitudes were both significantly correlated to all the five personality traits. Among which, O, C, E and A were positively correlated to Positive Attitudes, but negatively correlated to Negative Attitudes, while N (Neuroticism—a negative personality trait) had a negative correlation with Positive Attitudes and a positive correlation with Negative Attitudes. These results indicated that personality traits did influence both dimensions of attitudes, i.e. the more open to new experiences, the more conscientious, the more extraverted, the more agreeable or the less neurotic an individual, the more positive and the less negative attitudes they held towards tourism. Figure 4.11 and Figure 4.12 provided a clear picture of such relationships. Given these findings, it can be concluded that the research Hypothesis 2 holds true for the present data.

Figure 4.11 Comparisons of Positive Attitudes towards Tourism between Different Personality Traits (OCEAN)
Figure 4.12 Comparisons of Negative Attitudes towards Tourism between Different Personality Traits (OCEAN)

To summarize this section, while some factors either simultaneously influenced both dimensions of attitudes towards tourism or did not influence any dimension, others only showed influence on one of the dimensions (Table 4.8). This finding confirmed the research Hypothesis 3 that the influential factors do not necessarily demonstrate influences on all orthogonal dimensions of community attitudes towards tourism. Drawing on this finding, it was concluded that host residents living close to tourist sites, frequently using their local recreation bases, voluntarily participating in local tourism activities, and being high on the Openness to experience, Conscientiousness, Extraversion, Agreeableness personality traits, but low on the Neuroticism trait, tended to perceive more positive impacts of tourism as well as less negative impacts. Those who were older, living in the community for a shorter period of time or working in tourism industry seemed to have more positive attitudes than their counterparts. However they did not differ from their counterparts in terms of negative impacts of tourism. In contrast, respondents having less education or speaking a second language at home, tended to be more negative towards tourism, but they did not differentiate from their counterparts on the negative dimension of attitudes. Finally, the respondents belonging to different gender or household types did not significantly differ from each other on both positive and negative dimensions of their attitudes towards tourism.
4.4 Segmentation of Community Residents

As previously analysed in section 4.1, variations existed within the community in terms of attitudes towards tourism, which indicated that community residents could be segmented into different groups. This section aimed to identify such community segments using cluster analysis. The section provided the clustering results and addressed the following important issues associated with clustering: formation of the clustering base; choice of clustering base; cluster labelling; cluster profile; and inter-group differences in terms of attitudes towards tourism, tourism behaviour and personality traits.

4.4.1 Clustering base, procedure and results

Instead of using the traditional attitudinal variables as the clustering base, this study used socio-demographic variables. The reason for this choice was to provide more recognisable cluster profiles that could be easily utilised by tourism planners and developers to identify community members. Of course, an examination of inter-group differences on attitudes was subsequently performed given that socio-demographics were not predictable alone (Inbakaran & Jackson 2006). A comparison between the socio-demographic and the traditional attitude clustering approaches was given in the Discussion Chapter (section 5.4.1).

Seven socio-demographic variables were included in the clustering base (clustering variate).
They were age, education level, occupation, distance (from home to a major tourist attraction), length of residence, gender and household type. Although the later two variables (gender and household type) had been identified to be non-influential on attitudes in section 4.3.3, this result was obtained when they were treated individually. In other words, only the main effects of each variable were examined without addressing the interaction effect with other variables.

In cluster analysis, the respondents were grouped according to all variables selected as the clustering base, and the resulting clusters should exhibit high internal homogeneity and high external heterogeneity on the clustering variate (Joseph et al. 1995). Thus, when gender and household type were included in the clustering variate, they were not treated individually, but simultaneously with other variables. This process actually combined these two variables with the other five variables as a holistic representation of the resulting clusters. When the segmented groups were related to attitudes towards tourism, it was actually an examination of the relationship between attitudes and the characteristics of each cluster represented by the whole set of the base variables. Therefore, gender and household type were included in the clustering base. Another reason was that the inclusion of them could help describe the cluster profiles.

A series of K-means cluster analysis was performed on the data with different cluster solutions. The five-cluster solution seemed to be the most appropriate in giving acceptable cluster sizes and good separations that maximized within-cluster similarities and between-cluster differences. It also allowed an understandable interpretation. The characteristics of each cluster were summarised in Table 4.9.
Table 4.9 Summary of the Base Variables Constituting the Five-Cluster Solution

<table>
<thead>
<tr>
<th>Variables</th>
<th>Overall sample</th>
<th>Cluster</th>
<th>Cluster</th>
<th>Cluster</th>
<th>Cluster</th>
</tr>
</thead>
<tbody>
<tr>
<td>N (%)</td>
<td>877</td>
<td>107</td>
<td>222</td>
<td>192</td>
<td>263</td>
</tr>
<tr>
<td>Gender (% females)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age (mean in years)</td>
<td>42.0</td>
<td>27.9</td>
<td>58.3</td>
<td>33.5</td>
<td>35.7</td>
</tr>
<tr>
<td>Highest education completed (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>primary</td>
<td>1.9</td>
<td>0.9</td>
<td>3.1</td>
<td>1.0</td>
<td>1.1</td>
</tr>
<tr>
<td>secondary</td>
<td>30.4</td>
<td>27.1</td>
<td>32.4</td>
<td>20.3</td>
<td>36.1</td>
</tr>
<tr>
<td>TAFE</td>
<td>18.0</td>
<td>20.6</td>
<td>16.7</td>
<td>19.8</td>
<td>18.6</td>
</tr>
<tr>
<td>tertiary</td>
<td>49.6</td>
<td>51.4</td>
<td>47.8</td>
<td>58.9</td>
<td>44.2</td>
</tr>
<tr>
<td>Household type (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>single</td>
<td>18.4</td>
<td>15.9</td>
<td>15.8</td>
<td>23.4</td>
<td>20.5</td>
</tr>
<tr>
<td>couple family with children</td>
<td>42.6</td>
<td>48.6</td>
<td>32.4</td>
<td>39.6</td>
<td>51.3</td>
</tr>
<tr>
<td>couple family without children</td>
<td>26.3</td>
<td>21.5</td>
<td>40.5</td>
<td>21.9</td>
<td>18.3</td>
</tr>
<tr>
<td>one parent family</td>
<td>5.5</td>
<td>5.6</td>
<td>2.7</td>
<td>8.9</td>
<td>3.4</td>
</tr>
<tr>
<td>other</td>
<td>7.2</td>
<td>8.4</td>
<td>8.6</td>
<td>6.2</td>
<td>6.5</td>
</tr>
<tr>
<td>Distance from home to tourist site (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;10 Kms</td>
<td>70.8</td>
<td>13.1</td>
<td>87.4</td>
<td>91.1</td>
<td>88.6</td>
</tr>
<tr>
<td>&gt;10 Kms&lt;20 Kms</td>
<td>17.1</td>
<td>40.2</td>
<td>11.3</td>
<td>8.9</td>
<td>9.5</td>
</tr>
<tr>
<td>&gt;20 Kms</td>
<td>12.1</td>
<td>46.7</td>
<td>1.3</td>
<td>0</td>
<td>1.9</td>
</tr>
<tr>
<td>Length of residence (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;10 years</td>
<td>41.7</td>
<td>54.2</td>
<td>45.5</td>
<td>100.0</td>
<td>0</td>
</tr>
<tr>
<td>&gt;10 years &lt; 20 years</td>
<td>20.1</td>
<td>32.8</td>
<td>20.7</td>
<td>0</td>
<td>30.8</td>
</tr>
<tr>
<td>&gt;20 years</td>
<td>34.9</td>
<td>12.1</td>
<td>32.4</td>
<td>0</td>
<td>63.1</td>
</tr>
<tr>
<td>absentee land owners</td>
<td>3.3</td>
<td>0.9</td>
<td>1.4</td>
<td>0</td>
<td>6.1</td>
</tr>
<tr>
<td>Occupation connection (% tourism related)</td>
<td>22.6</td>
<td>25.2</td>
<td>21.2</td>
<td>25.5</td>
<td>22.1</td>
</tr>
</tbody>
</table>

Figures in bold are the highest scores among the five clusters.

Figures in italic are the lowest scores among the five clusters.

### 4.4.2 Cluster profiles

In order to get a clear distinction between the clusters for labelling purposes, inter-group differences on the base variables were examined using a One Way between groups ANOVA (for continuous variables) and a Chi-square test (for categorical variables). Where statistical significance was reported, post-hoc analysis using Tukey’s statistic was performed to identify the significantly different groups. Table 4.10 summarized the results of such analyses.
As seen in Table 4.10, significant inter-group differences were identified on all variables with the exception of occupation. Specifically, age, distance (from home to a major tourist site), and length of residence provided high distinctions between the clusters. Nominal names were given to each cluster according to the difference exhibited on these variables. They were: “Distant New Residents” (Cluster One); “Proximous Settlers” (Cluster Two); “Proximous New Comers” (Cluster Three); “Proximous Natives” (Cluster Four) and “Distant Natives” (Cluster Five). “Settlers” here indicated a relative short living period in comparison with “natives” and a relative long period in comparison with “new residents”. The profile of each cluster was presented below.

**Cluster One: “Distant New Residents”** This cluster (n=107, 12.2%) was the second smallest and the youngest group. It had the highest percentage of females (65.4%), the highest percentage of people who had been living in the current community between 10 and 20 years, the highest percentage of TAFE (Technical and Further Education), and the lowest percentage of primary education. Overall, members in Cluster One were typically well educated (in terms of trade) young couple families with dependent children. They lived far away from a major local tourist attraction (86.9% living at least 10 kilometres away) and had lived in the current community for a short period of time (nearly 55% lived for less than 10 years).

**Cluster Two: “Proximous Settlers”** This group was the second largest and the oldest group (n=222, 25.3%) with an average age of 58.3 years. The cluster had the highest percentage of males, the highest percentage of couple families without dependent children.
and the lowest percentage of one-parent families. Members within Cluster Two were comparatively less educated. They lived very close to a major local tourist attraction, with 87.4% living within 10 kilometers. Their length of residence showed a bipolar distribution of either less than 10 years or more than 20 years.

**Cluster Three: “Proximous New Comers”** This group ranked middle in group size (n=192, 21.9%). It had the highest education level (nearly 60% having completed tertiary education), the highest percentage of single families and the highest tourism-related occupations. Members within Cluster Three were typically females in early-30s who had just moved into the community. Compared with the other four clusters, they were the people who lived the closest to a major tourist site (over 90% within 10 kilometers) for the shortest period of time (100% less than 10 years).

**Cluster Four: “Proximous Natives”** This was the largest group (n=263, 30%). It had the highest percentage of secondary education, but the lowest percentage of tertiary education. It also distinguished itself by the highest percentage of couple families with dependent children, and the highest percentage of “living in the community for more than 20 years” with no one “living in the community for less than 10 years”. Members within this cluster were typically females in their mid-30s who lived close to a major local tourist site (88.6% within 10 kilometers) for more than 20 years. The cluster showed roughly opposite characteristics to Cluster One in terms of distance and length of residence.

**Cluster Five: “Distant Natives”** This was the smallest group (n=93, 10.6%) and was gender balanced. It was principally made up of mature families (average age of 54 years) with independent children, who lived far away from any tourist attractions. The cluster had the highest percentage of one-parent families, the highest percentage of primary education, the highest percentage of “absentee land owners” and the second highest percentage of living in the community for more than 20 years. While on the other hand, it ranked the lowest on percentage of “single family”, “Technical and Further Education”, “living within 10 kilometers from a tourist site” and “occupation connection with tourism”.

4.4.3 Between-cluster differences on attitudes towards tourism

For the above profiles to be useful, there should be between-cluster differences in terms of attitude towards tourism. This section examined these differences using one way between groups ANOVA. Where significant F values were reported, Tukey’s post-hoc analysis (significance level set at .05) was performed to identify which groups were significantly different from each other. The inter-group differences were examined respectively on the composite attitude variables (Positive Attitudes and Negative Attitudes) and the individual attitude statements. Overall between-cluster differences were reported on both composite and individual attitude variables (Table 4.11). Such differences were sufficient to distinguish the five clusters in terms of their attitudes towards tourism.

### Table 4.11 Between-Cluster Differences on Attitudes towards Tourism

<table>
<thead>
<tr>
<th>Factoring Variable (one way ANOVA results)</th>
<th>Sample mean</th>
<th>Mean score of each cluster</th>
<th>Cluster difference detected from post-hoc analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Composite Positive Attitudes</strong> (F=8.487, df=4, p&lt;.001)</td>
<td>16.82</td>
<td>15.3</td>
<td>17.6</td>
</tr>
<tr>
<td>Tourism improves economy (F=5.820, df=4, p&lt;.001)</td>
<td>3.65</td>
<td>3.39</td>
<td>3.81</td>
</tr>
<tr>
<td>Tourism improves quality of life (F=6.802, df=4, p&lt;.001)</td>
<td>3.39</td>
<td>3.08</td>
<td>3.57</td>
</tr>
<tr>
<td>Most residents benefit from tourism (F=8.499, df=4, p&lt;.001)</td>
<td>3.32</td>
<td>2.95</td>
<td>3.55</td>
</tr>
<tr>
<td>Regional dull without tourism (F=4.237, df=4, p=0.002)</td>
<td>3.24</td>
<td>2.86</td>
<td>3.36</td>
</tr>
<tr>
<td>Better world perspective (F=2.953, df=4, p=.019)</td>
<td>3.21</td>
<td>3.03</td>
<td>3.26</td>
</tr>
<tr>
<td><strong>Composite Negative Attitudes</strong> (F=4.793, df=4, p=.001)</td>
<td>10.95</td>
<td>11.98</td>
<td>10.86</td>
</tr>
<tr>
<td>Tourists increase costs (F=2.010, df=4, p=.091)</td>
<td>2.6</td>
<td>2.78</td>
<td>2.61</td>
</tr>
<tr>
<td>Local communities offside (F=2.585, df=4, p=0.036)</td>
<td>2.44</td>
<td>2.68</td>
<td>2.38</td>
</tr>
<tr>
<td>Interfere with culture/heritage (F=1.287, df=4, p=.273)</td>
<td>2.11</td>
<td>2.23</td>
<td>2.09</td>
</tr>
<tr>
<td>Tourists pay more for local resources (F=3.635, df=4, p=.006)</td>
<td>1.94</td>
<td>2.19</td>
<td>1.96</td>
</tr>
<tr>
<td>Tourism spreads disease (F=3.146, df=4, p=.001)</td>
<td>1.85</td>
<td>2.10</td>
<td>1.83</td>
</tr>
</tbody>
</table>

*Figure in bold is the highest score among the five clusters.*

*Figure in italics is the lowest score among the five clusters.*
It was obvious that Cluster One significantly differed from other clusters on most of the attitudinal items. It not only rated the lowest score on all positive statements, but also rated the highest score on most of the negative statements. Compared with other groups, members in Cluster one perceived the least positive impacts and the most negative impacts of tourism. This result indicated that Cluster One was the least pro-tourism group.

Cluster Two and Cluster Three were significantly different from Cluster One on a wide range of perceived impacts of tourism. In contrast to Cluster One, these two clusters both scored much higher on positive items and lower on negative items. It was found that all the highest scores on positive items and most of the lowest scores on negative items were rated by members within these two clusters. Thus, Cluster Two and Cluster Three are the most pro-tourism groups. Although Cluster Two, in comparison with Cluster Three, had slightly higher mean scores on positive items and slightly higher scores on negative items, post-hoc analysis did not generate any significant differences between these two clusters on any items.

Compared with the above three clusters, Cluster Four and Cluster Five gave neutral ratings to all of the positive items and some of the negative items. Although Cluster Four showed the most disagreement to three out of five negative statements, these lowest scores did not really distinguish it from other groups. Post-hoc analysis only generated one significant difference with Cluster One. In general, Cluster Four and Five demonstrated characteristics of “in-betweeners”. An examination of mean scores on all the statements indicated that Cluster Five ranked higher than Cluster Four on all of the negative statements, an indication of a stronger assent in negative impacts, and also ranked higher on most of the positive statements, an indication of more perceived positive impacts of tourism. Nevertheless, no significant differences were identified between them on any items.

**4.4.4 Between-cluster differences on tourism related behaviours**

The five clusters were also compared in terms of tourism-related behaviours with a hope to identify whether there were significant behavioural differences between them. Two types of
behaviour were compared: Self-tourism behaviour (visitation to local tourist site and long holiday making) and community-tourism behaviour (voluntary involvement in community tourism promotions and meetings). Between-cluster differences were examined using one way ANOVA with post-hoc analysis when significant F values were reported. Table 4.12 summarized the analytical results.

The five clusters did not differ from each other in terms of visiting local tourist sites and taking long holidays (self-tourism behaviours). However, they differed on community-tourism behaviours. Cluster One had the lowest involvement in community tourism activities and was widely different from all other groups except Cluster Four. In contrast, Cluster Two was the most involved group and was significantly different from Cluster One and Four on both items. Standing in the middle, Cluster Three and Cluster Five demonstrated similarities, as post-hoc analysis did not identify any significant differences between them. Combining these significant differences with the cluster profiles developed in section 4.4.2 could help local governments to identify relevant people who were willing to be involved in community tourism activities.

Table 4.12 Between-Cluster Differences on Tourism-Related Behaviour

<table>
<thead>
<tr>
<th>Factoring variable (one way ANOVA results)</th>
<th>Sample mean</th>
<th>Mean score of each cluster</th>
<th>Cluster difference detected from post-hoc analysis*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-tourism-behaviour</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 I often visit local tourist sites</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(F=2.339, df=4, p=.054)</td>
<td>3.41</td>
<td>3.21 3.50 3.49 3.39 3.31</td>
<td>-</td>
</tr>
<tr>
<td>2 I often make interstate/overseas holidays</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(F=1.060, df=4, p=.375)</td>
<td>3.28</td>
<td>3.32 3.28 3.32 3.32 3.05</td>
<td>-</td>
</tr>
<tr>
<td>Community tourism-behaviour</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 I often offer assistance to community</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>tourism promotional activities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(F=9.351, df=4, p&lt;.001)</td>
<td>2.83</td>
<td>2.42 3.08 2.86 2.72 3.01</td>
<td>1 ≠ 2 1 ≠ 3 1 ≠ 5 2 ≠ 4</td>
</tr>
<tr>
<td>4 I often attend local community meetings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>that focus on tourism development</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(F=11.404, df=4, p&lt;.001)</td>
<td>2.39</td>
<td>2.00 2.66 2.39 2.26 2.59</td>
<td>1 ≠ 2 1 ≠ 3 1 ≠ 5 2 ≠ 3 2 ≠ 4 4 ≠ 5</td>
</tr>
</tbody>
</table>

* The between-group mean difference is significant at the .05 level.

**Figure in bold is the highest score among the five clusters.**

**Figure in italics is the lowest score among the five clusters.**
4.5 Evaluation of the TRA, TPB and TIB in predicting resident-tourist interactive behaviour

The key objective of this study was to develop a theoretical model in predicting host-tourist interactive behaviour. The model development was based on the evaluation of the TRA (Fishbein & Ajzen 1975), the TPB (Ajzen 1985) and the TIB (Triandis 1977; 1980) in predicting the behaviour defined in the present study. This section provided the evaluation of each of the three models as well as comparisons of them in terms of their predictive powers. Pearson’s correlation and standard multiple Regression were utilised for the evaluation. One-tailed significance tests were applied for all Pearson correlation analyses in this section because the relationship between any two relevant variables was directional according to the theorization of the TRA, TPB and TIB. As previously explained in the methodology chapter (section 3.6.2), Adjusted R Square was utilized to represent the explained variance for comparison purposes.

4.5.1 Test of assumptions associated with multiple regression

As multiple regression is one of the more sensitive statistical techniques (Pallant 2001), it is important to meet all the assumptions associated with the regression. This section provided the results of assumption tests and outlined remedial actions where violations were detected. For simplicity, such information was only provided here for the regression within the TRA framework as the other two models followed exactly the same testing procedure and remedial methods.

Ratio of cases to independent variables: This assumption was well satisfied due to the large sample size. It had 400 times more cases than independent variables, which was much higher than the generally accepted criteria (20 times more) for a standard regression (Coakes & Steed 2003).

Outliers: Univariate outliers were checked by inspecting case-wise diagnostics obtained as a
part of regression analysis. The result indicated six cases carrying a standardised residual either greater than 3.3 or less than -3.3. Multivariate outliers were checked by Mahalanobis distance, which detected three multivariate outliers (critical value ≥13.82). As it is common to have a number of outlying residuals within a large sample, it was not necessary to take any action with them if there were only a few (Pallant 2001). Therefore, the detected univariate and multivariate outliers were kept in the analyses considering the large sample size and comparatively very small number of outliers.

*Multicollinearity and singularity:* These assumptions were checked by examining the Tolerance value obtained as part of the regression program. In case of the TRA model, when “intention” was regressed on “attitude” and “subjective norms”, the Tolerance values for the two independent variables were both very respectable (.874 in each case), indicating no evidence of multicollinearity or singularity. This result was confirmed by checking the correlation matrix, which indicated that the correlation coefficient between the two independent variables (.354) was much lower than the maximum accepted level of .70 (Pallant 2001).

*Normality, linearity and homoscedasticity of residuals:* These were checked by inspecting the Normal Probability Plot of the regression and the Residuals Scatter Plots. The points in the Normal Probability Plot were located along a reasonably straight diagonal line, suggesting no major deviations from normality. In the Scatter-plot of the standardised residuals, most scores concentrated in the centre along the 0 point in a roughly rectangle shape. The plot did not show any clear relationship between residuals and the predicted values, indicating consistency with linearity and homoscedasticity assumption.

In conclusion, all the major assumptions associated with multiple regression have been satisfied. This enabled the evaluations of the TRA, TPB and TIB models using the technique.
4.5.2 Evaluation of the TRA model

In brief, the TRA assumes a causal chain between “behaviour”, “intention” to perform the behaviour, “attitudes” towards the behaviour and “subjective norms” about the behaviour. According to the theory, the best predictor of behaviour is “intention” to perform the behaviour, while “intention”, in turn, is a function of both “attitude” and “subjective norms” (Fishbein & Ajzen 1975).

As explained in section 3.7.2, “attitude” here included both instrumental and affective dimensions. Pearson correlation (one-tailed) was first performed between all variables defined in the TRA model (Table 4.13). In line with the prediction of the TRA, the correlation between “behaviour” and “intention” was the highest among all the correlations. Thus, the best predictor of “behaviour” was “intention” which explained 47.06% variance of “behaviour”. “Subjective norms” (SN), “affective attitude” (AA) and “instrumental attitude” (IA) were all significantly correlated to “intention” at .001 level, indicating the linear relationship between them.

<table>
<thead>
<tr>
<th></th>
<th>Intention</th>
<th>Affective Attitude</th>
<th>Instrumental Attitude</th>
<th>Subjective Norms</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Behaviour</strong></td>
<td>Pearson Correlation</td>
<td>0.686</td>
<td>0.558</td>
<td>0.409</td>
</tr>
<tr>
<td></td>
<td>Sig. (1-tailed)</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td><strong>Intention</strong></td>
<td>Pearson Correlation</td>
<td>1</td>
<td>0.480</td>
<td>0.405</td>
</tr>
<tr>
<td></td>
<td>Sig. (1-tailed)</td>
<td>.</td>
<td>0.000</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Given the satisfactory bivariate correlations and the consistency with the assumptions, “intention” was regressed on IA, AA and SN. The regression yielded an Adjusted R Square of .493 ($p<.001$), indicating that nearly half of the “intention” variances was explained. All the three predictors carried a significant Beta value (Table 4.14). “Subjective norms” made the strongest contribution in predicting “intention”, followed by “affective attitude” and “instrumental attitude”. 
Table 4.14 Regression coefficients for Intention within the TRA Model

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>-3.277</td>
<td>0.704</td>
<td>-4.656</td>
<td>0.000</td>
</tr>
<tr>
<td>Subjective Norms</td>
<td>0.787</td>
<td>0.044</td>
<td>0.505</td>
<td>18.066</td>
</tr>
<tr>
<td>Affective Attitude</td>
<td>0.210</td>
<td>0.028</td>
<td>0.204</td>
<td>7.427</td>
</tr>
<tr>
<td>Instrumental Attitude</td>
<td>0.147</td>
<td>0.024</td>
<td>0.163</td>
<td>6.218</td>
</tr>
</tbody>
</table>

The results suggested that the TRA model was useful in predicting the host resident’s interactive behaviour with tourists. The model and the relevant relationships between its constructs were shown in Figure 4.13.

Figure 4.13 The TRA Model in Predicting Resident-Tourist Interactive Behaviour

4.5.3 Evaluation of the TPB model

The TPB is an extension of the TRA by incorporating an additional construct – Perceived Behaviour Control (PBC). According to the theorization of the TPB, PBC may serve as either a direct or an indirect predictor of Behaviour, while in the later case, PBC is more commonly referenced as a direct predictor for Intention. Both scenarios were examined in this section.

Bivariate correlation between the TPB variables was presented in Table 4.15. The highest correlation was once again found between “intention” and “behaviour”. PBC was
significantly correlated to both “intention” and “behaviour”, but with a higher correlation with “intention”. Thus it was predicted that PBC might be better off in predicting “intention” than “behaviour”. The prediction was supported by the results of the subsequent two regression analyses where the role of PBC in predicting “behaviour” and “intention” was respectively examined.

Table 4.15 Bivariate Correlations between the TPB Variables

<table>
<thead>
<tr>
<th>Behaviour</th>
<th>Intention</th>
<th>Affective Attitude</th>
<th>Instrumental Attitude</th>
<th>SN</th>
<th>PBC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pearson Correlation</td>
<td>0.686</td>
<td>0.558</td>
<td>0.409</td>
<td>0.539</td>
</tr>
<tr>
<td></td>
<td>Sig. (1-tailed)</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
</tbody>
</table>

| Intention   | Pearson Correlation | 1.000 | 0.480 | 0.405 | 0.652 | 0.584 |
|-------------| Sig. (1-tailed)    | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |

Firstly, PBC was treated as a direct predictor of “behaviour”. The regression of “behaviour” on “intention” and PBC was significant at .001 level with 47.5% of variance explained. This percentage was almost the same as the TRA (47.06%). Thus, the inclusion of PBC in predicting “behaviour” did not increase the TPB’s predictive power. For comparison purposes, a second regression was performed in which PBC was treated as a predictor of “intention”. The regression of “intention” on AA, IA, SN and PBC was significant at .001 level with 55.70% of explained variance in “intention”. In comparison with the TRA (49.3%), the inclusion of PBC as an additional predictor of “intention” in the TPB accounted for an incremental variance of 6.40%. Therefore, it was appropriate to treat PBC as an indicator of “intention” rather than “behaviour” in the context of resident-host interactive behaviour. AA, IA, SN and PBC all contributed to the explanation of “intention” because all of them carried a significant Beta value (Table 4.16). SN made the strongest contribution, same as its rank order in the TRA. PBC took the second place before attitude variables.
Table 4.16 Regression Coefficients for Intention within the TPB Model

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>-4.941</td>
<td>0.674</td>
<td>-7.327</td>
<td>0.000</td>
</tr>
<tr>
<td>SN</td>
<td>0.591</td>
<td>0.044</td>
<td>0.380</td>
<td>13.353</td>
</tr>
<tr>
<td>PBC</td>
<td>0.567</td>
<td>0.050</td>
<td>0.299</td>
<td>11.232</td>
</tr>
<tr>
<td>AA</td>
<td>0.170</td>
<td>0.027</td>
<td>0.165</td>
<td>6.378</td>
</tr>
<tr>
<td>IA</td>
<td>0.125</td>
<td>0.022</td>
<td>0.140</td>
<td>5.663</td>
</tr>
</tbody>
</table>

Given the above analytical results, “perceived behavioural control” should be treated as a distal predictor of “behaviour” and a proximal predictor of “intention” in the current context. The flowchart of the TPB in predicting resident-tourist interactive behaviour was presented in Figure 4.14.

4.5.4 Evaluation of the TIB model

Based on the theoretical framework of the TIB (Triandis 1977), “behaviour” is immediately predicted by three proximal variables: “intention”, “facilitating conditions” (FC) and “habit”. While Intention is, in turn, predicted by six variables: “affect”, “perceived consequences” (PC), “role beliefs” (RB), “normative beliefs” (NB), “personal normative beliefs” (PNB) and
“self identity” (SI). As suggested by Triandis (1977), “habit” could also exert an influence on the emotive component of attitude – “affect”. Bivariate correlation was performed between “behaviour”, “intention” and their predictors (Table 4.17). It was observed that all the correlations were significant at .001 level. These significant correlations ensured the linear relationships between the dependent variables and their corresponding predictors for regression analysis.

Table 4.17 Bivariate Correlations between the TIB Variables

<table>
<thead>
<tr>
<th>Behaviour</th>
<th>Intention</th>
<th>FC</th>
<th>Habit</th>
<th>NB</th>
<th>Affect</th>
<th>RB</th>
<th>PC</th>
<th>PNB</th>
<th>SI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>0.686</td>
<td>0.160</td>
<td>0.668</td>
<td>0.539</td>
<td>0.558</td>
<td>0.259</td>
<td>0.539</td>
<td>0.510</td>
<td>0.498</td>
</tr>
<tr>
<td>Sig. (1-tailed)</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
</tbody>
</table>

First, “behaviour” was regressed on “intention”, FC and “habit”. The model was significant ($p<.001$) and explained 63% of the variance in “behaviour”. “Intention” and “habit” both carried a significant Beta value, while FC appeared to be a non-significant predictor. Taking out FC, “behaviour” was regressed again on “intention” and “habit”. The new regression yielded the same amount (63%) of explained variance in “behaviour” as the first regression. “Intention” made a slightly stronger unique contribution than “habit” in the prediction of “behaviour” (Table 4.18).

Table 4.18 Regression Coefficients for Behaviour within the TIB Model

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intention</td>
<td>0.412</td>
<td>0.02</td>
<td>0.483</td>
<td>20.883</td>
</tr>
<tr>
<td>Habit</td>
<td>0.857</td>
<td>0.044</td>
<td>0.448</td>
<td>19.391</td>
</tr>
</tbody>
</table>

Second, “intention” was regressed on its six predictive variables, i.e. “affect”, PC, RB, NB, PNB and SI. The regression model was significant ($p<.001$) and explained 53.2% of the variance in “intention”. All the six variables made a significantly unique contribution to the
prediction of “intention” (Table 4.19). “Normative beliefs” was the best predictor, followed by “personal normative beliefs”, “role beliefs”, “perceived consequences”, “affect” and “self identity”.

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-1.362</td>
<td>0.476</td>
<td>-2.863</td>
<td>0.004</td>
</tr>
<tr>
<td>Normative Beliefs (NB)</td>
<td>0.668</td>
<td>0.044</td>
<td>0.428</td>
<td>15.121</td>
</tr>
<tr>
<td>Personal Normative Beliefs (PNB)</td>
<td>0.196</td>
<td>0.054</td>
<td>0.123</td>
<td>3.653</td>
</tr>
<tr>
<td>Role Beliefs (RB)</td>
<td>0.095</td>
<td>0.021</td>
<td>0.116</td>
<td>4.454</td>
</tr>
<tr>
<td>Perceived Consequences (PC)</td>
<td>0.127</td>
<td>0.037</td>
<td>0.115</td>
<td>3.481</td>
</tr>
<tr>
<td>Affect</td>
<td>0.097</td>
<td>0.033</td>
<td>0.095</td>
<td>2.968</td>
</tr>
<tr>
<td>Self Identity (SI)</td>
<td>0.025</td>
<td>0.009</td>
<td>0.092</td>
<td>2.887</td>
</tr>
</tbody>
</table>

In summary, the TIB model showed its validity in predicting the resident-tourist interactive behaviour. The flowchart of the model was presented in Figure 4.15.
4.5.5. Comparisons between the TRA, TPB and TIB model

Summarizing the evaluation results, all three models were suitable and valid to be utilized to predict host resident’s interactive behaviour on tourists and the intention to perform the behaviour (Hypothesis 4). “Intention” was the best predictor for “behaviour” within the frameworks of all the three models (Hypothesis 5). A comparison of the predictive power of the models (Table 4.20) indicated that the TIB was the most powerful in predicting “behaviour”, while the TPB model was the best in predicting “intention” to perform the behaviour. Of note, the TIB model encompassed all of TPB’s predictive variables predicting “intention” plus “role belief” and “self identity”. However, the increased number of predictors in TIB did not result in a higher, but a slightly lower predictive power in “intention” than the TPB. Given this result and the parsimony principle associated with modelling, the TIB model was obviously not as good as the TPB in predicting “intention”. In comparison with these two models, the TRA explained much less variance in both “behaviour” and “intention”.

Table 4.20 Summary of the Predictive Power of the TRA, TPB and TIB

<table>
<thead>
<tr>
<th>Model</th>
<th>Behaviour Intention</th>
<th>Explained Variance (Adjusted R Square)</th>
<th>Predictors</th>
<th>Intention</th>
<th>Explained Variance (Adjusted R Square)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The TRA</td>
<td>Intention</td>
<td>47.06%</td>
<td>SN, IA, AA</td>
<td>SN, IA, AA</td>
<td>49.30%</td>
</tr>
<tr>
<td>The TPB</td>
<td>Intention</td>
<td>47.06%</td>
<td>SN, PBC, IA, AA</td>
<td>SN, PBC, IA, AA</td>
<td>55.70%</td>
</tr>
<tr>
<td>The TIB</td>
<td>Intention, Habit</td>
<td>63.00%</td>
<td>NB, PNB, RB, PC, Affect, SI</td>
<td>NB, PNB, RB, PC, Affect, SI</td>
<td>53.20%</td>
</tr>
</tbody>
</table>

4.6 Developing a new model predicting resident-tourist interactive behaviour

Based on the evaluation results in the previous section, a new model was developed to predict host-tourist interactive behaviour. This section presented the development and evaluation of the new model. Furthermore, moderating effects of gender, age and personality traits were also examined within the framework of the new model to identify whether these factors contributed to the remaining unexplained variance.
4.6.1 Model development and validity

Given the above comparative results, a new model was developed by capturing the TIB’s predictors for “behaviour” and the TPB’s predictors for “intention”. The new model retained the theorization of each construct in their respective original model on one hand, and combined the predictive advantages of the TIB and TPB in “behaviour” and “intention” on the other hand. The framework of the new model was presented in Figure 4.16. The new model was the same as the TPB except for an additional construct (“habit”) directly predicting “behaviour”. Given that the model was developed in the context of resident-tourist interactive behaviour, it was named Resident-Tourist Interaction Model, abbreviated R-T Interaction Model.

![Figure 4.16 The Resident-Tourist Interaction Model](image)

A bivariate correlation using Pearson coefficient was performed between all variables within the framework of the R-T Interaction Model and the results were summarized in Table 4.21. A one-tailed significance test was applied because directional correlations were hypothesized based on the theorization of the constructs in their respective original models. It was observed that all the correlations were significant beyond .001 level, indicating the linear relationship between the dependent variable and its corresponding predictors.
To examine the predictive power of the R-T Interaction Model, “behaviour” and “intention” were separately regressed on their predictors. As expected, the new model explained the same amount of variance in “behaviour” (63%) as the TIB, and the same amount of variance in “intention” (55.70%) as the TPB. The best predictor for “behaviour” was “intention” ($\beta=.483$, $p<.001$), followed by “habit” ($\beta=.448$, $p<.001$). This finding was in line with the research Hypothesis 6. “Intention” was best predicted by SN ($\beta=.380$, $p<.001$), followed by PBC ($\beta=.299$, $p<.001$), “affective attitude” ($\beta=.165$, $p<.001$) and “instrumental attitude” ($\beta=.140$, $p<.001$). In summary, the R-T Interaction Model developed in this study was valid in predicting the host resident’s interactive behaviour with tourists.

4.6.2 Examination of the effects of moderating factors

Although the new model explained a high percentage of variance in both “behaviour” and “intention”, there remained 37% of unexplained variances in “behaviour” and 46% of unexplained variance in “intention”. Experimental studies using the TPB for varied behaviours (such as Conner & McMillan 1999; Rhodes, Courneya & Jones 2005) have proposed that the remaining variance might be explained by the moderating effects of such factors biasing the linear coefficients within the model. Gender, age and personality traits were the most frequently examined moderating factors in behavioural studies using the TPB, and therefore were examined here within the framework of the new model developed in this study (Hypothesis 7). Moreover, the moderating effect of attitude towards general tourism was also examined (Hypothesis 8).
4.6.2.1 Moderating effects of gender

The moderating effect of gender was examined by splitting the sample into male and female as suggested by Holland and Hill (2007). “Behaviour” was first regressed on “intention” and “habit” for men and women separately. The model explained only one percent more variance of “behaviour” for women (Adjusted $R^2=.626$, $p<.001$) than for men (Adjusted $R^2=.616$, $p<.001$). “Intention” ranked before “habit” in predicting “behaviour” for both genders. Next, “intention” was regressed on AA, IA, SN and PBC for men and women separately. The two regressions yielded Adjusted R Square of .562 ($p<.001$) for men and .543 ($p<.001$) for women, with a difference of .019. The predictive ranking order of the independent variables was the same for men and women and was consistent with the overall sample. Given such little gender differences on the explained variance in both “behaviour” and “intention” (less than 2% in each case), it was concluded that gender only slightly moderated “behaviour” and “intention” at a very low level within the framework of the R-T Interaction Model. This effect was too low for gender to be considered as an additional variable. The above process could also be treated as a reliability test of the Model using the systematic split-sample technique (Joseph et al. 1995). The result indicated that the R-T Interaction Model was reliable for both males and females.

4.6.2.2 Moderating effects of age

In examining the effects of age within the new model, a bivariate correlation using Pearson statistic was first performed between age and all variables within the new model. A two-tailed significance test was applied due to the uncertainty of direction of such bivariate correlations. It was observed that all the correlations were non-significant, suggesting there was no linear relationship between age and any of the relevant variables in the Model. Given this, subsequent regression analysis incorporating age was not applied. This finding suggested that age was not a good predictor for either “behaviour” or “intention”.

4.6.2.3 Moderating effects of personality traits

The relationship between the five personality traits (OCEAN) and the variables of the R-T Interaction Model were examined using Pearson correlation (Table 4.22). Again, a two-tailed significance test was applied given the uncertainty of the direction of the correlations. All the correlations were significant beyond the .01 level, indicating the linear relationship between them. Next, the moderating effects of personality traits were examined on both “behaviour” and “intention” within the framework of the Model. This was supported by empirical studies that applied the TPB and FFM in the study of exercise behaviours. For example, Rhodes et al. (2004) had suggested that personality traits could moderate either behaviour or the intention to perform the behaviour. Step-wise regression was implemented on the hierarchical level of personality traits after controlling relevant variables in the Model. The step-wise regression technique allowed for all personality traits to be considered for entry into the regression equation and was an appropriate technique for the exploratory phase (Cohen & Cohen 1983) of this study. The criteria of probability of F to be entered was set at <.05, and probability of F to be removed was set at >.10.

| Table 4.22 Bivariate Correlation between Personality Traits and Variables within the R-T Interaction Model* |
| Behaviour | Openness | Conscientiousness | Extraversion | Agreeableness | Neuroticism |
| Behaviour | 0.401 | 0.184 | 0.564 | 0.412 | -0.267 |
| Intention | 0.415 | 0.194 | 0.534 | 0.360 | -0.229 |
| Habit | 0.362 | 0.191 | 0.515 | 0.447 | -0.256 |
| Affective Attitude | 0.426 | 0.184 | 0.610 | 0.434 | -0.376 |
| Instrumental Attitude | 0.374 | 0.190 | 0.440 | 0.220 | -0.102 |
| Subjective Norms | 0.396 | 0.169 | 0.491 | 0.336 | -0.263 |
| Perceived Behavioural Control | 0.343 | 0.185 | 0.359 | 0.242 | -0.152 |

* All correlations were significant at .01 level

The effect of personality traits on “behaviour” was first examined by regressing “behaviour” on “intention”, “habit” and the five personality traits. “Intention” and “habit” were first entered into the regression (block 1) using the Enter method, followed by the five personality traits (block 2) using the Stepwise method. The regression model eventually accepted
Agreeableness ($\beta=.063$, $p=.05$) and Extraversion ($\beta=.067$, $p=.05$), but rejected the other three traits. However, the inclusion of Agreeableness and Extraversion only increased the explained variance in “behaviour” by 0.6%, which indicated an extremely low moderating effect on “behaviour”.

Next, the five personality traits were taken into the regression of “intention” using the same method as above. The regression only accepted Extraversion ($\beta=.153$, $p=.001$) in the model and rejected the other four traits. The inclusion of Extraversion gained an Adjusted R Square of .569 ($p=.001$), an increase of .012 in comparison with the model without it (.557). Again, this incremental variance was too low for Extraversion to be included in the Model as an additional predictor for “intention”.

To summarize, personality traits in general did not moderate resident-tourist interactive behaviour. Although traits such as Extraversion and Agreeableness carried significant Beta values when they were included in the regressions, their predictive effects were too low to be accepted in the R-T Interaction Model.

4.6.2.4 Moderating effects of attitudes towards general tourism

It was important to note that the attitude variables (Instrumental Attitude and Affective Attitude) examined above were all defined as the specific attitudes towards the specific behaviour of interacting with tourists, but not the attitudes towards general tourism. The purpose of doing so was to be consistent with the theorization of these variables in the TRA, TPB and TIB. Tourism researchers (Inbakaran & Jackson 2006) had proposed the question of whether positive attitude towards general tourism would lead to positive tourism behaviour and what other factors might contribute to the prediction. This was also at the interest of the present study. To answer this question, general attitude’s predictive power was examined within the framework of the R-T Interaction Model. The composite variable - “Positive Attitude” derived in section 4.3.2 was used to represent positive attitude towards general tourism.
A bivariate correlation between “Positive Attitude” and all variables of the R-T Interaction Model was performed and all the correlations were significant beyond .001 level. Using the same regression method as that of personality traits, “behaviour” and “intention” were separately regressed on their corresponding predictors with Positive Attitude as an additional one. The inclusion of Positive Attitude yielded 0.2% and 0.7% incremental variance in “behaviour” and “intention” respectively. Although Positive Attitude carried significant Beta values in both regression models, it contributed little to the explained variance, indicating its poor predictive power regarding either “behaviour” or “intention”.

Given the significant correlations between Positive Attitude, Affective Attitude and Instrumental Attitude, multicollinearity issue might affect the predictive power of Positive Attitude. To eliminate the overlap, Affective Attitude and Instrumental Attitude were replaced by Positive Attitude in another regression of “intention”. The model yielded an Adjusted R square of .530 ($p < .001$), which was lower than the original .557. Thus, it was concluded that specific attitudes were better than general attitudes in predicting behavioural intention in the context of this study.

To summarise section 4.6.2, none of the external factors (gender, age and personality traits) demonstrated significant moderating effects on host-tourist behaviour within the R-T Interaction Model. Thus, Hypothesis 7 did not hold true for the current data. Although residents’ attitudes towards general tourism can be used to predict their interaction with tourists, its predictive power is lower than the specific attitudes. This finding was in line with the Hypothesis 8.

4.7 Summary

This chapter provided answers to the research questions (1-9) and confirmation to the research hypotheses (1-8) through a series of statistical analyses. In summary, it was found that internal factors associated with host residents were not necessarily to be influential on all dimensions of their attitudes towards tourism, with some of them to be influential on only one
dimension. Overall, residents living in Melbourne’s urban-rural fringe held overall positive attitudes towards community tourism development. However, different groups of people demonstrated significant differences in terms of such attitudes. In the context of host residents’ interaction with tourists, the R-T Interaction Model developed in the present study explained 63.00% of variance in the interactive behaviour and 55.7% of variance in the behavioural “intention”. The best predictor for “behaviour” was found to be “intention” and then “habit”, while “intention”, in turn, was best predicted by “subjective norms”, followed by “perceived behavioural control”, “affective attitudes” and “instrumental attitudes” towards the behaviour. The model was reliable for both male and female respondents. All the external factors demonstrated very low moderating effects on resident-tourist interactive behaviour.
Chapter 5

INTERPRETATION AND DISCUSSION

5.1 Introduction

This chapter provided interpretation and discussion of the major research findings with regard to community attitudes towards tourism (section 5.2), influential factors on community attitudes (section 5.3), segmentation of community residents (section 5.4), hosts’ interactive behaviour with tourists and the R-T Interaction Model developed in predicting this behaviour (section 5.5). It also addressed the research gaps covered by this study and noticeable differences and similarities between this study and related literature. Implications for future tourism development and suggestions to local governments were made based on the findings of the present study.

5.2 Community attitudes towards tourism

Community attitudes towards tourism were examined through measuring the respondents’ perception of the impacts of tourism in the present study. As tourism impacts on host community have been extensively studied in the literature, the present study sought not so much to document these impacts, but, through capturing the major economic, social and cultural impacts perceived by residents, to highlight the basic community attitudes towards tourism for further analysis in section 5.3 and 5.4.

In general, residents living in Melbourne’s urban-rural fringe had positive attitudes towards tourism and tourists. This could be seen from their higher rating scores on positive impact statements (overall mean=3.36, individual mean ranging between 3.21 and 3.65) and lower rating scores on negative impact statements (overall mean=2.19, individual mean ranging between 1.85 and 2.60). These mean scores indicated Melbournians’ satisfaction with the current community tourism development. Should the impacts of tourism be maintained at the
current level and be appropriately managed in the future, we could expect them to support
new tourism development and to interact with tourists positively.

Not surprisingly, the most perceived benefit of tourism was its economic contribution to local
economy. This was a true reflection of the industry’s fast growth in Victoria and its
contribution to the state’s GSP. The respondents had few concerns in treating tourism as a
stimulator of local economy. The finding was in line with the majority of previous studies
conducted in either urban (such as: Davis, Allen & Cosenza 1988; Gunce 2003; Lawson et al.
1998) or rural areas (such as: Long, Perdue & Allen 1990; Sheldon & Var 1984), indicating
that host community’s perception on tourism’s economic contribution was quite universal
cross geographic areas.

From the perspective of social impacts, the respondents believed that the general quality of
their individual life had been improved and most of their peer residents had benefited from
tourism development. On the other hand, they also realized the negative social impact, such
as the increased costs on products and services. Although this impact seemed to be at
bearable level (mean=2.60), it remained the respondents’ biggest concern (the highest mean
score among all negative impacts statements). When asked whether tourists should pay more
for local resources to compensate them for the increased costs, the respondents said “no”
(mean=2.00), highlighting their fairness and unwillingness to discriminate against tourists.
Nevertheless, tourism planners need to make efforts in reducing the increased living costs
caused by rapid tourism development. Otherwise, this negative impact might grow to an
offensive level and consequently lead to greater anti-tourism attitudes.

Another notable social impact perceived by the respondents related to the role of tourism on
community development. In general, residents living in Melbourne’s urban-rural fringe
perceived tourism as a positive industry preventing their living community from being a dull
place. The arrival of tourists made the local residents have a proud image of their community.
At the same time, the development of tourism projects (such as leisure facilities, theme parks
etc.) also provided local people more places for leisure and fun activities. However, responses
to this impact had the biggest variation, indicating the controversy among the residents. This could be explained by their concern about problems caused by the excessive appearance of tourists in their community, such as traffic congestion, shopping delays, less security and noise pollution.

In comparison with economic and social impacts, the cultural benefits perceived by the respondents were weaker. Although respondents did not agree that tourists had interfered with their local culture or heritages, they conservatively agreed that the arrival of tourists had broadened their world perspective and understanding of other cultures. The weaker perception of cultural benefits was partially accounted for the fact that Melbourne residents had other means to access different cultures. Thanks to the encouragement of immigration and multi-cultural policy in Australia, Melbourne’s population demonstrates huge diversity in terms of ethnicity and culture. There are approximately 3.5 million residents from more than 140 nations living side by side in Melbourne (Ozdream 2004). Melbournians could easily gain direct access to other cultures through their peer residents. Furthermore, culturally themed activities (such as Orthodox Easter and Chinese New Year celebrations), restaurants featuring different cate-cultures and other rich-in-culture activities (such as exhibitions and art performances) give Melbourne residents more opportunities to learn about and experience other cultures. Therefore, tourists’ function in introducing their culture to the host community seemed fairly unimportant for Melbournians compared to other areas where the population has little diversity.

It was interesting to note that the least perceived negative impact was the spread of infectious disease due to tourist arrivals. It has been expected that this issue would be of the host community’s concern because this survey was conducted not long after the outbreak of SARS (Severe Acute Respiratory Syndrome) in China and South-east Asia in 2004. However, the finding did not support this expectation. A possible explanation was the strict quarantine actions taken by the Australian government and tourist-sourcing governments.

Overall, residents living in Melbourne’s urban-rural fringe demonstrated positive attitudes
Chapter 5 Interpretation and discussion

towards tourism. This indicates that tourism development in the study area has not reached an offensive level. Fitting this attitude into Doxey’s (1975) Irridex model, it should be within the ‘euphoria’ stage, but with the emergence of some ‘apathy’ symptoms. According to the Irridex model (Doxey 1975), host attitude changed with the pace and stage of tourism development. High-volume mass tourism would increase the degree of incompatibility between residents and tourists. When this incompatibility reaches a certain level, ‘antagonism’ will emerge and tourism development will enter into the ‘stagnation’ or ‘decline’ stage. Therefore, in minimizing the possibilities of falling into the undesired tourism development stages, tourism planners need to consider the speed of tourism development and the number of tourist arrivals. While it seems difficult to practically determine an appropriate pace of tourism development (in terms of rate and number of tourist arrivals), the residents’ attitude provides a good criterion for the decision-making, especially for short-term planning decisions. Medium and long-term plans could then be adjusted according to routine monitoring of community reactions. This bottom-up planning procedure is vital for the sustainability of tourism development as it assures the harmony between hosts, local governments and the tourism industry. It would be advantageous if tourism planners adopted a consistent framework with a common methodology applicable to a range of situations. In doing so, they would not only achieve savings on such matters as instrument design, but also observe variation and changes of community attitudes by longitudinal comparisons (Faulkner & Tideswell 1997).

Aside from the overall positive attitudes, the differences among community residents should also come to the attention of tourism planners. This study observed an obvious variation of community attitudes towards tourism. While some residents were placed on the extreme sides, either strongly supporting or opposing tourism development, others held neutral attitudes even living in the same community (an indication of the same level of tourism development). In explaining such variations of attitude, the stage based models were inadequate since they assumed “a degree of homogeneity and uni-directionality in community reactions” (Faulkner & Tideswell 1997, p. 7). In other words, the stage based models do not capture the influence of intrinsic characteristics (e.g. demographics and psychographics) of host residents on their attitudes towards tourism. On the contrary, the Social Exchange Theory (SET, Ap 1992)
captured intrinsic elements of an individual and was appropriated to explain these variations. In the tourism context, the adapted SET (Ap 1992) viewed residents’ attitudes toward tourism development as a trade off between the benefits and costs of tourism perceived by the residents. Residents were more likely to be inclined to tourism development if they perceived more favourable impacts (benefits) than negative impacts (costs) from development and vice versa. Drawing on the SET, the various attitudes held by residents living in the same community were attributed to the different evaluation results of an individual’s perception of the positive and negative impacts of tourism. Aside from this, previous studies also suggested that intrinsic factors of an individual, such as demographics and socio-graphics, were influential on their attitudes towards tourism. However, past studies performed in different communities demonstrated inconsistent results. Therefore, it was necessary to examine the effects of intrinsic factors on attitude within the current data.

5.3 Effects of intrinsic factors on community attitudes

Intrinsic factors referred to “characteristics of members of the host community that affect variations in the impacts of tourism within the community” (Faulkner & Tideswell 1997, p. 6). Four types of intrinsic factors were examined in this study. They were: socio-demographics, residential status variables, tourism-related variables and personality traits. The effects of these variables on attitudes were examined separately.

5.3.1 Orthogonal dimensions of community attitudes towards tourism

The issue of the orthogonal dimensions of attitudes was one of the emphases in this study. Although considerable literature has suggested the positive and negative impacts of tourism on host community, the majority of studies investigating the effects of intrinsic factors on community attitudes towards tourism do not carry this finding into further works. For example, while these studies asserted a specific intrinsic variable to be influential on attitudes, they did not distinguish whether the variable affected positive attitudes only, or negative attitudes only, or both. In addressing this research gap, this study recognized two orthogonal
dimensions of attitudes through factor analysis, namely “positive attitude” and “negative attitude”. When the intrinsic factors were examined on the two attitude dimensions respectively, interesting results were generated: while some variables were found to be influential on both dimensions, others were found to be influential on only one dimension (either positive or negative).

This finding supported the assertion of Long, Perdue & Allen (1990) and Madrigal (1993), who argued that community attitudes toward tourism might be better represented by two underlying dimensions - positive and negative aspects. Although it was not part of this study to explain why intrinsic variables had different effects on attitudes, the finding of this study extended the literature by highlighting that intrinsic factors do not necessarily affect the whole attitude, but can be influential only on one dimension of attitudes. The two-dimensional approach adopted in the present study provided an insight to where these effects were. In practice, it could be utilized by tourism authorities as an alternative easy mechanism of segmenting community residents for any identification purposes, for example, looking for voluntary tourism workers. In the State of Victoria, voluntary workers are in great demand. Many positions in local tourist information centers are fulfilled by volunteers, which requires the local governments to recruit the right people who are positive towards tourism and tourists. In such a case, focusing on the factors which only influence the positive dimension of attitudes can provide local governments with a more precise selection criterion. Factors that do not influence positive attitudes can be disregarded as they do not help to select the right volunteers.

5.3.2 Intrinsic variables only affecting one orthogonal dimension of attitudes

It was found that age, length of residence and economic dependence on tourism affected respondents only on positive attitude, with those who were older, living in the community for a shorter period of time, and working in the tourism industry to have a more positive attitude. On the other hand, level of education and language (a measurement of cultural background) were only influential on negative attitudes with those who were less educated and those who
spoke a second language at home, tending to have a more negative attitude towards tourism.

The positive relationship between age and the positive attitudes indicated that elderly people perceived more benefits of tourism. Compared with the young residents, they were more convinced that tourism has improved the general quality of life and has benefited most of the peer residents living in the community. Moreover, the contribution of tourism to the local economy and the community image also helped explain their more favourable attitudes towards tourism. This is understandable, as people at mature age have seen the improvement of quality of life and community economy by comparing the past (with a comparatively stagnant tourism industry) and the present (with a booming tourism industry). In contrast, young people are less sensitive to such improvements because what they have seen is an already boomed tourism industry. However, the elderly people did not differ with the young residents on their attitudes towards the contribution of tourism to providing a better worldview. This indicated that people were more dependent on other mechanism (such as media) to establish their views about the world. This finding was in line with Weaver & Lawton’s (2001) study, which also reported a positive relationship between age and favourable attitudes towards tourism held by residents living in an Australian urban-rural community. Interestingly, this finding did not support Tomljenovic & Faulkner’s (2000) study, which was also conducted in Australia, but reported a non-significant relationship between age and attitudes towards tourism. A possible explanation was that the two studies focused on the different geographic areas. The present study investigated the urban-rural fringe, while Tomljenovic & Faulkner (2000) looked into a typical urban area - Gold Coast, which is the main international destination of Australia.

With regard to the influence of length of residency, this study found that new residents tended to be more positive towards tourism than long-term residents. This was in line with the majority of previous studies conducted in Australia, such as Tomljenovic & Faulkner (2000) and Weaver & Lawton (2001). It should be noted that in the later two studies, the short-term residents were more positive towards tourism because they perceived less negative impacts of tourism. Whereas, in the present study, their positive attitudes were attributed to their
perceptions of the benefits of tourism development. This difference was simply because the previous studies did not separate the positive and negative dimensions of attitudes in their analysis.

It seemed to be quite consistent in the literature that dependence on tourism (working in the industry) would most probably lead to a more supportive attitude towards tourism (such as Allen et al. 1993; Haralambopoulos & Pizam 1996; Johnson, Snepenger & Akis 1994; Weaver & Lawton 2001). While the current study supported this assertion by reporting a positive relation between dependence and positive attitude, it further highlighted the non-significant relationship between the dependence on tourism and the negative attitudes. People working in the tourism industry preferred tourism development because of their income dependence. However, this dependence did not lead them to a less negative attitude in terms of economic and socio-cultural impacts. They appeared to have similar perceptions as other residents in terms of the negative impacts of tourism. This finding also supported the notion of orthogonal dimensions associated with positive and negative attitudes.

The relevance of education with attitudes towards tourism has been argued to be a feature of the third world contexts, but not of more advanced economies (Weaver & Lawton 2001). The underlying indication of this assertion is that when the whole populations are well educated (as commonly seen in developed countries), education becomes a non-influential factor on community attitudes towards tourism. However, the results from this study suggested that such non-significant findings were only demonstrated on the positive dimension of attitudes. When the negative dimension was separately recognized, the relevance of education occurred: People who were less educated were found to have more negative attitudes towards tourism. This finding suggested that, in a developed economy such as Australia, education levels of residents could influence their reactions to the negative impacts of tourism. Compared with well-educated people, residents with less education have weaker worldview and tend to be more interested in negative local impacts. Thus they are less likely to take on tourism jobs or to be involved in local tourism promotional activities. From this point of view, this study did not support Weaver & Lawton’s (2001) assertion.
5.3.3 Influential variables affecting both dimensions of attitudes

The present study also identified several intrinsic variables that were influential on both positive and negative attitude. These were: distance (from home to tourist attraction), frequency of local recreation-base usage, frequency of involvement in community tourism activities and finally personality. In brief, respondents living closer to tourist sites, frequently using the local recreation bases, often participating in local tourism activities, or being more open, conscientious, extraverted, agreeable and stable (less neurotic), tended to perceive more positive and less negative impacts of tourism than their counterparts.

Distance (between home and tourist site) has been one of the most frequently examined variables in the literature. Basically there were two major different assertions about the relationship between distance and attitudes in the existing literature: the positive relationship (such as Mansfeld 1992; Sheldon & Var 1984) and the negative relationship (such as Jurowski & Gursoy 2004; Madrigal 1993; Tyrell & Spaulding 1984). In a positive relationship, the closer people resided to a tourist site, the more positive were their attitudes towards tourism; while in a negative relationship, the closer the distance, the more negative residents’ attitudes were. Although there have been studies reporting non-relevance between distance and attitude, such as Weaver & Lawton (2001), they were exceptions in the literature. This study supported the first assertion, suggesting that residents living closer to tourist attractions were more favourable towards tourism. Based on the SET (Ap 1992), these residents were inclined to support tourism development because they believed that shorter distance to tourist site could bring more benefits (such as convenient access to recreation facilities, more opportunities to encounter other cultures etc) than costs (such as traffic congestion, litter etc).

In explaining the various findings about the effects of distance on attitudes, the SET has been frequently used in the literature. The present study also argued the capability of stage based models in explaining these variations. This was because attitudes held by hosts living close to or far away from a tourist site could reflect, in some degree, the relevant stages of tourism development in the community. Based on the stage based models, host residents would not
hold a favourable attitude towards tourism if the industry was over developed. This was especially true for those who lived close to tourist sites because they were the group of people most exposed to tourism. Thus, a favourable attitude from host residents living in a short proximity to a tourist site was a reflection of the appropriate stage of community tourism development and vice versa. Combining the stage based models with SET could better help us to understand the effects of distance on attitude and the various cross-study findings. Importantly, this combination provided an up-front warning signal of mass tourism development. When proximous residents (living close to tourist site) start to evaluate tourism negatively, it indicates that the tourism development of the community is reaching an inappropriate stage. Actions taken at this point of time, such as an adjustment of tourism plan (either to slow the development or distribute tourism development across the community), would minimize the proliferation of negative impacts in the whole community.

Another group of intrinsic variables affecting both positive and negative dimensions of attitudes related to the respondent’s voluntary involvement in tourism. It was found that respondents who regularly 1) participated in local tourism promotional activities or 2) attended community tourism meetings or 3) visited local tourist sites were more favourable and less opposed to tourism than their counterparts. This indicated that involvement in tourism could help residents to be more positive and less negative towards tourism. A high level of involvement in these tourism-related activities provided the host with greater contacts with tourists and increased their knowledge about tourism. This finding was consistent with the majority of related studies, such as Pigram (1987), Allen et al. (1988), and Allen et al. (1993).

Of special interest were the effects of personality traits on attitudes towards tourism. Excitingly, the finding showed that personality traits affected both positive and negative dimensions of attitudes towards tourism. Residents scoring high on the traits of Openness to Experience (curiosity and the tendency for seeking and appreciating new experiences and novel ideas), Conscientiousness (degree of organization, persistence, and motivation in goal-directed behaviour), Extraversion (sociability, warmth, assertiveness and activity),
Agreeableness (interpersonal orientation, such as being soft-hearted, good-natured, trusting and gullible), but low on Neuroticism trait (anxiety, hostility and depression), were more positive and less negative towards tourism than those with the opposite personality profiles.

The role of personality in explaining community attitudes towards tourism has been neglected in the literature. This might be partially explained by the lack of a sound personality model. The evolvement of personality studies in the 1990s provided tourism researchers with a better theoretical foundation. Only recently have researchers suggested examining the relationship between personality and community attitudes towards tourism. However, to the best knowledge of the author, no published research has tested this relationship. As (one of) the first attempt(s) in addressing this research gap, this study confirmed the relation between personality traits and community attitudes towards tourism, i.e. positive attitude dimension was positively correlated to Openness to Experience, Conscientiousness, Extraversion, and Agreeableness, but negatively correlated to Neuroticism. The negative attitude dimension had the opposite relationship. This finding was reasonable given the psychological features embedded in attitude. According to Eagly and Chaiken (1993, p. 1), “Attitude is a psychological tendency that is expressed by evaluating a particular entity with some degrees of favour or disfavour…”. Although there was no universally accepted definition of attitude, the above definition “comes closest to a definition that would satisfy the greatest number of researchers” (Williams & Lawson 2001, p. 272), and there seemed very little debate about the essence of this definition, i.e. attitude was a psychological tendency. Therefore, it was logical to assert the relationship between personality (a psychological factor) and community attitudes (a psychological tendency) towards tourism.

To explain the influence of personality on attitudes towards tourism, it is necessary to understand the underlying meanings of each of the personality traits (OCEAN). According to the FFM (McCrae & Costa 1996), people who possess the characteristics of Openness to Experience are curious towards new things and have a tendency of seeking new experience. In the context of tourism, this type of trait increases the tendency of such people to be interested in new developments of the industry. As to the trait of Conscientiousness, one of
the obvious characteristics of conscientious people is their strong belief of the positive relationship between hard work and goal achievement (Digman 1997, McCrae & Costa 1996). Thus, these people would believe that persistent efforts in community tourism development and appropriate management would eventually lead to successful outcomes to the local community, with benefits outweighing the costs. Extraverted people are positive towards tourism because they like to meet and interact with strangers. The arrival of tourists provides them with more opportunities to do so. Similarly, the influence of Agreeableness on attitudes towards tourism is straightforward. People who demonstrate highly agreeable characteristics are usually generous and soft-hearted. They like to get on well with people around them and make sure that strangers (tourists) are having a good time while visiting their communities. Thus, it is not surprising to see these people support local tourism development and positively interact with tourists. In contrast to the above four traits, Neuroticism is regarded as a negative personality trait. As suggested by Costa & McCrae (1992), people showing neurotic characteristics are most likely to experience emotional distress and worry about the current or future outcomes. For them, the development of tourism and the mass arrival of tourists would increase their anxiety, hostility and depression. Consequently, the negative impacts of tourism, such as shopping delays and traffic congestions would be at their immediate concerns. This helps explain why neurotic people held negative attitudes towards tourism and tourists.

The final issue that needs to be discussed is the measurement of personality. This study employed the Five Factor Model (FFM, McCrae & Costa 1996) to describe the respondent’s personality traits. The suitability of FFM considered the following three issues: First, FFM was the most popular descriptive model in personality studies. Its soundness and utility have been widely supported by a large number of empirical research works. Second, the five factors in FFM were stable over a 45-year period beginning in young adulthood (Soldz & Vaillant 1999). FFM suited the present study given that the respondents range from 18 years to over 80 years old. And finally, the factors in FFM were considered universal, having been identified in languages as diverse as German and Chinese (McCrae & Costa 1997), which suited the diverse ethnic background of the community residents in this study.
5.3.4 Non-influential intrinsic variables

Several intrinsic variables i.e. gender, household type and birth place were found not to have a significant influential effect on either positive dimension or negative dimension of attitudes. Therefore, it was concluded that these variables did not affect community attitudes towards tourism.

All three variables have been frequently examined in prior studies with various findings in terms of their effects on attitudes towards tourism. While the finding from this study was in line with most previous studies, it opposed some others. Take gender for example, this study supported Davis et al. (1988), Ryan & Montgomery (1994) and Weaver & Lawton (2001) that males and females did not differ in attitudes towards tourism, but were opposite to the finding of Martin’s (1995) work in which females were reported to be more supportive to tourism development than males.

To summarize the intrinsic factor’s effects on community attitudes in terms of variable types, psychological variables (personality traits) influenced both dimensions of community attitudes towards tourism; tourism-related variables (occupation dependence, voluntary involvement) and residential-status variables (length and distance) were relevant to at least one dimension; while socio-demographic variables showed much less relevance, with most of them being totally irrelevant. Thus, compared with demographic and other types of intrinsic variables, psychological variables show a wider influence on community attitudes towards tourism. This highlighted the need to introduce psychological variables into tourism attitude antecedent studies.

The array of variables identified above and the permutations of their influence on attitude dimensions highlighted the complexity of understanding community attitudes towards tourism. The two-dimensional attitude approach helped to gain better understanding of the phenomenon. There are two important issues associated with the above findings in the current study. First, tourism attitude literature has shown that the effects of most of intrinsic variables
are not universal, thus the generalization of these findings outside the sampling frame and methodology needs to be cautious. Second, the influence of intrinsic variables on attitude was examined separately. When it was concluded, for example, respondents being mature, living close to a tourist attraction, or working in the tourism industry tended to have a more favourable attitude towards tourism, it only meant respondents could fit into pro-tourism situations if they possessed any one of the attributes, but not all. Similarly, when it was concluded that some variables did not affect community attitude, it meant that no statistical relationships between attitude and these individual variable, but did not indicate whether the combination of these variables would have a significant effect. The next section evaluated the effects of combined demographic variables to indicate the complexity of community attitudes towards tourism.

5.4 Community segmentation

In order to further identify the diversity of attitudes among host community, community residents were segmented using seven socio-demographic (intrinsic) variables as the clustering base. The analysis eventually generated five segments of the resident population: Cluster One – distant new residents; Cluster Two – proximous settlers; Cluster Three – proximous new comers; Cluster Four – proximous natives; and Cluster Five – distant natives. These clusters showed an overall difference on their demographics and residential status, i.e. gender, age, education level, household type, distance from residence to major local tourist attraction(s), and length of residence. Among which, the most significant inter-group differences were age, distance (from residence to major local tourist attractions) and length of residence.

5.4.1 Socio-demographic segmentation approach

Given that the present study was one of the first attempts to segment community residents based on their socio-demographics, the first issue that needs to be discussed is the validity of this approach. Traditionally, community segmentation studies used attitudinal variables as
Chapter 5 Interpretation and discussion

clustering base (hereinafter called attitudinal-variable approach). An essential advantage associated with the attitudinal-variable approach was that, by maximising between-group differences on attitudes, it could provide rich information on how the segmented groups differ from each other in terms of their attitudes toward tourism. However, the attitudinal-variable approach was not good at providing a recognizable description (such as demographic features) of subjects. Although previous studies using this approach have tried to relate the segmented resident groups with their demographics, most of them reported non-significant between-group demographic differences (such as Davis, Allen & Cosenza 1988; Ryan & Montgomery 1994) or limited differences on only a few demographics (such as Perez & Nadal 2005; Williams & Lawson 2001). In practice, tourism planners and developers need sufficient but easily recognizable information for identification purposes. For example, to identify residents who are positive towards tourism and tourists as voluntary tourism workers, or to identify those who are negative towards tourism so that possible remedial solutions can be delivered to the right key people. The socio-demographic approach adopted in this study is satisfactory at this point, simply because socio-demographic variables are the most easily recognizable. Contrary to the traditional approach, the socio-demographic approach has great advantage in describing the resident segments by maximizing between-group differences on socio-demographics. However, community segments generated using this approach must also show sufficient between-group differences in terms of attitude variables. That is, clusters based on socio-demographics must be predictive and distinguishable on their attitudes towards tourism. Thus, the choice of clustering base between the two approaches was subject to study objectives.

With the aim of providing recognizable cluster profiles that will enable tourism planners to identify the key people for any targeted actions, the current study used a socio-demographic approach. Overall, the five clusters generated by this approach demonstrated significant between-group differences on attitudes, especially on the positive dimension. The cluster profiles in terms of attitudes towards tourism were given below.
5.4.2 Cluster profiles in terms of attitudes towards tourism

On the positive dimension of attitudes, Cluster One (distant new residents) and Cluster Four (proximous natives) held less positive attitudes and were significantly different from Cluster Two (proximous settlers) and Cluster Three (proximous new comers). On the negative dimension, Cluster One was the most negative group and was significantly different from Clusters Two, Three and Four. Cluster Five did not show any significant differences with any other groups on both dimensions. Combining these results revealed that Cluster One was the least positive, and also the most negative group towards tourism development in the local community. In contrast, Clusters Two and Three held more positive but less negative attitudes. Clusters Four and Five demonstrated more neutral attitudes: being less positive regarding the benefits of tourism, and less negative to the downsides.

5.4.2.1 Profiles for residents perceiving the least benefits and the most costs

Members of Cluster One (distant new residents) perceived the least positive impacts, and the most negative impacts of tourism. These people are commonly known as “haters” in previous community segmentation studies (such as Davis, Allen & Cosenza 1988, Fredline & Faulkner 2000).

Cluster One demonstrated significant socio-demographic differences from other clusters in terms of gender, age, distance and length of residency. It was the youngest group (average age of 27.9) and consisted of the highest proportion of females (65.4%). Members in Cluster one typically have lived in the current community for less than ten years and reside at least ten kilometers away from a major tourist attraction. Nearly half of them were couple families with dependent children. Thus, residents with these demographic features were typically those who perceived the least advantages and the most disadvantages of tourism development. These easily recognizable characteristics made it possible for tourism planners and entrepreneurs to target them for any practical utilization.
To understand the least positive and the most negative perceptions by Cluster one, several explanations could be drawn from the profiles associated with the cluster members.

First, the majority of members in Cluster One are young mothers with dependent children. They saw congested roads, crowded shops and masses of tourist strangers as a threat to their new family lifestyle.

Second, the far distance (from home to tourist sites) made them have low contact with tourists and less opportunity to see the positive impacts.

Third, as new residents, they may need time to familiarize themselves in the community. Before feeling settled, they might not be willing to see strangers (tourists) invading their community. Finally, unlike those residents who have been living faraway from tourist site since birth, residents belonging to Cluster one chose to live far for a very short period of time.

Drawing on the stage based models, in an overwhelmingly developed tourist destination, residents would prefer to live in distant areas in order to escape from the problems caused by mass tourism. However, this inference did not apply to Cluster One members because they were living in a reasonably appropriate tourism development area. This indicated that there should be other reasons to explain their move to a community distant from crowded cities and tourist sites. A pastoral lifestyle might be one of the reasons. Given this, sufficient attention in terms of density and pace should be given to any new tourism projects in such communities. A possible way to achieve this is to start with a low-tourist-density tourism project and strictly control the pace of tourism development. By doing so, the disturbance to residents’ current pastoral lifestyle can be controlled at a non-offensive level. On the other hand, it allows host community to gradually perceive the potential economic, cultural and social benefits associated with tourism. Further development can be considered only if the above goals have been achieved. Otherwise, it is hard to eliminate their concerns about the undesirable influence of tourism on their life style. Without the support of host community, it would be very difficult for the tourism industry to gain long-term successful development.
(Allen et al. 1988; Ap & Crompton 1993; Inbakaran & Jackson 2003). Campaigns highlighting the long-term benefits of tourism to the local communities (for example, jobs in ten years for their children) can also help reduce Cluster One’s negative attitudes towards tourism. As the majority of Cluster One, the young mothers would be concerned about their children’ jobs in the future considering the increasing intensity of competition. Should they realize that tourism development could help maintain the sustainability of jobs, they are likely to change their negative attitudes and become positive (or at least neutral) towards local tourism development.

5.4.2.2 Profiles for residents perceiving the most benefits and the least costs

Host residents who perceived the most benefits and the least costs of tourism were found to be within Cluster Two (proximous settlers) and Cluster Three (proximous new comers). These two clusters did not demonstrate significant difference on any individual attitudinal statements between them. However, they were significantly different from Cluster One on both positive and negative dimensions of attitudes towards tourism. Thus, Cluster Two and Three were identified as the most pro-tourism groups, which are better known as “lovers” in tourism literature (such as Davis, Allen & Cosenza 1988, Mardrigal 1995, Fredline & Faulkner 2000).

Cluster Two was the oldest group (average age of 58.3) with the highest proportion of male (53.6%). Members within Cluster Two have been typically living in the current community for more than 10 years and living close (within 10 kilometers) to a major tourist attraction. Cluster Three predominantly consisted of females in their early-30s. Residents belonging to this cluster have the highest proportion of single people, completing tertiary education, working in the tourism industry, living the closest to a major tourist attraction (91% living within ten kilometers), and for the shortest period of time (100% living in the current community for less than ten years).

Significantly different from Cluster One, people within Clusters Two and Three featured for
their living proximity to tourist sites. This gave them more opportunities to interact with tourists, make use of tourist facilities, and see the value of tourism in improving local economy, quality of life and culture exchange. The new comers in Cluster Three chose to live close to tourist attraction most probably for urban lifestyle and easy access to work. This is contrary to those new residents in Cluster One who lived far from tourist centers and were wishing for a pastoral lifestyle.

The main concern of people within Cluster Two and Three seemed to be the increase of living cost due to the arrival of large number of tourists. Both Clusters were not significantly different from Cluster one on this point. Although the mean scores on “price-increase” statement were below 3.00 (the neutral point), they were high enough (2.61 for Cluster Two and 2.60 for Cluster Three) to draw tourism planner’s urgent attention to take actions to minimize the increase of living costs due to tourism development. Such actions are important to maintain continuous support from these tourism “lovers”.

Another notable difference between these tourism “lovers” (Clusters Two and Three) and Cluster One was that the former were more frequently involved in local tourism promotion activities and community meetings focusing on tourism. This indicated at least one of the following two assertions: members in Cluster Two and Three were willing to be involved because they were positive towards tourism; or more frequent participation in community tourism activities would lead to more favourable attitudes toward tourism. Although it is not the scope of this study to identify which assertion is correct, it is evident that there is no harm to encourage residents (especially the less positive residents) to be more involved in community tourism activities. By doing so, local governments can hear different voices from their residents and consequently consider their opinions in the planning process. On the other hand, those residents, who have less positive attitudes towards community tourism development, can obtain more knowledge about tourism and see the value of tourism through these activities and communications with “lovers”.
5.4.2.3 Profiles for residents perceiving moderate benefits and moderate costs

Compared with the positive groups (Clusters Two and Three) and the negative group (Cluster One), residents within Cluster Four (proximous natives) and Cluster Five (distant natives) demonstrated moderate attitudes on both positive and negative dimensions. While they did not perceive many positive impacts of tourism, they did not perceive many negative impacts either. Thus these two groups of people are characterized as “neutral” or “in-betweeners” or “middle of the roaders”.

As the largest group, Cluster Four featured for having the highest proportion (51.3%) of “couple family with children”, the highest proportion (63.1%) of people living in the current community for “at least 20 years” and the lowest proportion (44.2%) of completing “tertiary education”. Members within Cluster Four were typically females in their mid 30s with dependent children and lived very close to a major tourist attraction (nearly 90% within ten kilometers).

An important reason for Cluster Four’s neutral attitudes towards tourism is because its members had weak belief that the majority of peer residents have benefited from tourism development. Thus, to gain these people’s support to community tourism development, the local governments should make them aware of the contributions of tourism industry to the whole community. An efficient way of doing so is to deliver tourism information sheets to them. Such information sheet should highlight the direct contribution of tourism to the community, such as improved local economy, increased job opportunities, improved infrastructure and leisure facilities. On the other hand, it should also provide information about the indirect contribution of tourism to the local residents. Few examples are: the improved cultural exchange and tolerance, the use of income generated from tourism in better protecting local heritage. Given the fact that most local governments in Victoria distribute council (or community) newsletters to their residents on a regular basis, the tourism information sheets can be distributed together with the council newsletters for cost-cutting purposes. An alternative method is to integrate the tourism information into the newsletters.
Cluster Five was the smallest group and gender balanced. It had the most percentage of members fitting into “one parent family”, “absentee land owners” and “living at least ten kilometers away from a major tourist site”. It also had the least percentage of members working in a tourism-related industry. Members of Cluster Five were typically mature people having been living in the current community for more than 20 years.

When compared with Cluster Four, members in Cluster Five perceived slightly more positive impacts as well as more negative impacts. However, no significant differences were identified between them on any of the attitudinal items. An interesting finding associated with Cluster Five was the “absentee landowner”, which was, in this study, defined as people who owned a home in the survey community, but did not live there or leased it. They came back to stay in the property for leisure and relaxation during weekends and annual leave as opposed to doing commercial tourism activities. Almost one tenth of residents in Cluster Five were identified as absentee landowners. One way ANOVA analysis revealed that absentee landowners held the most negative attitudes towards tourism, compared with all other groups in terms of length of residency. A possible reason to explain absentee landowners’ negative attitudes was that they did not want their valuable leisure heaven to be destroyed by an influx of tourists. This was similar to those people who chose to live far away from tourism sites for pastoral lifestyle. Thus the pace of tourism development and the number of tourist arrivals should be well planned and controlled in order to reduce their concerns about lifestyle changes due to mass tourism development.

Standing in the middle-of-the-road, people within Cluster Four and Five were changeable. They might become potential supporters or opposition based on their future perception of tourism impacts. Given this and the large number of people within these two groups, their opinions towards tourism need more urgent attention from the local governments.

In summary, the community segments generated in the present study demonstrated overall inter-group differences on both positive and negative dimension of attitudes. The profiles for each segment provided recognizable characteristics of residents for easy identification.
Applying these profiles in practice makes it possible for local governments to deliver different remedial actions to relevant people instead of all residents. Such a method is more economical.

However, in comparison with section 5.3, the findings from this section (5.4) demonstrated inconsistency in terms of the influence of several socio-demographics on community attitudes towards tourism. For example, while gender and household type were found to be non-influential on attitudes in section 5.3, they demonstrated some influences in section 5.4, at least for some clusters. This inconsistency could be partially explained by the analytical variations in these two sections. Contrary to section 5.3 where each variable was examined individually, the socio-demographics in section 5.4 were examined collectively and simultaneously as the clustering base. In other words, section 5.3 only examined the main effect of each variable without considering its interaction effects with other variables, whereas such interaction effects were encompassed in section 5.4. Thereby, this inconsistency was not a conflict, but a difference between the main effect and interaction effect. This difference highlighted one of the realistic obstacles faced by tourism planners in identifying people with particular positive or negative attitudes towards tourism, that is, should a single socio-demographic variable be used or a group of them? To answer this question, this study has the following three suggestions.

First, an actual investigation of community attitudes is always desirable as it is better than any estimation. This is especially important for the process of planning large community tourism projects and development.

Second, if the actual situation (such as financial constrain) does not allow such investigation, tourism planners could make use of the findings from this study (section 5.3 and 5.4) to identify residents with different attitudes. The collective treatment of socio-demographics (section 5.4) should take the priority as this approach, by incorporating the interaction effects, could theoretically provide a more accurate estimation than the single-variable approach. Demographics such as age, distance (from home to major tourist site) and length of residence
should be included in the estimation as these three variables collectively created the most significant inter-group differences of attitudes. In case that single-variable approach was used, distance and length of residence would produce better identification results than other socio-demographics. The influence of these two variables on attitudes was supported not only statistically by this study, but also theoretically by the stage-based models as discussed in section 5.3.3. Nevertheless, most of the findings in both section 5.3 and 5.4 should be cautiously applied outside the scope and the sample frame of the present study.

Third, the majority of the socio-demographics examined in this study are popular variables covered by Australia census. Thus, tourism planners can easily utilise the readily available census database to locate resident and anticipate where future tourism development may be problematical.

The above section discussed the internal differences between the collective approach (cluster profiles) and single-variable approach. This section would address cross-study comparisons. Given the specific clustering base, the cluster profiles developed in this study did not match the majorities developed in previous community segmentation studies (Davis, Allen & Cosenza 1988; Fredline & Faulkner 2000; Madrigal 1995; Williams & Lawson 2001). To the best knowledge of the author, the only exception was the work of Inbakaran and Jackson (2006), who conducted a community segment research in five tourist product regions in Victoria, Australia using socio-demographics and tourism behaviour as the clustering base. Their study generated four segments of resident populations: “tourism industry connection”, “low tourism connection”, “neutral tourism connection” and “high tourism connection”. Although nominal names were given with different focus, the two studies generated three similar profiles in terms of gender and age (the most two recognizable demographic variables). They were the young female cluster, mid-30s female cluster and mature male cluster. However, conflicts were found when comparing these three clusters’ attitudes towards tourism (see Table 5.1). While the young females/mid-30 females/mature males were found to be the most negative/neutral/the most positive cluster in this study, they were identified as the most positive / the most negative / and neutral cluster in Inbakaran and Jackson’s (2006) work.
Such attitudinal differences were understandable when comparing their living distance from tourist site and length of residence. Consulting Table 5.1, each pair of relevant clusters demonstrated significant differences on either distance, or length of residents or both. As previously discussed in section 5.2, both variables could influence host residents’ attitudes towards tourism. In addition, the urban-fringe focus of the present study and the more rural focus of Inbakaran and Jackson (2006) also contributed to explaining the attitudinal differences between similar profiles.

Table 5.1 Comparisons of the Similar Community Segment Profiles between the Present Study and Inbakaran & Jackson (2006)

<table>
<thead>
<tr>
<th>Profile similarity</th>
<th>Attitudes towards tourism</th>
<th>Distance (% within 10 km)</th>
<th>length of residency (% &lt; 10 years)</th>
<th>Cluster Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Young females</td>
<td>The most negative</td>
<td>13.1</td>
<td>54.2</td>
<td>Distant new residents</td>
</tr>
<tr>
<td>Mid-30s females</td>
<td>The most positive</td>
<td>70.2</td>
<td>50.0</td>
<td>Tourism industry connection</td>
</tr>
<tr>
<td>Mature males</td>
<td>The most positive</td>
<td>87.4</td>
<td>45.5</td>
<td>Proximous settlers</td>
</tr>
<tr>
<td>Neutral tourism development</td>
<td>Neutral</td>
<td>55.6</td>
<td>21.8</td>
<td>Neutral tourism development</td>
</tr>
</tbody>
</table>

Nevertheless, this study in conjunction with Inbakaran and Jackson’s (2006) work, validated the feasibility and validity of the socio-demographic approach in community segmentation studies. The most obvious advantage of this approach was to provide easily recognizable segment profiles for identification purposes. If, however, sufficient attitudinal differences were not identified between the segmented clusters, this approach should not be utilized since demographic variables are non-predictive alone. In such a case, attitude approach would be more appropriate. It will be favourable to see more future research further testing the socio-demographic segmentation approach in diverse communities, such as rural and urban, developed and developing communities.
5.5 Modelling resident-tourist interactive behaviour

The previous sections focused on community attitudes towards tourism, the influence of individual intrinsic variables on attitudes and community segment profiles in terms of different attitudes. One of the concerns that tourism researchers and entrepreneurs have is whether specific positive/negative attitudes towards tourism held by host residents would lead them to engage in positive or negative behaviours towards tourists that are consistent with these attitudes. Further, are there other factors that would contribute to the prediction of the host-tourist interaction? However, the number of studies focusing on host-resident interactive behaviours is scarce and the theoretical frameworks modeling such behaviours remain simplistic. To address this research gap, the present study developed a theoretical model (The R-T Interaction Model) that would attempt to predict the antecedents of host residents’ interactive behaviours with tourists. The following sections discussed the theoretical foundation of the model, model validity and reliability, moderating effects of external factors and finally the model’s contribution to the body of knowledge and tourism practice.

5.5.1 Theoretical foundation of the model

The R-T Interaction Model developed in the present study was drawn on the evaluation results of the Theory of Reasoned Action (TRA, Fishbein & Ajzen 1975), the Theory of Planned Behaviour (TPB, Ajzen 1985) and Theory of Interpersonal Behaviour (TIB, Triandis 1977; 1980). The R-T Interaction Model had its roots in the TPB and TIB as it captured the proximal predictors for “behaviour” from the TIB, and distal predictors for “behaviour” from the TPB. Although the flowchart of the Model looked like the TPB with an additional construct (“habit”–a proximal predictor of “behaviour”), the inclusion of “habit” has significantly increased the predictive power of the R-T Interaction Model. The addition of extra constructs to the TPB was supported by empirical studies applying the TPB such as Manstead & Parker (1995) and Godin et al. (1996). They found that, for some behaviours, the TPB was not sufficient and should consider including some of TIB’s constructs that were not
included in the TIB. The theorization of each construct within this Model originated from the original models. The theoretical foundation of the Model considered the following two aspects: First, both of its original theories have been extensively tested and verified by a large number of empirical studies. Applications of these two theories have supported their validity in understanding and predicting a wide range of behaviour; Second, among the limited tourism research in modeling host resident’s behaviour, Carmichael (2000), in the context of casino development, has proposed the causal relationship between residents’ attitudes and their behaviours using a model developed in geography discipline. Such a model captured attitudes as the sole predictor of behaviour. Realizing the simplicity, Carmichael (2000) have suggested to model host residents’ behaviour by borrowing more complex expectancy value models, such as the Ajzen’s TRA. The R-T Interaction Model developed in this study not only tested the TRA in this data, but also evaluated the TPB and TIB which encompassed additional predictors in terms of behavioural control and habit.

5.5.2 Validity and reliability

The development of the R-T Interaction Model developed was validated by predicting the residents’ interactive behaviour with tourists. It explained 63% of variance in the “behaviour” and 55.7% of variance in “intention” to conduct the behaviour. While it was impossible to compare this result with other tourism studies given the lack of work utilizing TPB or TIB in the context of resident-tourist interactive behaviour, comparisons with other behavioural studies indicated a very satisfactory predictive validity of the Model. For example, Rhodes, Courneya et al. (2005) in summarizing previous research applying the TPB on exercise behaviour suggested that the TPB explained an average of 30% of variance in exercise behaviour and approximately 40% of variance in intention. In another meta-analysis including 185 independent studies on the predictive potential of the TPB for a variety of health-related behaviours, the TPB explained 27% and 39% of the variance in behaviour and intention, respectively (Armitage & Conner 2001).

With regards to the reliability of model measurement, Cronbach’s alpha ranged between .81
and .90 for all constructs with the exception of “perceived behavioural control”. In the social sciences, a reliability coefficient over .80 is usually accepted (Foster 2001). Thus, the Cronbach’s alpha values in this study indicated high reliability. Although the measurement of “perceived behavioural control” generated a lower reliability (alpha=.66), it was acceptable given the broader conceptualization of different types of controls over the behaviour.

The systematic split-sample (comparing male and female) demonstrated that the Model was reliable in the prediction of both “behaviour” and “intention” because the Model generated a very similar proportion of the explained variances between men and women (with a difference of less than 2%) in terms of both “behaviour” and “intention”.

5.5.3 Model constructs and interrelationships

Based on the R-T Interaction Model, host residents’ interactive behaviour with tourists was predicted by two proximal variables and four distal variables.

5.5.3.1 Proximal predictors for resident-tourist interactive behaviour

The R-T Interaction Model identified two proximal variables in the prediction of residents’ interactive behaviour with tourists. They were “intention” and “habit” with the former being slightly more predictive. In comparison with the original TPB where intention was the only predictive variable for behaviour, the addition of “habit” in the R-T Interaction Model explained a dramatically extra variance in “behaviour” by 16.7%. This indicated that the strength of established habit (past behaviour) also had strong influence on host residents’ interaction with tourists. On the other hand, when comparing with the TIB, the current model had one less predictive proximal variable – “Facilitating Conditions” because it appeared to be a non-significant predictor for resident-tourist interactive behaviour. Thus, time-constrains, language-barrier, shyness and bad emotion (measured in this study as barriers constraining realisation of the behaviour) all seemed non-influential in impeding host residents from interacting with tourists.
In this data, “intention” was the best predictor for “behaviour”, which by itself, explained 47.06% of variance in “behaviour”. Thus, the most efficient way to encourage residents’ interaction with tourists is to increase their intention to do so. “Intention” in the present study, was defined as the residents’ willingness and motivation to interact with tourists visiting their communities. Therefore, to increase their intention means to increase their willingness and motivation. Given the latent and personal attribute of willingness and motivation, it is hard for the local governments to directly influence their residents’ intention to interact with tourists. However, this goal can be eventually achieved by indirect mechanism. That is, to change the factors that influence and predict “intention”. According to the R-T Interaction Model, these factors include attitudes, subjective norms and perceived behavioural control. Discussions about these factors were provided in the section 5.5.3.2.

“Habit” also predicted resident-tourist interactive behaviour, but ranked after “intention”. This finding was consistent with the majority of previous studies applying the TIB for the prediction of a broad array of behaviours. However, the predictive power of “habit” in the current context was much stronger than previous studies. In this study, the predictive strength of “habit” was only slightly lower than “intention” because the Beta values carried by them were very close. Whereas, in previous studies, “habit” was usually found to be much less predictive than “intention” (Gagnon et al. 2003; Godin et al. 1996). Apparently, the influence of “habit” in the prediction of resident-tourist interactive behaviour was much stronger than in other behaviours. This finding suggested that once the behaviour of interacting with tourists becomes a habit, more frequent interaction would be expected in the future.

5.5.3.2 Distal predictors for resident-tourist interactive behaviour

“Instrumental attitude”, “affective attitude”, “subjective norms” and “perceived behavioural control” constituted the distal predictors for “behaviour” within the framework of the R-T Interaction Model. These factors were distal because they did not predict the “behaviour” directly, but through influencing “intention” to perform the “behaviour”. From this point of view, they were also proximal predictors for “intention”. “Subjective norms” made the
strongest contribution in explaining the variance in “intention”, followed by “perceived
behavioural control”, “affective attitude” and “instrumental attitude”. There were a few
important issues associated with this finding.

The first issue that needs to be discussed relates to the role of “subjective norms”. In the
broad array of behavioural studies using the TPB, the predictive power of subjective norms in
behavioural intention has been frequently reported to be after the attitudinal factors. However,
this study identified the opposite rank orders in terms of their predictive power. “Subjective
norms” ranked first in the prediction of “intention”. According to this finding, the most
efficient way of increasing residents’ intention to interact with tourists is to influence the
subjective norms. It should be noted that “subjective norms” in the present study
encompassed two types of norms, i.e. injunctive norms and descriptive norms. The former
referred to the important referents’ (family, friends, colleagues etc.) approval or disapproval
of whether a person should interact with tourists, while the later referred to whether the
important referents themselves would interact with tourists. Therefore, both types of norms
should be considered by the local governments in the efforts of influencing “subjective
norms”. Interestingly, this study identified a highly significant correlation ($r = .732$) between
the injunctive norms and descriptive norms. This indicated that the important referents who
themselves interacted with tourists would most probably approve of others to do so as well.
Thus, encouraging efforts applied to the salient referents would not only increase their own
interaction with tourists, but also increase their approval of others to do so. It should be noted
that the influence of referents would be different across people because an individual’s
motivation to comply with the expectations of these significant others differed from everyone
else.

Next, “perceived behavioural control” was found to be the second best predictor for
“intention”. In the original TPB, “perceived behavioural control” was postulated as either a
direct predictor for “behaviour” or “intention”. Examination of both roles of the element in
this data showed that it was a better predictor for “intention” than for “behaviour” because the
inclusion of it in predicting “intention” accounted for an incremental variance of 6.40%
whereas the explained variance in “behaviour” was almost the same with and without it. “Perceived behavioural control” in the present study referred to “volitional control over the behaviour, i.e. if an individual could decide at will to perform or not perform the behavior” (Ajzen 1991, pp. 181-2). It did not encompass non-motivational factors (availability of requisite opportunities and resources) such as money, skill etc. This was reasonable for two reasons. First, from the theoretical point of view, Ajzen (1991) have suggested that some behaviours might meet volitional requirement quite well without the need to consider the non-motivational factors. Second, the analytical results from this study confirmed Ajzen’s (1991) assertion by showing that the non-motivational factors (such as time constraints, language and bad emotion) were non-significant predictors in the current context.

The attitudinal factors also predicted host residents’ intention to interact with tourists. However, its contribution ranked the last place among all predictors. The finding indicated that the influence of attitudinal factors tended to be overshadowed by social norms and behavioural control. Nevertheless, it still carried a significant Beta value. Therefore, another way of increasing host resident’s intention to interact with tourist is to influence their attitude towards the interactive behaviour. Local government should focus on the instrumental dimension (such as good-bad, beneficial-unbeneficial) of attitude, because the affective dimension (such as pleasant-unpleasant) of attitude was gained from past experience and very little could be done to change it.

To summarize, the R-T Interaction Model developed in the present study was powerful in predicting host residents’ interactive behaviour with tourists. Given the early stage of the Model, it is desirable to see more future research further testing the Model in the same context of the present study.

5.5.4 Effect of external moderators

The moderating effects of gender, age and personality traits were examined within the framework of the R-T Interaction Model. This process served two tasks: 1) to examine
whether these potential moderators could explain the remaining variance not covered by the current Model, and if yes, to what degree; 2) whether the Model could be extended by incorporating the moderators that contributed significant incremental variance. The analytical results showed that none of them significantly moderated the model in the prediction of either “behaviour” or “intention”. Given this, they were not included in the Model as additional predictors.

Among these three factors, age seemed not to have moderating effects whereas gender and personality traits slightly moderated the predictive power of the model, but for less than two percent. This was commonly regarded as a low level moderating effect (Rhodes, Courneya & Jones 2005). Of special note, all the five personality traits (OCEAN) were significantly correlated to both “behaviour” and “intention”. However, when they were taken into the model as additional predictors after controlling the existing variables, they only contributed a very minor incremental variance for both “behaviour” (0.6%) and “intention” (1.2%). And this contribution was basically made by Extraversion trait (for both behaviour and intention) and Agreeable trait (for behaviour only). All the other three traits were non-significant in the regression equations. This finding indicated that most of the effects of personality traits on “behaviour” and “intention” have been overlapped by the existing predictors in the model. Among which, attitudinal construct contributed the most to the overlap effects. According to the results in section 4.3.3.5, all the five personality traits (OCEAN) were significantly correlated with attitudes towards tourism. Thus, part of the influences of personality traits could be reflected by attitudes. This assertion was confirmed by examining the relationship between OCEAN and all the constructs within the R-T Interaction Model. Three (O, E and N) out of the five traits had the strongest correlation with “Affective Attitude”. Therefore, when attitudes (especially the affective dimension of attitudes) are included in the prediction of resident-tourist interaction, the influences of personality traits are partially encompassed by the attitudinal element. The finding was in line with Rhodes et al.’s (2005) study which found that the effects of personality traits on exercise behaviours were covered by the TPB constructs in the exercise domain.
Chapter 5 Interpretation and discussion

Given the low predictive power of these moderators, it is suggested that such potential moderators may be excluded in future research and community intervention that focuses on hosts’ interactive behaviour with tourists. However, given the early stage of this research, it would be desirable to see future works evaluating this assertion within the context of resident-tourist interaction.

The influence of attitude towards general tourism was also examined in the present study. The general attitudes differed from the attitudinal factors (instrumental and affective attitudes) in the R-T Interaction Model that the former referred to community residents’ attitudes towards general impacts of tourism, while the later referred to their attitudes towards the specific behaviour of interacting with tourists. Given the fact that the majority of community tourism attitude studies focused on investigating general attitudes, it was in the present study’s interest to identify the role of general attitude in predicting resident-tourist interactive behaviour, i.e. the moderating effects of general attitude within the framework of the R-T Interaction Model and whether general attitudes could substitute for specific attitude measures. In the former case, general attitudes increased the predictive power of the model by 0.2% and 0.7% on “behaviour” and “intention” respectively, indicating a very low moderating effect. In the later case, substituting specific attitudes by general attitudes in the prediction of “intention” generated a lower proportion of explained variance (2.7% less), indicating that general attitudes were not as good as specific attitudes for the prediction of resident-tourist interaction. This finding supported Ajzen (1985; 2002)’s assertion about the principle of compatibility between all predictors. Nevertheless, given the significant Beta value carried by general attitudes in the regression model, general attitudes could be utilized in predicting resident-tourist interactive behaviour. The advantage of doing so is to make use of the already existing research findings from enormous general tourism attitude studies. However, it should be kept in mind that using general attitudes would most probably yield a lower prediction than specific attitudes.
5.5.5 Implications for tourism authorities

The R-T Interaction Model developed in the present study contributed to the body of knowledge that, as one of the first attempts in modelling the occurrence of host residents’ interaction with tourists, it provided a theoretical framework in understanding the antecedents of the behaviour and predicting the behaviour. In a practical phenomenon, it provided local governments with the following implications in understanding and encouraging their local residents’ interaction with visiting tourists.

First, like many other social behaviours, the behaviour of host resident interaction with tourists is complex. It is influenced by motivational, habitual, attitudinal, normative and volitional factors. Thus, efforts in encouraging host resident’s interaction with tourists should not be single-focused, but be more comprehensive. Moreover, such efforts should be made on a medium to long term basis, as most of the influential factors could not be easily changed within a short period of time.

Second, among the influential factors, habit and perceived behavioural control of an individual were hard for local governments to manage through intervention, whereas intention, attitude and social pressure (subjective norms) are comparatively easier to be changed. To increase the behavioural intention is the key issue to encourage host resident’s interaction with tourists, and the most efficient way of achieving this is to increase the social community support (subjective norms). The matter of whether important referents approve or disapprove of interaction with tourists is actually a reflection of their evaluation of the outcomes of doing so. Thus, it is valuable for the local governments to make them aware of the comprehensive benefits associated with interacting with tourists, from community levels such as building up a good community image to individual levels such as gaining wider world perspective and more communicative skill. Aside from this, efforts delivering general benefits of tourism would also contribute to resident’s intention to interact with tourists. Although these efforts might yield slightly weak results, it is a good alternative for those local governments working with a low budget to run separate campaigns focusing on the specific benefits of host-guest
interaction.

Third, although it is hard for the local governments to directly influence an individual’s habit in interaction with tourists, local governments can cultivate resident-tourist interactions in public events, for example, to encourage their residents to participate in local fairs that also attract tourists. Based on the findings of the present study, once such efforts lead the interactive behaviour to a habitual level, the local governments could expect twice the result with half the effort because habitual performance directly and significantly influences future actions.

Finally, the interaction with tourists is not influenced by host residents’ age and only slightly influenced by gender and personality traits (OCEAN). Thus, all the efforts aiming at encouraging interactions with tourists can be applied to all residents regardless of their gender, age and personality differences. It should be noted that this result was obtained within the framework of the R-T Interaction Model. The effects of gender and personality traits have been partially overlapped by the internal factors (especially the attitudinal factor). Thus, when the internal factors are not considered, gender and personality traits would make more contribution to the prediction of residents’ interaction with tourists. It was found that females and people being less neurotic and more extraverted, open, conscientious and agreeable had more interactions with tourists. Therefore, these people are more likely to take on voluntary jobs that deliver help and assistance to tourists. On the other hand, more interventions should be given to males and people who are more neurotic, less extraverted, less agreeable, less conscientious and not open to experience. However, the role of age did not change in both cases (with or without the internal factors captured by the Model). Young, middle-aged and elderly people did not show any significant differences in interacting with tourists. Thus the age difference can be disregarded in intervention actions.

Tourism researchers have come to a common agreement that a harmonious relationship between community residents (hosts) and tourists (guests) is important for successful tourism development in the destination (Carmichael 2000; Pizam, Uriely & Reichel 2000; Reisinger
Welcoming behaviour from the hosts would leave tourists with good impressions of the destination. On the contrary, unpleasant behaviour from hosts would reduce tourists’ satisfaction and consequently affect the destination’s ability to attract return visitors. In such cases, the destination must continually attract new customers (Zhang, Inbakaran & Jackson 2006). However, efforts for attracting new tourists, such as repositioning of the tourism product and remarketing for new tourist market segments were more risky and expensive than continuous targeting to a satisfactory market (Reisinger & Turner 1998). Furthermore, these tourists might spread their impressions, feelings and attitudes on the destination to their families, friends and colleagues, which would also affect the destination’s ability in generating new visitors. Therefore, it is important to maintain a harmonious interaction between the hosts and tourists.

5.6 Summary

Focusing on the research gaps the deficiencies in the context of community attitudes and host-guest interaction, this chapter interpreted the major findings from the present study and highlighted the comparative results between these findings and the relative literature. The chapter also provided recommendations to the local governments in terms of future tourism development and resident-tourist interaction (served to answer the research question No. 10). In reality, the efficient implementation of some of these recommendations relies on appropriate identification of people holding a specific attitude towards tourism. The research findings from section 5.3 and 5.4 can help tourism planners in this identification task.
Chapter 6

CONCLUSIONS, LIMITATIONS AND IMPLICATIONS

6.1 Introduction

This chapter presented the conclusions and limitations of the present study and implications for future research.

6.2 Conclusions

The present study looked into the antecedents of community attitudes towards tourism and interactive behaviour with tourists and addressed relevant research gaps and deficiencies in the current context. The Resident-Tourist Interaction Model developed in this study was one of the first attempts to model the conditions under which a host resident would most probably initiate an interaction with tourists. Several important conclusions could be drawn from the findings of the present study.

First, residents living in Melbourne’s urban-rural fringe demonstrated overall positive attitudes towards tourism. For these people, tourism development has brought more positive influences than the negative impacts in terms of local economy development, social structure and culture exchange. Among which, tourism’s contribution to local economy was the most perceived benefit. Nevertheless, variations of attitudes did exist among community residents: while some residents were keen to see further tourism development in their community, others were reluctant or held neutral attitudes. Therefore local governments should listen to various voices from their residents and bring their attitudes into future planning so that positive impacts could be maintained and consolidated, while negative impacts could be controlled and remedied on the other hand.

Second, the orthogonal dimensions of community attitudes towards tourism should be
identified and distinguished when examining the relationship between attitudes towards tourism and potentially influential factors. The present study suggested that while some factors (distance from home to a tourist attraction, usage of local recreation bases, voluntary involvement in local tourism activities and personality) simultaneously influenced both positive and genitive dimensions of attitudes, some factors (age, length of residence, and occupational dependence on tourism) only influenced the positive dimension, and others (education level and cultural background) only influenced the negative dimension. These findings were valuable as they demonstrated where the influences were, which, in turn, provides a deeper understanding of the antecedents of community attitudes towards tourism.

Third, the personality of individuals played a role in their attitudes towards tourism. As one of the first attempts to study the relationship between personality and attitudes towards tourism, the present study found that all the five personality traits (OCEAN) measured by FFM were significantly correlated to both positive and negative dimension of attitudes towards tourism. Those respondents who were high on Openness to Experience, Conscientiousness, Extraversion, Agreeableness personality traits, but low on Neuroticism trait (negative trait), were more positive but less negative towards tourism.

Next, the socio-demographic clustering base seemed to be a valid clustering approach for community segmentation study. Compared with the traditional attitude clustering base, the socio-demographic approach provided recognizable cluster profiles that could be utilized by tourism authorities to identify the key people that need to be targeted. However, this approach should be used only when the segmented clusters showing significant inter-group differences in terms of attitudes towards tourism as in the present study, since otherwise, demographic variables alone were non-predictive.

Finally but importantly, the R-T Interaction Model developed in the present study was valid and reliable in predicting host residents’ interactive behaviour with tourists. It provided a comprehensive theoretical framework in understanding the antecedents of the host-tourist interaction. The model validated that host residents’ interaction with tourists were influenced
by attitudinal, normative, volitional, motivating and habitual factors. The best predictor of residents’ interaction with tourists was their intention (motivation) to do so, which, in turn, was best predicted by the social supports from important referents, followed by the volitional control over the behaviour and attitudes towards it. Habit also directly contributed to the prediction of the interactive behaviour. When all these factors were accounted, demographic factors (age and gender) and psychological factor (personality) were non-significant in predicting the host-tourist interactive behaviour. Utilization of the Model in practice could provide local governments an efficient guidance on how to encourage their residents to be more involved in interacting with visiting tourists and consequently create and maintain a harmonious relationship between the hosts and tourists.

In conclusion, community attitudes towards tourism and resident-tourist interaction are important for sustainable development of the tourism industry. Research investigating the antecedents of such attitudes and interactive behaviour helps maintain harmonious relationship between the host, the guests and the tourism industry. The present study contributed to the body of knowledge by being one of the first attempts to model resident-tourist interactive behaviour, to investigate the influence of intrinsic factors on positive and negative dimension of attitudes respectively, to examine the role of personality traits on community attitudes towards tourism and interaction with tourists, and to test the socio-demographic clustering approach in segmenting host community residents. It also provided tourism authorities with practical implications and recommendations in terms of controlling and managing the impacts of tourism on host communities and maintaining a harmonious interaction between host residents and tourists. From geographic point of view, the present study addressed the lack of research in the fast-changing landscape - urban-rural fringe areas.

### 6.3 Limitations

Despite the every effort throughout the entire research project, there were several limitations associated with the present study that need to be addressed.
First, the scope of the study was limited to local communities in Melbourne’s urban-rural fringe with a dominant sample from western culture background. Generalization of the behavioural model developed in this study to other cultures should be made with caution because cross-culture differences did exit in a wide rage of behaviours.

Second, considering the possible low response caused by a lengthy questionnaire, only the higher order of personality traits was investigated in the present study and the measurement of each trait was limited to two items. The lower order of personality traits was not addressed due to the large number of lower order traits.

Third, the present study only examined the influences of intrinsic factors (demographics, socio-graphics and personality traits) on community attitudes towards tourism. The influence of extrinsic factors, such as the stage of tourism development of each community was not explored in this research due to time and resource constraints.

Finally, behaviour in the original TRA, TPB and TIB referred to future behaviour that required a longitudinal survey. Thus, an ideal measurement of the resident-tourist interaction behaviour would be a repeated observation of the same sample at a later time. However, given the difficulties in locating the same respondents, time constrains and financial constrains, the behaviour in the present study was defined as current behaviour in the past month and was measured in the same questionnaire collecting all other data.

In conclusion, these limitations may affect the interpretation and generalizations of the results. Thus, the findings need to be interpreted with consideration of such limitations. And given the early stage of this research, it is favourable to see future research to validate the findings from the present study.

6.4 Implications for future research

Although this study contributed to the existing research arena of community attitudes towards
tourism and host-tourist interaction, it should preferably be used as a research foundation to trigger further investigation into the study areas. Drawing on the findings and limitations of the present study, the following implications for future research were proposed:

- To apply the R-T Interaction Model to a variety of communities, nations and cultures for further validation and generalization

- To test the validity and reliability of the R-T Interaction Model using Structural Equation Modeling (SEM) method which allows simultaneous consideration of the multi-layer relationships in the model

- To take a longitudinal approach (time one and time two) to measure “behaviour” in order to verify whether the R-T Interaction Model can predict future behaviour

- To apply the R-T Interaction Model among tourists to verify whether this model can be used to predict tourists’ intention or actual action to interact with host residents

- To further investigate the influence of both higher order and lower order of personality traits (OCEAN defined by FFM) on community attitudes towards tourism and identify which lower order traits actually have the influence on attitudes

- Additional segmentation studies using easily recognizable variables (such as socio-demographics) to segment host communities and then examine the inter-group differences on attitudes towards tourism

It is desirable to see more future research to further test the findings of the present study and look into the proposed issues. Given the continuous and fast development of the tourism industry, it is possible to see new emerging impacts on host communities and more interaction between the host residents and tourists. In such cases, future research focusing on host community attitudes towards, and behaviour in tourism development would be more
meaningful, necessary and demanding. Without supportive host communities, it would be difficult to sustain a long-term and healthy development of tourism.

6.5 Summary

This study sought to investigate the antecedents of community attitudes towards tourism and their interaction with tourists. It addressed several important research gaps and deficiencies in the literature. Despite the limitations, the present study contributed to the body of knowledge by providing a theoretical framework in the prediction of resident-tourist interactive behaviour; exploring the influences of intrinsic factors on different dimension (positive and negative) of community attitudes towards tourism; and examining the role of personality traits in community attitudes towards tourism and resident-tourist interaction. From practical point of view, this study provided local governments with useful information and recommendations in terms of tourism planning and the intervention of resident-tourist interaction. The results of this study also provided important implications for future research.

With the development of the tourism industry, host community residents will be exposed to a wider range of impacts of tourism and more interactions with tourists. Such impacts and interactions are not always positive and can cause problems and conflicts between the host residents, tourists and the tourism industry. Therefore, research investigating host community’s reactions to tourists and the tourism industry can help maintain a harmonious relationship between the host, guest and the industry, which in turn, will contribute to the long-term successful development of the tourism industry.
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Dear resident,

I am a current doctoral student in the School of Management, Business Portfolio, RMIT University. My thesis topic is “Understanding community attitudes towards tourism and resident-tourist interaction – A socio-behavioural study of Melbourne’s urban-rural fringe”. The aim of this research project is to enlist your opinions and attitude towards the tourism development in your local community and identify how to build a harmonious relationship between you (the host) and visiting tourists. Recommendations for better tourism management and planning will be made by the completion of this study.

I am inviting you to participate in this research by completing the enclosed questionnaire. It will take you approximately 10-15 minutes to complete. For your convenience, all you need to do is to tick in the space that best describes your status and opinions. Participation in this research is voluntary and you may withdraw at anytime.

This project is subject to the Ethics Policy and Procedures of RMIT University. None of the statements in this survey are considered intrusive or invasive of your privacy. I guarantee that your response will remain completely anonymous. The data collected will only be used for my thesis and the results may appear in academic publications. In both circumstances, you will not be identified, as only group data will be reported.

If you have any queries regarding this project, please do not hesitate to contact me or my senior supervisor Dr. Robert Inbakaran, phone (03) 99251534, E-mail robert.inbakaran@rmit.edu.au or my second supervisor Dr. Merv Jackson, phone (03) 99257367, E-mail merv.jackson@rmit.edu.au or RMIT Business Human Research Ethics Sub-committee, phone (03) 9925 5594, e-mail rdu@rmit.edu.au.
Your participation is invaluable for the success of this project. It will be much appreciated if you could mail your completed questionnaire with the prepaid and pre-addressed envelop before the 10th of December 2004.

Yours Sincerely,

Jiaying Zhang

School of Management
Business Portfolio
RMIT University
Phone: (03) 9925-1698
E-mail: jiaying.zhang@rmit.edu.au
APPENDIX B

Questionnaire

Instructions: There are five sections in this questionnaire.

1. For sections 1 to 4, please tick to what extent you agree with each statement in the appropriate cell.

2. For section 5, please answer each question by ticking the number that best describes your background information.

Section 1: Attitudes towards tourism development in your community

<table>
<thead>
<tr>
<th>Attitudes towards tourism</th>
<th>strongly disagree</th>
<th>disagree</th>
<th>neutral</th>
<th>agree</th>
<th>strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Tourism development in general has put our local communities offside.</td>
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<td>2. The general quality of life has become better because of tourism development.</td>
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<td>3. The arrival of international tourists in my community has helped me to have a better perspective of the world.</td>
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<td>4. International tourists should be made to pay more than the domestic tourists to enjoy local tourism resources.</td>
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<td>5. Tourism development has interfered with our culture and heritage.</td>
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<td>6. Tourists have made product/service prices increase in my community.</td>
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<td>7. Our local economy has developed thanks to tourism development.</td>
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<td>8. Most residents in my region benefit on account of the tourism industry.</td>
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<td>9. My community would be a dull place if tourism did not develop to this extent.</td>
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<tr>
<td>10. Tourists have brought infectious diseases to our local community.</td>
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</tbody>
</table>
Section 2: Tourism activities and interactive behaviour with tourists

<table>
<thead>
<tr>
<th>TOURISM RELATED ACTIVITIES</th>
<th>strongly disagree</th>
<th>disagree</th>
<th>neutral</th>
<th>agree</th>
<th>strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I visit local tourist sites on a monthly basis.</td>
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<tr>
<td>2. I take interstate or overseas holidays every year.</td>
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<tr>
<td>3. I often offer my assistance to tourism promotional events/activities in my region.</td>
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<td>4. I often attend local community meetings that focus on tourism development.</td>
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<tr>
<td>5. I often actively interact/talk to tourists visiting my community in the past five years</td>
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</tr>
<tr>
<td>6. I always actively provide my assistance to tourists who need help in the past five years.</td>
<td></td>
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</tr>
</tbody>
</table>

For the following three behaviours, please indicate how many times you have practiced each in the past month.

<table>
<thead>
<tr>
<th>Behaviour</th>
<th>none</th>
<th>1 time</th>
<th>2 times</th>
<th>3 times</th>
<th>4 and more times</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. Greeting tourists visiting my community</td>
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<tr>
<td>8. Talking to tourists visiting my community.</td>
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<tr>
<td>9. Offering help to tourists visiting my community.</td>
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</tr>
</tbody>
</table>

Section 3: Issues about your interactive behaviour towards tourists visiting your community. “Interactive behaviour with tourists” is defined here as any friendly behaviour towards visiting tourists, such as greeting tourists, talking to tourists, providing help to tourists and introducing local tourist sites to them.

<table>
<thead>
<tr>
<th>Issues about interacting/talking with tourists</th>
<th>strongly disagree</th>
<th>disagree</th>
<th>neutral</th>
<th>agree</th>
<th>strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I intend to interact with tourists visiting my community in the coming year.</td>
<td></td>
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<tr>
<td>2. I would try to interact with tourists visiting my community as much as I can in the coming year.</td>
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<tr>
<td>3. I estimate that I have many chances to interact with tourists visiting my community in the coming year.</td>
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<tr>
<td>4. My family/friends, whose opinion I value, would approve me to interact with tourists.</td>
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<tr>
<td>5. My family/friends, whose opinion I value, interact with tourists visiting their communities.</td>
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</tbody>
</table>
### Section 3: Continued

<table>
<thead>
<tr>
<th>Issues about interacting/talking with tourists</th>
<th>strongly disagree</th>
<th>disagree</th>
<th>neutral</th>
<th>agree</th>
<th>strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. For me, to interact with tourists visiting my region in the coming year would be possible.</td>
<td></td>
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<tr>
<td>7. It is up to me whether or not to interact with tourists visiting my region.</td>
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<tr>
<td>8. To what extent could the following elements could impede your interacting with a tourist?</td>
<td>8.1 Time constraint</td>
<td>8.2. Shyness</td>
<td>8.3. Emotion</td>
<td>8.4. Language</td>
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</tr>
<tr>
<td>9. Interacting with a tourist is proof of a local resident’s friendliness.</td>
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<tr>
<td>10. I consider myself to be friendly.</td>
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<tr>
<td>11. A resident who interacts with tourists shows his/her communicative characteristic.</td>
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<tr>
<td>12. I consider myself to be communicative.</td>
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<tr>
<td>13. Interacting with tourists would be in my principles.</td>
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<tr>
<td>14. I would feel guilty if I did not interact with tourists visiting my community.</td>
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<tr>
<td>15. Interacting with tourists visiting my community would be:</td>
<td>15.1. valuable in promoting local tourism.</td>
<td>15.2. impressive to tourists.</td>
<td>15.3. positive to the image of my community.</td>
<td>15.4. a waste of time.</td>
<td>15.5. a good opportunity for me to know other people or cultures.</td>
</tr>
<tr>
<td>16. I consider that people should interact with tourists if they are in the following situations:</td>
<td>16.1. having the same religion as mine (including non-religious)</td>
<td>16.2. of my age</td>
<td>16.3. with same gender</td>
<td>16.4. living in the same community</td>
<td></td>
</tr>
<tr>
<td>17. For me, to interact with tourists is:</td>
<td>17.1. pleasant.</td>
<td>17.2. enjoyable.</td>
<td>17.3. stressful.</td>
<td>17.4. boring.</td>
<td></td>
</tr>
</tbody>
</table>
### Section 4: Statements about your personality traits

<table>
<thead>
<tr>
<th>Personality statements</th>
<th>strongly disagree</th>
<th>disagree</th>
<th>neutral</th>
<th>agree</th>
<th>strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I look forward to visiting new tourist developments in my community.</td>
<td></td>
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<tr>
<td>2. I am open-minded about future tourism development in my community.</td>
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<tr>
<td>3. My ability to be organized allows me to complete things on time</td>
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<tr>
<td>4. People can depend on me to get things done.</td>
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<tr>
<td>5. I would prefer to learn about different cultures by talking to overseas tourists.</td>
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<tr>
<td>6. I like to be friendly to tourists and make them feel welcome.</td>
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<tr>
<td>7. I am happy to provide directions for tourists who are lost.</td>
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<tr>
<td>8. I get annoyed by congestion caused by increased tourists.</td>
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<tr>
<td>9. I am worried about the impact of future tourism development in my community.</td>
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<tr>
<td>10. I am anxious when large numbers of tourists visit my community.</td>
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</tbody>
</table>

### Section 5: General information about yourself

1. What is your gender? 1) male 2) female

2. Which of the following age group do you belong to?
   1) 18-24 4) 35-39 7) 50-54 10) 70-79
   2) 25-29 5) 40-44 8) 55-59
   3) 30-34 6) 45-49 9) 60-69 11) 80 +

3. Which best describes your highest level of education that you have reached?
   1) primary school 3) TAFE
   2) Secondary school 4) Tertiary

4. Which of the following household type best describes you?
   1) single 4) one parent family
   2) couple family with children 5) other
   3) couple family without children
Section 5: continued

5. How far is your residential place from a major visitor attraction in your area? (in kilometers)

| 1) $\leq$ 5 | 3) 11-20 | 5) 31-40 |
| 2) 6-10      | 4) 21-30 | 6) 40 +  |

6. How long have you been residing in this town/region? (in years)

| 1) $\leq$ 2 | 3) 6-10 | 5) 21-30 | 7) Absentee land owner |
| 2) 2-5      | 4) 11-20 | 6) 30 + |

7. Were you born in Australia?

| 1) Yes | 2) No |

8. Do you speak any language(s) other than English at home?

| 1) Yes | 2) No |

9. Is your occupation/study connected to the tourism industry (either directly or indirectly)?

| 1) Yes | 2) No |

10. Have you ever voluntarily involved yourself in community tourism promotional activities?

| 1) Yes | 2) No |

You have completed the questionnaire.
Thank you very much for your time and cooperation.