

Destination segmentation: A recommended two-step approach

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Abstract

Market segmentation has been identified in the tourism marketing literature as an effective tool that can be used by management to meet the needs of a market more efficiently and effectively. It has been widely used by researchers seeking to develop tourism segments. Historically, most segmentation studies have developed tourism profiles at a destination using 1) a visitor questionnaire survey developed from studies in the literature or 2) secondary data. Very little research has taken a stakeholder approach to destination segmentation, despite many authors arguing the importance of utilising a stakeholder approach for destination management and marketing purposes.

This research proposes a two-step approach to destination segmentation. It details this approach using one Australian destination. The two-step approach to segmentation begins with firstly understanding how tourism stakeholders at a destination segment their market before surveying tourists for the purposes of identifying segments. In contrast to previous tourist-focused segmentation studies, the two-step approach recommended and detailed in this study considers both tourism stakeholders and tourists. The segments devised from the proposed approach are then compared and contrasted with segments currently utilised by the destination marketing organisation (DMO).

Step one involved interviewing 14 tourism stakeholders to determine how they segment the market. Based on these findings, a questionnaire survey was developed and data was collected from 852 tourists. This represented step two of the approach. Three tourism segments were identified through cluster analysis. Only one of these three segments was comparable with the segments defined by the DMO. The other two were not considered in the DMO segmentation. These segments represented over half of all tourists in the sample. Based on the sample in this study, the DMO segments target less than a quarter of the types of tourists visiting the destination.

Contributions to theory and practice were identified. Firstly, it was recognised that different tourism stakeholders attract different tourists, not all stakeholders segment their market, and some stakeholders do not adhere to segments targeted by the DMO which may lead to an inconsistent message in the market. Secondly, the two-step approach is a new method incorporating a stakeholder view, which gives a more holistic view and a richer description for the segments obtained when compared with academic and practitioner segmentation approaches. The two-step approach can be utilised at other tourist destinations.

The two-step approach to segmentation is capable of assisting tourism marketers to target more of the tourists frequenting the destination. This study suggests that many dollars may be wasted targeting tourists that are not likely to travel to the destination and not targeting those who would. Future research should be conducted at alternative destinations to further the understanding of the recommended two-step approach to segmentation.

Keywords: market segmentation, stakeholder theory, TwoStep® cluster analysis, destination

Certification of Thesis

I certify that the ideas, analysis, results and conclusions reported in this thesis are, to the best of my knowledge, accurate. All work is my own except where others' contributions are cited. I also certify that this work is original and has not been submitted for any previous degree or award.

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Tkaczynski, A, Rundle-Thiele, SR & Beaumont, N 2008, 'Insights into how regional tourism stakeholders view their markets', *International Journal of Organizational Behaviour*, vol. 13, no. 1, pp. 16-27. Paper available online at: <http://www.usq.edu.au/business/research/ijob/articles.htm>.

Conference (double blind reviewed)

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Chapter 1: Introduction

1.1 Introduction

In October 2007, the American Marketing Association (AMA)¹ updated its definition of marketing. It is now defined as ‘the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large’. Whilst marketing has traditionally been seen as a management system (e.g. Beane & Ennis 1987; Kotler 1980; Smith 1956), this new marketing definition includes the role marketing plays within society at large. This includes stakeholders such as clients and partners. Nancy Costopulos, Chief Marketing Officer of the AMA, expressed that ‘one of the most important changes to AMA’s new definition for marketing is that marketing is presented as a broader activity. Marketing is no longer a function – it is an educational process’. Costopulos further concluded that ‘marketing and its various elements change with the times. AMA recognises that shifts in the marketing world warrant a change in the way we define our practice’. One of these shifts in the tourism field has been the increasing usage of a stakeholder perspective for marketing and managing a tourism destination.

1.2 Background of this research

Tourism, the business of attracting visitors and catering to their needs, has rapidly grown into one of the world’s largest industries (Goeldner & Ritchie 2006). Research indicates that in 2007 tourism generated, directly and indirectly, 10.4 per cent of global GDP and nearly 232 million jobs in the world-wide economy (World Travel and Tourism Council 2007). Today’s consumers, facilitated by increased leisure time, rising levels of disposable income, and more efficient transportation networks (Goeldner & Ritchie 2006; Weaver & Lawton 2006), have the means to choose from an increasing array of tourism destinations.

Tourism provides many positives to a destination such as economic injection and creation of employment (Swarbrooke & Horner 1999; Weaver & Lawton 2006). Whilst tourism is growing internationally, not all destinations are experiencing growth. Reasons include: destination choices available to tourists have proliferated (French 1999; Pike 2004), tourists’ preferences for destinations are constantly changing (French 1999; Manente & Cerato 1999; Pike 2004), and/or a destination has a fixed image that does not promote the location effectively (Brackenbury 1999; French 1999; Levy 1999). ‘Tourism is an increasingly widespread and complex activity, which requires sophisticated management to realise its full potential as a positive and sustainable economic, environmental, social and cultural force’ (Weaver & Lawton 2006, p. 2). To successfully compete, it is essential that tourism

¹ This organisation is the largest marketing association in North America. It is a professional association for individuals and organisations involved in teaching, studying and practising marketing worldwide.

stakeholders within a single tourism destination employ a consistent approach to marketing (Lebe & Milfelner 2006; Sautter & Leisen 1999; Sheehan, Ritchie & Hudson 2007).

Freeman (1984) developed stakeholder theory to identify and model the groups of a company, corporation or organisation. Freeman (1984) classifies different types of stakeholders and addresses the principle of who or what really counts. This theory determines which stakeholders should receive management's attention (Agle, Mitchell & Sonnenfeld 1999; Berman et al. 1999; Post, Preston & Sachs 2002). In tourism, stakeholder theory has been applied to a destination (e.g. Sautter & Leisen 1999; Sheehan & Ritchie 2005; Sheehan, Ritchie & Hudson 2007; Wang & Xiang 2007). Essentially, it has been used to consider the interrelationships between tourism stakeholders and to consider how a destination can be marketed and managed effectively (Sheehan, Ritchie & Hudson 2007).

Tourism stakeholders require strategies that are market driven if they are to attract tourists. Market segmentation has been widely acknowledged in the tourism marketing literature as a relevant marketing strategy (e.g. Bieger & Laesser 2002; Dolnicar 2007; Johns & Gyimothy 2002; Kolb 2006). Market segmentation research has assisted researchers to understand the ways that tourism destinations can effectively segment tourism markets and thus identify and attract tourists from key tourism markets (Cha, McCleary & Uysal 1995; Dolnicar & Leisch 2003; Frochot 2005; Sarigollu & Huang 2005; Sirakaya, Uysal & Yoshioka 2003). Segmentation involves viewing a heterogeneous market as a number of smaller homogeneous markets (Smith 1956) that are distinguished by different consumer needs, characteristics or behaviour (Kotler 1980). It has been argued that segmentation can be conducted *a priori*, where the criterion variable for dividing the market is already known, or by *posteriori* means, where no such prior knowledge exists (Calantone & Mazanec 1991). Researchers can also use a combined *a priori* and *posteriori* approach to segmenting a market (Dolnicar 2004b). For segmentation to be purposeful it needs to be measurable, accessible, substantial and actionable (Kotler, Bowen & Makens 2003).

A review of the literature indicates that there is no correct way to segment a market (e.g. Beane & Ennis 1987; Dolnicar 2007; Kotler 1980). It has been concluded that tourists are unique and the tourism industry cannot cater to all individual needs (Dolnicar 2007). Despite this limitation, tourism researchers have applied one or a combination of the four segmentation bases of geographic, demographic, psychographic and behavioural, as described by (Kotler 1980), to segment markets.

The majority of market segmentation studies have emphasised building tourism profiles at a destination through using a visitor questionnaire survey developed from studies in the literature (e.g. Chang 2006; Horneman et al. 2002; Kim, Jogaratnam & Noh 2006; McGuiggan & Foo 2004; Sung 2004) or through using secondary data (e.g. Carmichael & Smith 2004; Jang, Morrison & O'Leary 2004; Laesser & Crouch 2006; Lehto, O'Leary & Morrison 2004; Reece 2004). Very little segmentation research has been conducted taking a stakeholder view to destination segmentation, despite many authors promoting the importance of utilising a stakeholder approach for destination management and marketing purposes (e.g. Blain, Levy & Ritchie

2005; Fyall & Garrod 2005; Jamal & Getz 1995; Morgan, Pritchard & Piggott 2003; Sautter & Leisen 1999; Sheehan & Ritchie 2005; Sheehan, Ritchie & Hudson 2007).

1.3 Justification for this research

This research is justified for two main reasons. Firstly, as discussed in Section 1.3.1 below, the segmentation of a destination from a multiple stakeholder perspective is not well understood. Through identifying how tourism stakeholders segment their market, this research provides insight into how incorporating a stakeholder perspective into marketing may assist destinations to survive in an increasingly competitive environment. Secondly, Section 1.3.2 below outlines the usefulness of the two-step segmentation approach at a destination which incorporates both tourism stakeholders and tourists. A two-step approach to segmentation may yield a more holistic view of the tourists travelling to a destination than the current DMO segmentation approach.

1.3.1 Gaps in the literature

A review of the literature identified that many market segmentation studies have been conducted at tourism destinations. These studies have been performed at a variety of destination levels, such as resort (e.g. Fuller & Matzler 2008; Morrison et al. 2003; Naylor & Kleiser 2002), region (e.g. Bonn, Joseph & Dai 2005; Moscardo 2004; Sarigollu & Huang 2005), state (e.g. Hallab & Kim 2006; Hsu & Lee 2002; Kang, Hsu & Wolfe 2003), and country (e.g. Clotey & Lennon 2003; Juwaheer 2007; Kim & Prideaux 2005). The majority of research efforts have largely centred upon using visitor data to profile tourists at the destination.

Authors such as Prideaux and Cooper (2002) and Sheehan, Ritchie and Hudson (2007) have asked tourism stakeholders how they market their destination, yet little research has been directed towards determining how stakeholders at a destination segment their tourists. Despite 16 different types of stakeholders being identified in the literature review (see Table 2.1 in Section 2.2.1), no more than two stakeholder types have been approached by researchers purportedly taking a stakeholder approach to segmentation. Further, the stakeholders that were considered (e.g. hotel and travel agency employees) were not decision makers for managerial and marketing purposes.

Destination marketing organisations (DMOs) are usually responsible for marketing a destination and identifying which tourism segments to target (Chandra & Menezes 2001; Dore & Crouch 2003; Pike 2004), yet these and other relevant stakeholders (e.g. different types of accommodation providers and tour operators) have not been considered when determining how a market is segmented. Because there is little existing knowledge on how tourism stakeholders segment their market, it is not known whether the segments identified by tourism researchers, (see studies listed in Appendix I) mirror the segments identified by the relevant DMOs. It is also unknown whether incorporating tourism stakeholders into the market segmentation process will provide a better understanding of the types of tourists that frequent a destination.

As will be discussed in the literature review, DMOs are generally responsible for marketing a destination, yet they rarely interact with tourists (Dore & Crouch 2003; Pike 2004). This indicates that some types of tourists that holiday at the destination may be overlooked or not targeted as they are not being considered by DMOs in the destination market segmentation process.

1.3.2 Two-step segmentation approach

An important rationalisation for the present study is to improve the understanding of segmentation at a destination by incorporating both a stakeholder and tourist perspective. Stakeholders have been recently identified as a relevant constituent by the AMA (American Marketing Association 2008). In addition, it was noted that marketing is now essentially an educational process. This research proposes and presents a two-step approach to market segmentation for tourism destinations. Additional viewpoints from tourism stakeholders would allow researchers to become more familiar with, and hence knowledgeable about, the destination under study.

A two-step segmentation approach is an approach to segmentation that considers two points of view. The two-step approach to segmentation proposed here requires consideration to be given to both 1) tourism stakeholders and 2) tourists. Segmentation researchers have not considered multiple tourism stakeholder views and to date a two-step research design utilising both stakeholder and visitor perspectives has not been applied in tourism segmentation research. This provides the impetus for this study. Unless the researcher has a complete understanding of the way each tourism stakeholder segments its market, some variables or methods that may be important to a tourism stakeholder may well be overlooked. Accordingly, this research sought to answer these gaps in the literature through two research questions. These research questions and the methods adopted to answer them are described in Section 1.4.

1.4 Methodology

As this research addresses new fields of enquiry in tourism destination segmentation from a combined stakeholder and tourist perspective, it adopted a realism paradigm to uncover the 'realities' of stakeholder destination segmentation for marketing strategies (Easton 1998). Methodologically, realism primarily uses multiple methods of enquiry (Easterby-Smith, Thorpe & Lowe 2002), and consequently, a two stage methodology within the realism paradigm was proposed. These methodologies are described in detail in Chapter 3 and merely introduced here. The two research questions and associated research methods are specified in Table 1.1.

Table 1.1: Two-step segmentation approach

Research Question	Research Method
<i>RQ1: How do tourism stakeholders segment tourists at a destination?</i>	Case study with semi-structured interviews with stakeholders.
<i>RQ2: Does the two-step approach yield a more holistic view of tourists travelling to the destination than the current DMO segmentation approach?</i>	Case study with semi-structured interviews with stakeholders and a questionnaire survey of tourists.

A case study approach with semi-structured interviews was used with tourism stakeholders at a regional destination (see Chapter 3). This answered the first research question. The case study approach has been widely used by researchers seeking to understand marketing phenomena within a tourism setting (e.g. Agarwal 2002; Awaritefe 2004; Scott & Parfitt 2004). This technique permits researchers to investigate complex issues in some depth (Yin 2003). A single case study was chosen as it was deemed most appropriate to ensure that an in-depth understanding of market segmentation from a tourism stakeholder perspective at a destination was obtained (Lee 1999).

The Fraser Coast was selected for this study because it is typical of a destination in terms of its tourism stakeholders as identified in the literature (see Table 2.1 in Chapter 2). It was also the best performing regional destination in Queensland in terms of percentage growth. Further details are provided in Chapter 3. The Fraser Coast is located approximately 300 kilometres or a 45 minute flight north of Brisbane and roughly 1200 kilometres or 90 minute flight north of Sydney.

The tourism stakeholders were selected on the basis of replication logic (Perry 1998; Yin 2003) and the stakeholders' willingness to participate in the research. A case study protocol and rules and procedures for the conduct of the study were used by the researcher in implementing this case research (Perry 2001). An analytical strategy involving data reduction, data display, and data analysis was created prior to data collection to ensure theory could be built (Eisenhardt 1989). Semi-structured interviews were held with 14 tourism stakeholders that included tour operators, accommodation providers, regional tourism marketers (DMOs), and city officials at the destination.

The findings from this first stage of research were analysed and then utilised in the development of a questionnaire that was administered and analysed in the second stage of this research. A questionnaire survey was chosen as this method is relatively easy for tourists to comprehend, can produce a large data quantity in a limited time period, and the results can be used for statistical analysis (Veal 2005). It is also the most effective method when information regarding an individual's own accounts of their behaviour and/or attitudes is required (Neuman 1997; Veal 2005). This method is also the most frequently used in research analysed in the literature review (see Chapter 2). A user survey was chosen for several reasons. Briefly, it enabled surveys to be collected at a variety of places such as accommodation and transport locations (Veal 2005). It also ensured that a large enough sample size could be collected for subsequent analysis (Veal 2005).

Cluster analysis was chosen to group objects (tourists) based on similar characteristics (Hair et al. 2006). This method has been used in several market segmentation studies (e.g. Beh & Bruyere 2007; Bieger & Laesser 2002; Dolnicar & Leisch 2003; Hyde 2006; McKercher et al. 2003). TwoStep® cluster analysis was used as it is the only type of cluster analysis in SPSS that forms clusters based on both continuous and categorical data (Chiu et al. 2001; Norusis 2007). Both forms of data had been identified in the literature and were required based on the findings from the first phase of research.

1.5 Contributions to theory and practice

The individual theoretical and practical contributions of the two-step approach are described in Table 1.2. This is a brief summary of the contributions which are discussed in detail in Chapters 6 and 7.

Table 1.2: Contributions to theory and practice

Theoretical Contribution	Description
Multiple stakeholder view	<ul style="list-style-type: none"> ➤ Segmentation is not used by all tourist stakeholders. ➤ Tourism stakeholders within a single destination classify their tourists using different segmentation bases and variables. ➤ Different tourism stakeholders attract different tourists.
Two-step segmentation approach	<ul style="list-style-type: none"> ➤ A new method was proposed and detailed for destination segmentation. ➤ The two-step approach to segmentation provides a much richer description of tourists than the DMO segments currently used.
Three expenditure categories	<ul style="list-style-type: none"> ➤ Rather than considering expenditure as one global measure, researchers should consider the different types of expenditure. ➤ Income and expenditure are not linear. Tourists with higher incomes do not necessarily spend more while at the destination.
Simultaneous inclusion of motivations in cluster analysis	<ul style="list-style-type: none"> ➤ A new method for including motivations simultaneously with other segmentation variables was developed. This study considered both the push and pull motivations and the number of both.
TwoStep® cluster analysis	<ul style="list-style-type: none"> ➤ This data analysis method enabled both continuous and categorical data to be used simultaneously to create three segments.
Practical Contribution	Description
Importance of segmentation for tourism stakeholders	<ul style="list-style-type: none"> ➤ Stakeholders vary considerably in how they classify their tourists. Management should focus on targeting tourists that have specific characteristics which appear prevalent at this destination. ➤ The marketing approach used by tourism providers could be improved at this regional destination.
Two-step segmentation method is more managerially useful than the current DMO segmentation approach	<ul style="list-style-type: none"> ➤ This approach captures more of the tourists frequenting the destination than the current DMO segmentation approach. ➤ All four bases of segmentation need to be considered when segmenting tourists at a destination.

1.6 Definitions

As terms may vary, definitions of concepts as used in this thesis are provided in this section. Table 1.3 lists the major concepts covered within this thesis. The primary areas of research are the context of the destination and the two parent theories of stakeholder theory and market segmentation.

Table 1.3: Definitions

Area of Research	Concept	Definition
Destination	Destination	A region or place with a distinct image that has natural attractions such as climate, hydrology, topography and/or iconic attractions such as amusement parks and shopping facilities (Weaver & Lawton 2006). It will have resources such as accommodation, food and beverages, tour operators and transportation that can be utilised by tourists (Pike 2004).
	Tourism	'The sum of the processes, activities and outcomes arising from the interactions among tourists, tourism suppliers, host governments, host communities, origin governments, universities, community colleagues and nongovernmental organisations, in the process of attracting, transporting, hosting and managing tourists and other visitors' (Weaver & Lawton 2006, p. 3).
	Tourist	'A person who travels temporarily outside of his or her usual environment (usually defined by some distance threshold) for certain qualifying purposes' (Weaver & Lawton 2006, p. 18) of 1) leisure and recreation, 2) visiting friends and relatives, and/or 3) business (Weaver & Lawton 2006).
Market segmentation	Market segmentation	The 'portioning of a large heterogeneous market into smaller, more homogeneous markets based on different needs, characteristics, or behaviour' (Goldsmith & Litvin 1999, p. 127).
	Market segment	A group that has its own unique profile and buyer characteristics. For marketing purposes, this group can be targeted separately from other segments in the market (Kotler 1980).
	<i>A priori</i> segmentation	Has the researcher defining the basis for segmenting the market from the outset (Dolnicar & Leisch 2003).
	<i>Posteriori</i> segmentation	Has the researcher defining the existing segments once data has been collected (Sirakaya, Uysal & Yoshioka 2003).
Stakeholder theory	Stakeholder theory	Proposes the 'interests of all stakeholders are of intrinsic value' (Donaldson & Preston 1995, p. 67).
	Tourism stakeholder	A person or organisation that has an interest in tourism in the destination (Sheehan & Ritchie 2005).
	Primary stakeholder	'One without whose continuing participation the corporation [or destination] cannot survive as a going concern' (Clarkson 1995, p. 106).
	Secondary stakeholder	Those who 'influence or affect, or are influenced or affected by, the corporation [or destination], but they are not engaged in transactions with the corporation [or destination] and are not essential for its survival' (Clarkson 1995, p. 107).

1.7 Delimitation of scope with justifications

This research has four delimitations of scope. Firstly, it is mentioned that an organisation must uphold three concepts to manage its stakeholders effectively: 1) it needs to clearly identify its stakeholders, their respective stakes, and their interests; 2) it needs to clarify the process necessary to manage the relationship with the stakeholders; and 3) it should understand the process of the management of a set of transactions or bargains between the organisation and its stakeholders. This forms the emphasis of stakeholder theory (Freeman 1984). This research focuses on only identifying the relevant tourism stakeholders, their respective stakes and their interests. These findings will be used in segmenting tourists at a destination. This represents the first concept of stakeholder theory. It does not seek to identify the process necessary to manage the relationship between tourism stakeholders or the management of their transactions or bargains. This is outside the scope of the research and this managerial approach between tourism stakeholders has been previously studied (e.g. Gretzel et al. 2006; Nilsson 2007; Wang & Xiang 2007).

Secondly, this research is limited to academic studies (see Chapter 2). In practice, it is possible that there are examples of destinations segmenting their market using a stakeholder approach that are not currently reported in the tourism marketing literature. For example, there is the likelihood that well developed tourism destinations (e.g. Las Vegas) may already be using a similar stakeholder approach that is being presented in this thesis.

Thirdly, despite many different types of destinations being considered for segmentation purposes in the tourism marketing literature as described in Chapter 2 (e.g. an attraction or country), this research classes a destination as a region. This destination is the Fraser Coast region, which encompasses many locations. These include the coastal city of Hervey Bay and the World Heritage listed Fraser Island (Tourism Queensland 2007a). This region has natural attractions and has tourism resources such as accommodation and tour operators. Tourism Queensland, the state tourism authority and DMO, markets these individual locations as the combined Fraser Coast region. Further details of the marketing approach are reviewed in Chapter 3. As an objective of this research is to identify whether a two-step segmentation approach yields a more holistic view of tourists travelling to the destination than the current DMO segmentation approach, it was decided to compare and contrast the current segmentation approach used at this destination. Consequently, the destination was treated as the whole region rather than focusing on an individual city or attraction.

The fourth delimitation of this research is that this research has only been conducted at one regional destination due to the financial and time constraints imposed in doctoral research. Therefore, results from this study cannot be generalised to other destinations. Despite this delimitation, this research provides a good analysis of the marketing segmentation approach of different tourism stakeholders, and the characteristics of tourists that frequent the destination. Future research is recommended at other destinations, and this is discussed in Chapter 7.

1.8 Outline of the thesis

This thesis adopts a seven chapter structure. Chapter 1 included an introduction, background and justification for this research. The two-step segmentation approach was briefly mentioned, as well as the methodology to answer the research questions. Brief conclusions and definitions were also provided. Chapter 2 reviews the relevant literature and highlights the gaps in the literature within the parent theories of stakeholder theory and market segmentation. It concludes with the theoretical research framework and an explanation of each of the two research questions addressed in this thesis.

Chapter 3 explains the methodology used for the research. Topics covered include a justification of the realism paradigm and a combination of qualitative and quantitative methods, a discussion of the semi-structured interview method and questionnaire survey method, and finally, an explanation of the data collection and analysis. Chapter 4 of the thesis examines the findings from the qualitative research which inform the development of the questionnaire survey used in the second step. Chapter 5 analyses the results from the questionnaire survey (the quantitative research) to develop profiles of tourists.

Chapter 6 is the discussion chapter which provides an overview of what this research has achieved. It links the findings of this research to previous studies. Chapter 7 presents conclusions, limitations and future research directions.

1.9 Conclusion

The foundations of this research have been presented in this chapter. From this introduction and background to the research, this chapter indicated the importance of stakeholder theory and market segmentation for destination marketing and management purposes. Within this review, several gaps in the literature were identified which will be discussed in further detail in the next chapter. This chapter also presented the justification for the research, an overview of the research methodology, research contributions, delimitation of scope, and an outline of the thesis. This research now moves to the development of the research questions from the literature in Chapter 2.

Chapter 2: Literature review and conceptual development

2.1 Introduction

The purpose of this chapter is to review the existing literature relating to the two-step approach to segmentation proposed in this thesis. Two bodies of literature are examined. The first section reviews stakeholder theory. This section focuses on how this concept has been used within a destination to manage the interests of relevant stakeholders (Section 2.2). The second section reviews market segmentation within the tourism marketing literature. This review identifies the forms of market segmentation to understand how tourism researchers have approached destination segmentation (Section 2.3). The emphasis that has been placed by researchers on visitor data will be highlighted within this second section. A justification will be presented for the theoretical framework guiding this research (Section 2.4). Here the research questions are also provided. This section is followed by the chapter conclusions (Section 2.5).

2.2 Stakeholder theory

Stakeholder theory is a management theory that determines which stakeholders should receive management's attention (Agle, Mitchell & Sonnenfeld 1999; Berman et al. 1999; Post, Preston & Sachs 2002). Its origins can be traced back to authors such as Barnard (1938), March and Simon (1958), and Pfeffer and Salancik (1978) who detail interorganisational relationships and organisation theory. Stakeholder theory, as proposed by Freeman (1984), suggests that an organisation is characterised by its relationships with various groups and individuals, including employees, customers, suppliers, governments, and members of the community. Freeman (1984) argues that an organisation must understand three concepts to manage its stakeholders effectively. Firstly, it needs to clearly identify its stakeholders, their respective stakes, and their interests. Secondly, it needs to clarify the process necessary to manage the relationship with the stakeholders. Thirdly, it should understand the process of the management of a set of transactions or bargains between the organisation and its stakeholders.

Stakeholder theory has been studied in various contexts including destination management and marketing (e.g. Blain, Levy & Ritchie 2005; Ermen & Gnoth 2007; Fyall & Garrod 2005; Jamal & Getz 1995; Lebe & Milfelner 2006; Morgan, Pritchard & Piggott 2003; Sautter & Leisen 1999; Sheehan & Ritchie 2005; Sheehan, Ritchie & Hudson 2007; von Friedrichs Grangsjø 2003). Stakeholder theory has been used extensively by researchers to explore the attitudes and perceptions of individual stakeholder groups in an attempt to understand their thoughts (e.g. Byrd, Bosley & Dronburger in press; Poria, Biran, & Reichel 2006; Sautter & Leisen 1999). For example, Byrd, Bosley and Dronburger (in press) determined that differences occurred in perceptions of tourism's impacts on a rural community between four

stakeholder groups in eastern North Carolina: residents, entrepreneurs, government officials, and tourists.

Stakeholder theory has also been used as an effective means for building inter-organisational linkages through marketing alliances or networks (Merrilees, Getz & O'Brien 2005). Marketing alliances and networks are voluntary arrangements between organisations involved in marketing and promoting products and services in a collective way (Wang & Xiang 2007). They occur as a result of a wide range of motivations, take a variety of forms, and function across vertical and horizontal boundaries (von Friedrichs Grangsjö 2003).

Several studies have addressed the issues of strength and formalisation of linkages (e.g. Merrilees, Getz & O'Brien 2005; Sheehan & Ritchie 2005; Timothy 1998; Wang & Xiang 2007). For example, Wang and Xiang (2007) proposed a framework for destination marketing alliance formation in which relations between stakeholders that were strategy orientated, transaction cost orientated, and organisational learning orientated were managed. The authors also identified the different forms of marketing alliance as either affiliation, cooperation, coordination, collaboration, and strategic networks depending upon the levels of formality, integration, and structural complexity². Conversely, D'Angella and Goh (in press) used stakeholder theory as an assessment measure to determine how to bundle stakeholders to improve a destination's performance.

Several benefits of destination market alliances have also been documented (Jamal & Getz 1995; Bramwell & Sharman 1999; D'Angella & Go in press). These include increasing performance of stakeholders through pooling resources together, which enables stakeholders to trust each other (Uzzi 1996), and strengthening political capital because firms are tied up through formal or informal agreements and implementation of projects (D'Angella & Go in press). D'Angella and Goh (in press, p. 9) argue that 'in tourism destinations collectivism is needed for individual success. In such a win-win situation cooperation brings higher competitiveness for the actors involved. The motto "all for one, one for all" seems to describe the DMO-tourism firms' relationship, even if individualism is still a fundamental motivation for network members'. This emphasis on inter-organisational collaboration through marketing alliances is relevant to tourism destinations with the increasing number of joint activities carried out by organisation (D'Angella & Goh in press).

There are several benefits to a destination adopting a stakeholder perspective. The first benefit is that favouritism is not given to one organisation (Sautter & Leisen 1999). Stakeholder theory proposes the 'interests of all stakeholders are of intrinsic value' (Donaldson & Preston 1995, p. 67) to an organisation, and key stakeholders should not be ignored by the organisation. If one of these key stakeholders withdraws its support for an organisation, that organisation may cease to exist (Clarkson 1995). Sautter and Leisen (1999) suggest that it seems appropriate for government organisations to actively seek input from all relevant stakeholders despite some having stronger voices or more financial resources than others. The existence of government bodies, such as development agencies, acts as a safeguard or

² For a full review on destination alliance formation please refer to Wang & Xiang (2007).

guaranteeing agent to protect the interests of small groups against the power of larger groups.

The second benefit of employing a stakeholder approach is that it allows organisations to join forces with each other to solve problems that are complex, wide in scope and beyond the means of a single organisation (Trist 1983). Whilst stakeholders do compete for clientele at a destination, this is only at the regional level. They are allies when facing competitors at a broader market level (Lebe & Milfelner 2006) and provide the tourist with their product, competing with other destinations (Ermen & Gnoth 2007). It has been argued by Fyall and Garrod (2005) and Von Friedrichs Gransgo (2003) that if destination marketing and promotion is done individually and independently by various tourism stakeholders, it cannot be conducive to developing a holistic destination image and cannot enable the destination to succeed in the long run.

The third benefit for the organisation is that stakeholder involvement can be optional. Stakeholders that want a say in decision-making unite when taking a stakeholder perspective. However, stakeholders that may have an interest in the organisation do not necessarily need to be involved in the organisational strategy. These stakeholders can merely choose to support the organisation through accepting the decision-makers' strategies (Mitchell, Agle & Wood 1997).

2.2.1 Tourism stakeholders

It has been argued that tourism is a complex phenomenon involving a diverse group of active tourism stakeholders (Sheehan, Ritchie & Hudson 2007) each with diverse interests (Pike 2004) and responsible for different components of what a destination has to offer (Bramwell & Lane 2000). Essentially, a destination is not a single product but an amalgamation of products, which includes accommodation, hospitality, culture, transport, heritage, infrastructure, arts, attractions, entertainment and the natural environment (Buhalis 2000; Middleton 1994; Morgan, Pritchard & Piggott 2003) that directly or indirectly support tourism (Blain, Levy & Ritchie 2005). Most of the stakeholders at a destination are independent small to medium sized enterprises, which already follow their own marketing strategies (Buhalis 2000).

An issue that has plagued stakeholder theory is how an organisation (or destination) should allocate time, energy and other scarce resources to stakeholders (Freeman 1984). Several authors (e.g. Carroll 1989; Clarkson 1995; Freeman 1984) have aimed to limit this problem by categorising stakeholders as either primary or secondary. Clarkson (1995, p. 106) has defined a primary stakeholder as 'one without whose continuing participation the corporation [or destination] cannot survive as a going concern'. A secondary stakeholder is also defined by Clarkson (1995, p. 107) as those who 'influence or affect, or are influenced or affected by, the corporation [or destination], but they are not engaged in transactions with the corporation [or destination] and are not essential for its survival'. In seeking to categorise stakeholders, Sheehan and Ritchie (2005) identified that 91 Chief Executive Officers of Destination Marketing Organisations (DMOs) in North America placed an emphasis on three stakeholders: 1) hotel/hotel organisation, 2) city/local government,

and 3) regional/country government. Other identified stakeholders such as airlines, the parks department, universities and retail stores were of less salience. These three stakeholders were considered most important based on financial resources involving membership, specific marketing partnerships, and in-kind services.

Table 2.1 lists the tourism stakeholders that have been identified in the literature.

Table 2.1: Stakeholder types

Stakeholder Type	Stakeholder	Author
Primary	City Officials (Local Government Organisations)	Blain, Levy & Ritchie (2005); Morgan & Pritchard (1999); Sautter & Leisen (1999); Sheehan, Ritchie & Hudson (2007); Sheehan & Ritchie (2005)
	Competitors	Sautter & Leisen (1999)
	Destination Marketing Organisations	Blain, Levy & Ritchie (2005); Morgan & Pritchard (1999); Sautter & Leisen (1999); Sheehan, Ritchie & Hudson (2007); Sheehan & Ritchie (2005)
	Hotels	Blain, Levy & Ritchie (2005); Sautter & Leisen (1999); Sheehan, Ritchie & Hudson (2007); Sheehan & Ritchie (2005)
	Residents	Sautter & Leisen (1999)
	Tourism Attraction Operations/Convention Centres	Blain, Levy & Ritchie (2005); Morgan & Pritchard (1999); Sautter & Leisen (1999); Sheehan, Ritchie & Hudson (2007); Sheehan & Ritchie (2005)
	Transportation companies (e.g. buses airports)	Blain, Levy & Ritchie (2005); Sautter & Leisen (1999)
	Tourists	Sautter & Leisen (1999); Sheehan & Ritchie (2005)
	Restaurants	Blain, Levy & Ritchie (2005); Sautter & Leisen (1999)
Secondary	Chamber of Commerce/Advisory Board	Morgan & Pritchard (1999); Sheehan & Ritchie (2005)
	Community Groups	Morgan & Pritchard (1999); Sautter & Leisen (1999); Sheehan & Ritchie (2005)
	Gas Stations	Sautter & Leisen (1999)
	Incentive Planners	Blain, Levy & Ritchie (2005); Morgan & Pritchard (1999); Sautter & Leisen (1999); Sheehan & Ritchie (2005)
	Media	Sautter & Leisen (1999); Sheehan & Ritchie (2005)
	Retail Outlets	Blain, Levy & Ritchie (2005); Sautter & Leisen (1999); Sheehan & Ritchie (2005)
	Universities	Blain, Levy & Ritchie (2005); Sheehan & Ritchie (2005)

Source: developed for this research

It was noted that different studies have emphasised different stakeholders. For example, Sheehan and Ritchie (2005) stated that hotels, governments, boards of directors, convention centres and residents were primary stakeholders as they have the ability to directly influence the DMO or withhold critical resources such as financial and human resources. These stakeholders also had the potential to threaten the DMO by their disagreement with the DMO's marketing approach. All other stakeholders in this study were treated as secondary. Sheehan, Hudson and Ritchie (2007) stated that city officials, hotels/hotel associations and attractions/attraction

associations were the major stakeholders who influence destination promotion. Despite several studies considering hotels as a primary stakeholder, none of these studies have considered other accommodation providers such as backpacker hostels, caravan parks or self-contained units.

Competitors, residents and tourists are also considered as primary stakeholders by some authors. Whilst the first two are considered as necessary by Sautter and Leisen (1999) in planning for a destination, these stakeholders have not been considered in marketing a destination by any authors. Despite tourists being an important tourism stakeholder in that they inject money into the economy and keep several other primary stakeholders such as restaurants, hotels, and transportation companies in operation, this stakeholder group has not been identified in the literature as decision-makers in a destination's marketing, as tourists do not make decisions about how the destination is marketed or segmented.

2.2.2 Destination marketing organisation (DMO)

As the phenomenon of tourism has grown (Goeldner & Ritchie 2006; Manente & Cerato 1999; Pechlaner 1999) and the benefits such as economic injection and employment have been identified (Gunn & Var 2002; Laws 1995; Swarbrooke & Horner 1999), the interests of destinations in attracting their share of visitors has also increased (Pike 2004; Swarbrooke & Horner 1999). In terms of segmentation, one key tourism stakeholder is the DMO. DMOs are non-profit entities generally funded by government budgets (Dore & Crouch 2003; Pike 2004) whose aim is to generate tourist visitation to a given area such as a country, state, province, region, city or town (Blain, Levy & Ritchie 2005; Chandra & Menezes 2001). Their major purpose is to market a specific destination to potential visitors, both individuals and groups, which will provide economic benefits to the community and its members (Blain, Levy & Ritchie 2005). This includes attracting the right type of visitors to the destination (Pike 2004). DMO marketing experience and coordination of marketing and sales efforts usually make this organisation a valuable resource for its tourism stakeholders (Blain, Levy & Ritchie 2005; Chandra & Menezes 2001).

Although DMOs are traditionally responsible for managing tourism developments and are generally responsible for marketing a destination (Pike 2004; Ritchie & Crouch 2003), they are rarely operators of the tourism product (Sheehan, Ritchie & Hudson 2007). DMOs cannot directly control marketing activities and mixes of the individual stakeholders; they can only provide guidance for marketing strategy (Buhalis 2000; French 1999). They are also critically dependent on the resources of stakeholders within the destination (Sheehan, Ritchie & Hudson 2007). DMOs have little control over different sectors, and yet this diverse range of agencies and companies are all stakeholders in the destination brand (Morgan, Pritchard & Piggott 2003).

Whilst not responsible for marketing a destination, individual tourism stakeholders have direct contact with tourists but only control a small part of the tourist's experience. They rarely have control over the path the tourists take when experiencing what a destination has to offer (Gnoth 2002), and are, therefore, not

able to control the service delivery of the entire experience (Ritchie & Crouch 2003; von Friedrichs Grangsjö 2003).

2.2.3 Stakeholder approach

Authors such as Gunn and Var (2002) and Laws (1995) have argued that tourism products in a destination have been marketed and sold in the marketplace in fragmented pieces by a variety of individuals for many years. Whilst a major role of DMOs is to identify markets and segments with the best potential, a major responsibility for them is to create cooperative marketing strategies in collaboration with other tourism stakeholders (Chandra & Menezes 2001). Due to the multifaceted nature of tourism and its tourism stakeholders, this presents a great challenge for the DMO (Augustyn & Knowles 2000). Most noticeably, the several stakeholders involved in the planning of a destination will unmistakably have different interests and objectives (King, McVey & Simmons 2000; Laws, Scott & Parfitt 2002). However, if tourism stakeholders can market the destination using a unified approach, this presents the destination with a competitive advantage, as the businesses are working together to achieve a common goal (Buhalis 2000).

Laws, Scott and Parfitt (2002) consider the interaction among stakeholders in tourism as synergetic. However, a destination will face peculiar marketing challenges since they have many stakeholders who exhibit different interests in what the destination is promoting to tourists and which markets the destination is targeting (Pike 2004). Therefore, managing often conflicting stakeholders' interests makes controlling and marketing destinations as a whole extremely challenging (Buhalis 2000).

One of the main problems in reaching a unified approach to destination marketing is that stakeholders at a destination often mistrust each other (Lebe & Milfelner 2006). Some tourism providers, such as small to medium sized enterprises, perceive they may lose some of their market position if they join forces with other organisations (Lebe & Milfelner 2006). This reduces the destination to operating at a linear level instead of using the possibility of working synergistically (Lebe & Milfelner 2006). This view is supported by Pike (2004) who argued that the 'greatest challenge faced by DMOs, certainly in the implementation of Integrated Marketing Communications, is stimulating a coordinated approach among all those stakeholders who have a vested interest in, and will come into contact with the target visitors' (p. 140).

For the marketing strategy at a destination to be effective, there needs to be a strong network of stakeholder relationships which all share a common vision (Brackenbury 1999; Buhalis 2000; Hankinson 2004). Pike (2004) argues that what is required is that all stakeholders understand the marketing strategy targeted to tourists. 'The more stakeholders that have an understanding of the rationale behind the strategy, the more effective they will be able to integrate their own marketing and customer interactions' (Pike 2004, p. 140). For this to be effective, primary stakeholders need to be involved in the development of the marketing strategy.

Stakeholders must agree that the final marketing strategy provides both a meaningful and an operational 'dream' for the future of their destination - one that reflects the

values of tourism stakeholders while not ignoring the realities and constraints of the marketplace (Morgan, Pritchard & Piggott 2003). Through participating in the marketing, all stakeholders benefit from a unified destination (Lebe & Milfelner 2006).

Consensus is emerging that a stakeholder approach to tourism destination marketing is beneficial, yet there has not been much emphasis on stakeholders in segmentation research within the tourism marketing literature. The following section outlines the current market segmentation approaches employed in profiling tourists at a destination. These findings are then used in the development of the theoretical framework which will answer the two research questions.

2.3 Market segmentation

Tourism stakeholders that recognise the importance of tourism and the potential that it offers for future growth and economic development require strategies that are market driven if they are to attract tourists. This can be difficult to achieve due to the self interest of stakeholders such as the host community, local businesses and travel intermediaries wanting to target their own tourists. Pike (2004, p. 126) argues that a 'DMO must somehow showcase the destination in a way that offers benefits sought by travellers, represents the interests of tourism suppliers, and does not commodify residents' sense of place'.

The marketers responsible for promoting a destination, such as the DMO, need to also acknowledge that every tourist is unique and that the tourism industry cannot possibly cater for all individuals separately (Dolnicar 2007). Dolnicar (2007, p. 129) argues that 'every tourist feels attracted by different tourist destinations, likes to engage in different activities while on vacation, makes use of different entertainment facilities and complains about different aspects of their vacation'. These tourists also travel from different geographic areas, socio-demographic groups, and lifestyle clusters. Further, different tourists will respond to different offers for different reasons, such as purpose of travel, individual motivation(s), time available, the time of year, and availability of other discretionary spending opportunities (Pike 2004).

Managers require a tool to help frame their thinking in order to meet the needs of the diverse market efficiently and effectively. Small business owners also need to conserve limited financial resources (Perdue 1996) and large organisations should not waste unnecessary finances on unprofitable markets (Kotler, Bowen & Makens 2003). Market segmentation is a management strategy that was developed by Smith in 1956. Smith (1956, p. 6) states that 'Market segmentation...consists of viewing a heterogeneous market (one characterised by divergent demands) as a number of smaller homogeneous markets'.

Market segmentation has been extensively used in the tourism marketing literature to develop a better understanding of tourist characteristics and for creating marketing strategies (Park et al. 2002). It offers businesses a tool to break large heterogeneous markets into smaller homogeneous segments which allows marketers to define customer needs and wants more precisely (Dolnicar 2007; Goldsmith & Litvin 1999;

Kotler 1980; Kotler, Bowen & Makens 2003; Swarbrooke & Horner 1999). This, in turn, offers a mechanism that may assist to frame management thinking (Aguas, Costa & Rita 2000) by targeting customers' needs, characteristics, or behaviour more precisely (Kotler 1980). Market segmentation enables tourism marketers to efficiently allocate resources to attracting and retaining the most profitable segments (Mykletun, Crofts & Mykletun 2001). It allows destination marketers to become more familiar with the characteristics and profile of actual and potential market segments for a destination (Aguas, Costa & Rita 2000).

The importance of segmentation is widely acknowledged in the tourism marketing literature (e.g. Bieger & Laesser 2002; Cha, McCleary & Uysal 1995; Dolnicar 2007; Kastenzholz, Davis & Paul 1999; Kotler, Bowen & Makens 2003). The expected outcome from market segmentation is competitive advantage based on designing product, placement, pricing or promotion strategies for tourists in specific markets with certain needs and characteristics (e.g. Kolb 2006; Kotler 1980; Kotler, Bowen & Makens 2003; Murphy & Murphy 2004; Swarbrooke & Horner 1999). Smaller tourists segments can be reached more efficiently and effectively with products and services that match the segments' unique needs (Dolnicar 2007; Kotler, Bowen & Makens 2003).

Market segmentation also ensures that competition can be minimised from the global market as a certain destination may target tourists with similar needs and characteristics that another does not (Dolnicar 2007). The utilisation of market segmentation can also ensure that the appropriate tourists are correctly targeted by having the marketer applying the correct message to the relevant media. These tourists that experience what the destination has to offer are likely to be satisfied with the stay and could revisit, and further they could promote the destination among like-minded friends (Dolnicar 2007).

Market segmentation differs from target marketing in that segmentation groups tourists into segments based on similar characteristics as the initial phase. After the market has been divided into segments, the destination marketer then chooses the one or more segments most likely to respond to the promotional message to a promotional message on a destination's features or benefits (Kolb 2006; Kotler, Bowen & Makens 2003). This is classed as targeting. For target marketing to be successful the message must be designed to directly address each segment's different needs and desires if the tourists are to be willing to visit (Kolb 2006). Destination marketers can utilise an undifferentiated, differentiated or concentrated targeting strategy (Kotler, Bowen & Makens 2003; Kolb 2006). An undifferentiated strategy has the marketers sending a general message to all potential tourists with no distinction amongst tourists, whereas a concentrated target marketing strategy targets a specific segment. The final targeting strategy, differentiated, is where more than one segment is targeted. Consequently, different promotional messages are designed for each targeted segment (Kolb 2006; Kotler, Bowen & Makens 2003).

It is argued by Dolnicar (2007) that market segmentation can be applied to any unit operating in the tourism industry. This includes hotels, travel agencies, tourist attractions, restaurants, or a tourism destination. The usefulness of market segmentation at a destination is evident with more than 100 studies in the last five years being conducted in many different countries at a variety of destinations such as

a resort, village, town, city, region, province, state, and country. Segmentation research has assisted tourism academics and practitioners worldwide to understand the ways that tourism destinations can effectively segment tourist markets with a range of different segmentation bases available to practising marketers.

For segmentation to be purposeful, Kotler, Bowen and Makens (2003) argue that each segment needs to be measurable, accessible, substantial and actionable. These authors refer to a measurable segment as one where the size of the segment and the related purchasing power can be quantified. Kotler, Bowen and Makens (2003) also suggest that for a segment to be accessible, it needs to be able to be reached and served effectively by the organisation or entity. To be substantial, the authors suggest that the segment needs to be large and profitable enough to warrant the marketing entity to design marketing mix strategies (product, price, promotion, and placement) that are differentiated from strategies that target other segments. Therefore, these markets must be sufficiently different from one another to ensure distribution of resources is worthwhile (Kotler, Bowen & Makens 2003). The segment must be actionable in that the marketing entity can design effective marketing strategies to attract and serve the segment (Kotler, Bowen & Makens 2003).

2.3.1 *A priori* vs *posteriori* segmentation approach

Despite the usefulness of segmentation for marketing and management purposes, there is no correct way to segment a market (Beane & Ennis 1987; Dolnicar 2007; Kotler 1980; Kotler & Armstrong 2008; Kotler, Bowen & Makens 2003). Rather, the criteria used to segment a market will vary depending on the needs and situation of the organisation or entity (McKercher et al. 2003). Segmentation can be conducted by *a priori* means, where the criterion variable for dividing the market is already known, or by *posteriori* means, where no such prior knowledge exists (Calantone & Mazanec 1991). Both approaches have been frequently used in the tourism marketing literature. In a recent review of traveller segmentation studies, Hsu and Lee (2002) reviewed 12 *a priori* and 21 *posteriori* segmentation studies when considering how to segment senior motorcoach travellers.

Dolnicar (2004b) also argues that researchers can use a combined *a priori* and *posteriori* approach to segmenting a market. The author reviewed the tourism segmentation studies published in the *Journal of Travel Research* over a 15 year period and grouped them into four groups. Dolnicar (2004b) found that 53 per cent of the studies utilised an *a priori* approach, 32 per cent used a combined *a priori* and *posteriori* approach (*a priori* sub-groups divided into *posteriori* segments), 11 per cent were a combination of more than one *a priori* segment, and 5 per cent were *posteriori*.

In the context of tourism, *a priori* segmentation would class tourists into two or more groups based on a known characteristic of relevancy such as accommodation type or level or country of origin (Chandra & Menezes 2001). For example, the researcher may aim to identify differences between tourists based on whether they were British, American or Australian. The *a priori* approach has been frequently used as a segmentation method (e.g. Baloglu & McCleary 1999; Goldsmith & Litvin 1999;

Kashyap & Bojanic 2000) and is popular as it collects easily obtainable information on mostly geographic and demographic characteristics (Pike 2004).

In contrast, by using a *posteriori* segmentation approach, tourists are classified into groups based on their similarities (Chandra & Menezes 2001; Dolnicar 2004a). The *posteriori* segmentation approach is often more difficult and seeks to identify groups within a population that exhibit similar psychographics or behavioural tendencies (Pike 2004; Sirakaya, Uysal & Yoshioka 2003). However, it can be used for many variables such as psychological, demographic, lifestyle, and any other variable of interest (Chandra & Menezes 2001). This form of segmentation has become increasingly popular in recent years (e.g. Dolnicar 2004b; Dolnicar & Leisch 2003; Frochot 2005; Hsu & Lee 2002; Sirakaya, Uysal & Yoshioka 2003) and is used to classify tourists into clusters, which is useful for predicting tourist behaviour (Chandra & Menezes 2001).

In utilising a combined *a priori/posteriori* segmentation approach, the starting point is a sub-group of the population (*a priori*). One of these groups is then chosen. As the next step, a *posteriori* segmentation is then performed using data from only the *a priori* segment. This form of segmentation has been identified in the tourism literature (e.g. Dodd & Bigotte 1997; Hsu & Lee 2002; Kastenholz, Davis & Paul 1999). The advantage of this method is that it identifies sub-groups that may be of managerial interest (Dolnicar 2004b). A major problem with this approach is that the market structure is restricted to only a selection of tourists. This limits the segmentation reach and risks the possibility that new potential market segments will not be detected (Dolnicar 2004b).

After the selection of either the *a priori* and/or the *posteriori* segmentation approach, a researcher needs to consider the bases for segmentation (Chen 2003a). As noted by Bieger and Laesser (2002), there are many studies in the tourism context using different descriptors and discriminating variables to segment a market. Marketers can use different segmentation variables alone or in combination to find the best and most meaningful way to view the market structure (Beane & Ennis 1987; Dolnicar & Laesser 2007; Kotler, Bowen & Makens 2003). Kotler (1980) identifies the four segmentation bases as demographic, geographic, psychographic and behavioural. Hsu and Lee (2002) in their review of 33 travel segmentation studies in the 1990s identified that these same four bases were used to divide the market into segments. In a review of 119 studies (see Appendix I) since 2002, it was confirmed that the four segmentation bases identified by Kotler (1980) were used by researchers in different combinations. Each of these four main segmentation bases will be reviewed in turn.

2.3.2 Demographic segmentation

Demographic segmentation categorises customers by variables such as age, gender, income, ethnic background and family life cycle (Summers et al. 2005). Demographics have, for several years, been the market segmentation method popular across many industries (Bowen 1998; Gartner 1996; Kotler, Bowen & Makens 2003). It has been argued by Bowen (1998) that demographic characteristics must be known to assess the size of the target market and to reach it efficiently. This form of segmentation is easily quantifiable and identifiable, and remains a standard tool in

market segmentation (Gartner 1996). Kotler, Bowen and Makens (2003) argue that a key reason for its popularity is that consumer needs, wants and usage rates usually vary closely in accordance with demographic variables. Another reason is that demographic characteristics are generally accessible and easy to measure (Bowen 1998; Brayley 1993; Kotler, Bowen & Makens 2003).

Demographic segmentation has its limitations. Beane and Ennis (1987) concluded that clearly defined segments can be identified using demographic variables, but entire markets cannot usually be segmented by demographic segmentation alone. Brayley (1993) suggests that whilst demographic segments can be identified, they lack richness in that the values, motivations, activities, interests or lifestyle variations of tourists are not provided. In addition, the relative power of demographics to predict tourist behaviour has been a point of concern in the literature. Whilst Cha, McCleary and Uysal (1995) and Morrison et al. (1996) identified that demographic variables are effective for predicting the behaviour of their visitors, the majority of other authors (e.g. Andereck & Caldwell 1994; Lehto, O'Leary & Morrison 2002; Prentice, Witt & Hamer 1998) argue that demographics are useful in describing tourists, but concluded they should not be relied upon for strategy development because they were unable to predict behaviour.

2.3.3 Geographic segmentation

Geographic segmentation involves segmenting tourists based on their place of residence (Gartner 1996). This can include nations, regions, states, municipalities, cities or neighbourhoods (Kotler, Bowen & Makens 2003). The assumption for geographic segmentation is that people living in similar areas share similar motivations and behavioural characteristics (Kahle 1986). Geographic segmentation also provides proximity or ease of access to certain destinations (Dolnicar 2007). Moscardo, Pearce and Morrison (2001) argue that the use of geographic variables such as usual residence provides important descriptors to use in the development of marketing strategies. Kolb (2006) similarly argues that because a city [destination] is a product that a consumer must choose to travel to and consume, it makes sense for geographic segmentation to be used in tourism, as tourists from different areas will come to the destination.

Geographic segmentation is simple in terms of statistical analysis (Dolnicar & Leisch 2003; Kolb 2006; Moscardo, Pearce & Morrison 2001). Once the tourists are segmented based on their place of origin, simple frequency and means computation are sufficient to describe the target market (Dolnicar & Leisch 2003). Several authors also claim geographic segmentation is popular because of its ease of use in the development of media promotional campaigns (e.g. Bojanic & Warnick 1995; Dodd & Bigotte 1997; Mazanec 1992; Obenour, Lengfelder & Groves 2005). For example, Dolnicar and Leisch (2003) argue that advertising and promotion activities are limited to the borders of the nation chosen. Marketers can market to a much smaller regional level. For example, promotional campaigns using media forms such as the Internet and print media can target states and cities (Belch & Belch 2007). Geographic target markets can easily be monitored and the danger of these segments changing over time or not being detected is minimal (Dolnicar & Leisch 2003).

A major disadvantage of geographic segmentation is that it is possible to mix very heterogeneous tourists from the same place of origin and treat them as the same segment (Dolnicar & Leisch 2003). Therefore, whilst marketers can identify where these tourists come from, these tourists may have very different needs and wants that cannot be identified by geographic segmentation. In addition, geographic segmentation is only appropriate for tourism destinations that are already well known to actual and potential tourists. The additional expense of both researching and paying for the suitable media to use for new promotion makes this strategy inappropriate for areas new to tourism (Kolb 2006).

2.3.4 Psychographic segmentation

Psychographic segmentation involves assessing potential customers' psychological characteristics such as interests, motivations, opinions and attitudes (Gartner 1996). Psychographic segmentation has been considered useful in tourism segmentation due to its ability to understand tourists' thoughts and feelings. It is argued by Murphy and Murphy (2004) that psychographic information can be used to create a context for understanding motivations. The marketer can then recognise and attempt to satisfy tourists' needs and respond to their consumption preferences (Brayley 1993).

Kolb (2006) states that psychographics are internal to the tourist, and consumers today are more likely to define themselves by psychographics such as interest rather than by gender or age. Brayley (1993) argues that whilst demographics indicate what the market looks like, psychographics tell the marketer what is needed to know to appeal to the market and be successful in winning the opportunity to satisfy its needs and wants. Consequently, it has been argued that psychographic variables are more predictive of tourists' decision-making processes and can be used to support tourism decisions such as positioning, advertising, promoting and packaging a destination (Lehto, O'Leary & Morrison 2002).

Psychographic segmentation has two major limitations. The first is that the accessibility of these markets is difficult to identify (Brayley 1993; Kolb 2006). Whilst psychographic segmentation can help a marketer to understand what tourists want, it is difficult to target these markets. Kolb (2006) suggests that it will be difficult to determine the suitable marketing mix methods to target these tourists. For example, as tourists' characteristics such as place of origin are unknown, the promotional strategy may have difficulty in targeting the appropriate tourists with the same needs and motivations. In most cases resources for destinations are extremely limited and national or regional tourism authorities often have very small promotional budgets (Dore & Crouch 2003; Pike 2004). Therefore, psychographic segmentation alone is ineffectual.

The second major limitation with psychographic segmentation is that there is the potential for instability amongst the segments (Brayley 1993). Whilst demographic characteristics such as gender or age do not change, or if they do, they may change very slowly, psychographics such as motivations and interests may change dramatically according to certain situations and within a short period of time (McIntosh & Goeldner 1986).

2.3.5 Behavioural segmentation

Behavioural segmentation divides the market into groups based on their behavioural characteristics such as trip types, Internet use, travel arrangement, and travel expenditures (Hsu & Lee 2002). Behavioural segmentation differs from the other forms of segmentation in that tourism marketers are concerned with consumer responses rather than their characteristics (Kotler, Bowen & Makens 2003). This segmentation method aims to identify how people buy and what people buy, rather than who they are (Murphy & Murphy 2004). Many marketers believe that behavioural variables are the best starting point for building profitable market segments as they can differentiate segments based on their purchase rate or usage (Kotler, Bowen & Makens 2003).

A major advantage of behavioural segmentation is that this form of segmentation identifies constructs of segments on the basis of information that is evaluated as being highly relevant to the tourism service experience (Dolnicar 2007; Dolnicar & Leisch 2003). Tourism marketers can create homogeneous constructs with regard to information that is assumed to be of the most influence in a destination choice process, such as accommodation type and usage, in their marketing mix strategy (Dolnicar 2007).

The second advantage of behavioural segmentation is its ability to predict behaviour. Whilst the other three forms of segmentation have been popularised as a basis for segmenting markets, there is contrasting evidence on whether these methods can predict tourists' behaviour (e.g. Andereck & Caldwell 1994; Cha, McCleary & Uysal 1995; Johns & Gyimothy 2002; Lehto, O'Leary & Morrison 2002; Morrison et al. 1996; Prentice, Witt & Hamer 1998). Despite psychographic segmentation providing a useful understanding of who the tourist is, logically the most effective predictor of tourist behaviour should be the behaviour itself (Johns & Gyimothy 2002). By utilising behavioural segmentation, tourism marketers can determine the way a tourist is likely to behave at the destination (Kolb 2006).

Behavioural segmentation has its limitations. The identification or construction of behavioural segments is often difficult and mistakes can be made along the way, due to the uniqueness of tourists, leading to solutions that may be suboptimal or completely random (Dolnicar 2007). Consequently, a substantial amount of expertise is needed to derive useful segments. A second limitation is that past actions will not always serve as a good predictor of future intentions, as personal conditions, needs and associated circumstances, and hence behaviours, change over time (Murphy & Murphy 2004). For example, whilst a tourist may have been satisfied with their experience of a holiday at a destination, they may not return because of time or monetary constraints (Kotler, Bowen & Makens 2003) and variety seeking behaviour (Bigne & Andreu 2004; Fuller & Matzler 2008; Keng & Cheng 1999).

2.3.6 Other segmentation types

It has been identified in the tourism literature that other forms of segmentation have been utilised. One that has been used extensively is benefit segmentation. This was

first proposed by Haley (1968) and has been utilised by many tourism academics as the emphasis of their research (e.g. Frochot 2005; Furr & Bonn 2006; Jang, Morrison & O'Leary 2002; Lehto, O'Leary & Morrison 2002; Loker & Perdue 1992; Naylor & Kleiser 2002). Benefit segmentation suggests that tourists are grouped into market segments based on the desirable consequences from the product (Kotler, Bowen & Makens 2003). Whilst some authors such as Summers et al. (2005) treat benefit segmentation as a separate form of segmentation, other such as Kotler, Brown and Makens (2003) and Kotler and Armstrong (2008) conclude that this is a form of behavioural segmentation, as it focuses on the tourist's behavioural response to the product.

Involvement segmentation (e.g. Dimanche, Havitz & Howard 1993; Kim & Petrick 2004; McCleary, Weaver & Meng 2005) and lifestyle segmentation (e.g. Fuller & Matzler 2008; Laws, Scott & Parfitt 2002; Lee & Sparks 2007; Naylor & Kleiser 2002; Scott & Parfitt 2004) have been popular in the literature, as has usage segmentation (e.g. Goldsmith & Litvin 1999; Goldsmith, Flynn & Bonn 1994; Summers et al. 2005).

Involvement segmentation has characteristics that relate to psychographics, and it is therefore classed as psychographic segmentation for this thesis. Mannell (1993, p. 128) defined involvement with a tourism or leisure activity as 'an attitudinal or motivational state to continue participating in an activity and to invest effort in regardless of the short-term costs and benefits of participation'. Kim and Petrick (2004) argue that this form of segmentation is useful for identifying tourists' attachment to products, services and activities in a tourism setting. They also argue that a highly involved person has consistent participation and high-level psychological involvement without the beneficial consequences from participating in a travel activity.

Lifestyle segmentation is also classed under the same segmentation form as involvement, as these studies emphasise motivations (e.g. Laws, Scott & Parfitt 2002; Scott & Parfitt 2004) or other psychographic characteristics such as lifestyle change (e.g. Naylor & Kleiser 2002). Lifestyle is also classed as part of the psychographic definition by Kotler, Bowen and Makens (2003).

Despite usage segmentation being classed as a separate segmentation form by Summers et al. (2005), usage segmentation can be classed as part of behavioural segmentation as it shows similar characteristics to this type of segmentation. Usage segmentation classifies tourists based on whether they are light, medium, or heavy user groups and/or regular users of the product (e.g. Goldsmith & Litvin 1999; Goldsmith, Flynn & Bonn 1994). Usage segmentation is also classed under behavioural segmentation by Kotler, Bowen and Makens (2003).

For the classification of this thesis, the infrequently used forms of segmentation were grouped into the four main segmentation bases. Involvement and lifestyle segmentation were classified as psychographic segmentation whereas benefits and usage segmentation were treated as behavioural segmentation in the review of studies (refer to Section 2.3.8).

2.3.7 Singular versus combined segmentation approach

Tourism researchers have used one or a combination of the four segmentation bases described by Kotler (1980) to segment markets. Whilst some studies have used one form of segmentation (e.g. Bogari, Crowther & Marr 2004; Kim & Lee 2002; Scott & Parfitt 2004), several authors have concluded that a combined technique is superior (e.g. Cha, McCleary & Uysal 1995; Dodd & Bigotte 1997; Kolb 2006; Moscardo, Pearce & Morrison 2001; Murphy & Murphy 2004). A combined approach has dominated tourism research.

Segmentation based on a single base may not be representative of a diverse and heterogeneous group (Bowen 1998). For example, people in the same demographic groups can also have very different psychographic profiles (March & Woodside 2005). Loker and Perdue (1992) argue that combining descriptive variables (e.g. demographic and/or geographic segmentation) with predictive factors (e.g. psychographic and/or behavioural segmentation) provides a clearer insight into marketing and communication strategy formulation. Murphy and Murphy (2004) suggest that the limitations of behavioural segmentation in identifying tourists' motivations and age can be minimised by combining demographics and psychographics to profile tourists and target them effectively. Moscardo, Pearce and Morrison (2001) claim that the use of geographic variables such as usual residence provides important descriptors to use in the development of marketing strategies and should be used in combination with psychographic or behavioural segmentation.

A review of 119 tourism market segmentation studies indicates that there was a mixture of the usage of demographic, geographic, psychographic and behavioural bases to segment markets. These studies are detailed in Appendix I. A snapshot of these studies is summarised in Table 2.2.

Table 2.2: Snapshot of destination segmentation studies

Author/s	Destination/s	Tourist Sample	Segmentation Bases			
			Demographic	Geographic	Psychographic	Behavioural
Bogari, Crowther & Marr (2004)	2 cities (Saudi Arabia)	400			√	
Kim & Lee (2002)	6 national parks (South Korea)	838			√	
Hsu & Lee (2002)	State of Kansas (America)	817	√		√	
Jang & Wu (2006)	City of Taipei (Taiwan)	353	√		√	
Jang (2004)	Country (Canada)	249*	√			√
Jang et al. (2007)	Countries (Canada/America)	434*	√			√
Petrick & Sirakaya (2004)	Voyage (Caribbean)	792			√	√
Bigne & Andreu (2004)	City attractions (Spain)	400	√	√	√	
Hallab & Kim (2006)	State of Mississippi (America)	235	√	√	√	
McGuiggan & Foo (2004)	City of Sydney (Australia)	207	√	√	√	
Hyde (2006)	Country (New Zealand)	528	√	√		√
Clotley & Lennon (2003)	Country (Lithuania)	103	√		√	√
Furr & Bonn (2006)	City of Tampa (America)	906	√		√	√
Hu & Yu (2007)	Mid-west state (America)	199	√		√	√
Juwaheer (2007)	Country (Mauritius)	410	√		√	√
Mehmetoglu (2007)	2 nature-based attractions (Norway)	162	√		√	√
Williams & Dossa (2003)	Province (Canada)	261*	√		√	√
Beh & Bruyere (2007)	3 reserves (Kenya)	465	√	√	√	√
Bloom (2005)	City of Cape Town (South Africa)	694*	√	√	√	√
Hallab & Kim (2006)	State of Mississippi (America)	235	√	√	√	√
Hsu & Kang (2007)	Region of Hong Kong (China)	1303	√	√	√	√
Kozak (2002)	2 countries (Mallorca and Turkey)	1872	√	√	√	√
Laesser & Crouch (2006)	Country (Australia)	10066*	√	√	√	√
Park et al. (2002)	Town of Black Hawk (America)	523	√	√	√	√
Reece (2004)	State of South Carolina (America)	40612*	√	√	√	√
Swanson & Horridge (2006)	4 states (America)	398	√	√	√	√

Key: * Secondary data

Only a small proportion of the studies have utilised one base (2.5%) or two bases (8.4%) to segment a market. Psychographics were used as the sole base in three studies. Demographic, geographic and behavioural characteristics were not employed as a sole base of segmentation. Of the 10 studies that utilised two segmentation bases, demographics combined with psychographics was the most popular combination, being chosen in seven studies. Psychographics combined with behavioural characteristics were used in one study (Petrick & Sirakaya 2004) and demographics combined with behavioural characteristics were employed in the other two studies (Jang 2004; Jang et al. 2007).

Using at least three forms of segmentation was the most frequent option identified from the 119 studies (89.1%). The most popular combination was all four bases with just under a half of the 119 studies (47.9%). Three bases were also dominant (41.2%). The combination of demographics, psychographics and behavioural characteristics was a popular option being applied in just under a third of the reviewed studies (30.3%). The importance of demographics (96.6%), psychographics

(95%) and behavioural characteristics (84%) cannot be underestimated, with these bases being used in at least four of every five reviewed studies. Geographic variables (58.8%) were not utilised as frequently as a segmentation base. Geographic variables combined with demographic and either psychographic (7.6%) or behavioural variables (3.4%) were seldom identified, indicating that geographic variables are not used as frequently as a segmentation variable when compared with the other three bases.

2.3.8 Segmentation variables

To date, many segmentation variables have been used by academic researchers to build tourist profiles. The most frequently used variables for destination segmentation since 2002 are listed under the four major segmentation bases in Appendix I and are discussed below. Other variables were identified in the literature such as *values* (psychographic) (Chandler 2004; Chandler & Costello 2002; Reisinger & Turner 2002), *package type* (behavioural) (Kozak 2002; Seiler et al. 2002; Shoham, Schrage & van Eeden 2004), and *benefits sought* (behavioural) (Frochot 2005; Furr & Bonn 2006; Naylor & Kleiser 2002). Whilst these variables may have been relevant as a segmentation variable for these authors, they were used far less frequently (less than 15% of total studies) and were not included as segmentation variables in Appendix I. Only the 22 most frequently identified variables were listed³.

It can be concluded from this review of the 119 studies that there is no correct way to segment tourists at a destination. This confirms the views of authors such as Beane and Ennis (1987), Kotler (1980), and Kotler, Bowen and Makens (2003). Many different bases and subsequent variables have been used by academics. In describing the usage of variables, it was identified that demographics were utilised most frequently due to the frequency of this form of segmentation. Eight were prominent. In order of usage they were: *age* (84.9%), *gender* (76.5%), *education* (61.3%), *income* (60.5%), *travel party composition (TPC)* (49.6%), *marital status* (41.2%), *employment* (39.5%), and *household stage* (21%). The studies that used geographic variables all related to the tourists place of residence or area travelling to, and were grouped together as a region⁴ for this thesis. *Region* was used in just over half of the total studies (58.8%). This combined variables such as usual place of residence and country of origin to classify tourists travelling from or to different regions.

Six psychographic variables and seven behavioural variables were identified. It was noted that *activities* was used as both a psychographic (e.g. Lee & Sparks 2007; Mehmetoglu 2007; Swanson & Horridge 2006) and a behavioural (e.g. Carmichael & Smith 2004; Sarigollu & Huang 2005; Sung 2004) variable. An activity was also identified as one of several motivations to visit a destination (e.g. Bansal & Eiselt 2004; Jang & Cai 2002; Jang & Wu 2006). Due to the different usages of an activity, this variable was classed differently. If tourists were interested in an activity, it was treated as the psychographic variable, *activities sought*. If tourists had undertaken an

³ It should be noted that certain authors have used segmentation bases despite not having one of the most commonly identified variables in Appendix I. For example, Bansal and Eiselt (2004) used a behavioural segmentation variable (travel planning) but this is not listed in the Appendix.

⁴ This is based on the definition provided by Kotler (1980).

activity with varying levels of usage, it was treated as a behavioural variable, *activities undertaken*.

Motivations (42.9%), *experience*⁵ (37%), *trip purpose* (34.5%), *activities sought* (21.8%), *perceptions* (20.2%), and *satisfaction* (19.3%) were the most popular psychographic variables utilised. *Length of stay* (51.3%), *expenditure* (38.7%), *accommodation* (32.8%), *activities undertaken* (26.9%), *information sources* (23.5%), *mode of transportation* (22.7%), and *frequency* (20.2%) were the behavioural variables most frequently used by academics.

2.3.9 Visitor data

The general approach adopted in tourism segmentation studies is to develop tourist profiles for one destination using tourist questionnaire surveys. From reviewing the 119 studies in Appendix I, it was concluded that 86 studies (72.3%) undertook primary data research and utilised a questionnaire survey. The remaining 33 studies (27.7%) utilised secondary visitor data such as national tourism surveys in creating market segments (e.g. Jang 2004; Johns & Gyimothy 2002; Laesser & Crouch 2006; Lehto, O'Leary & Morrison 2004; Reece 2004).

Developing a questionnaire survey based solely on a review of the tourism marketing literature (e.g. Hu & Yu 2007; Jang & Wu 2006; Lo, Cheung & Law 2002; McGuiggan & Foo 2004; Mehmetoglu 2007) was the most popular option identified in the 57 primary data research studies⁶ that listed how they created their instrument (57.9%). Only 15 studies considered stakeholders in their questionnaire development. These studies are listed in Table 2.3.

⁵ This variable was created by the researcher for classification purposes. It combined many less frequent variables that related to a tourist's experience at a destination (e.g. past experience versus novelty).

⁶ 29 studies (all primary data) did not list how their questionnaire survey was developed.

Table 2.3: Use of stakeholders in questionnaire development

Author	Stakeholders							Other Methods			Number of Stakeholders considered
	Tourists	Funding Agency	Hotel Managers	Residents	Travel Agency Managers	Industry Experts	Attraction Employees	Literature Review	Guidebooks	Photographic Surveys	
Bigne & Andreu (2004)							√	√			1
Hsu, Kang & Wolfe (2002)		√						√			1
Hsu & Lee (2002)	√							√			1
Hudson & Ritchie (2002)				√							1
Juwaheer (2007)			√					√			1
Kang, Hsu & Wolfe, (2003)		√						√			1
Kim, Wei & Ruys (2003)					√	√		√			2
Laws, Scott & Parfitt (2002)	√										1
Lee, Yoon & Lee (2007)	√						√	√			2
Lee et al. (2006)	√					√		√			2
Lee & Zhao (2003)			√		√				√		2
McCleary, Weaver & Wong (2005)*	√							√			1
Obenour, Lengfelder & Groves (2005)	√					√		√	√	√	2
Poria, Reichel & Biran (2006)	√							√			1
Scott & Parfitt (2004)	√										1

Key: * Tourists were participants in a dance festival

It was noted that nearly three quarters of the studies that considered stakeholders also applied additional methods such as a literature review or guidebooks for the development of their questionnaire. This indicated that variables considered relevant by these stakeholders may have been modified based on a review of the literature, therefore, not reflecting a true stakeholder approach.

Of the three studies that considered only stakeholders, two of these (Laws, Scott & Parfitt 2002; Scott & Parfitt 2004) interviewed tourists who stayed at a hotel. This indicates that tourists who stayed in other types of accommodation at this destination were excluded from these studies. The other study, Hudson and Ritchie (2002), considered only residents. Whilst a resident is considered a primary stakeholder by Sautter and Leisen (1999), these authors emphasise managing the relationship between tourists and residents at a destination was of importance for tourism planning purposes. Residents were not considered a relevant stakeholder for marketing the destination.

None of the 15 studies that considered stakeholders when segmenting tourists involved more than two types of stakeholders. This is a limitation, as many primary stakeholders such as city officials, tourism officials and tourism attraction operators were identified in the tourism literature (see Table 2.1). Choosing just two indicates that only some of the primary tourism stakeholders are being considered. Therefore, preference has been given to certain types of stakeholders instead of considering all relevant tourism stakeholders at a destination within these studies. As these stakeholder types are crucial for the continual operation of a destination, their insights into market segmentation may be useful for marketing and management purposes as they have been identified as knowledgeable about tourism (e.g. Sautter & Leisen 1999; Sheehan & Ritchie 2005; Sheehan, Ritchie & Hudson 2007).

Additionally, whilst studies have asked tourists to complete a questionnaire as a basis to define market segments (e.g. Hsu & Kang 2007; Poria, Reichel & Biran 2006; Reisinger & Mavondo 2002; Sung 2004; Walker & Hinch 2006), these studies have aimed to segment tourists based on the destination rather than tourism operator level. As this study has found that tourism operators differ in how they segment their tourists at the same regional destination, this provides further justification for research to be conducted at the tourism operator level rather than the destination level as a first phase of research.

2.4 Theoretical framework

Prideaux and Cooper (2002) argue that whilst marketing is imperative for a destination's survival, the organisation of marketing in destinations is not well understood. From reviewing the literature, it has been identified that while stakeholder theory has been applied to a destination, less than 15 per cent of segmentation studies considered a stakeholder approach when developing a questionnaire survey of tourists. In addition, despite several primary stakeholders being identified in Section 2.2.1 based on a review of the tourism marketing literature, no more than two types of stakeholders were considered in these studies. Additionally, the studies did not consider the different types of organisations at a

destination within the one stakeholder category (e.g. the different types of accommodation providers).

Whilst numerous studies have evaluated visitor data, no studies have considered which variables multiple tourism stakeholders use to describe their markets. Furthermore, it was also unknown whether stakeholders at a tourism destination segment their tourists utilising similar methods. In this study, a *posteriori* segmentation approach is used to classify tourists based on their similarities, as variables relevant to the multiple tourism stakeholders are unknown. This approach enables the creation of segments by grouping tourists with similar variables of interest to the tourism stakeholders (Chandra & Menezes 2001). Accordingly, this research seeks to firstly identify how multiple tourism stakeholders at a destination segment their market. This will be answered through the first research question listed below.

RQ1: How do tourism stakeholders segment tourists at a destination?

A two-step approach is an approach to segmentation that considers two points of view. In this research a two-step approach would require consideration to be given to both 1) tourism stakeholders and 2) tourists. Until now, segmentation research has focused on tourism data with little stakeholder information. Typically researchers seek to profile a market using some segmentation variables. Unless the researcher has a complete understanding of each tourism stakeholder, some variables that may be important may well be overlooked. The variables generated in these studies are likely to be guided by the researchers' own experience and their review of the literature. Such endeavours may not accommodate the variation within a single regional tourism destination. For example, five star hotels at a destination attract certain types of tourists while backpacker hostels attract a completely different cohort.

A two-step approach involves giving consideration to a diverse group of stakeholders to ascertain all variables that may be needed to segment tourists for a tourism destination. This research design would require researchers to take a two-step approach. An outline of this research design is listed in Figure 2.1.

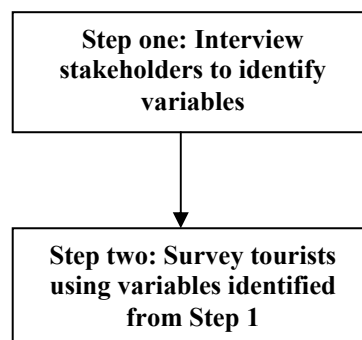


Figure 2.1: Two-step approach

Firstly, researchers would interview tourism stakeholders to understand which segmentation variables are used by stakeholders to describe the tourists that are currently attracted to the tourism destination. Tourist stakeholder views would enable the researcher to generate a comprehensive list of variables to be used in tourist surveys. The second step would involve surveying tourists to develop tourist segments.

Segmentation researchers have not considered a tourism stakeholder approach and to date a two-step research design employing a stakeholder and visitor perspective has not been used in tourism segmentation research. This leads to the second research question listed below.

RQ2: Does the two-step approach yield a more holistic view of tourists travelling to the destination than the current DMO segmentation approach?

This two-step approach may provide a more holistic view of tourists because it accommodates various stakeholders in a tourism destination rather than treating the destination as a single entity viewed through the eyes of one tourism stakeholder. The incorporation of multiple viewpoints should therefore provide a broader view of the tourists that are currently attracted to a destination than the current DMO segmentation approach. This approach is outlined in Chapter 3.

2.5 Conclusion

This chapter has reviewed the literature from the two parent theories of stakeholder theory and market segmentation. Stakeholder theory is relevant for destination marketing and management. It can be applied to identify how an organisation (DMO) can fulfil the needs of primary stakeholders to manage and market a destination effectively. Market segmentation is a useful management technique that enables tourism stakeholders to target the most appropriate customers without wasting unnecessary finances on unprofitable markets. It was identified that segmentation can be conducted either *a priori* or *posteriori* depending on whether information on the markets is already known or what the aims of management are. It was concluded that there is no correct way to segment a destination and that the four segmentation bases of demographic, geographic, psychographic and behavioural have been frequently used by tourism academics to profile tourists at a destination. Researchers have used several variables within each of these bases to classify tourists.

Whilst there are many studies that have segmented tourists at a destination based on visitor data, no studies have considered which variables multiple tourism stakeholders use to describe their markets. This research proposes a two-step approach to segmentation. It considers both tourism stakeholders and tourists. Tourism stakeholders are interviewed to understand which segmentation variables could be used to describe the tourists that are currently attracted to the tourist destination. Tourism stakeholder views enable the researcher to generate a comprehensive list of variables to be used in tourist surveys. The second step involves surveying tourists to gather data for analysis. This will then determine whether a two-step approach to segmentation is more beneficial to a destination than

the current market segmentation method. This thesis now moves to the methodology section which discusses how the research questions will be answered.

Chapter 3: Research methodology

3.1 Introduction

The aim of this chapter is to explain the research design used to answer the research questions proposed from the literature review. The research design reflects the philosophy of science held by the researcher and is determined by the type of research question (Neuman 1997; Nunnally & Bernstein 1994). All components of the methodology, including the research paradigm, choice of methodology and data collection methods, and the analysis, derive from the research questions.

This chapter will discuss the research design which utilises a two-step approach to segmentation. Section 3.2 discusses the realism paradigm, which is followed by the justification for the research methods in Section 3.3. Section 3.4 describes the qualitative method of a case study with semi-structured interviews which is the first stage of the two-step approach to segmentation. This is designed to answer the first research question. The development of the research design and case study protocol, selection of interviewees and the interview process are described, followed by the procedures used to analyse and validate the data. The limitations of case study research are also provided.

Section 3.5 explains the usage of a questionnaire survey. This is the method used for the second stage of the two-step segmentation approach, which is used to essentially answer the second research question. This section briefly discusses the findings from the case study which were used in the development of the questionnaire instrument. The usage of a self-administered questionnaire, user survey method and TwoStep® cluster analysis are also justified. The validity of the method and process taken to limit any related errors will also be described. The sampling issues of selection and sample size will be discussed along with the response rates. Section 3.6 discusses the ethical considerations of both methodologies. Section 3.7 ends with a summary of the chapter.

3.2 Justification of the research paradigm

The primary aim of this research is to identify market segments for a tourism destination using a two-step approach. It was concluded from the literature review that a multiple stakeholder perspective to market segmentation at a destination has not been used previously. Therefore, the choice of a research paradigm that supports theory development about how tourism stakeholders segment their tourists as an emergent field of enquiry is required.

A decision about the philosophical basis of the research has been made in assessing the appropriate paradigm or world view (Deshpande 1983). A plethora of

researchers⁷ have reviewed the philosophy of research design and have proposed four types of paradigms. These are positivism, critical theory, constructivism and realism (Denzin & Lincoln 1998; Easterby-Smith, Thorpe & Lowe 2002; Guba 1990; Guba & Lincoln 1994; Perry 1998; Perry, Riege & Brown 1998). Realism, also sometimes called post-positivism or critical realism, was chosen as the paradigm for this study. The realism position is that exploratory knowledge is sought (Easton 1998) of a real world that is independent of researchers, although there are many perceptions of it (Perry, Alizadeh & Riege 1997). For example, in marketing a destination, there is a real world in which different stakeholders use varying segmentation strategies to capitalise on the market potential of tourism.

The three elements of ontology (or the reality), the epistemology (or relationship between the researcher and the reality) and methodology (method of investigating that reality) are interrelated in the choice of a paradigm (Guba & Lincoln 1994). Realism takes the ontological position that an external reality is real and exists, but that our knowledge of it is imperfect, due to humans perceiving it with their imperfect intellectual mechanisms (Guba 1990). Epistemologically, a researcher of realism aims for objectivity in an objective world. However, these findings are not absolute truth (Easterby-Smith, Thorpe & Lowe 2002). Methodologically, realism generally uses more than one form of enquiry (Easterby-Smith, Thorpe & Lowe 2002). Easterby, Thorpe and Lowe (2002, p. 34) argue that ‘the assumed difficulty of gaining direct access to reality means that multiple perspectives will normally be adopted’. For example, a case study with semi-structured interviews followed by a questionnaire survey is a common approach (Easterby-Smith, Thorpe & Lowe 2002).

3.3 Justification of research methods

The decision to undertake qualitative or quantitative research is dependent upon the potential contribution of either method to solving the selected research problem (Yin 2003). A qualitative research method is one that focuses on the process of production rather than the product itself (Patton 1990). A quantitative research method emphasises developing knowledge with the intention of theory testing, employing inquiry techniques such as surveys, and collecting data using instruments that produce statistical data (Malhotra 2004).

This research employed both qualitative and quantitative methodologies to address the research questions listed in Chapter 2. Creswell (2003) and Easterby, Thorpe & Lowe (2002) argue that both semi-structured interviewing (qualitative method) and a questionnaire survey (quantitative method) can be used within the realism paradigm. Whilst Riley (1996, p. 22) argues that ‘the majority of tourism marketing research has relied on structured surveys and quantification’, De Crop (1999) argues that the subordinate and exploratory nature of qualitative research provides information for developing further quantitative research. Taking a combined approach also limits the personal and methodological biases and enriches the study’s generalisability (Decrop 1999).

⁷ For a review of the different paradigms refer to Denzin & Lincoln (1998); Easterby-Smith et al. (2002), Guba (1990a), Guba & Lincoln (1994), Perry, Riege & Brown (1998).

The first stage employed a qualitative methodology in the form of a case study with semi-structured interviews to explore how the tourism stakeholders segment their tourists (Carson et al. 2001; Eisenhardt 1989; Yin 2003). This was designed to answer the first research question. A quantitative methodology in the form of a questionnaire survey (Neuman 1997; Veal 2005) based on the findings from the semi-structured interviews was then utilised to profile tourists that frequent a destination. This was designed to answer the second research question. This combined use of methods represents the basis of the two-step approach to tourism destination segmentation. A similar procedure, though based only on tourist data, was used by Scott and Parfitt (2004). The authors used a case study to interview 70 tourists that stayed in two hotels in Tropical North Queensland, Australia. The semi-structured interviews with tourists were used to develop a structured questionnaire which was then used for subsequent research.

The overview of the two-step research approach is illustrated in Figure 3.1.

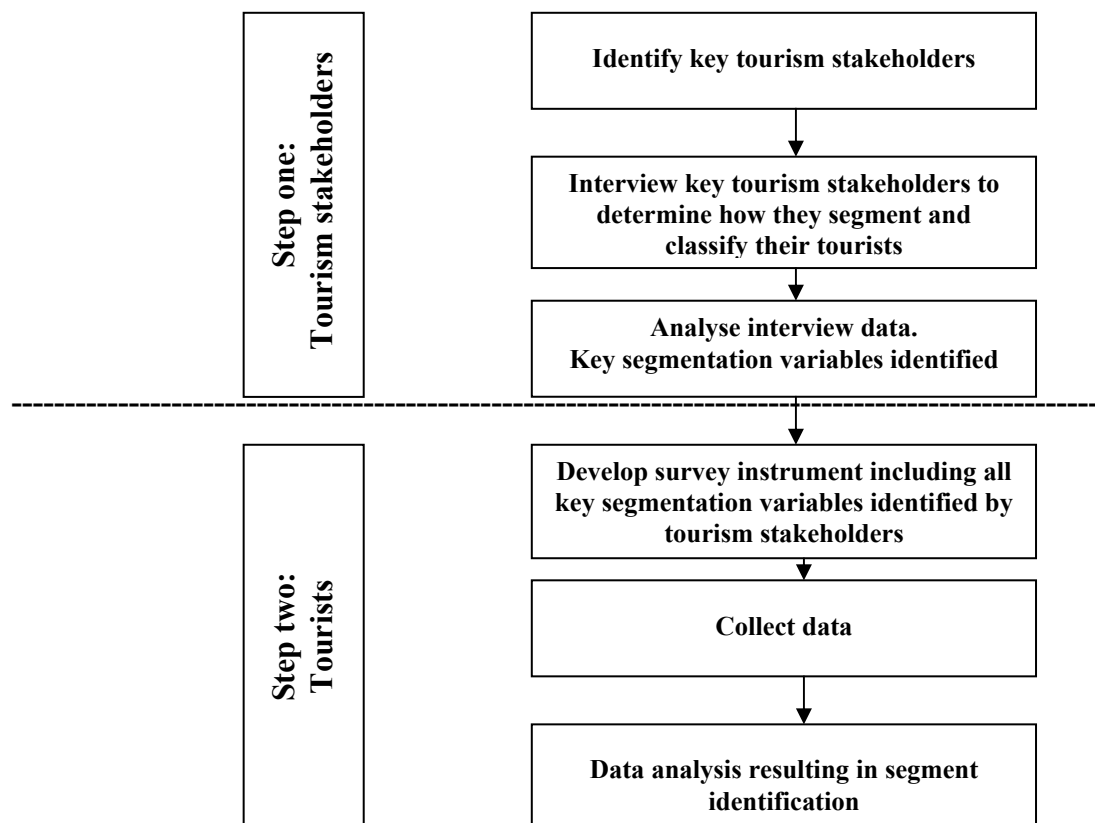


Figure 3.1: Two-step research approach

3.4 Step one: case study with semi-structured interviews

A case study method with semi-structured interviews was chosen to explore how tourism stakeholders currently segment their market. Advantages of a case study design are that in-depth data is collected and evidence is grounded in the social setting being studied (Jennings 2001). Case study researchers typically interact with people about their perceptions and experiences to gather rich, quality data and to explore deeper meanings (Merriam 1988; Patton 1990; Yin 2003). A common case study method is a semi-structured interview (Merriam 1988; Patton 1990; Yin 2003). In this study the exploratory nature of the first question guides the step one research design and the case study methodology (Patton 1990).

Yin (2003) expressed the view that case studies are the preferred methodology when ‘how’ or ‘why’ questions are proposed, when the investigator has little control over events (e.g. how tourists are segmented by tourism stakeholders), and when the focus is on a contemporary phenomenon within a real-life context (e.g. the recent usage of stakeholder theory for destination marketing and management purposes). Yin (2003) further argues that the case study methodology is the most appropriate recent method when the phenomenon of study is difficult to distinguish from its context, multiple sources of evidence are needed, and there is a need to define the topic broadly in the first instance (Yin 2003). This research satisfies these conditions.

A case study was required as the researcher wanted to cover contextual conditions. It is believed that determining how tourism stakeholders segment their tourists is highly pertinent to the phenomenon of study (Yin 2003). This phenomenon is also difficult to separate from the context. Multiple sources of evidence are also required as this research considers different types of stakeholders within a single destination. There is also little known about how different stakeholder segment their tourists, so this topic needs to be defined broadly.

3.4.1 Case research design and case selection

This research applies a single case study research design (Creswell 2003; Gummesson 1991; Hill & McGowan 1999; Lee 1999; Yin 2003). A single case study⁸ was chosen as it was deemed most appropriate to ensure that an in-depth understanding of market segmentation from a tourism stakeholder perspective at a destination was obtained (Lee 1999).

It was identified in Section 1.3.1 that the scope of a destination varies and studies have been conducted at various levels such as a region or a country. This research treated a destination as a region with varying tourism stakeholders. Due to the time and financial constraints imposed on doctoral research, this research was conducted at one destination. As this research is being conducted at a tourism destination which has multiple stakeholders, the choice of a single case study design was justified due

⁸ This research design reported in Section 3.4 has been published online in the journal *Tourism Management*. Details of the in press article titled ‘Segmentation: A tourism stakeholder view’ appear on page x of this thesis.

to this study being a typical case (Yin 2003); a tourism destination that has several tourism stakeholders.

Both Gummesson (1991) and Yin (2003) argue that it is not the number of cases (destinations) that is important, but saturation and the diminishing, marginal contribution of each individual case. As it was identified in Table 2.1 of Chapter 2 (literature review) that many different types of stakeholders such as city officials (local government organisations), competitors, DMOs, hotels, restaurants, tourism attraction operations, convention centres, and transportation companies may be targeting different tourist types, an analysis at one destination is sufficient as it provides a sufficient level of enquiry (Gummesson 1991). To aid in the comprehension of a single case design, certain primary tourism stakeholders (identified in Table 2.1) were selected (Gummesson 1991).

Maximum variation is also suggested (Perry 2001). In using a single case study, the process followed replication logic (Yin 2003). This means that one of each stakeholder type was chosen with the expectation of similar results, whereas different types of tourism stakeholders were chosen with an expectation of varying outcomes across the stakeholder types (Carson et al. 2001; Eisenhardt 1989; Yin 2003). Fourteen stakeholders were selected based on replication logic established within an Australian destination. These stakeholders represented the units of analysis (Yin 2003). Efforts were made to include participants from a wide cross section of the tourism stakeholders in the destination to maximise variation among stakeholders. Each of these organisations was considered a primary stakeholder as listed in Table 2.1. Interviews were conducted with the local government organisation, DMOs (regional and state), accommodation providers, and tour operators. The accommodation providers were a backpacker resort, caravan park, self-contained unit provider, and a low, a medium and a high star rating hotel. The tour operator stakeholders consisted of a whale watching operator, a fishing charter operator, an adventure tour operator, and a museum.

The Fraser Coast has many different tourism stakeholders that provide different components of what the destination has to offer. This level of heterogeneity was substantial with all of the tourism stakeholders offering different tourism services. Each of these stakeholders represented a primary stakeholder for the destination. Apart from the regional and state DMO and the two government officials, the other stakeholders were largely different. It was assumed that they had varying interests and catered to different tourists (the different types of tourists are described in section 4.3 of Chapter 4). For example, there were five different accommodation providers that provided different accommodation services. It can be assumed that tourists choosing a five star hotel over a backpacker resort are requiring greater levels of service. The four tour operators also offered different tourism activities or attractions.

The DMOs, the government official representatives and one of the larger tour operators have a large influence on the marketing of the destination. The regional DMO is responsible for marketing the destination, but these other organisations have funded marketing promotions for the destination. As will be discussed in Chapter 4, many of the stakeholders rely on the DMO for marketing the destination and have little influence on how it is marketed.

An embedded, single case design was chosen for this research as it was concluded that logical sub-units could be identified within the case (Yin 2003). From reviewing Table 2.1 in Chapter 2, several tourism stakeholders were identified as relevant for a tourism destination. It was briefly discussed above that 14 units of analysis (stakeholders) were considered for this first phase of the research. It was determined through initial contact with the potential organisations that only one interview could be granted with 12 of the 13 organisations due to their financial and human constraints in allocating time to the researcher. Consequently, the researcher sought to interview the employee responsible for managing and/or marketing tourism for their organisation. One stakeholder, who was the largest and had many departments dealing with tourism, granted a second interview for the research. This organisation also partially funded the doctoral research and requested a second interview. Despite two interviews being conducted at this one organisation, these representatives were both knowledgeable about Fraser Coast tourism and dealt with different areas of marketing tourism for the organisation. They were treated as separate in the analysis.

3.4.2 Semi-structured interviews

In line with the realism paradigm and case study research, a qualitative methodology in the form of semi-structured interviews was used to collect the data for step one of the research. To define the information required in the design of the interviews, a review of the literature was conducted to provide the impetus for the study (Yin 2003). Whilst this research sought to examine a stakeholder's perspective of market segmentation, it was necessary to determine which variables had been identified in the literature prior to conducting the interviews for potential prompts should the interviewees struggle in providing details of their market segmentation strategies. Therefore, a *posteriori* segmentation approach was used as the researcher did not seek to define segments from the outset, and did not want to limit interviewees to certain criteria (Calantone & Mazanec 1991; Sirakaya, Uysal & Yoshioka 2003). Additionally, reviewing the literature allowed the interviewer to identify whether variables identified as prevalent in the literature were also considered relevant by the interviewees. Consequently, the most frequently identified variables in the literature review (e.g. age, gender and motivations) were considered as potential prompts.

There are many advantages to using a semi-structured interview. Firstly, multiple realities can be determined because the semi-structured interview format does not constrain the interviewee to following the interviewer's *a priori* reasoning (Jennings 2001). Secondly, interview probes can be altered to follow the path the interviewee is focused on pursuing (Jennings 2001). Finally, follow up questions can be framed to further extend responses (Jennings 2001). A major limitation of using a semi-structured interview is that this method requires the interviewer to undertake training and to be confident to be fully effective in data gathering. Additionally, theoretical insight is often required for the interviewer to be able to probe for more detail on valuable ideas [segmentation methods] as an interview is conducted (Jordan & Gibson 2004). The interviewer had prior experience and was deemed to have the necessary skills to conduct the interviews.

The researcher developed a guide for the research, which included the case study protocol and rules and procedure for the conduct of the interviews (see Appendix II).

Three questions were proposed. The first two questions were introductory (questions A1 and A2). The final question aimed to answer the first research question, *how do tourism stakeholders segment tourists at a destination?* Thirteen variables were provided as a backup if the interviewees did not currently segment their tourists. These questions were based on the most popular variables identified in the literature (see Appendix I). Purchasing behaviour, despite not being listed within Appendix I, was proposed as the researcher wished to know what the tourists spent their money on. As it was acknowledged in the literature that demographics and psychographics do not predict future behaviour (e.g. Johns & Gyimothy 2002; Kolb 2006) and insights gained from tourism stakeholders, the researcher considered it necessary to collect additional expenditure behaviours. This was treated as separate from expenditure which dealt with how much tourists spend. An additional final question (B2) was used in many cases which asked the interviewees to list which segmentation variables identified in the literature they would use to segment their tourists. These variables needed to be listed in order of importance.

To improve the credibility and validity of the semi-structured interviews, a copy of the case study protocol was sent to several academics at the University of Southern Queensland (USQ) to examine the way the questions were asked and the design of the script. Some modifications to the questions and format were made and the final script for the case study protocol can be seen in Appendix II⁹.

To evaluate the usefulness of the case study protocol, it was decided to use the first interview to pilot test the case study protocol. Outcomes of the first interview suggested that further pilot interviews were not needed. Rather, the depth of information generated in the first interview adequately justified its inclusion with the other 13 interviews for analysis.

3.4.3 Semi-structured interview process

Members of the regional tourism board¹⁰ were considered as potential interviewees. Initial contact was made with the interviewees via telephone to determine if they qualified for the study. To qualify, a tourism stakeholder had to be actively catering to tourists and be a member of the regional tourism board. Once qualified, a letter was sent by mail confirming the interviewee's involvement in the study. Interviewees were asked to sign an informed consent form and an interview was arranged. This letter and consent form can be viewed in Appendix III and Appendix IV respectively. If there were more than one tourism organisation in a specific group (e.g. backpacker accommodation), the first listed on the tourism board's website¹¹ was chosen. If the organisation refused to take part in the interview, the second listing in the group was contacted. The interviewees who wished to participate were asked to be interviewed within their workplace to ensure a relaxed setting.

To establish rapport and neutrality, the researcher clarified a number of preliminary issues at the start of the interview (Carson et al. 2001). Confidentiality of responses

⁹ Several other questions were asked in the interviews to provide data for post-doctoral research. These are not reported in this study.

¹⁰ This is the Fraser Coast South Burnett Tourism Board. The destination is described in Section 3.4.7.

¹¹ This website URL is www.frasercoastholidays.info

was assured. Interviewees were also asked for their permission to have the interview recorded. A few opening questions *Tell me the story of your organisation. What services does it offer? How has it developed over time and what are your future plans?* were used to establish the context for which the research was conducted. Not all questions were designed ahead of time. Several questions were created during the interview based on the interviewee's responses to the pre-interview structured questions to allow the interviewer the flexibility to probe for details or discuss issues (Gaskell 2000). A single 60-minute audio cassette tape was used for each interview. This was used to impose a time limit on the interview.

As mentioned in Section 3.4.1, one interview was conducted at 12 of the 13 stakeholders. Stakeholder C, which was a larger organisation and not as constrained with regard to human resources, allowed interviews to take place with two employees from its organisation. All interviewees gave permission for their interview to be recorded after confidentiality of responses was assured. Interviews averaged 40 minutes and were recorded and transcribed for analysis.

3.4.4 Semi-structured interview data analysis

An analytical strategy was created before the research commenced to ensure that theory could be built (Eisenhardt 1989). This included data reduction, data display, and data analysis. Data reduction involved selecting, focusing, simplifying and transforming the raw data, while data display was achieved through the assembly and synthesis of data to draw conclusions about the research issue (Miles & Huberman 1994). Prior to the analysis, responses from each interview were transcribed into a Microsoft Word document within 24 hours of completion after being carefully listened to by the researcher.

To reduce the data, information that did not relate to how a tourism stakeholder segments its tourists was not included in the final analysis. This enabled the researcher to make sense of the field data (Lincoln & Guba 1985). To classify data, the researcher manually went through the transcripts and highlighted or wrote notes that helped to answer the first research question. An example from a transcript of an interview is provided in Appendix V. It was decided not to use a computer package, due to the potential for the researcher to be weighed down by the myriad of tools and to, in turn, lose the ability for creative insights (Riege 1997).

To effectively display the data, the responses to each question were categorised by the researcher in an Excel document once the data had been reduced (Han & Munro 1999; Wojciechowski & Cichowski 2007). As it was acknowledged that 13 backup questions were provided for each of the interviews as a prompt, there were 16 sections that each interviewee could answer. These 16 sections included the backup questions and three questions designed prior to the interview. A process of data indexing was adopted so that each unit of analysis was allocated an alphabetical label for reporting in this thesis to preserve confidentiality. A deliberate attempt was made to show no anticipated order of tourism stakeholders on their bases of operation. Moreover, to avert concerns about identifying interviewees within these stakeholders, this system did not identify the nature of the organisations.

A comparison of stakeholder findings was employed to explore the data and explain the findings (Miles & Huberman 1994). Through using the process of pattern matching, the researcher highlighted key findings of the research and aimed to identify if there were similarities between the stakeholders (Eisenhardt 1989). Patterns identified were also compared with segmentation methods identified in the literature. Tables in the form of a matrix were used to provide a visual display of results for each stakeholder on the range of findings (Miles & Huberman 1994). For example, in discussing how tourism stakeholders segment their market, a tick was placed next to an option that was identified by an interviewee. If this was considered important by the interviewee¹², an asterisk was also placed in the table. The benefit of pattern building is that theory could be built from the broad research question.

3.4.5 Criteria for quality of case study design

Ensuring reliability and validity improved the usability of this research. The four constructs of reliability, construct validity, internal validity, external validity (Yin 2003) were used to improve the quality of the case study researched. *Reliability* was achieved through the execution of the case study protocol and the establishment of the Microsoft Excel spreadsheet (Eisenhardt 1989; Parkhe 1993).

Construct validity was enhanced through firstly establishing a chain of evidence, and secondly having key informants review the draft report (Yin 2003). This chain of evidence has been provided through the development of the case study protocol (Yin 2003). Most importantly, this provided the structured process for recording, transcribing and interpreting the data (Lincoln & Guba 1985). Several tourism stakeholders that participated in the study reviewed the draft report findings and were satisfied with the findings (Yin 2003).

Internal validity was achieved through the type of research question, stakeholder selection, and data analysis. The 'how' question ensured that the research is ontologically appropriate (Healy & Perry 2000). The choice of the tourism stakeholders improved the validity of this research by selecting different types of organisations that represented the primary stakeholders at the destination. The credibility of the research was improved through using pattern matching which compared the results between the different stakeholders in their approach to market segmentation (Yin 2003).

External validity was ensured by having the researcher identify the gaps in the literature. This ensured that the initial review was comprehensive and rigorous (Perry 2001; Yin 2003). A detailed description of how the destination is currently segmented by the state tourism authority (DMO) was also reviewed. This process enabled the researcher to confirm or disconfirm theory and make analytical generalisability as a result of the research (Perry 2001; Yin 2003). Comparing stakeholder responses, the application of a case study protocol, and the use of procedures for coding and analysis also ensured validity (Lincoln & Guba 1985; Miles & Huberman 1994).

¹² This consideration was determined during the interviews. More detail is listed in Chapter 4.

3.4.6 Limitations of case study research

There are a number of limitations in qualitative case study methodologies. The first is that case study research leads to overly complex theories possibly resulting in narrow idiosyncratic theories (Eisenhardt 1989; Parkhe 1993). Complexity was minimised by using prior theory and specific research questions to address issues within a theoretical framework. It was also noted that the aim of this stage was to understand how tourism stakeholders segment their market. It is also important to note that this research did not seek to develop theory on the research manner (Parkhe 1993).

Further criticism relates to the external validity of the case study method. Many critics claim that a case study cannot be generalised past the current study (Jennings 2001; Yin 2003). However, while the use of multiple case studies can improve the validity of the case study (Yin 2003), the study of multiple destinations was not possible given the time constraints imposed on this doctoral research. Replication in other tourism destinations is called for (see Chapter 7).

3.4.7 The destination

A regional tourism destination in Queensland, Australia, was chosen for this study. As Queensland's third largest export earner, tourism contributes significantly to the economic well being of the state (Tourism Queensland 2007b). Tourism Queensland figures reveal that international visitors spent more than \$3.7 billion across all of Queensland in 2006 with a substantial 11.1 per cent increase in the average spent per international visit from the previous year (Tourism Queensland 2007a).

The Fraser Coast was selected for this study because it is typical of a destination in regard to its tourism stakeholders. Each of the primary tourism stakeholders listed in Table 2.1 are represented on the Fraser Coast (e.g. DMOs, local government officials, hotels, tourism attraction operators). The Fraser Coast was also chosen as it was the best performing region in Queensland in terms of percentage growth¹³ with international visitor spending increasing by 30 per cent to \$68 million in 2006 (Fraser Coast South Burnett Regional Tourism Board 2007). The Fraser Coast currently receives approximately 195,000 international visitors annually, which represents 16 per cent of all visitors to this region (Tourism Queensland 2007b). The total number of visitors for the year ended June 2006 was 1,257,000 with over five million nights spent by visitors in the region. The Fraser Coast is located approximately 300 kilometres or a 45 minute flight north of Brisbane and roughly 1200 kilometres or 90 minute flight north of Sydney.

While segments were clearly evident for the domestic (Australian) market, less detail was published on the international market. According to the DMO, international visitors are likely to come from the United Kingdom (UK), Germany, the United States of America (USA), New Zealand (NZ) and Europe. International tourists were

¹³ Brisbane outperformed the Fraser Coast region overall in 2006.

either self drive tourists or backpackers seeking to fulfil an inner drive to challenge themselves (Tourism Queensland 2007b).

Table 3.1 lists the target markets that were identified by the DMO for the domestic (Australian) market (Tourism Queensland 2007b). These segments were identified through a combination of tourism research and market intelligence by Tourism Queensland in coordination with Tourism Australia¹⁴. According to the DMO, these five segments represent the core consumers who have the most potential to convert into visitors to the Fraser Coast. Consequently, they are the most likely to provide a positive return on investment in marketing activities (Tourism Queensland 2007b).

Queensland preferrers are those leisure travellers (holiday and visiting friends and relatives (VFR)) who state they would like to visit Queensland for at least one night for a holiday in the next two years. Fraser Coast preferrers are those leisure travellers (holiday and VFR) who state they would like to visit Fraser Coast for at least one night for a holiday in the next two years (Tourism Queensland 2007b).

¹⁴ These segments were based on the findings of the NVS survey designed by Tourism Australia. Further details of this survey are listed in Section 5.3 in Chapter 5.

Table 3.1: Destination marketing organisation segments

Segment			Characteristics					Size of segment	
Segment Number	Lifestage	Source Market	Age	Household Income	Travel Party	Transport	Type Of Trip	QLD preferrers	Fraser Coast preferrers
1	45 years plus*	Brisbane	45+	Over \$60K	Couples, some family and friends groups	Car, fly	Short break or 1-2 weeks	409,000 (19% of intrastate QLD preferrers)	113,000 (20% of intrastate Fraser Coast preferrers)
2	Young Parents*	Brisbane	25-45	Over \$60K	Family	Car, fly	Short break or 1-2 weeks	272,000 (13% of intrastate QLD preferrers)	83,000 (15% of intrastate preferrers)
3	45 years plus#	Regional QLD (excl. Brisbane)	45+	Up to \$60K	Couples, some family and friends groups	Car, fly	Short break or 1-2 weeks	490,000 (23% of intrastate QLD preferrers)	107,000 (19% of intrastate Fraser Coast preferrers)
4	Young Parents#	Regional QLD (excl. Brisbane)	20-45	Up to \$70K	Family	Car	Short break or 1 week	366,000 (17% of intrastate QLD preferrers)	115,000 (20% of intrastate Fraser Coast preferrers)
5	Young Parents and Midlife Households#	Sydney	25-64	Over \$60K	Couples and family, some friends and groups	Car, fly/drive	Short break or 1-3 weeks	847,000 (15% of interstate QLD preferrers)	111,000 (17% of interstate Fraser Coast preferrers)

Key: * primary market, # secondary market

Source: Tourism Queensland (2007b)

According to the DMO's marketing plan, the primary domestic target market for the destination is couples (families to a lesser extent) aged 45 and over from Brisbane with a household income of \$60,000 or more per annum. These segments travel to the Fraser Coast for a short break, often touring by car which allows them to discover things at their own pace. VFR, rest and relaxation, social activities, escaping the grind, and sightseeing are of interest to these segments. The secondary domestic target market identified by the DMO is young couples and mid-life households, 25-64 years, residing in Sydney with a household income exceeding \$60,000 per annum. These segments take short breaks consisting of outdoor pursuits. Rest and relaxation, VFR, social activities, swimming or surfing are of interest to this segment. The DMO has identified a segment that is aged 25-54 years from Brisbane and South East Queensland who travel for whale watching. No further description is provided for this segment. Additionally, this segment is not listed as either a primary or secondary segment in their marketing plan (Tourism Queensland 2007b).

The DMO also lists two international markets that are believed to have the most potential to convert into visitors to the Fraser Coast in the short to medium term (Tourism Queensland 2007b). No research has been conducted by the DMO, and these markets are based on information from Tourism Australia, the national tourism organisation. The first segment is classed as the international drive market (size is estimated at 360,000 for all of Queensland). This segment travels to fulfil an inner drive to challenge themselves. This reward is intensely personal (Tourism Queensland 2007b). This group travels from the UK, Germany, USA, Europe and NZ. The international drive market segment is considered the best opportunity for international visitation to the Fraser Coast, in conjunction with other Queensland destinations. The second international market is the youth and backpacker market (size is estimated at 320,000 for all of Queensland) which travels for the same reasons as the international drive market. This segment travels from the UK, Germany, USA and Europe. The youth and backpacker market is considered secondary to the drive market (Tourism Queensland 2007b).

The DMO and state tourism organisation, in partnership with other local tourism stakeholders, undertake marketing activities for the Fraser Coast (Tourism Queensland 2007b). Limited funds are available and funds have to be allocated carefully. The major marketing initiative for the destination is the annual Whale Watch campaign. In 2006, this included television, press and online activity in the Brisbane/South East Queensland market from July until the middle of October. An eight-page brochure was produced with 120,000 copies distributed during this period through the Sunday Mail into Brisbane and the Sunshine Coast (both located in South East Queensland) and Toowoomba (located in the Darling Downs). An additional 120,000 copies were placed in Visitor Information Centres and RACQ (a Queensland car insurance organisation) branches within these locations. The Fraser Coast is also promoted to the drive market through a year-round regional billboard campaign. These are placed on key routes to the region such as the Bruce Highway (Tourism Queensland 2007b).

One-off campaigns have also been used to target both intrastate and interstate tourists. For example, a \$400,000 five week integrated 'nothing compares to nature' campaign was run in Sydney following the introduction of direct flights from Sydney

to Hervey Bay (the major airport in the Fraser Coast) in July 2005. This campaign employed television, print, and online media to target domestic tourists.

On an international level, the Fraser Coast participates in several marketing initiatives. This includes the Journalists Program for international journalists which showcase the region's main features to self-drive tourists. These are Fraser Island, whales, beaches, Hervey Bay and nature (Tourism Queensland 2007b). The Fraser Coast is also part of other state-wide marketing promotions such as 'Brand Queensland'. Additionally, Fraser Coast tourism products are currently featured in brochures distributed in Austria, France, Germany, Italy, Japan, Netherlands, NZ, Scandinavia, Singapore, South Africa, Switzerland, UK, USA and Canada (Tourism Queensland 2007b).

3.5 Step two: questionnaire survey

A questionnaire survey was utilised to complete the second step of this research. Questionnaire surveys are appropriate for the realism paradigm (Creswell 2003; Easterby-Smith, Thorpe & Lowe 2002) and are probably the most commonly used technique in tourism research (Veal 2005). This was confirmed in the literature review, with every one of the 119 destination segmentation studies summarised in Appendix I using either a questionnaire survey or data from previous studies using a questionnaire survey. A questionnaire survey is popular for many reasons. It is relatively easy for tourists to understand, can produce a large amount of data in a short time, and the results can be used for statistical analysis (Veal 2005). Questionnaire based surveys are also best used when information regarding an individuals' own account of their behaviour and/or attitudes is required (Neuman 1997; Veal 2005). A limitation of this method is that the format of questions included in the questionnaire survey (e.g. wording and structure) can often influence a tourist's responses (Veal 2005). The development of the questionnaire will be discussed in Section 3.5.2.

Veal (2005) argues that there are six types of questionnaire surveys used in tourism research. The first is the *household survey* where people are selected based on where they live and are interviewed in their home (Bieger & Laesser 2002; Bloom 2004; Carmichael & Smith 2004). A *street survey* is where people are intercepted in places such as the street or shopping malls (Hsu, Kang & Lam 2006; Hyde 2006; Pike 2002). The *telephone survey* is where interviews are conducted over the phone (Fleischer & Pizam 2002; Hsu & Lee 2002; Walker & Hinch 2006). A *mail survey* has questionnaires sent and returned by mail (Horneman et al. 2002; Kang, Hsu & Wolfe 2003; Lau & McKercher 2004). A *user survey* is where tourists are surveyed on-site such as indoor or outdoor recreation facilities, or on modes of transport (Frochot 2005; Hsu & Kang 2007; Sarigollu & Huang 2005). Finally, a *captive group survey* is where members of groups such as students at a university are surveyed (Jang & Wu 2006; Kim, Noh & Jogaratnam 2006; Kim, Jogaratnam & Noh 2006).

3.5.1 Justification of the user survey

A user survey was chosen as the method to collect the data for several reasons. Firstly, this method has been widely used by tourism researchers (e.g. Bansal & Eiselt 2004; Bonn, Joseph & Dai 2005; Furr & Bonn 2006; McCleary, Weaver & Meng 2005; Naylor & Kleiser 2002) and is the most common type of survey used by managers in tourism (Veal 2005). Secondly, through collecting questionnaires at a variety of places such as accommodation and transport locations, this research will ensure that a good spread of tourists with potentially different characteristics, such as income and travel preferences, will be surveyed (Veal 2005). Thirdly, collecting surveys on-site whilst the tourists are at the destination is the most convenient way of collecting data. Due to time and the financial constraints for this doctoral research, the user surveys permitted the researcher to collect a large enough sample size for subsequent analysis (Veal 2005). Fourthly, this method permits the researcher to observe and interact with tourists at the destination, which improves the ability to judge solutions after analysis (Veal 2005).

The user survey has many advantages over the other methods. Firstly, a telephone interview, unlike the user survey, cannot show interviewees lists which are particularly relevant to tourism surveys. Telephone interviews can only gather limited amounts of information (Neuman 1997; Veal 2005). A household survey was not chosen as this research aimed to profile tourists to a destination from a variety of regions. Household surveys involve the researcher having to focus on a specific geographic region/s which may cause bias of the results (Aaker, Kumar & Day 2003; Veal 2005). The mail survey was not chosen because of the problem of low responses rates. It is common in tourism research that fewer than 30 per cent of respondents choose to reply (Aaker, Kumar & Day 2003; Veal 2005). For the user survey, respondents needed to complete the questionnaire survey prior to leaving the destination. This usually results in higher response rates.

A street survey was not chosen as these surveys need to be completed very quickly and are the shortest of all surveys (Veal 2005). As this research seeks to classify tourists into segments based on a stakeholder approach, a greater depth of information was required which a user survey could provide. Finally, a user survey was chosen over a captive group survey as this research aimed to gather individual tourists' characteristics, rather than a group of tourists with similar characteristics such as an education class or type of employee (Veal 2005).

There are disadvantages of the use of a user survey over other forms of surveys. The first disadvantage is that it can be intrusive to the tourist. Tourists may feel violated by having to complete a questionnaire survey (Veal 2005). However, this limitation can be overcome by allowing tourists the opportunity to decline to participate. User surveys also have a cost disadvantage in that a researcher often needs to be present to administer the questionnaires to potential tourists. This may take considerable time on the behalf of the researcher (Aaker, Kumar & Day 2003; Veal 2005). Whilst the researcher did spend substantial time collecting surveys, the advantages of the user survey outlined above clearly outweighed this time limitation.

3.5.2 Questionnaire development

Once the results for step one of this research were confirmed¹⁵, a questionnaire survey (see Appendix VII) was developed to enable data to be collected for each of the variables identified by the tourism stakeholders. These variables were *age, gender, travel party composition (TPC), income, origin, trip purpose, motivations, activities sought, nights, expenditure* and *purchasing behaviour*.

Some modifications were made from the semi-structured interviews. This resulted in a total of 13 variables being included in the questionnaire. Purchasing behaviour and expenditure were combined to form three expenditure variables: *activities expenditure, food and beverages expenditure, and accommodation expenditure*. The modification was needed as the tourism stakeholders knew that the tourists spent their money most frequently on these items, but did not know the amount. These variables represent different aspects of tourists' expenditure¹⁶ at the destination and it was decided to treat them as separate questions rather than provide an overall expenditure for marketing and management purposes. Examining different components of a tourist's expenditure has been prominent in the literature (e.g. Hong et al. 2005; Lehto, O'Leary & Morrison 2004; Wilson & Thilmany 2006). This process could determine whether there were differences between the segments on what they spent and how much they spent whilst at the destination.

Motivations was considered a relevant segmentation variable by the tourism stakeholders. Upon analysis, the researcher determined that these motivations were mostly activities sought and/or a trip purpose previously identified in the interviews. Additionally, the latest Fraser Coast visitor survey (Synovate 2006) commissioned by Tourism Queensland treated motivations in a similar manner. As motivations have been frequently identified in the tourism marketing literature (e.g. Baloglu & Uysal 1996; Cha, McCleary & Uysal 1995; Kim & Lee 2002) as separate from an activity and/or trip purpose, and have also been used in past travel surveys at the destination by the state tourism organisation (DMO), popular motivations based on both these sources were included in the questionnaire.

Both *push* and *pull motivations* were chosen as they represent different aspects of a tourist's motivation (Christensen 1983; Crompton 1979; Dann 1981; Uysal & Hagan 1993; Yuan & McDonald 1990)¹⁷. While Bansal and Eiselt (2004) considered only push motivations (reason to travel) and Stoeckl, Greiner and Mayocchi (2006) examined just pull motivations (reason to choose the destination), the majority of studies (e.g. Bogari, Crowther & Marr 2004; Jang & Wu 2006; Kim & Lee 2002) considered both. As tourist motivation is considered multidimensional (e.g. Bieger & Laesser 2002; Dolnicar 2004b; Sirakaya, Uysal & Yoshioka 2003), several push and pull motivations were considered based on a review of the literature and past visitor surveys. Briefly, *to go sightseeing* was frequently identified as a push motivation (e.g. Chandler & Costello 2002; Jang & Wu 2006; Mehmetoglu 2007; Reisinger & Mavondo 2002; Williams & Dossa 2003), whereas *the weather* was commonly used as a pull motivation (e.g. Dolnicar & Leisch 2003; Hudson & Ritchie 2002; Kozak

¹⁵ These findings can be viewed in detail in Chapter 4.

¹⁶ These categories can be identified in Chapter 4.

¹⁷ For a review of push and pull motivations, refer to these studies.

2002; Lau & McKercher 2004; Prebensen 2005). Eleven push motivations and 12 pull motivations were measured.

Thirty-nine questions were used for this questionnaire¹⁸. Multiple questions were asked for three of the variables. Thirty-seven of these questions were pre-coded. A pre-coded question is one where the respondent is offered a range of answers to choose from and is asked to tick boxes relating to the question (Malhotra 2004; Veal 2005). An advantage of this method is that these questions are often used when asking respondents about quantified information, such as age, income, and expenditure (Veal 2005). Pre-coding can save the respondent embarrassment of having to disclose precise figures such as household income (Veal 2005). Response rates to questions can also be higher and more convenient as people are inclined not to write out free-form answers (Veal 2005). Two questions (origin and nights) were presented as open questions.

The variables of age, gender, TPC, income, trip purpose, accommodation expenditure, activities expenditure, and food and beverages expenditure were designed as categorical variables. As will be confirmed in the next chapter, the tourism stakeholders classified tourists most frequently into categories based on these variables. It was also identified in the review of the 119 destination segmentation studies that over 60 per cent of the researchers have used categories for age, gender, TPC, income, and trip purpose.

Age category levels are used consistently in the tourism segmentation studies. For example, several authors (e.g. Andreu et al. 2005; Laesser, Crouch & Beritelli 2006; MacKay, Andereck & Vogt 2002) had categories for tourists aged under 18, whereas others (e.g. Hsu & Lee 2002; Kim, Wei & Ruys 2003; Reece 2004) exclude tourists younger than 50 as they were focusing on senior tourists. It was also noted that the number of categories varied between two (e.g. Molera & Albaladeo 2007; Reisinger & Turner 2002; Swanson & Horridge 2006) and eleven (e.g. Brey et al. 2007; Laesser, Crouch & Beritelli 2006). Six categories were chosen in this study to capture all tourists aged 18 or over. This number has been used previously (e.g. Hsu, Kang & Wolfe 2002; Johns & Gyimothy 2002; Yoo, McKercher & Mena 2004), and would cover the different age groups identified in the semi-structured interviews.

In categorising gender, respondents needed to indicate whether they were male or female. This process is unanimous in the tourism marketing literature.

TPC was categorised into five groups. Despite several studies (e.g. Bansal & Eiselt 2004; Dolnicar & Laesser 2007; Hu & Morrison 2002) categorising tourists based on the number in the travel party, tourists were classified on whether they were travelling alone, in a couple, with family, or with friends. This was selected to permit comparison with the current Destination Management Plan (see Section 3.4.7). Further, categories have been used previously in the literature (e.g. Becken, Simmons & Frampton 2003; Jang, Morrison & O'Leary 2004; Sung 2004), and group types were listed in the interviews. The *other* category was chosen for tourists that did not fit into one of the other four categories. This option has been found in the literature (e.g. Andriotis, Agiomirgianakis & Mihotis 2007; Johns & Gyimothy 2002; Park et

¹⁸ A few additional questions were listed in the questionnaire to provide data for post-doctoral research. These are not reported in this study.

al. 2002), and it was identified from initial research that many types of travel groups travel to the destination.

Despite currency differences, considerable differences in income categories were evident in the studies reviewed. The majority of studies had a lowest possible category (e.g. less than \$US15000) and a highest possible category (e.g. \$US75000 and above). Six categories were chosen with a lower and an upper category level. This number is frequently chosen in the literature (e.g. Bonn, Joseph & Dai 2005; Kang, Hsu & Wolfe 2003; Pike 2002), and it was deemed that six categories would cover the income levels identified in the first phase of research.

Similarly to the literature (e.g. Hsu & Kang 2007; Jang, Morrison & O'Leary 2002; Kang, Hsu & Wolfe 2003), the researcher aimed to identify a tourist's main trip purpose. Two of the most popular trip purpose options from the semi-structured interviews¹⁹ were considered in the questionnaire development. No activities or motivations listed by tourism stakeholders for this variable were listed to avoid confusion for respondents. Despite business being identified as the second most popular trip purpose by tourism stakeholders²⁰, this category was not utilised by the researcher, as this research excluded tourists who were at the destination for work purposes (see Section 3.5.4).

Despite the majority of studies (64.7%) applying continuous data for trip expenditure, the three expenditure variables (accommodation expenditure, activities expenditure, and food and beverages expenditure) in this study were designed as categorical. These three options were chosen as three expenditure categories emerged from interviews with tourism stakeholders. Despite food and beverages being considered as separate options by some stakeholders, these were combined into one variable as they represent a similar expenditure. It was also determined that three tourism stakeholders considered these items the same²¹. As the tourism stakeholders were unaware of how much tourists spent when at the destination²², categorising tourists based on their differing level of expenditure could provide insight into the tourists spending patterns of certain segments. It was noted in the literature that expenditure levels can vary considerably. For example, Becken, Simmons and Frampton (2003) had categories that ranged from less than \$NZ99 to over \$NZ1000. This can determine if a higher percentage of tourists spend a certain amount at the destination.

In the literature, expenditure studies often had a lowest and highest possible expenditure. For example, Fuller and Matzler (2008) had a category for under \$500 for the trip [lowest category] and \$2000 and above for the trip [highest category]. The number of categories varied from three (e.g. McCleary, Weaver & Meng 2005; Molera & Albaladeo 2007; Sung 2004) to six (e.g. Moscardo 2004). Five categories were chosen as this was deemed to be consistent with the literature (e.g. Yoo, McKercher & Mena 2004). Similarly, with reference to the literature (e.g. Diaz-Perez, Bethencourt-Cejas & Alvarez-Gonzalez 2005; MacKay, Andereck & Vogt 2002; McCleary, Weaver & Meng 2005), daily expenditure was chosen to identify

¹⁹ The trip purpose of to visit friends and relatives was split into two. This is detailed in Section 3.5.5.

²⁰ Refer to the findings on trip purpose in Chapter 4.

²¹ These findings can be viewed in detail in Chapter 4.

²² Refer to the findings on expenditure in Chapter 4.

the three expenditure variables. The same five categories were chosen for each expenditure variable for the following reason. Firstly, keeping expenditure levels similar will lessen confusion for respondents. Secondly, as it was determined from the semi-structured interviews²³ and research on the destination (published promotional material) that tourists have the potential of spending nothing on the options or over \$200 per day on accommodation (e.g. five star resort), activities (e.g. whale watching), and food and beverages (e.g. buffet dinners) per person, each category comprised a range of \$50 to gather the levels of daily expenditure on these three items.

For origin, respondents needed to list where they had come from (country if international, town or postcode if domestic). Origin was treated as a categorical variable once the places of origin were identified. This process has been used in the literature (e.g. Hong et al. 2005; Onyx & Leonard 2005; Park et al. 2002). The international destinations were categorised as *North America*, *Europe*, and *Asia Pacific*. The domestic locations were grouped as *Queensland (QLD)*, *New South Wales (NSW)*, *Victoria (VIC)* and *Australia* (not specified). This final option was for people in other Australian states or that did not list which state they come from.

Six activities were identified from the semi-structured interviews which were developed for the questionnaire survey. Push and pull motivations were deemed relevant by stakeholders, yet they often classed activities and trip purpose as these type of motivations. To identify relevant motivations, 11 push and 12 pull motivations that were identified frequently in the literature and that had been used in past motivation studies were included in the questionnaire.

The individual activities sought, push motivations and pull motivations were each designed in a dichotomous 'yes' or 'no' format. This format has been used for activities (e.g. Dolnicar 2004a; Lee et al. 2006; Morrison et al. 2003) and motivations (e.g. Dolnicar 2004b; Kim, Wei & Ruys 2003) in the literature. If respondents did not answer the question, it was treated as no (Dolnicar 2004a, 2004b).

For data analysis, the total number of activities sought, push motivations and pull motivations were chosen as the unit of analysis. For this to be achieved, each activity sought, push motivation and pull motivation specified by respondents was added together to create a total for each of these three variables. The variables were converted into continuous variables for data analysis to ensure that each of the 13 variables was treated equally in the analysis. Having too many variables of one kind may distort the research findings by placing an emphasis on one tourist characteristic (Hair et al. 2006). For example, almost 60 per cent of the variables relate to motivation, and examining all these variables separately would bias the construct of the defined segments, therefore limiting the importance of the other variables (Hair et al. 2006).

Nights had the respondent listing in one word or number how many nights they had stayed at the destination or how many nights they planned to stay.

²³ Refer to the findings on activities in Chapter 4.

As an additional measure, respondents were provided with an option to list alternative trip purposes, push motivations, pull motivations and activities sought that may not have been listed in the questionnaire survey. This procedure has been used in the literature (e.g. Bieger & Laesser 2002; Hsu & Kang 2007; McKercher & Chan 2005). Despite tourists being screened for their applicability to the research prior to commencing the survey, 28 tourists (3.3%) listed their trip purpose as work related. As this was a substantial figure, *for business purposes* was created as a fourth trip purpose after data collection. The frequency for other trip purposes, activities sought or motivations was insignificant (less than one percent) and was not listed in Chapter 5.

3.5.3 Self-administered questionnaire

A self-administered questionnaire survey method was chosen as the research method for several reasons. Firstly, this was the most frequently used survey method (52.9%) in the review of 119 destination market segmentation studies (see Appendix I). Secondly, this method has a high level of accuracy and speed and limited cost (Malhotra 2004). Thirdly, a self-administered questionnaire survey ensures confidentiality of respondents' responses. This survey was anonymous and respondents could disclose information such as income and expenditure without being identified (Veal 2005). Lastly, a standard manner of data collection is used for each tourist using a self-administered questionnaire to ensure consistency (Malhotra 2004).

There are disadvantages of using the self-administered questionnaire. The first limitation is that it does not allow participation of illiterate people (Malhotra 2004). This method does not allow the researcher to provide prompts or give help to the respondent if clarification is required (Malhotra 2004). This may lead to the respondents providing incorrect information or leaving a question incomplete which increases the level of missing data. In order to confirm the usefulness of the self-administered questionnaire survey, a pilot study was conducted which is described in Section 3.5.5.

3.5.4 Sampling methodology

The majority of empirical studies require a random or representative sample to be drawn from some population. It needs to be considered whether the sample is representative of the population and whether the sampling method is appropriate; if a sample is not representative of the population, it is described as biased (Aaker, Kumar & Day 2003; Malhotra 2004; Veal 2005). This section details the sample selection, sample size and sampling method determination.

The sample population for this study was tourists to a regional tourism destination in Australia. Respondents needed to be over 18 and had or would have spent at least a night in the chosen destination. The tourists also needed to have made the choice to visit the destination for a purpose other than business/work. This was justified as the results were to be compared to the type of visitor segments outlined in the Fraser Coast's Destination Management Plan (see Section 3.4.7). A sample size of at least

500 needed to be collected to provide a 95 per cent confidence level so that results can be generalised to this tourist population (Veal 2005). This sample size is also considered as a minimum for valid and reliable statistical analysis (Malhotra 2004). To obtain this minimum sample size, the questionnaire survey was conducted using a cross-sectional study design over a seven month period from July 2007 to January 2008. By using this design, the seasonality at the coastal destination was not a limitation, as the data was collected during the different seasons, catering to the high and low tourist times.

A non-probability sampling method in the form of quota sampling was utilised. Whilst research bias is a concern, probability sampling was impossible as a list of sampling units with a known probability was unable to be verified (Aaker, Kumar & Day 2003; Veal 2005). The regional tourism authority (DMO) has primary markets that it targets (which were described in Section 3.4.7), but every type of tourist that travels to this region is not known. Researchers of non-probability sampling argue that it can readily be used in the exploratory stages of research (Aaker, Kumar & Day 2003; Malhotra 2004) which is essentially what this thesis represents.

A quota sampling method is a form of judgment sampling with the constraint that the sample includes a minimum number from each specified group in the population (Aaker, Kumar & Day 2003). To ensure that a large enough group of respondents was targeted, at least 120 surveys were collected each month. This allowed monthly comparisons to be made. The user survey method was used where responses were collected at a variety of locations. This included collecting questionnaires at accommodation places, such as a caravan park, a backpacker hostel and a five star resort, at a visitor information centre and at transport locations, such as the bus terminal, the ferry terminal and the airport. A minimum of eight responses each month was collected from each location to ensure that a specific type of tourist that was the most easily accessible did not dominate the results. The time spent at each location to collect the responses varied. The researcher spent whole days at the accommodation places to achieve the quota, whereas only one hour was necessary at the airport. It is noted that the largest quota of tourists was collected at the airport terminal, as these respondents had the highest acceptance rate for completing the questionnaire. Tourists with different demographics, geographics, psychographics and behavioural tendencies also used this similar transport mode which ensured that a diversity of tourists could be targeted at this location.

In researching the destination, the researcher considered popular locations where tourists of all different demographics may be during the beginning or the end of their holiday. By choosing many locations, this ensured that a dominant location was not chosen which may have biased results (Veal 2005). The respondents were identified as a 'first past the post' sampling method. Thus, who was there at the time was approached (McKercher & Wong 2004) by the researcher. This limited the potential for survey error as the researcher followed a format instead of choosing respondents that may have better represented the study (Aaker, Kumar & Day 2003).

3.5.5 Pilot study

A pre-test of the questionnaire was conducted in the month of May 2007. A copy of the questionnaire was distributed to academics (n = 36) in the School of Management and Marketing at the USQ to test the wording, layout and content of the questionnaire. A few suggestions on how the questionnaire could be improved were made, some of which were taken into account. A suggested change was to code the push and pull motivations, activities sought, and trip purposes with a letter to save the researcher time in completing the responses. Other changes involved treating certain variables as separate to avoid double barreled questions (Veal 2005). For example, the trip purpose variable of *to visit friends and family* was split into *to visit friends* and *to visit family*. One suggested change that was not implemented was to ask if the respondents aimed to return to the destination. This was not included as it was outside the scope of the study.

Once these changes were made, a pilot study of the questionnaire survey was conducted in June 2007 to test the usability of the questionnaire. In total, 62 questionnaires were collected at the visitor information centre, airport and bus terminal. On average, respondents completed the survey in 10 minutes. It was identified that the layout, length, and comprehension of the questionnaire was acceptable with all of these questionnaires being completed. A couple of motivational questions, *to go four wheel driving* and *to go bird watching* were deleted from the instrument, as it was identified that several tourists believed these questions were irrelevant to a holiday at the destination.

3.5.6 Non-response bias

Non-response bias is likely to be present in tourism research (Veal 2005). Non-response creates unacceptable reductions of sample size and increases bias (De Vaus 1995). Non-response bias was expected in this research with certain tourists refusing to complete the survey for reasons such as wanting to relax on a holiday (Veal 2005). Respondents who did not care about the topic, or had other priorities, may have also been unlikely to respond. It was also expected that tourists from other countries may not have the ability to respond due to not being able to read or write English.

Non-response bias is one of the many respondent variables that can affect the reliability and validity of results (Nunnally & Bernstein 1994). There are two suggestions for dealing with non-response (Baldauf, Reisinger & Moncrief 1999). Firstly, the researcher will need to make allowances for non-response bias. Secondly, the researcher can design the research carefully to reduce non-response bias. Both of these options were considered for this research.

The strategies of reducing the costs to the respondent, and establishing trust as proposed by Dillman (1978) were utilised to increase response rates. To reduce the cost to the respondent, tourists were asked to complete the survey whilst not busy. Tourists at transport terminals completed the questionnaire whilst waiting for their mode of transport. Tourists that were waiting in the departure lounge of hotels or at

the visitor centre were also chosen. Finally, tourists sitting outside of their caravan, tent, or backpacker hostel in the accommodation places were approached.

To establish trust, the researcher approached each potential respondent and briefly discussed the purpose of the study. This represented the initial stage. If the respondent fulfilled the criteria for completing the questionnaire and wanted to participate, the questionnaire was passed to the tourist. This represented the second stage. The questionnaire commenced with an introduction stating the purpose of the study. An e-mail address and telephone contact of the Associate Dean of Business (Fraser Coast) of the USQ was also provided so that the respondents could contact the university regarding any queries or concerns. Trust was also established by using the USQ and Hervey Bay City Council logos on the letterhead.

Table 3.2 lists the response rates from the research. It is noted that whilst 13.4 per cent of the reviewed studies listed in Appendix I used a similar approach to non-response bias, only Wilton and Nickerson (2006) discussed every stage. Many studies had an initial screening approach (e.g. Andriotis, Agiomirgianakis & Mihotis 2007; Bogari, Crowther & Marr 2004; Hu & Yu 2007; Kim & Petrick 2004; Moscardo 2004; Yuksel 2003), but did not list the number of refusals or approached tourists that did not fulfil the selection criteria. Conversely, authors such as Andreu et al. (2005), Shin (2007), and Yuksel and Yuksel (2002) listed the number of completed surveys, but did not discuss the response rate.

Table 3.2: Summary of response rates

Initial stage		
Number of respondents approached	1224	100%
Customers meeting pre-qualifying criteria	1018	83.2%
Customers not meeting pre-qualifying criteria	206	16.8%
Second stage		
Acceptance	864	84.9%
Refusal	154	15.1%
Third stage		
Incomplete questionnaires	12	1.4%
Missing data included questionnaires	283	32.8%
Completed questionnaires	569	65.9%

It was identified from the collection of the data research that refusals were limited in this research. Refusals did not vary between months with the range being between 15 and 25 refusals per month. In total, the acceptance rate was 84.9 per cent. This is comparable to Hu and Yu (2007), Kim and Petrick (2004), and Lee and Zhao (2003) who had a response rate of approximately 90 per cent. For example, Lee and Zhao (2003) stated tourists needed to be Japanese and over the age of 18.

It was noted that almost a third of questionnaires contained missing data. A small percentage of questionnaires were returned not completed. The response rate of 65.9 per cent is higher than three studies in the literature review that listed their response levels (Andriotis, Agiomirgianakis & Mihotis 2007; Bogari, Crowther & Marr 2004; Wilton & Nickerson 2006) which were under 60 per cent. However, this is

considerably lower than the six other studies (e.g. Andreu et al. 2005; Hu & Yu 2007; Yuksel & Yuksel 2002) that each had a completion rate of over 74 per cent.

3.5.7 Reliability and validity of self-administered questionnaire surveys

Reliability is achieved through minimising the systematic bias using methods illustrated from the previous section and limiting random bias. This was done in the development of the questionnaire through clarifying question wording and instructions.

To construct an instrument that maximises *content validity*, a researcher needs to address six issues: the actual scale items, the scale and instrument length, item selection and analysis, and sample (Nunnally & Bernstein 1994). Through following the processes outlined in the questionnaire development, sampling method and pilot study, it can be concluded that content validity was confirmed. To maximise *construct validity*, a researcher should have homogeneous items in a construct and heterogeneity in the methodology, and finally the appropriate items should be selected and analysed. It can be concluded that construct validity was achieved in the development of the questionnaire as the researcher chose items that were similar to variables identified by tourism stakeholders in step one of the proposed two-step approach to segmentation and the items were also consistent with items used in the literature.

3.5.8 Questionnaire survey data analysis

Quantitative data collected in the survey were analysed using the Statistical Package for the Social Sciences (SPSS) Version 15.0 (SPSS 2007). The individual survey results were entered into SPSS within 24 hours after survey administration. Univariate statistics in the form of percentages were used as a first step in the analysis to describe the frequencies for each segmentation variable deemed relevant by tourism stakeholders.

It has been argued that questionnaire survey data should be analysed using multivariate techniques (Hair et al. 2006). Multivariate statistical techniques include correlation, factor analysis, regression, cluster analysis and structural equation modelling (Hair et al. 2006; Malhotra 2004). It is argued by Chandra and Menezes (2001, p. 89) that *posteriori* segmentation involves ‘analysing a large cross sectional sample of tourists’ and the ‘preferred method of analysing this large set of data is cluster analysis’. Unlike *a priori* segmentation where the researcher knows and specifies the number of segments to identify, in the *posteriori* segmentation approach using cluster analysis the segments are produced analytically (Chandra & Menezes 2001).

Cluster analysis is a group of multivariate techniques whose primary purpose is to group objects based on the characteristics possessed (Hair et al. 2006). Cluster analysis is considered a good exploratory data analysis technique when it is expected that the sample is heterogeneous (Hair et al. 2006), and when neither the number nor

the members of the group are known (Chan et al. 2006). It aims to classify objects so that each object is similar to others in the cluster based on certain characteristics. The clustering of objects should exhibit high internal (within-cluster) homogeneity and high external (between-cluster) heterogeneity (Hair et al. 2006). Cluster analysis has the advantage that this classification scheme can represent a convenient method for organising a large set of data so that the retrieval of information may be made more efficiently (Everitt 1993). In marketing, for example, it is considered useful to group a large number of respondents according to their needs in a particular product area (Everitt 1993).

In the context of segmenting tourism markets, cluster analysis can be applied to identify different clusters of tourists that exist within a larger group or tourism market. As a consequence, this method may be used to develop a taxonomy of different types of tourism segments and thereby gain a better understanding of the composition of the tourism population (Chandra & Menezes 2001). Cluster analysis has been used successfully in past tourism studies. In the review of the 119 studies, it was identified that 69.2 per cent chose cluster analysis to profile tourists. Most have employed factor analysis to reproduce items in subsequent analysis, followed by cluster analysis (43.7% of the 119 reviewed studies). Other studies have employed only cluster analysis (e.g. Beh & Bruyere 2007; Bieger & Laesser 2002; Dolnicar & Leisch 2003; Hyde 2006; McKercher et al. 2003).

When using factor and/or cluster analysis, most of these studies have used a continuous variable such as motivation (Andreu et al. 2005; Beh & Bruyere 2007; Bieger & Laesser 2002; Kim & Petrick 2004; Lee, Morrison & O'Leary 2006) or activities (Becken, Simmons & Frampton 2003; Carmichael & Smith 2004; Hsu & Lee 2002; Jang, Morrison & O'Leary 2004; Mehmetoglu 2007) as a first phase to classify their tourists into segments. Several statistical mechanisms such as Analysis of Variance (ANOVA), chi-square tests, multiple discriminant analysis and student t-tests have then been run on other variables (e.g. age, income and expenditure) to differentiate between the segments. Whilst this has showcased differences between the segments, it has placed a greater emphasis on one variable rather than considering all variables equally.

TwoStep® cluster analysis is a form of cluster analysis that has recently been created for SPSS and was applied for this study. TwoStep® cluster analysis using the log-likelihood measure was used to reveal natural groupings in the data set using all of the segmentation variables identified in step one of the proposed two step approach to segmentation. Cases represent the objects to be clustered, whereas the variables represent attributes on which the clustering is based (Laesser, Crouch & Beritelli 2006). TwoStep® cluster analysis was considered most appropriate for this research as it is the only type of cluster analysis in SPSS that forms clusters based on both continuous and categorical data (Chiu et al. 2001; Norusis 2007). Both these data forms were used in this study. Data transformation prior to analysis was therefore not required.

TwoStep® cluster analysis permits researchers to retain full information providing rich explanation for managerial decision-making purposes. TwoStep® cluster analysis is also considered more reliable and accurate when compared to traditional clustering methods such as the k-means clustering algorithm (SPSS 2001). This

method also determines the correct number of clusters automatically. A common problem in single-step clustering methods is that they frequently overestimate the true number of clusters (SPSS 2001). Finally, TwoStep® cluster analysis is suitable for a large data set (n = 582 in this study) (Hsu, Kang & Lam 2006).

The use of two-step cluster analysis is not without precedent. It has been used recently in a diverse range of contexts including nursing (Chan et al. 2006), psychology (Stefurak & Calhoun 2007), transportation (Chang & Yeh 2007), psychiatry (Ulstein, Wyller & Engedal 2007), and sociology (Okulicz-Kozaryn & Borucka 2008). Further, it has been used previously in tourism settings (Hu et al. 2005; Rosenbaum & Spears 2006).

TwoStep® cluster analysis was applied in two of the 119 studies reviewed in this thesis (Hsu, Kang & Lam 2006; Laesser, Crouch & Beritelli 2006). Both of these studies utilised this method for some of the variables in the study. Laesser, Crouch and Beritelli (2006) clustered both reasons and influences using this procedure, whereas Hsu, Kang and Lam (2006) clustered tourists based on perceptions of reference group opinions and likelihood to comply with these opinions. Neither study used this method for all variables. Laesser, Crouch and Beritelli (2006) used secondary data from a 1998 International Visitor Survey that collected other data such as tourists' accommodation and place of origin. Hsu, Kang and Lam (2006) chose a factor analysis to identify the underlying dimensions of the benefits-sought items of travelling to Hong Kong. This will be the first known tourism segmentation study that includes all items in one TwoStep® cluster analysis.

In TwoStep® cluster analysis, the clustering algorithm is based on a log-likelihood distance measure. TwoStep® cluster analysis assumes that all variables are independent, that continuous variables have a normal distribution, and categorical variables have a multinomial distribution (Norusis 2007). A joint multinomial-normal distribution can be placed on categorical and continuous variables (Laesser, Crouch & Beritelli 2006). This rarely happens, but the algorithm is thought to behave reasonably well when these assumptions are not met (Norusis 2007). As cluster analysis does not involve hypothesis testing and the calculation of observed significance levels, other than for descriptive follow-up, it is acceptable to cluster data that may not meet the assumptions for best performance (Norusis 2007). Only the researcher can determine whether the solution is satisfactory to their needs.

3.5.9 Two-step clustering process

The two-step cluster analysis involves two stages. As a first step, original cases are grouped into preclusters (Okazaki 2007). The goal of preclustering is to reduce the size of the matrix that contains distances between all possible pairs of cases (Norusis 2007). As a case is read, the algorithm decides based on the distance measure (in this case log-likelihood) if the current case should be merged with a previously formed precluster or start in a new precluster. When preclustering is complete, all cases in the same precluster are treated as a single entity. The size of the distance matrix is no longer dependent on the number of cases but on the number of preclusters (Norusis 2007).

In the second step, the preclusters are clustered using the hierarchical clustering algorithm (Norusis 2007). Forming clusters hierarchically lets the researcher explore a range of solutions with different numbers of clusters (Norusis 2007). This produces a range of solutions which is then reduced to the best number of clusters on the basis of the Schwarz's Bayesian information criterion (BIC). The BIC is considered one of the most useful and objective selection criteria, as it avoids the arbitrariness of traditional clustering techniques (Norusis 2007). Additionally, outliers can be identified and screened out in the algorithm (Chiu et al. 2001). In considering which model to use (missing data included or excluded) the analysis, the one with the lowest BIC is preferred (Norusis 2007).

A step that can be utilised in TwoStep® cluster analysis is running chi-square tests for dichotomous variables once the clusters have been formed. TwoStep® cluster analysis creates a cluster membership variable that allows variables that may have been combined into one to be tested for their significance at an individual level. Therefore, if the number of push motivations, the number of pull motivations or the number of activities sought variables were relevant in forming clusters in the TwoStep® cluster analysis, the individual variables (the six activities sought, 11 push motivations and 12 pull motivations) can be tested against their combined variable. This determines whether each segment is significantly different from the other based on each of the individual variables (Norusis 2007). If a dichotomous variable has a significance value of less than 1 per cent it is considered as highly significant; if it is higher than 1 per cent but less than 5 per cent it is significant (Hair et al. 2006).

After the segments are identified, and the chi-square tests on the dichotomous variables have been performed, further tests need to be conducted. Chi-square tests were conducted for each of the categorical variables and student t-tests for each of the continuous variables. These tests are run to examine all variables within a cluster (Norusis 2007). The critical value line that is drawn in SPSS provides some notion of how dissimilar each cluster is from the average (Norusis 2007). In examining the importance of individual variables, if the absolute value of the statistic for a cluster is greater than the critical value, the variable is considered important in distinguishing that cluster from the others (Norusis 2007). If a variable is below the critical value line for any of the clusters, it is insignificant in distinguishing a cluster from the others and can be removed from further analysis (Norusis 2007).

3.5.10 Cluster analysis research design

Hair et al. (2006) argue that there are four criteria to be considered in the cluster analysis research design. Firstly, an appropriate sample size must be collected. It is argued that the sample size must be large enough to provide sufficient representation of small groups within the population and represent the underlying structure (Hair et al. 2006). As the sample size collected is greater than 500, which was previously argued as the minimum required for statistical analysis, it can be concluded that the sample size is adequate.

Researchers also need to consider whether missing data is to be included. The simplest and most direct approach is to include only those observations with

complete data (Hair et al. 2006). Despite 852 cases being identified, it was noted that 283 of these cases had questions that contained unanswered questions. It is argued that missing data under 15 per cent for an individual case or observation can generally be ignored (Hertel 1976), except when the data occurs in a specific non-random fashion (Malhotra 2004). However, it is argued that deleting cases may distort the structure of the clusters and, therefore, careful consideration needs to be considered before the deletion of cases (Hair et al. 2006). It has also been noted that some variables are more susceptible to missing data. For example, it has been found in the tourism marketing literature that the demographic variable of income has a category relating to 'non-response/refusal' (e.g. Bieger & Laesser 2002; Hsu & Kang 2007; Jang, Morrison & O'Leary 2004; Jang et al. 2007; Lo, Cheung & Law 2002). Respondents can be reluctant to provide information on their income as they find this intrusive (Veal 2005) and, subsequently, many choose not to answer this question. To determine whether a solution with or without missing data was to be chosen for this research, the model with the lower BIC using TwoStep® cluster analysis, as recommended by Norusis (2007), was chosen.

The second issue in research design is to consider whether outliers can be detected and, if so, should be deleted. Outliers are data records that do not fit well into any of the clusters (SPSS 2007). It has been argued that cluster analysis can be affected dramatically by the inclusion of one or two irrelevant variables (Milligan 1980). Hair et al. (2006) argue that outliers can represent either: 1) truly aberrant observations that are not representative of the population; 2) representative observations of small or insignificant segments within the population; and 3) an under sampling of actual group(s) in the population that causes poor representation of the group(s) in the sample.

In the first case, the outliers distort the structure and make the developed clusters unrepresentative of the actual population structure. In the second case, the outlier is deleted so that the resulting clusters are more accurate in representing the relevant segments in the populations. However, for the third case, the outliers should be included in the cluster solutions, even if they under represent the sample, because they represent valid and relevant groups (Hair et al. 2006).

Hair et al. (2006) suggests that one of the easiest ways to screen data for outliers is to prepare a graphic profile diagram. In TwoStep® cluster analysis each variable can be evaluated in a graphical profile in SPSS to identify 1) whether it is normally distributed amongst the population and 2) whether there are outliers detected in the sample. The researcher examined the distribution of each variable to identify if it was normally distributed and whether outliers were detected. It is noted that the researcher should exhibit caution in deleting observations from the sample because this deletion may distort the actual structure of the data (Hair et al. 2006). Therefore, if a variable contained outliers but appeared to be representative of a cluster's structure, it remained in the analysis.

The third requirement in research design is to measure the similarity between objects to be clustered. This can be achieved through using the log-likelihood criterion distance measure in TwoStep® cluster analysis. Distance measures represent similarity as the proximity of observations to one another across the variables in the cluster variate (Hair et al. 2006). As the data measured are a mixture of continuous

and categorical variables, the log-likelihood criterion was the option chosen. This distance measure is derived from a probabilistic model where the distance between two clusters is equal to the decrease in log-likelihood function as a result of merging (Chiu et al. 2001). The distance between two clusters depends on the decrease in the log-likelihood when they are combined into a single cluster (Norusis 2007). TwoStep® cluster analysis allows the number of clusters to be automatically determined and indicated in the results. Therefore, for this research, the researcher allowed the cluster analysis to determine the number of clusters.

The final criterion for research design is to determine whether the data should be standardised before similarities are calculated. As distance measures can be quite sensitive to differing scales or magnitudes among the variables, and variables with larger dispersion (e.g. larger standard deviations) have more impact on the final similarity value (Hair et al. 2006), clustering variables should be standardised whenever possible (Baeza-Yates 1992). Standardising the data ensures that one variable does not dominate the cluster solution (Hair et al. 2006). In TwoStep® cluster analysis, the algorithm automatically standardises all of the variables unless this is overridden (Norusis 2007). The researcher saw no reason to override this option, and all variables were standardised.

3.5.11 Interpretation of clusters

Once the clustering has been completed, the clusters need to be interpreted. This involves examining each cluster in terms of the cluster variate and providing a label which accurately describes the nature of each cluster (Hair et al. 2006). As this data had been standardised by TwoStep® cluster analysis, the raw scores for the original variables were computed (Norusis 2007). Within the results section, the most popular response for each variable was bolded.

This profiling and interpretation of clusters provided the means to compare prior theory or practical experience (Hair et al. 2006) and to validate the clusters generated. This is highly relevant for answering the second research question where the results of the two-step segmentation approach are compared to how the destination is currently segmented by the DMOs.

3.5.12 Validation of clusters

The final process in the cluster analysis is validating the cluster solution (Hair et al. 2006). Validity will assure that the cluster solution is representative of the general population, and, therefore, is stable over time (Hair et al. 2006). Cross-validation is a technique that can be applied. This occurs when the sample is split in half using some classifying measure (Hair et al. 2006). The results of the cluster solutions were compared and this research assessed the correspondence of results (Hair et al. 2006). Efforts were made to split the file effectively to improve validity of the data sets. Following the utilisation of the quota sampling method, the tourists were grouped into a month based on when the research was collected. This file was then split in two based on the month of data collection (odd-month solution versus even-month solution). As data was collected over a seven month period, one of the odd-months

was randomly excluded from analysis. The month was considered the most effective option as it enabled both data sets to contain tourists from both the high (e.g. Christmas period) and low seasons (e.g. mid-year). Combining months also ensured that month of data collection did not bias the sample.

The same clustering process outlined in Sections 3.5.9 to 3.5.11 was used for the split files. Once the process had been completed, each cluster was compared based on the odd-month solution, even-month solution, and final solution. If similarities were found for all solutions, then validity was confirmed as the results do not differ based on the month of data collection (Hair et al. 2006). As will be discussed in Section 5.4.4 in Chapter 5, it was determined that that validity was confirmed as the segments developed did not differ based on the month the data was collected.

3.5.13 Limitations of cluster analysis

Despite many attempts to construct various tests of the statistical reliability of the cluster solution, cluster analysis has no statistical basis upon which to draw inferences from a sample to a population which limits the reliability of this method (Hair et al. 2006). No fully defensible procedures are currently available. These problems stem from the problem in establishing realistic null hypotheses (Aaker, Kumar & Day 2003). However, this method is considered an exploratory technique which seeks to provide description of variables utilised in an analysis. Assigning tourists randomly into the cluster solution and splitting the data file in two suggests that the research has some validity. Additionally, it was identified that nearly 70 per cent of studies in the literature review (summarised in Appendix I) have used cluster analysis which improves the validity of this model.

Another limitation of cluster analysis is that the cases are extremely sensitive. If slight changes to the processes outlined above are made to the cluster analysis, a solution may be presented which produces completely different results (Hair et al. 2006). To guard against this, all stages of the research were carefully administered by the researcher to ensure that the process as suggested by Hair et al. (2006) was followed accurately.

3.6 Ethical considerations

The collection of data involving humans raises many important ethical considerations. These range from legitimacy to moral issues (Neuman 1997). A researcher needs to consider the potential damage their research can cause to themselves, the community and to respondents when conducting their research. The key issues are physical or legal harm, deception, informed consent and privacy (Neuman 1997).

This research did not involve any physical harm. Each tourism stakeholder that was approached was asked to have the interviews completed in their own workplace to provide them with comfortable surroundings. Survey respondents were likewise

asked to complete the questionnaire survey in comfortable surroundings such as a hotel lobby.

Psychological harm depends on the type of questions being asked and the potential embarrassment or stress (Neuman 1997). The topic under consideration was that of a personal nature and stakeholders and tourists needed to be willing to participate. Semi-structured interviewees were able to finish the interview at any time they wished, and respondents that did not want to complete the questionnaire were not harassed. In such cases, respondents were merely thanked for their cooperation. During the semi-structured interviews all respondents were informed of the research process for the research and their role within in (Patton 1990). A full disclosure about the purpose and context of the research and copies of the case study protocol was provided to all participants at the time of interview (Patton 1990). Following the data analysis, tourism stakeholders who were interviewed were provided with a detailed summary of findings of the interviews so that points of concern about issues raised or confidentiality could be discussed and resolved prior to the final write-up and submission of the thesis. For the second stage of research, the purpose of the research was provided to the tourist by the administrator after initial contact was made, and respondents were asked to complete the research. Once confirmation was provided, data was collected at each of the locations listed in Section 3.5.4.

Legal harm can occur if an activity of illegal nature is observed during the research procedure (Neuman 1997). This was limited in both phases of research. Prior to the commencement of the research, ethical clearance needed to be confirmed through the USQ. This document listed the questions to be asked and how the research was to be conducted and analysed. This ethical clearance is provided in Appendix VI. The ethical conduct of the research also ensured that the privacy, anonymity, safety and comfort of respondents were respected through the research process (Miles & Huberman 1994; Riege 1997). For the second phase of research, the legal obligations were adhered to and the researcher gained insurance from the USQ to collect research at many of the locations (e.g. bus and airport terminals).

Deception involves deliberately misleading the respondents for the purpose of the research. If deception is evident, this can decrease the trust of the respondents and the results may be contaminated (Neuman 1997). Deception was not present as the purpose of the research was made clear by the researcher during introductions in both phases of research. The identity of the researcher was also confirmed as university clothing highlighting the USQ's insignia was worn at all times. The Associate Dean of the Fraser Coast Campus's contact details were also divulged. Participation was on a voluntary basis.

Informed consent is crucial and participants must never be forced or feel like they are being forced into participating and must make their decision based on the available information (Neuman 1997). The initial page of the case study protocol listed the purpose of the research and stated that the findings will be kept as strictly confidential and anonymous. The covering page of the questionnaire survey stated the purpose of this research and the utilisation of data for analysis. Privacy and confidentiality are crucial components of survey research in that respondents need to understand that their responses will be kept private (Neuman 1997). This was

confirmed in the research with the questionnaire survey being completely anonymous.

3.7 Conclusion

This chapter has discussed and justified the realism paradigm and the research design approach employed in this research. The two-step segmentation approach that was developed from the theoretical framework in Chapter 2 was described in this chapter. Firstly, a qualitative methodology with a case study method and semi-structured interviews with stakeholders was used for the first step of the two-step segmentation approach. Essentially, this stage would answer the first research question. Secondly, a questionnaire survey which was distributed to tourists was used to profile the tourism segments. Here, usage of the TwoStep® cluster analysis was outlined to identify the Fraser Coast segments. This chapter also outlined the research design and ethical procedures of both data methods. The validity and reliability of both methodologies was also presented. The research now moves to Chapter 4 which details the findings from step one of this research.

Chapter 4: Step one: tourism stakeholders

4.1 Introduction

The case methodology for data collection was outlined and justified in Chapter 3. The purpose of this chapter is to analyse the collected data for step one of this research to identify the first research question: *How do tourism stakeholders segment tourists at a destination?* The findings from the case study methodology were used as a basis for the questionnaire survey. The results of this survey will be listed in the next chapter. A discussion of how the findings from the case study research and questionnaire survey built upon existing literature is detailed in Chapter 6 and their implications for theory and practice is then discussed in Chapter 7.

This chapter begins with a review of how tourists are currently segmented by the tourism stakeholders (Section 4.2). The variables used by these stakeholders to classify their tourists are then discussed in Section 4.3. The variables that appeared most relevant for segmentation purposes are then discussed (Section 4.4). Section 4.5 provides the conclusion for the chapter.

4.2 Stakeholder market segmentation

The 14 stakeholders which were the local government organisation, destination marketing organisations (DMOs) (regional and state), a travel agent, accommodation providers (backpacker resort, caravan park, self-contained unit provider, and a medium and a high rating hotel), and tour operators (whale watching operator, a fishing chapter operator, an adventure tour operator, and a museum) were asked how they currently segment their tourists.

Six of the stakeholders defined tourist segments. The state DMO utilises the five segments that are described in Section 3.4.7. This was expected as this organisation has developed these segments in coordination with Tourism Australia. These segments were considered the primary target market that the DMO plans to attract until the year 2010. This is outlined in the Destination Management Plan for the region (Tourism Queensland 2007b). Three other stakeholders argued that they classed their tourists based on these five segments. However, whilst they understood the emphasis on the lifestage and source market of the tourists, they were unfamiliar with the defining characteristics of each segment and referred the researcher to the Tourism Board. For example, one stakeholder said.... *What I will actually do is email it to you. I've just had this executive research done from Tourism Australia.*

Only two stakeholders defined tourism segments. These stakeholders differentiated their segments by a tourist's trip purpose. One stakeholder classed tourists into six segments. These are *the frequent independent traveller, we have leisure, we have our corporate market...our government market...travel industry so airlines, airline staff, hospitality workers...we have also free of charge market.* The second stakeholder had segments based on tour types. *We have the Fraser Explorer Tour... We have*

another tour called the Lake MacKenzie Tour... There's also the Two Day Explorer Tour which, as the name suggests, is an overnight accommodated tour....There's also the Cool Dingo Tour. The stakeholder detailed what a tourist does on each of these tours. Despite demographic characteristics being prevalent in the literature, these two stakeholders did not use any of these characteristics (e.g. age or income) to distinguish their tourism segments.

The remaining eight stakeholders did not have defined segments. For example, one stakeholder argued that *Tourism Queensland do all the research*. Another stated that *we are managing this on behalf of the [local council]*. Other stakeholders argue they do not try to target tourists. One stakeholder commented *we don't try to target them*.

4.3 Segmentation variables

As not all stakeholders had defined segments, the 13 segmentation variables which were considered the most popular in the review of the 119 studies in Chapter 2 were used in this research to gain a description of the tourists from the tourism stakeholder perspective. As mentioned in Chapter 3, purchasing behaviour was also provided. To ensure comparisons between stakeholders, all interviewees were asked to classify their tourists based on the 13 segmentation variables. If stakeholders did not distinguish tourists based on these variables (e.g. income), this stakeholder was not listed in the matrix for that variable. Additionally, stakeholders were also invited to list other segmentation variables that they use to classify tourists. However, it was determined that no additional variables were used by stakeholders to classify their tourists.

The 13 variables that were presented to the stakeholders were *age, gender, travel party composition (TPC), income, and education* (demographic), *origin* (geographic), *push motivations, pull motivations, trip purpose, and activities sought* (psychographic), *nights, expenditure, and purchasing behaviour* (behavioural). Sections 4.3.1 to 4.3.5 discuss each of the demographic variables. Section 4.3.6 discusses the geographic variable of origin. Sections 4.3.7 to 4.3.10 provide the results of the psychographic variables. The behavioural characteristics are detailed in Sections 4.3.11 to 4.3.13.

4.3.1 Age

Four of the stakeholders argued that there is no specific age group of their tourists. Stakeholder G commented that *there's quite a mix* whereas Stakeholder K stated that *it's diverse, across the board. There's really no specific age groups*. Ten of the stakeholders did provide age groups for their tourists. Six of these stakeholders had multiple age groups: Stakeholders A and C1 had four, Stakeholders C1 and E had three, and Stakeholders B and I had two. These age groups have been categorised to best compare stakeholder responses. The results are listed in Table 4.1.

Table 4.1: Age

Stakeholder	Under 25	26-30	31-35	36-40	45-54	55-65	Over 65
A	√	√	√	√	√	√	√
B			√	√	√	√	√
C1	√	√	√	√		√	√
C2	√	√		√		√	
D						√	
E	√	√	√	√		√	√
F		√	√	√			
I		√				√	√
J	√						
L					√	√	√

It was concluded that tourists of all ages travel to the destination. Five stakeholders have tourists aged under 25. Stakeholder E commented that a group of their tourists are aged in their *late teens to early 20s*, whereas Stakeholder J determined that an average customer age is *between 18 and 25*. The age categories of 26-30 and 31-35 were identified six and seven times respectively. However, these categories were frequently part of a greater age range. The age category 26-30 was included as part of a larger range (e.g. under 25) four times and tourists aged 31-35 were combined with another category (e.g. 36-40) in each instance²⁴. For example, Stakeholder C2 had tourists aged in their *early 20s to mid to higher 20s* (both under 25 and 26-30), whereas Stakeholder A had tourists aged *25 to 35* (both 25-30 and 31-35). Both Stakeholders E and F had tourists aged *between 30 to 40*.

The age category of 35-40 was considered by three stakeholders. Stakeholder C1 argued that *35 to 40* is a market whereas Stakeholder C2 stated a *short break market is 40 year olds*. Whilst Stakeholder A was in this same category, this stakeholder argued their international tourists are *over 35*, which falls into this category, and all other tourists over 35.

The age group of over 45 was a dominant age category considered by eight stakeholders. In three instances the age categories of 45-54, 55-65 and over 65 were considered. For example, Stakeholder L stated that their tourists are *over 45* and Stakeholder B commented a market of theirs is *over 50*. Stakeholder A commented that an *elderly market is 45s to 65s*²⁵. Stakeholders C1 and C2 had a market of *over 55s*. Stakeholder D also commented that *40 per cent of their market is over 55s*. Over 65 was considered twice. Stakeholder E had a segment aged over 60 and Stakeholder I had tourists aged *60 to 80*.

4.3.2 Gender

Gender was a segmentation variable considered by four of the tourism stakeholders. The remaining stakeholders indicated they do not use this variable, as no gender was dominant. Stakeholder A stated it was *about half* and Stakeholder I concluded it is

²⁴ Stakeholders C1 and C2 commented that an age group was 30.

²⁵ This respondent also had a category of over 35s for their international tourists. Therefore, two groups of tourists were within the over 45 category.

fairly reasonably mixed. Stakeholder B clarified the insignificance of choosing a specific gender, by stating that *normally they* [their tourists] *will come as a family; it's not usual that people come on their own*. Of the four stakeholders that classified tourists based on gender, Stakeholders F and H listed *male* whereas Stakeholders D and J listed *female*. Stakeholder D stated that there are *more females* whereas Stakeholder F argued that there are *more males than females because of the corporate market*. As the minority classified tourists by gender, this variable is seldom used to distinguish tourists by these tourism stakeholders.

4.3.3 Travel party composition (TPC)

The TPC of tourists to the destination varied. Stakeholder K claimed *it's incredibly diverse* and Stakeholder J argued *it varies*. Stakeholder D also stated that *there's lots of families, lots of backpackers, coach tours, and older groups travelling together* who are all in their target market. Five categories were identified which are listed in Table 4.2. All but one of the respondents was able to distinguish tourist types using TPC. These 13 stakeholders listed TPC as either a number or family. It is noted that 12 of these respondents listed multiple TPCs. Stakeholder H stated that there it *averages three...but there are also a lot of two kids plus two adults, families and couples*. This indicates that because of the diversity of TPC, tourists with different numbers in their travel party come to the destination.

Table 4.2: Travel party composition

Stakeholder	One	Two	Three	Four	Families
A	√	√		√	√
B		√		√	√
C1		√			√
C2	√	√			√
D					√
E		√		√	√
F		√			√
H	√	√	√	√	
I		√	√	√	√
J	√	√			
K	√				√
L		√			√
M		√			√

The majority of stakeholders listed *families* or *two* as a TPC. Stakeholder F discussed the importance of a family by stating that *we are a family destination*. Stakeholder M suggested the organisation *doesn't attract more of the double income no kids, or the retirees...it's geared towards family holidays*. The number in a family was difficult to determine as only four were able to provide a figure. Stakeholder L argued *I have no percentages off the top of my head*. The four stakeholders (Stakeholders A, B, E and I) that specified a family suggested a group of four with *two adults and two kids*. Because of 1) the inconclusiveness of a family size and 2) Stakeholder H specifying that *four or more singles in the younger market can travel together*, it was decided to

treat *families* and *four* as two separate categories. However, both these categories received a tick from these stakeholders because of the composite number.

The TPC of *two* included a person travelling with someone else. Stakeholder H argued that they *get a lot of couples*. Five stakeholders listed a TPC of singles. Stakeholder C2 stated *a lot of people are travelling alone* and Stakeholder J argued that *we don't usually get large numbers of people travelling together*. A TPC of *three* was seldom identified. Stakeholder H stated that their *average is three or four*. Stakeholder I suggested it *averages three*.

4.3.4 Income

Four of the tourism stakeholders classified tourists based on their household income levels. Other stakeholders had little information on their tourists' income with responses such as *not a clue* (Stakeholder J), and *wouldn't have the faintest* (Stakeholder E) provided. Stakeholder K stated that it is a *very broad range. Don't ask the question*. Likewise, Stakeholder H argued that *it varies. Doesn't come into topic much*. Because of the broadness of the income ranges, these stakeholders do not know the income of their tourists. The results can be viewed in Table 4.3.

Table 4.3: Income

Stakeholder	Under \$40,000	\$40,000-\$44,999	\$45,000-\$49,999	\$50,000-\$54,999	\$55,000-\$59,999	\$60,000- up to \$100,000
A		√	√	√	√	√
D			√	√	√	
F				√		
L	√	√	√	√	√	

The income levels of these tourists varied. Stakeholder L provided the lowest category and Stakeholder A provided the highest category. However, all four of the stakeholders appeared to list \$50,000 as a median household income. These stakeholders also provided an upper limit to their tourists' income. Stakeholder A indicated it *stops at \$100,000*, Stakeholder D stated *\$55,000*, Stakeholder F suggested *around \$50,000 per annum* and Stakeholder L indicated *under \$60,000*. It was suggested by the stakeholders that the destination does not target the high income tourists. Stakeholder A stated that *we don't attract the high rollers* and Stakeholder L suggested *not a high demographic*. This suggests that these four stakeholders target tourists that they perceive to earn at a lower to medium income level.

4.3.5 Education

Five of the stakeholders were able to list their tourists' education level. These are listed in Table 4.4. The other stakeholders knew little of this tourist demographic. Stakeholder E suggested that *we don't really get involved in that side of it* whereas

Stakeholder C1 stated that *there's really no research done on education. There's been no research done on it so no-one could know.*

Table 4.4: Education

Stakeholder	High School (Grade 8-10)	Completed High School	Tertiary (some)
B	√	√	√
C2	√	√	√
D	√	√	
H	√		√
I	√	√	

All five stakeholders indicated that tourists will have completed *junior high school* at a minimum level. Stakeholder H stated that *80 per cent of the tourists are educated people in the ways of the world. Like grades 8 to 10.* The other four stakeholders indicated that the tourists will have *completed high school*. Determining higher levels of education was difficult. Stakeholder I suggested that *50 per cent are reasonably well educated....high school and above*, whereas Stakeholder B argued that the tourists do *high school and probably do other courses, but not many university graduates*. Stakeholder C2 finally suggested that some *would be tertiary educated*. Because of the inconclusiveness of the tourists' education levels, it is unknown how educated the tourists are that holiday at the destination.

4.3.6 Origin

Every stakeholder could distinguish tourist types based on their place of origin. Both international and domestic tourists appeared important with only one stakeholder (Stakeholder J for domestic) and (Stakeholder M for international) not identifying these type of tourists as a market from where their tourists travel from. Twelve stakeholders had both domestic and international tourists. The locations are listed in Table 4.5.

Table 4.5: Origin

Stakeholder	Domestic								International				
	Queensland				New South Wales		Other States		Europe			Other	
	Brisbane	SEQ	Darling Downs	Other	Sydney	NSW (other)	Victoria	Other	Europe	UK	Germany	NZ	Other
A		√	√		√	√			√	√	√	√	√
B									√				
C1	√	√			√	√	√		√	√	√	√	√
C2		√		√	√			√	√		√	√	
D		√							√	√			
E		√				√	√	√	√	√	√		√
F	√	√	√									√	
G						√	√		√		√		
H		√	√		√	√	√		√	√			√
I		√							√		√		√
J									√	√	√		
K		√						√	√	√	√		√
L	√	√	√						√	√	√	√	
M	√				√			√					

It was concluded that there were eight domestic and five international primary places of origin for tourists. It was also noted that all but one of the respondents specified multiple locations for where tourists originate from, indicating that these stakeholders attract tourists from more than one location.

Most of the stakeholders argued that their tourists come from within Queensland (QLD). *Brisbane* is part of *South East Queensland (SEQ)*, but both locations are mentioned by three stakeholders. For example, Stakeholder L stated the *majority are from Brisbane and SEQ*. These locations were, therefore, kept as separate. The Fraser Coast is part of SEQ, and locations in proximity to the destination in this area were identified. SEQ was seen as a dominant market with 10 stakeholders commenting that their tourists come from this location. Stakeholder C1 specified the *Gold Coast* and *Sunshine Coast* (both in SEQ) as tourists' origin points. Whilst no destinations are explicitly mentioned by Stakeholder K, it is assumed that some origins are in proximity, as the stakeholder argued that most tourists are from *domestically mostly the eastern side of Australia*. As this could also include other locations, this stakeholder has a response in both the *Other (Queensland)* and *Other (Other States)* domestic categories. These are miscellaneous domestic markets. They depend on whether the state has been included or not. The *Other (Queensland)* category includes other locations such as *Gayndah* and *Mundubbera* (Stakeholder C2), whereas the *Other (Other States)* includes the Australian states of *South Australia* and *Tasmania* (Stakeholder E) which were only listed by one stakeholder. These destinations are too infrequently mentioned to be classified as a common place of origin.

Four respondents that listed destinations in *SEQ* also listed destinations in the Darling Downs region. Both the *Sunshine Coast (SEQ)* and *Toowoomba (Darling Downs)* are mentioned by Stakeholder L. Stakeholder E argued that they receive

tourists that are local, being *Gympie*, *Maryborough* (SEQ) and *Toowoomba* (Darling Downs). Many other Darling Downs locations were listed. For example, Stakeholder H stated that they receive tourists from *Dalby*, *Toowoomba*, *Chinchilla*, *Miles* and *Roma*.

Locations in the Australian state of *New South Wales* (NSW) were mentioned by half of the respondents. *Sydney* was the most popular, being identified in five instances. The area of *Northern NSW* is identified by Stakeholders A and C1 as a key place of origin for tourists. NSW (the state) and another state, *Victoria*, were both identified by four stakeholders. These stakeholders did not list any specific locations in Victoria, but two of the stakeholders (C1 and H) also listed *Sydney* with the other two locations.

In classifying the origin of international tourists, 12 stakeholders listed locations in *Europe*. Any location that was part of Europe but was not specifically mentioned by a stakeholder was still listed as this location. *Germany* and the *United Kingdom* (UK) were the most popular international destinations identified by nine and eight stakeholders respectively.

New Zealand (NZ) was listed as a tourists' place of origin by five stakeholders. All other international locations were seldom identified by stakeholders. *France*, *America*, *Switzerland* and *Canada* were identified twice. These locations were listed as part of the *Other (International)* market, because similarly to the Other (QLD) and Other (Other States) domestic markets, they are only occasionally identified and did not represent a common place of origin.

4.3.7 Push motivations

All stakeholders were able to list a reason why tourists chose to travel. Five push motivations were identified and these are listed in Table 4.6. It was noted that half of the stakeholders listed at least two push motivations, indicating that the stakeholders believe that the tourists have more than one motivation to travel.

Table 4.6: Push motivations

Stakeholder	Holiday	New/different	VFR	Escape	Family
A		√			
B	√				
C1		√	√		
C2			√		
D		√			
E		√	√		√
F	√		√		
G	√			√	
H	√			√	√
I		√			
J		√			
K	√				
L	√		√	√	√
M	√				√

Holiday was the most frequently identified push motivation. Stakeholder K stated that *we all need a holiday* and Stakeholder H argued that the main motivation is *generally holiday* as they are *tired from working*. Topics relating to change or to experience something *new or different* were identified by six stakeholders. Stakeholder A suggested that the tourists are *looking for a different experience; experience different areas, different environments* and Stakeholder J argued that tourists are *trying to get out and see a bit. Bit of experience behind them. See what other cultures, other people are doing*.

Visiting friends and relatives (VFR) was listed by five respondents. Stakeholder C2 stated *a lot will be coming to see their friends and relatives*. Three stakeholders stated that *escape* was a push motivation. Stakeholder G stated that tourists *need a break. Escape from real life*, whereas Stakeholder L argued that tourists want to *get away from it all*. Three stakeholders listed reasons relating to a *family holiday* as a push motivation. Stakeholder L suggested tourists *spend time with families, friends or partners* and Stakeholder H argued a motivation was to *also get the kids away from the home town for a little bit*.

4.3.8 Pull motivations

There were multiple motivations why tourists chose the destination. In total, 13 stakeholders provided pull motivations. Eight were identified and each was listed by at least two stakeholders. Eleven of the stakeholders listed multiple pull motivations, of which eight provided at least four different reasons for coming to the destination. It was concluded that there are many reasons why tourists are motivated to come to the Fraser Coast. The pull motivations are listed in Table 4.7.

Table 4.7: Pull motivations

Stakeholder	Fraser Island	Whales	Beach	Relaxed Lifestyle	Family Orientated	Price	Climate	Fishing
A	√							
B	√		√	√	√			√
C1	√		√	√				
C2						√		
D	√	√			√		√	
E	√	√	√	√			√	
G	√							
H	√					√		√
I		√	√		√			
J	√	√	√					
K	√	√				√		
L	√	√						

Fraser Island was the most popular pull motivation. Stakeholder A stated *I think Fraser Island is the major motivation* and Stakeholder J suggested *definitely Fraser Island as number 1. That's what they're here for*. Six stakeholders rated *whales* as a major pull motivation. In five instances, it was listed with Fraser Island as the most important reasons to choose the destination. Stakeholder D argued that *they do*

whales and Fraser. They are the only two things that people come to Hervey Bay [a city at the destination] for. They do Fraser Island first and whales as a bonus whereas Stakeholder K stated that Fraser Island and whales put it on the map. They're two pretty big things.

A third pull motivation that was popular was *beach* with five responses. Most of the responses related to the safety of the beaches. Stakeholder B stated that tourists *like the beach because it is not rough* whereas Stakeholder C1 argued that tourists come to the destination for *its very, very safe beaches*. Stakeholder I also mentioned the *safety aspect of the beaches*.

Five other pull motivations were identified by three or fewer stakeholders. The first of these dealt with the *relaxed lifestyle* of the Fraser Coast. Both Stakeholders C1 and E argued that tourists come because the location is *relaxed*. Stakeholder B also suggested that it's *a nice spot, not too busy*. Another pull motivation was *price*, mentioned three times. Stakeholder C1 argued that the *cheaper cost* was a motivation, whereas Stakeholder H believed that the destination is *reasonably priced – financially viable to places like Noosa*. An additional pull motivation was the destination's *family orientated* nature. Stakeholder B argued that tourists come because it is *family orientated. They want suitable activities for the family*. Stakeholder I also stated the *perception of it [the destination] being a safe family area*. Stakeholder D argued in favour of *its reasonably safe environment*. The final two pull motivations were listed infrequently. Stakeholders D and E both discussed the *climate* of the destination as a pull motivation. Stakeholder E believed that tourists come to the destination *for the warmer weather*. The final motivation is *fishing* listed by both Stakeholders B and H.

4.3.9 Trip purpose

All respondents provided a tourist's trip purpose. Thirteen of the respondents stated that the main purpose related to leisure or a leisure activity. Stakeholder C1 was the exception, claiming that a leisure activity was the second most important factor behind visiting friends and relatives (VFR). The different trip purposes can be viewed in Table 4.8.

Table 4.8: Trip purpose

Stakeholder	Leisure/Holiday	Business	VFR	Whale Watching	Fraser Island	Other
A	√	√	√		√	
B	√	√				
C1	√	√	√			
C2			√	√	√	√
D				√		
E	√					√
F	√	√	√			√
G				√	√	√
H						√
I				√		√
J	√					
K	√	√				
L	√	√	√			
M	√	√				

The category *leisure/holiday* was the most popular, identified by eight stakeholders. This was classed in the same category as the term *leisure* (e.g. Stakeholders A and F) and *holiday* (e.g. Stakeholders B and K) used to describe the same trip purpose. It is noted that 10 stakeholders listed multiple trip purposes indicating that tourists have multiple reasons to choose the destination.

Half of the stakeholders listed *business* trip purposes. However, it was never listed as the main trip purpose. In all cases, the respondents emphasised leisure as the main purpose. As an example, Stakeholder L suggested that *11 per cent is for business* which was five times less than holiday visitors of *55 per cent*. Stakeholders F and M considered *conference* as a trip purpose. Stakeholder B applied the term *work* and Stakeholder K listed *research purposes*.

Five of the stakeholders listed *VFR* as the purpose of the trip. This purpose is extremely important for Stakeholder L who claimed that *just over 30 per cent are VFR. Not for the whole purpose of a holiday*. Four stakeholders listed *whale watching* as a trip purpose. Stakeholder D argued that tourists aim *to see the whales* whereas Stakeholder G stated that *whale watching is also a big thing* [after Fraser Island] *as well. Fraser Island* was identified by three stakeholders. Stakeholder C2 stated that *Fraser Island is a big drawcard* whereas Stakeholder A argued that *internationals come to set foot on Fraser Island*. It is noted that both of these attractions are listed as a pull motivation (Section 4.3.8) and as an activity sought (Section 4.3.10 following). It was thought that the stakeholders treated these psychographic variables similarly when segmenting tourists by these attractions.

Other responses that were recorded include *sightseeing* and *get out of the cold weather* (Stakeholder E), *warm climate* (Stakeholder C2), *checking out Hervey Bay* (Stakeholder F), *ecotourism* and *relaxation (veg out)* (Stakeholder G), *to go fishing* and *to get out on the water* (Stakeholder H), and *beach* (Stakeholder I). However, none of these trip purpose factors are shared by more than one stakeholder. As they were infrequently considered, these three responses were grouped together in the *Other* category.

4.3.10 Activities sought

Activities sought is the final psychographic segmentation variable used by all tourism stakeholders. As mentioned in the trip purpose section (Section 4.3.9), attractions were listed as activities tourists seek when coming to the destination. The results are listed in Table 4.9.

Table 4.9: Activities sought

Stakeholder	Fraser Island	Whale Watching	Beach	Fishing	Spa	Outdoors
A	√					√
B	√	√	√	√		√
C1	√	√		√		√
C2	√	√	√			√
D	√	√				√
E	√	√				
F	√	√	√	√		√
G	√	√				
H		√	√			
I	√	√	√			
J	√	√	√			
K	√					
L	√		√			√
M					√	

Similarly to the other psychographic variables, the majority of stakeholders listed multiple activities that tourists choose to experience at the destination. Fraser Island was the most popular activity tourists sought at the destination as perceived by the stakeholders. Stakeholder A stated that *Fraser Island is a big drawcard. That is the one thing that we focus on* whereas Stakeholder L stated that *the key one [activity] is obviously to visit Fraser Island*. Almost two-thirds of the stakeholders listed Fraser Island in conjunction with *whale watching*. This shows similarities to the pull motivations section (Section 4.3.8). Stakeholder B stated that *generally they will all want to go Fraser Island and see the whales*. Stakeholder C2 similarly argued that *Fraser Island is obviously a big drawcard. And whale watching in season* and Stakeholder F also suggested that *definitely Fraser Island, whale watching. I mean they are the two big ones*. Owing to the fact that whale watching was often mentioned at the same time as Fraser Island, it was determined that 10 of the stakeholders listed whales as a tourist activity.

Beach was another popular activity. Stakeholder B suggested doing beach activities such as *catamaran, jet skis* whereas Stakeholder F suggested tourists like *walking on the beach*. Stakeholder L argued that tourists like *relaxing on the beach* and Stakeholder H stated that tourists *like beach activities – beach orientated water sports*.

The fourth activity mentioned was *fishing* which was identified by three stakeholders. The activity of *spa* was listed by Stakeholder M, but this was not listed by any other stakeholders. This was the fifth activity. It was noted that several other

activities relating to the *outdoors* were identified by tourism stakeholders. However, each of these activities was rarely mentioned and was grouped together linked by the common *outdoors* theme. Stakeholder A listed the activities of *sky diving* and *kayaking*, Stakeholder C1 considered *4WD driving*, Stakeholders C1 and D suggested *dolphin watching*, Stakeholder F argued *bike riding* and Stakeholder L considered to *experience nature* as an activity.

4.3.11 Nights

Most stakeholders listed their tourists' length of stay based on the number of nights the tourists were at the destination. The six categories were based on responses provided by the tourism stakeholders. These are listed in Table 4.10. It is noted that some of the time period categories appear to be quite similar. For example, Stakeholder M listed both *weekend* and *1-2 nights*. Whilst both of these categories could have the same length of stay, they were treated separately. In addition, some stakeholders listed categories that overlap. For example, Stakeholder B mentioned that their tourists *stay for a weekend, week, or half a week*. Consequently, four categories (*weekend*, *2-3 nights*, *3-7 nights*, and *7 nights*) were listed for this respondent. These were treated as separate as some stakeholders were able to distinguish their tourist type using this variable.

Table 4.10: Nights

Stakeholder	Weekend	1-2 nights	2-3 nights	3-7 nights	7 nights	14 nights
A			√	√		
B	√		√	√	√	
C1			√			√
C2			√			
D			√			
E					√	
F			√			
H				√		
I	√				√	
J				√		
K				√		
L		√				
M	√	√				

The category *2-3 nights* was the most frequently identified length of stay. Two stakeholders provided reasons for this length of stay. Stakeholder C2 suggested that there's a focus of *that short break market where people are just taking, you know, two or three nights. They want a short, sharp relaxation type holiday*. Stakeholder D mentioned that the tourists will *do Hervey Bay and whale watching and two or three nights accommodation*.

The next most popular category was *3-7 nights*. Stakeholder H stated that they use this as a benchmark as the *three to seven night people generally try to pack as much in to their three to seven nights...Bang, bang, bang, it's all done*. Stakeholder J argued their tourists *go to Fraser Island for two nights, come back and stay another*

night. Then they'd do whale watching and then they'd possibly stay another night and then go. So you're pretty accurate with three to seven nights. Stakeholder K concluded that we're sort of pitched in the market. The three to seven nights stay.

The other four categories were infrequently identified. 7 nights and weekend were chosen three times. Stakeholder E suggested their tourists *come here* [the destination] *just to spend a week on the beach*. Stakeholder I argued that their tourists are *normally here for seven days*. This stakeholder also suggested they receive the weekend travellers as *it's handy* [for the tourists] *to get from Brisbane for the weekend*. Stakeholder M has tourists that stay for the *weekend holiday* tourists. 1-2 nights was chosen twice. Stakeholder M has the *conference traveller that stay one to two nights*. Stakeholder L also mentions that they have tourists with *a length of stay from one to two nights*. The final category is 14 nights listed by one stakeholder.

4.3.12 Expenditure

Five stakeholders were unable to provide an amount for a tourist's expenditure at a destination. Stakeholder C1 stated *I actually haven't got that* [expenditure] *off the top of my head but I can send you some information*. Stakeholder I mentioned *Nah. No idea*. It was, however, noted that all 14 stakeholders were able to list what their tourists spent their money on when at the destination (see Section 4.3.13).

Of the nine stakeholders that provided an expenditure amount, seven of them provided figures that related to what the tourist paid the stakeholder, not the whole trip. In each case it was listed as daily expenditure. A tour operator argued after listing the price of their trip, that *you'd need to probably talk to the Tourism Board about that* [expenditure]. *They have a much better idea because they know visitor nights and what they spend on accommodation tours. I only know what they spend when they are with me*. An accommodation provider commented that *food, beverage, we don't control. They tend to spend that at the restaurant themselves*. The remaining two respondents were DMO representatives that based their expenditure on statistics listed from Tourism Australia. The daily expenditure of the tourists as perceived by tourism stakeholders is listed in Table 4.11.

Table 4.11: Daily expenditure

Stakeholder	< \$50	\$50-\$99	\$100-\$149	\$150-\$199	\$200-\$249	\$250-\$299	\$300-\$349	\$350-\$399	\$400-\$450
A			√ (\$120)						
B		√	√						
D					√	√			
E	√ (\$25)								
F				√					
H				√					
J				√	√	√	√	√	√
K				√					
L		√							

It was concluded that the nine stakeholders provided varying levels of expenditure levels for their tourists. The lowest expenditure listed was \$25 (Stakeholder E) with the highest being \$450 (Stakeholder J). Stakeholder E was the only stakeholder with a tourist's daily expenditure *under \$50*. This stakeholder argued that *the average is around the \$25 mark per night*. Two stakeholders had tourists that spent between \$50-\$99 per day. Stakeholder L stated *between \$83 and \$86 a night*. Stakeholder B had tourists spending *between \$90 and \$120* which also takes into account the \$100-\$149 category. Stakeholder A was also in this \$100-\$149 category. They argued that *the average that they spend is about \$120 a day and that includes everything generally speaking. So that is accommodation, food, activities etc.*

The most popular category was the next expenditure category of \$150-\$199 with four responses. Stakeholder F suggested \$150. *Well looking at, our average rate is around \$100. Probably add another you know \$50 per night on to that. Covering phone calls and things like that.* Stakeholder H argued that *the average family price is \$170*. Stakeholder J is within this category, but this stakeholder also listed expenditure in five other categories. This stakeholder stated *accommodation can be \$40 to \$100...And then tours vary from like \$135 up to \$350*. This indicates a tourist's daily expenditure could be between \$175 and \$450. This is the only case where it was indicated that tourists spend over \$300 per day. Stakeholder D argued that their tourists' daily expenditure is *between \$240 and \$260*. This stakeholder is considered part of both the \$200-\$249 and \$250-\$299 categories.

4.3.13 Purchasing behaviour

Tourism stakeholders argued that tourists spend their money on five different destination elements. These can be viewed in Table 4.12. Each category has at least four responses indicating that several stakeholders believed tourists spent money on these areas.

Table 4.12: Purchasing behaviour

Stakeholder	Activities	Accommodation	Food	Beverage	Souvenirs
A	√	√	√	√	√
B	√	√	√		
C1		√			
C2	√		√		
D	√			√	√
E	√	√			
F	√	√	√	√	
G			√		
H	√		√	√	
I	√			√	√
J		√	√	√	
K	√	√	√	√	√
L	√	√	√		
M		√	√	√	

It is noted that the majority of respondents listed multiple expenditure categories. Stakeholder C2 suggested *food and some entertainment* [whale watching]. Stakeholder F mentioned *accommodation and dining* [food and beverages]. *Dining would probably even be higher on the list than activities.*

Activities was a popular expense category. Stakeholder A stated that the tourists *do spend it generally on activities*. Whilst the two activities of Fraser Island (Stakeholders C2 and K) and whale watching (Stakeholder I) were mentioned, the other seven stakeholders simply listed activity as a response. Because it was identified in Section 4.3.10 that many activities were chosen for the activities sought variable, it was decided to group all activities together in this variable.

Accommodation received a high response with nine stakeholders identifying this factor. Stakeholder C1 suggested *accommodation is obviously a primary one* whereas Stakeholder L argued that tourists spent money *obviously on their accommodation*. Several responses relating to *food and beverages* were identified. These were *food and beverages* (Stakeholders A and M), *cold drinks* (Stakeholder I), *dining out* (Stakeholder F), *eating* (Stakeholder L), *takeaway* (Stakeholder G), *restaurants* (Stakeholder G), *alcohol* (Stakeholders D, H and K), *drinking* (Stakeholder J), and finally *food* (Stakeholders B, C2, H and J). *Food and beverages* were, however, treated as separate. It can be noted in Table 4.12 that there are four instances when food is only mentioned and two when only a beverage is listed. If a respondent chose both options, a tick was placed in each category.

A final category was *souvenirs*, listed by four stakeholders. This item appeared to be only considered as an extra item or in tandem with another expense. Stakeholder K suggested that whilst tourists spend a lot on their tour, they also choose *trip memorabilia, towels, knick knacky things*. Stakeholder D argued that *the younger ones they tend to spend money on souvenirs, postcards, and of course alcohol*.

4.4 Variables used to describe tourists²⁶

As it was acknowledged in Section 4.2 that 1) eight stakeholders did not have defined segments and 2) the six stakeholders that did have segments also described their tourists using many of the 13 variables listed in Section 4.3, all stakeholders were asked to determine which of these 13 variables they considered most important for segmenting their tourists. This process was chosen to compare the results to the literature, as these were the most popular variables in the literature. It also ensured that all 14 stakeholders could be compared to identify the similarities or differences between stakeholders in segmenting their tourists.

Stakeholders struggled to identify the differences between push and pull motivations as the most important variable. Consequently, these two variables were combined for the rest of the study. The remaining 12 variables were used by at least one

²⁶ The results reported in section 4.4 have been published online in the journal *Tourism Management*. Details of the in press article titled 'Segmentation: A tourism stakeholder view' appear on page x of this thesis.

stakeholder. No other variables were considered important in classifying tourists by these stakeholders. A list of order of importance was also provided which indicates the usefulness of each variable for segmentation purposes. The results are summarised in Table 4.13.

Table 4.13: The bases used by tourism stakeholders to describe their tourists

Stakeholder	Demographic					Geographic	Psychographic			Behavioural			Total responses
	Age	Gender	TPC	Income	Education	Origin	Motivations	Trip Purpose	Activities Sought	Nights	Expenditure	Purchasing Behaviour	
A	√(*)			√		√(*)	√	√	√		√		7
B						√(*)							1
C1	√			√		√(*)	√	√	√		√	√	8
C2	√					√			√(*)				3
D	√(*)					√		√		√			4
E	√					√		√(*)	√				4
F	√	√		√(*)			√	√	√				6
G	√(*)		√(*)						√(*)		√(*)		4
H				√			√					√(*)	3
I									√(*)				1
J				√				√(*)	√(*)				2
K							√(*)						1
L	√(*)		√(*)			√(*)				√			4
M								√(*)		√(*)			2
∩	4	0	2	1	0	4	1	3	4	1	1	1	
≈	8	1	2	5	0	7	5	7	8	3	3	2	

*:- Indicates most important variable/s

∩:- Indicates how often identified as most important variable

≈:- Indicates how often the variable is identified

The lowest number of variables applied was one (Stakeholders B, I, and K) whereas the most was eight (Stakeholder C1). Stakeholder B argued that they *just rang particular areas*. After promoting, it was identified that this stakeholder would use a telephone book and target tourists within a town or city. Stakeholder K suggested that they differentiate their tourists with [price motivation], as *all people are price motivated when it comes to touring. And what product they are going to go [to]. It's just price motivation*. Stakeholder C1 suggested that *a lot of the target marketing is segmented by location*. Also they asked to *reserve it for expenditure, activities, their motivation... Trip purpose. Segmenting age, like you were going to do a backpacker campaign. That's where you aim it. TPC. Purchasing behaviour I suppose is tied up with expenditure... Income is a condition for sure*.

4.4.1 Segmentation bases

It was noted that three of the stakeholders (A, C1 and D) could distinguish between tourist types using all four segmentation bases (demographic, geographic, psychographic and behavioural) identified by Kotler (1980). Five of the stakeholders listed three forms of segmentation. The combination was mixed for the stakeholders, but in each case a demographic variable was considered. In total, over half of the stakeholders used at least three forms of segmentation which accords with the majority of studies from the literature review. Three stakeholders used a combination of two segmentation bases, with demographic and psychographics the most popular (Stakeholders F and J). The remaining three stakeholders used one segmentation base. It is noted that two stakeholders used psychographics.

Tourism stakeholders used different segmentation variables to describe the tourists that use their services. Frequent variables used to describe tourists included *activities sought* (psychographic) (8 responses), *age* (demographic) and *location* (geographic) (7 responses each), *trip purpose* (psychographic) (6 responses) and *motivations* (psychographic) and *income* (demographic) (5 responses each). Segmentation variables used less frequently included *gender*, *TPC*, (both demographic) *expenditure*, and *purchasing behaviour* (both behavioural).

As previously noted, most tourism stakeholders were able to describe their tourists using more than one segmentation base. Three of the stakeholders (A, C1 and E) utilised demographic, geographic, psychographic and behavioural segmentation variables. Stakeholder A was able to list the segmentation variables in descending order of importance. *Put those two [age and location] together for sure. Trip purpose and motivations would be the next one. Then activities and expenditure. Then group income in there*. Stakeholder C1 identified *location* as a dominant variable, but found it difficult to distinguish the level of importance between the other eight identified segmentation variables.

Three tourism stakeholders described their tourists using one segmentation base. Two of these stakeholders were small tourism stakeholders who did not appear to actively segment tourists. The first, Stakeholder B, stated that when required they segment by location. *We don't try to target them. But when we did we used the telephone and just rang particular areas*. Stakeholder I focused on activities sought as the sole variable by claiming that *we'd be aiming to get people into here as an*

activity to experience life as it used to be. I wouldn't look at any other criteria. Conversely, Stakeholder K, which was one of the larger organisations, argued that they focus on *price motivation* as the only relevant criterion. The stakeholder argued that *all people are price motivated when it comes to touring. And what product they are going to go [to]. It's just price motivation. They weigh up the pros and cons of a tour and it's price motivation.*

It was identified that whilst stakeholders may have listed similar distinguishing variables, each of them tended to classify their tourists differently. For example, Stakeholder E argued that *trip purpose, activities sought and nationality [location] all play a part. And age, that'd be about it.* Stakeholder L stated that they *segmented the market by lifestyle stage [a combination of age and TPC] and demographics. Also length of stay [nights]. That's how we currently do it.* The stakeholder later argued that the *visit market tends to reside in Brisbane and the South East Queensland*, indicating that origin is an additional measure of segmentation.

Stakeholder F illustrated the difference in their segmentation technique by indicating that they would segment by *first, well, definitely income, second would be age. You know about the 25 to 45 age group, [third] trip purpose, why they are coming here. Activities [activities sought] would be fourth, and then motivations.* Stakeholder D argued that they would *put age straight at number 1, as we have the highest level of patronage over 55. We target the older market...And then we would probably want a second selection of nationality [origin] because we try to promote to the backpacker market... Trip purpose [third] – the idea of the trip purpose is we do a different tour.*

It was also noted that certain stakeholders focused on segmentation variables that were important to them, but were deemed irrelevant by others. For example, Stakeholder H argued that they focus on *purchasing behaviour...because you want to know what time, how much*, whereas Stakeholder I suggested that *I wouldn't really be worried about purchasing behaviour.* Stakeholder E suggested that *we don't know anything whatsoever on that [purchasing behaviour]. Whether they've got 20 cents to their name or 20 million you know. It doesn't affect us here.* Stakeholder G suggested that *travel party composition* was very important, whereas Stakeholder C1 argued concerning this same variable that *I don't think that matters.* The same stakeholder considered location as the most important variable, arguing that *a lot of the target market is segmented by location.* Conversely, Stakeholder F suggested that location is *lowest on the list. I mean they come from all backgrounds.* Stakeholder I also suggested that *I wouldn't worry about nationality [origin].*

4.4.2 Most important variable

It was noted that nine stakeholders considered one variable as the most important for segmentation of their tourists. In total, seven of these variables were identified. *Origin* (Stakeholders B and C1) and *activities sought* (Stakeholders C2 and I) were identified twice. *Age* (Stakeholder D), *income* (Stakeholder F), *motivations* (Stakeholder K), *trip purpose* (Stakeholder K), *purchasing behaviour* (Stakeholder H) were chosen once. For example, Stakeholder C1 suggested that *I think a lot of the target marketing is segmented by location*, whereas Stakeholder I stated that they are *trying to get people into here as an activity to experience life as it used to be.*

In five instances, a combined most important variable was identified. It was, therefore, possible that more than one variable can be considered most important for a respondent. Stakeholder A listed both age and *origin* as being equally important, *put those two together* [age and origin] *for sure...Trip purpose and motivations would be the next one...Activities* [activities sought] *and expenditure. And then I think the rest of it's not. Well, actually I will group income in there too. The rest of it is not really relevant.* Stakeholder G identified four important variables. *You'd probably say travel, travel party composition. So you'd look at families.... You'd look at nationality* [origin]. *Activities would be one that, you know, that you'd want to market a Fraser Island trip, then you'd be looking at what activities they are doing. Age, you know, you'd probably target the specific age group for a particular, you know, if you were doing a safari tour, you'd target an age group.*

In reviewing Table 4.13, it was noted that the variables of *age* and *activities sought* (eight responses) were identified most frequently by the stakeholders. Both variables were also identified as the most important variables four times, indicating that these variables are crucially important for the tourism stakeholders for classifying purposes. Stakeholder D argued that they would *put age straight at number one, as we have the highest level of patronage over 55. We target the older market...And then we would probably want a second selection of nationality* [origin] *because we try to promote to the backpacker market...Trip purpose* [third] – *the idea of the trip purpose is we do a different tour.*

Origin was also listed as the most important variable four times, but had one less frequency score (seven). *Trip purpose* also polled well with the same frequency score and three most important ratings. For example, Stakeholder E suggested *trip purpose would be number 1.* Stakeholder M argued that *they segment based on trip purpose.* It is noted that *TPC* has two most important ratings. However, both times (Stakeholders G and L), this is listed in conjunction with other variables. Five other variables (*income, motivations, nights, expenditure, and purchasing behaviour*) are identified once as an important variable. It is noted that two of the variables, *education* and *gender*, received no most important classification variables. Education received no responses at all. However, Stakeholder F argued that *gender is used simply because women are the main bookers* of their tourism type.

A few stakeholders were able to rank their variables differently. For example, Stakeholder F indicated that they segment by *first, well, definitely income, second would be age. You know about the 25 to 45 age group, [third] trip purpose, why they are coming here. Activities* [activities sought] *would be fourth, and then motivations.* However, some respondents only listed a few variables (e.g. less than four) and treated the secondary variables as equal. As not all stakeholders were able to rank the variables they use to classify tourists, it was decided not to rank variables further than the most important variable. If a variable was considered *most important*, this was identified in the *most important* and *total* category.

4.5 Conclusion

This chapter provided a semi-structured analysis to answer the first research question outlined in Chapter 2. It was concluded that only six of the tourism stakeholders currently segment their tourists. There was considerable variation between how stakeholders at the destination use segmentation variables to distinguish between tourist types. The implications of the findings of this research are discussed in Chapters 6 and 7. The findings from this research were used in the development of the questionnaire survey which was used to complete step two of the proposed two-step segmentation approach. The results from the questionnaire survey will now be reviewed in Chapter 5.

Chapter 5: Step two: tourists

5.1 Introduction

This chapter reports the data analysis for stage two of the proposed two-step approach to segmentation (the questionnaire survey). The data analysis is reported in four sections. Descriptive statistics are detailed in Section 5.2. Here the response frequencies of each segmentation variable as identified by the tourism stakeholders in the semi-structured interviews are listed. Section 5.3 compares the findings of this study to findings from a recent study conducted by Tourism Australia. Section 5.4 reports the tourism segments identified for the destination arising from the TwoStep® cluster analysis. The next section (Section 5.5) compares the segments arising from the two-step approach to segmentation with the segments that are currently used by the destination marketing organisation (DMO). Here the second research question: *Does the two-step approach yield a more holistic view to tourists travelling to the destination than the current DMO segmentation approach?* will be addressed. The two-step approach segments are also compared with a prominent study from the literature. This process was used to showcase the more comprehensive tourist profile to guide managerial decision making using the two-step approach to segmentation. Section 5.6 provides the conclusion to the chapter. How the findings reflect and build upon the existing literature will be discussed in Chapters 6 and 7.

5.2 Descriptive statistics and analysis

In this section the frequencies of the 13 segmentation variables identified from step one of the research are reported. The total number of push motivations, pull motivations and activities are also listed. The frequencies of the categorical variables are reported in Table 5.1.

Table 5.1: Categorical variables

Age		Gender		Travel Party Composition	
18-24	19.2%	Male	46.1%	By myself	11.3%
25-34	26.2%	Female	52.5%	Couple	39%
35-44	14.1%	Missing	1.4%	Family	16.8%
45-54	13.7%			Adult group	27.6%
55-64	15.8%			Other	2.6%
65+	8.6%			Missing	2.8%
Missing	1.3%				
Annual Household Income SAUD		Origin		Trip Purpose	
Under \$20,000	16.3%	North America	4.9%	To have a holiday	66.1%
\$20,000-\$39,999	12.3%	Europe	32.3%	To visit your friends	14.6%
\$40,000-\$59,999	12.3%	Asia Pacific	3.1%	To visit your family	16.1%
\$60,000-\$79,999	9.6%	Queensland	14.6%	Business purposes	3.3%
\$80,000-\$99,999	12.9%	New South Wales	24.1%		
\$100,000+	21.9%	Victoria	10.7%		
Missing	14.6%	Australia (other)	7%		
		Missing	3.4%		
Daily Accommodation Expenditure SAUD		Daily Activities Expenditure SAUD		Daily Food and Beverages Expenditure SAUD	
Under \$50	45%	Under \$50	31.9%	Under \$50	44.8%
\$50-\$99	15.1%	\$50-\$99	23.4%	\$50-\$99	28.2%
\$100-\$149	13.5%	\$100-\$149	15.3%	\$100-\$149	11.9%
\$150-\$199	8.7%	\$150-\$199	7.4%	\$150-\$199	3.2%
\$200+	11.3%	\$200+	9.5%	\$200+	4.3%
Missing	6.5%	Missing	12.6%	Missing	7.6%

A sample size of 852 was collected. Almost half of the respondents were aged between 18 and 34. There were slightly more *females* than *males*. Travelling as a *couple* was considered the most popular option with a frequency of almost 40 per cent. Annual household income varied with the highest percentage of tourists surveyed earning in excess of \$100,000. The international destination of *Europe* was the most common origin point with just over 30 per cent of responses. The domestic state of *New South Wales (NSW)* was also common with one in four respondents travelling from this location. Approximately two-thirds of the tourists travelled to the Fraser Coast for the purpose of *to have a holiday*. The largest percentage of tourists spent *under \$50 per day* in each expenditure variable of accommodation, activities, and food and beverages.

The results for the continuous variables are listed in Table 5.2.

Table 5.2: Continuous variables

Push Motivations		Number of Push Motivations			
To rest and relax	54.1%	0	4.3%		
To go to a place you have not been before	51.4%	1	9.9%		
To go sightseeing	50.4%	2	16.8%		
To have fun	49.3%	3	17.4%		
To see something different	42.4%	4	14.4%		
To escape from your everyday lifestyle	39.6%	5	12.3%		
To spend time with your partner	27%	6	9.3%		
To experience a different culture	21.5%	7	7.6%		
To be together with your family	21.1%	8	4.3%		
To participate in recreational activities	19.2%	9	2.6%		
To get away from the demands of home	16.8%	10	0.8%		
		11	0.2%		
Pull Motivations		Number of Pull Motivations			
The weather	34.7%	0	21.9%		
It was recommended by someone	25.2%	1	25.1%		
To experience a relaxed lifestyle	20.2%	2	28.2%		
It is a convenient stop over point	17.7%	3	13%		
The untouched nature	15.6%	4	6.3%		
There's a variety of things to see and do	13.7%	5	3.2%		
To go camping	10.4%	6	1.1%		
It is a family orientated destination	10.2%	7	0.7%		
The competitive price	7.7%	8	0.2%		
The friendly locals	7.7%	9	0.1%		
The safe environment	7.5%	10	0.1%		
The luxury accommodation	5.2%				
Activities Sought		Number of Activities Sought			
Fraser Island	60.4%	0	16.9%		
Beaches	28.4%	1	42%		
Whale Watching	21.5%	2	25.8%		
Nature activities	13.7%	3	11.6%		
Fishing	11.9%	4	2.9%		
Beach activities	7.9%	5	0.7%		
Nights (number of)					
1	4.9%	8	1.9%	16	0.2%
2	16.3%	9	1.4%	17	0.2%
3	20.1%	10	2.2%	18	0.2%
4	17.6%	11	1.1%	19	0.1%
5	8.9%	12	0.9%	20	0.4%
6	3.5%	14	1.9%	21	0.9%
7	8.5%	15	0.4%	Over 21	3.9%
Missing	4.5%				

Fraser Island was the most frequently identified activity that tourists sought when coming to the destination, with almost two-thirds of the sample choosing this option. *Fraser Island* received over twice as many responses than the next highest activities, *beaches* and *whale watching*. Over 40 per cent of tourists sought one activity when coming to the Fraser Coast, and one quarter considered two activities. This indicates the majority of respondents (67.8%) chose one or two activities.

Six push motivations were chosen by 40 per cent or more of respondents. *Rest and relaxation* was the most common choice (54.1%). There was not a dominant number of push motivations, with the highest, three, being identified by just under one-fifth of respondents.

Despite 12 pull motivations being presented to tourists, only three were considered by more than 20 per cent of respondents. Half of the pull motivations were chosen by 10 per cent or less of the sample. The *weather* was the most identifiable pull motivation with just over one-third of tourists attracted to the destination based on this aspect. Over three-quarters of respondents had between zero and two pull motivations. It is noted that about one-fifth of respondents did not specify a motivation for choosing this destination. The lower response rate could be because activities such as Fraser Island, beaches and whale watching may have been the reason why tourists were attracted to the destination, and they had previously stated this under activities sought.

The number of nights that tourists stayed at the destination varied. Over half the respondents (54%) spent between *two* to *four* nights at the destination. Just over 20 per cent spent between *five* and *seven* nights at the destination. Approximately 15 per cent stayed for longer than *one week*. It was noted that over 30 tourists (3.9%) spent longer than *three weeks* at the Fraser Coast. The length of stay for these tourists varied, and, therefore, these tourists were grouped together into one category.

5.3 Comparison with the National Visitor Survey (NVS)

The results from this study were compared with data from the National Visitor Survey (NVS)²⁷ that was conducted in the Fraser Coast for 2006 to gain insights into the representativeness of the sample. It was noted that the NVS encompassed both the Fraser Coast and the South Burnett (a neighbouring region). Many variables were not directly comparable to this study. For example, the activities provided in the NVS (e.g. pubs, clubs, and discos, and eating out at restaurants) were irrelevant and were not identified by either Fraser Coast tourism stakeholders or tourists. Conversely, two of the most popular Fraser Coast activities (Fraser Island and whale watching) were not included in the NVS. Expenditure was listed in the NVS as overall expenditure for the financial year based on all costs within the region. It was, therefore, not comparable to this study. Despite these differences, five of the variables in this study were able to be directly compared to the NVS (see Table 5.3).

²⁷ The NVS is a standardised tourism destination questionnaire used by Tourism Australia at all Australian tourism destinations.

Table 5.3: Comparison of studies

Age (domestic)	NVS	This study	Age (international)	NVS	This study
18-24 ^a	14%	8%	18-24	42%	35%
25-44	31%	37%	25-44	37%	47%
45-64	41%	40%	45-64	15%	16%
65+	14%	15%	65+	6%	2%
TPC (domestic)			TPC (international)		
Alone	22%	10%	Alone	54%	14%
Couple	36%	45%	Couple	25%	34%
Adult group ^b	17%	20%	Adult group ^c	16%	40%
Family	24%	21%	Family		11%
Other	2%	3%	Other	5%	1%
Trip Purpose			Origin		
To have a holiday	57%	66%	Intrastate	65%	15%
To visit friends and relatives	32%	31%	Interstate	19%	43%
Business	11%	3%	International	16%	42%
Origin (domestic)			Origin (international)		
Queensland (QLD)	78%	26%	Europe	63%	80%
New South Wales (NSW)	13%	43%	North America	17%	12%
Melbourne (Victoria) ^d	4%	19%	Other ^f	20%	8%
Other ^e	5%	12%			
Nights (domestic)					
Intrastate	5.3	10			
Interstate	3.5	9.2			
International	4.6	4.2			

a: For NVS, the age of tourists ranged from 15-24.

b: For the NVS this includes all adults (e.g. friends and adult family) travelling together.

c: For this study, Adult Group includes all adults (that are not related) that travel together.

d: For this study, Melbourne was combined into Victoria. The NVS does not list Victoria as a location.

e: For both studies, this category was for locations outside of the first three options.

f: This is classed as Asia Pacific in this study as no other locations were identified. The NVS treated any locations outside of Europe and North America as other.

Trip purpose was largely similar²⁸ for both studies, with *to have a holiday* most frequently identified. A major difference was that over four-fifths of tourists were *international* in the current study, whereas less than one-fifth were in the NVS. Despite the larger international market in this study, the majority of tourists travelled from *Europe* in both studies. Whilst *Queensland (QLD)* was the dominant market for the 2006 study, the state of *New South Wales (NSW)* was most popular in the current study. *QLD* and *Victoria (VIC)* were also relevant. The ages of the segments were similar in both studies. Whilst the TPC for the domestic tourists was also comparable for both studies, it was noted that significantly more people travelled as an *adult group* for the current study, and many more people travelled *alone* in the NVS. Additionally, a small percentage travelled as a *family* in this study. This was not listed as a separate category in the NVS for international travel results. The number of nights was comparable for international tourists; however, both intrastate and interstate tourists travelled for significantly longer in the current study.

²⁸ This study sought to focus on leisure travel. The NVS considers all forms of travel. Therefore, the trip purpose of business is minimal.

Whilst there were similarities between the NVS and this study, it can be concluded that the sample collected for this study may not be entirely representative of the NVS. Eighty-four per cent of tourists were domestic in the NVS, whereas about 58 per cent of the tourists were domestic in this study. This study focused on leisure travel, while the NVS considered all forms of tourism as a purpose of the visit.

5.4 Cluster analysis

This section reports the results of the cluster analysis. Section 5.4.1 discusses the screening of variables for missing data and outliers. Section 5.4.2 lists the initial cluster solution. The next section (Section 5.4.3) lists the final solution. Section 5.4.4 discusses the validity of the model by splitting the final solution into two based on the month of collection.

5.4.1 Initial screening of variables

It was identified that all of the variables had missing data²⁹. However, it is noted that no variables are candidates for deletion based on this criteria, as none exceed 15 per cent of missing data (Hertel 1976). It was also concluded that data did not occur in a specific non-random fashion (Malhotra 2004). In examining the data for outliers using a graphic profile in SPSS, all but one variable were normally distributed amongst the sample and did not contain outliers. Outliers were present in the variable, nights, but this was minimal as less than 5 per cent of these respondents were considerably different from the remaining cases. As Hair et al. (2006, p. 573) argue that ‘the researcher should exhibit caution in deleting observations from the sample because such deletion may distort the actual structure of the data’, these outliers were not removed as they were deemed representative of some tourist types encountered by the researcher.

As can be viewed in Table 5.2, a small percentage of tourists spent considerable time (approximately 4 per cent spent longer than three weeks) at the destination. In addition, from reviewing published material on the Fraser Coast (e.g. the Destination Management Plan), the researcher determined that some tourists spent many weeks, even months at the destination. Hence, the researcher considered that the cases were representative of a type of tourist that travels to the destination.

5.4.2 Initial cluster solution

TwoStep® cluster analysis was used to form the segments which were based on the 13 segmentation variables that were identified by tourism stakeholders in step one. It was identified that 283 cases had missing data. Cluster analysis was performed on both the full set and a data set that had all cases with missing data removed. The solution with missing data cases omitted produced a smaller BIC. It was, therefore,

²⁹ The continuous variables of activities sought, push motivations and pull motivations treated missing data as a negative response. Refer to section 3.5.2.

decided to remove cases with missing data. Key statistics are reported in Table 5.4. This table also lists the findings of the four other cluster solutions presented for this study.

Table 5.4: Cluster selection with BIC values

Model	Number of segments	Schwarz's Bayesian Criterion (BIC)	BIC change ^a	Ratio of BIC changes ^b	Ratio of distance measures ^c
Initial solution (All cases, 13 segmentation variables)	3	14,280.518	-395.950	.413	1.719
Missing solution (283 missing cases removed, 13 segmentation variables)	3	14,186.355	-467.317	.476	2.159
Final solution (Cases with missing data removed, 10 segmentation variables)	3	11,961.731	-418.615	.415	1.919
Odd-month solution	3	5,537.972	-123.793	.315	1.703
Even-month solution	3	5,476.333	-108.051	.361	1.398

a. Changes are from the previous numbers of clusters in the table.

b. Ratios of changes are relative to the change for each of the three cluster solutions.

c. Ratios of distance measures are based on the current number of clusters against the previous number of clusters.

The cluster analysis with cases containing missing data removed produced three segments with a BIC of 14186.355 (see Appendix VIII for an overview of the model). In total, 283 cases were excluded from the analysis. The 13 segmentation variables were examined to evaluate their ability to discriminate between segments. Seven segmentation variables (age, TPC, income, origin, accommodation expenditure, food and beverages expenditure, and nights) exceeded critical lines for all three segments, and were able to distinguish between segments. The six remaining variables were closely considered to ascertain whether they were able to discriminate between segments. Three variables were able to distinguish between two of the three segments (activities expenditure, number of push motivations, number of pull motivations), one variable (trip purpose) was capable of distinguishing the variables between one of the three segments, and two variables (gender and number of activities sought) were unable to discriminate between the segments.

Despite the two motivation variables and activities expenditure failing to distinguish between all segments, they remained in the analysis as they are statistically different for two segments. In addition, each of these variables distinguished between the other segments. For example, segment one spent the most on daily activities (over 40% spent more than \$100 per day), followed by segment three (over 70% spent less than \$100 per day), and then segment two (over 70% spent less than \$50 per day). Further results can be viewed in Appendix VIII. Whilst trip purpose distinguished segment two, at least half the respondents in each segment had the same purpose of trip which was *to have a holiday*. Number of activities sought and gender failed to discriminate between any segments and also provided similar responses in Appendix VII. As these three variables do not sufficiently distinguish between segments, they

were deleted from further analysis, as inclusion of variables can change segments (Hair et al. 2006).

5.4.3 Final cluster solution

Cluster analysis was performed once again with the 10 variables that were capable of distinguishing between at least two segments. Three segments were revealed with a smaller BIC value, a lower BIC change and distance measure (see Table 5.4). A cluster solution with 10 segmentation variables was accepted as the final solution. The details of this are listed in Tables 5.5 and 5.6. In each table, the option with the highest percentage for both categorical and continuous variables is bolded. Student t-tests and chi-square tests confirmed that each of the 10 variables varied between clusters. The details are listed in Appendix IX. The same seven variables exceeded the critical line for all three segments, and activities expenditure, number of push motivations, and number of pull motivations distinguished between two of the three segments. These three variables were again able to classify tourists differently.

It is noted that 10 of the push motivations (90.9%) and 11 of the pull motivations (91.7%) were significantly different among the three segments (see Table 5.6). The three segments displayed highly significant differences for eight push motivations (72.7%) and 10 pull motivations (83.3%). Only the push motivation '*to get away from the demands of home*' and the pull motivation '*the untouched nature*' were not significantly different among all three segments.

Table 5.5: Final cluster solution

	Total		Young Europeans		Wealthy Travellers		Long Stay Travellers	
Segment size	N = 569		N = 224		N = 233		N = 112	
Segment %	100		39.4		40.9		19.7	
Continuous Variables	Overall Mean	Overall SD	Mean	SD	Mean	SD	Mean	SD
Push Motivations	4.2	2.3	4.8	2.2	4.1	2.3	3	1.9
Pull Motivations	1.7	1.5	1.4	1.3	1.7	1.4	2.5	1.7
Nights	6.6	11.8	3.7	2.4	4.3	2.4	17	23.5
Categorical Variables	N	%	n	%	n	%	n	%
Age								
18-24	117	20.6	89	39.7	16	6.9	12	10.7
25-34	181	31.8	109	48.7	68	29.2	4	3.6
35-44	86	15.1	17	7.6	50	21.5	19	17
45-54	83	14.6	7	3.1	56	24	20	17.9
55-64	68	12	2	0.9	30	12.9	36	32.1
65+	34	6	0		13	5.6	21	18.8
TPC								
By myself	64	11.2	39	17.4	5	2.1	20	17.9
Couple	219	38.5	63	28.1	99	42.5	57	50.9
Family	102	17.9	6	2.7	80	34.3	16	14.3
Adult group	168	29.7	116	51.8	43	18.5	9	8
Other	16	2.8	0		6	2.6	10	8.9
Income								
< \$20,000	109	19.2	85	37.9	3	1.3	21	18.8
\$20,000-\$39,999	81	14.2	35	15.6	21	8.8	26	23.2
\$40,000-\$59,999	75	13.2	35	15.6	27	11.3	20	17.9
\$60,000-\$79,999	74	13	24	10.7	29	12.1	20	17.9
\$80,000-\$99,999	85	14.9	24	10.7	48	20.1	13	11.6
\$100,000+	145	25.5	21	9.4	111	46.4	12	10.7
Origin								
Nth America	38	6.7	25	11.2	10	4.3	3	2.7
Europe	208	36.6	158	70.5	50	21.5	0	
Asia Pacific	14	2.5	8	3.6	6	2.6	0	
Qld	92	16.2	1	0.4	45	19.3	46	41.1
NSW	135	23.7	29	12.9	81	34.8	25	22.3
VIC	53	9.3	0		31	13.3	22	19.6
Aus (not specified)	29	5.1	3	1.3	10	4.3	16	14.3
Daily Accommodation Expenditure								
< \$50	289	50.8	181	80.8	15	6.4	93	83
\$50-\$99	88	15.5	39	17.4	34	14.6	15	13.4
\$100-\$149	77	13.5	4	1.8	70	30	3	2.7
\$150-\$199	55	9.7	0		55	23.6	0	
\$200 +	60	10.5	0		59	25.3	1	0.9
Daily Activities Expenditure								
< \$50	208	36.6	82	36.6	45	19.3	81	72.3
\$50-\$99	157	27.6	75	33.5	58	24.9	24	21.4
\$100-\$149	98	17.2	36	16.1	57	24.5	5	4.5
\$150-\$199	51	9	14	6.3	37	15.9	0	
\$200 +	55	9.7	17	7.6	36	15.5	2	1.8
Daily Food and Beverages Expenditure								
< \$50	285	50.1	176	78.6	20	8.6	89	79.5
\$50-\$99	163	28.6	44	19.6	99	42.5	20	17.9
\$100-\$149	82	14.9	3	1.3	77	33	2	1.8
\$150-\$199	16	8.4	1	0.4	15	6.4	0	
\$200 +	23	4	0		22	9.4	1	0.9

Table 5.6: Push and pull motivations

	Total %	Young Europeans %	Wealthy Travellers %	Long Stay Travellers %	Sig.
Push Motivations					
To go to a place where you have not been before	56.1	77.7	50.2	25	.000**
To rest and relax	54.8	42.9	62.2	63.4	.000**
To have fun	52.2	68.3	44.6	35.7	.000**
To go sightseeing	52	62.9	51.5	31.3	.000**
To see something different	45	59.8	42.1	21.4	.000**
To escape from your everyday lifestyle	42.4	50.9	37.8	34.9	.004*
To spend time with your partner	29.3	26.3	35.6	22.3	.018*
To experience a different culture	24.4	45.5	12.9	6.3	.000**
To participate in recreational activities	21.3	25.9	22.7	8.9	.001**
To be together with your family	20.7	3.6	30.5	34.8	.000**
To get away from the demands of home	18.1	14.7	21	18.8	.213NS
Pull Motivations					
The weather	33	25.9	33.5	46.4	.001**
It was recommended by someone	26.7	35.3	24	15.2	.000**
To experience a relaxed lifestyle	18.6	6.7	21.5	36.6	.000**
It is a convenient stop over point	18.1	25.4	12	16.1	.001**
The untouched nature	16.9	19.2	17.6	10.7	.137NS
There's a variety of things to see and do	12.3	5.8	15	19.6	.000**
To go camping	11.4	14.3	3	23.2	.000**
It is a family orientated destination	10.2	0.4	10.7	28.6	.000**
The safe environment	7.7	1.3	6.9	22.3	.000**
The competitive price	7.2	3.6	10.7	7.1	.013*
The friendly locals	6.7	2.7	4.7	18.8	.000**
The luxury accommodation	5.8	1.3	12	1.8	.000**

** Significant at the $p < .001$

* Significant at the $p < .05$

NS Not significant

The first segment is almost 40 per cent in size. This segment is young with the overwhelming majority aged *under 35*. This segment earns the least and travels predominantly from *Europe*. The segment also spends little with *under \$50* being the most popular option for all three expenditure categories. Just over half of this segment travel as an *adult group*. This segment stays for about *four nights*. This segment has the most push motivations and the fewest pull motivations. *It was recommended by someone* was the dominant pull motivation and *to go to a place you have not been before* was the most popular push motivation. The key distinguishing features of this segment is that the tourists are young and travel from Europe. Due to these features, this segment is labelled *young Europeans*.

The second segment is the largest (40.9%), although only 1.5 per cent larger than the first segment. This indicates these two segments are approximately the same size. The largest percentage of people in this segment earn over *\$100,000 a year* and travel from *NSW*. Tourists in this segment are primarily aged between *25-54*. These tourists travel as a *couple* or as a *family* and they stay on average *four nights*. Of the three segments, this segment spends the most with *\$100 or more* for daily accommodation and between *\$50-\$149* for daily activities and for food and

beverages expenditure being identified. This segment has approximately *four* push motivations and *two* pull motivations. The most popular push motivations were *to rest and relax* and *the weather* pulled tourists most frequently to the destination. The key distinguishing feature of this segment is the higher income and expenditure. This segment was, therefore, labelled *wealthy travellers*.

The third segment is the smallest and represents approximately 20 per cent of the tourist data set. These tourists are older with more than half being aged *over 55*. The income of this segment was relatively evenly distributed across the six categories, though there are somewhat fewer in the two highest income categories. This segment largely comprises domestic travellers with QLD the dominant origin. These tourists travel as a couple and stay the longest, an average of *17 nights*. They have the lowest number of push motivations and the highest number of pull motivations. This segment also travels *to rest and relax* and is pulled by *the weather* and *to experience a relaxed lifestyle*. This segment is distinguishable based on its long length of stay. This segment was, therefore, labelled *long stay travellers*.

5.4.4 Cross-validation

To validate the model, the tourists were sorted on the basis of the month when the survey was collected. Three odd months ($n = 253$) and three even months ($n = 246$) were chosen to split the data set evenly. As can be seen from Table 5.4 (on p. 103), both models produced a similar BIC value. Three clusters were again extracted using TwoStep® cluster analysis. The three segments of *young Europeans*, *wealthy travellers*, and *long stay travellers* are now reviewed and the similarities of the three segments based on the odd-month, even-month and final solution.

The young European market was extremely similar for all three solutions (see Appendix X). The size of each segment was approximately 40 per cent and the result for each of the 10 variables was comparable for all three solutions. The number of push motivations was similar, being approximately between 4 and 4.5. The pull motivations were about 1.5 for each solution and the number of nights was between 3.7 and 3.9.

Over four-fifths of young Europeans were aged under 35, and the greatest percentage of these tourists earned an annual household income of under \$20,000 in each of the three solutions. Over two-thirds of these tourists travelled from Europe with no common secondary place of origin in the odd-month, even-month and final solution. Each of the three solutions also had a dominant daily expenditure of under \$50 for each of the three expenditure variables. The percentage difference was less than two per cent for the food and beverages and accommodation expenditure categories. Each solution had an adult group as the dominant TPC with over half of respondents within this category. No noted differences were identified between the three solutions.

The size of the wealthy traveller segment varied little between the three solutions (see Appendix XI). The size of the odd-month (38.7%) was very similar to the final solution (40.9%). The even-month solution (47.6%) was slightly larger than the other two solutions. The three solutions produced similar results for each of the continuous

variables. Each solution had between 4 and 4.5 push motivations. The average number of pull motivations for each solution was identified as 1.75. Finally, each solution had the wealthy travellers staying for an average of approximately 4.5 nights.

The age and income of the wealthy traveller tourists was similar in each model with over 70 per cent of the group aged between 25-54 and about half of each solution earning an annual household income in excess of \$100,000. The second most frequently identified category was \$80,000 to \$99,999 which was considered by about 20 per cent of tourists (25% for the odd-month solution) for each of the three models.

All solutions also had tourists spending between \$50 and \$99 on daily activities and food and beverage expenditure. The expenditure categories for each of these variables varied for each model. Over 60 per cent of wealthy travellers also spent over \$100 per night on accommodation. At least 30 per cent of tourists travelled as a couple or a family in all three solutions. All three solutions had approximately 20 per cent of wealthy travellers travelling from Europe, NSW and QLD. NSW was the dominant place of origin for the odd and final solution, whereas Europe had a slightly higher percentage for the even solution.

It was noted that the size of all three of the solutions varied for the long stay travellers segment (see Appendix XII). Whilst the size of this segment was approximately 20 per cent in the final solution, the even-month solution's percentage was only 15 per cent, presumably because of the increase of the wealthy traveller segment during these months. The odd-month solution size was similar to the percentage of the final solution. Despite the difference in solution sizes, the number of push and pull motivations, expenditure levels, origin, and TPC are similar in all three solutions.

Whilst the even-month solution has a segment percentage size that is slightly larger than the other two solutions, many similarities are identified for this final segment. The average number of push motivations was similar which was between approximately 2.5 and 3. The number of pull motivations was also between 2.25 and 2.5 on average for all solutions. The age segment of 55-64 was most popular in each solution³⁰ and the largest percentage of tourists (over a third of the respondents) travelled from QLD. NSW and VIC were also the second and third place of origin respectively for each of the three solutions.

The daily accommodation, activities, and food and beverages expenditure was similar between all three solutions, with over 70 per cent of long stay travellers spending under \$50. Additionally, about half of these tourists travelled as a couple. There was also a similar percentage for the TPC for travelling alone (by myself) and family. Approximately a quarter of tourists earn between \$20,000 and \$39,999.

It was noted that whilst there are a few differences between the odd-month and even-month solutions in the wealthy travellers and long stay travellers, each solution for the three segments produced results that were essentially similar to the final model.

³⁰ For the odd-month solution the percentage for the age categories of 25-34, 45-54, and 55-64 are the same.

The young European market was also similar for all 10 variables. The three cluster solution was, therefore, validated for this study (Hair et al. 2006).

5.5 Comparison to DMO segments

The segments derived from the two-step approach were then compared with the primary segments that have been identified by the DMO as set out in Table 3.1 (Tourism Queensland 2007b). According to Tourism Queensland (2007b), these segments represent the tourists who have the greatest potential to be converted into visitors to the region, and therefore, a high chance of providing a positive return on investment in marketing activities. Young parents (family) and older tourists (aged 45 and over) with an annual household income of \$60,000 dominate the segments that are currently described by the DMO.

Considerable differences arose between the segmentation variables used by the DMO and in this study. Specifically, *mode of transportation* and *lifestage* were not identified as a segmentation variable in the two-step approach to segmentation. Further, the three expenditure items (behavioural) and two motivation variables (psychographic) were not utilised in the DMO segmentation. The DMO segmentation uses three forms of segmentation, being demographic (lifestage, age, and household income), geographic (source market) and behavioural characteristics (travel party, transport, and type of trip). The segments derived from the proposed two-step approach use all four segmentation bases. It was also noted that whilst the DMO segmentation emphasises the lifestage and source market segmentation variables, the cluster solution treats each of the 10 segmentation variables equally.

The wealthy traveller segment compares favourably with the DMO segments that travel from Sydney and Brisbane (segments 1, 2 and 5). The wealthy traveller segment has tourists that originate from NSW (whose capital is Sydney) and QLD (whose capital is Brisbane). This segment is also aged between 25-54, which are the ages included in these three DMO segments. Wealthy travellers also travel predominantly as a couple or a family and stay for a short break (approximately half a week). Additionally, over 75 per cent of the wealthy travellers earn a household income in excess of \$60,000 per annum which is similar to the three segments. A major point of difference is that the source market of Europe which is the second largest market for the wealthy traveller segment (refer to Table 5.5) is not currently defined nor targeted by the DMO. The young Europeans and long stay traveller market were not described within the DMO segments. A further point of difference was that the third and fourth segments of the DMO were not identified when the two-step approach to segmentation was used.

5.5.1 Comparable solution

Further analysis of the segments generated from the recommended two-step approach to segmentation was undertaken. The DMO segments were compared to the three segments identified using the two-step approach to segmentation. Any tourists with distinguishing characteristics not described in the DMO segments were

eliminated from the data file to understand how many tourists were not being described by the five DMO segments that were listed as primary or secondary markets by the DMO. This occurred as follows. Firstly, tourists that were not from within QLD or Sydney (NSW) were removed from the data file. This resulted in 625 cases being deleted and produced a data set of 227 which is just over a quarter of the original sample (26.6%). Secondly, tourists that travelled as singles were deleted from the data file as this category was not considered by the DMO when segmenting tourists based on their travel party. This resulted in 12.8 per cent of the 227 cases being deleted, which left a tourist market of 198 tourists. The proposed two-step segmentation method captured 569 of the 852 tourists which represents approximately two-thirds (66.8%) of the tourist data set, while the segments currently used by the DMO targeted 198 tourists which represents just 23.2 per cent of the tourists in the study sample (see Figure 5.1).

Current DMO segments (198 tourists)	76.8% missed
Recommended two-step approach (569 tourists)	33.2% missed

Figure 5.1: Comparison of segmentation approaches

In answering the second research question, it can be argued that the two-step approach yields a more holistic view of tourists travelling to a destination than the current DMO segmentation approach. The two-step approach encompasses more tourists. This method captures approximately two-thirds of the tourists travelling to the destination whereas the DMO segmentation approach represents less than a quarter of the 852 tourists in the study sample. This study provides a more holistic view to segmentation as it includes all the types of leisure tourists that travel to a destination. Whilst it was acknowledged in the Destination Management Plan that the international market such as the backpacker segment represented an opportunity for the destination, these tourists are not targeted by the DMO. From a marketing and managerial approach, the two-step approach ensures that limited resources could be distributed to target more potential tourists, thus maximising return on investment. The implications and conclusions from this model will be discussed in Chapters 6 and 7.

5.5.2 Two-step approach compared to the literature

To further showcase the applicability of the two-step approach, the three segments were then compared with a prominent segmentation study (see Appendix I). Andreu et al. (2005) created five segments based on 10 variables to segment British tourists visiting Turkey. These tourists were segmented based on their motivation to travel as the classifying variable. This study used a factor analysis followed by cluster analysis to create the five segments. Details of their five segments are listed in Table 5.7.

Table 5.7 Study conducted by Andreu et al. (2005)

Variable	Total %	Fuzzy tourists %	Recreation seekers %	Active tourists %	Escape seekers %	Relax seekers %
Segment Size	100	36.5	19.2	22.7	15.8	5.8
Age						
15-24	23.9	22.3	32.6	20.3	17.1	40
25-34	17.3	22.3	4.3	18.6	19.5	13.3
35-44	31.4	31	41.4	25.4	34.1	20
45-54	18.6	13.8	13	25.4	24.4	26.7
55+	8.6	10.6	8.7	10.3	4.9	
Gender						
Male	37.1	42.6	40.9	44.1	10.5	30.8
Female	62.9	57.4	59.1	55.9	89.5	69.2
Income						
≤ 9,999	12.4	11.8	15.9	1.9	13.5	40
10,000-19,999	28.3	28.2	47.7	21.2	24.3	6.7
20,000-34,999	42.9	41.2	20.5	57.6	56.8	33.3
35,000-44,999	10.3	8.2	15.9	13.5		20
≥ 45,000	6.1	10.6		5.8	5.4	
Holiday						
All-inclusive	1.2	1.1		3.4		
Full-board	1.9	2.1		5.1		
Half-board	17.1	11.6	16.3	23.7	7.3	57.1
Bed and Breakfast	21.3	28.4	2.1	28.8	24.4	
Self-catering	55.8	55.7	75.5	37.3	63.4	42.9
Room only	2.3	1.1	6.1		4.9	
Flight only	0.4			1.7		
Resort						
Marmaris	60.2	60.5	62.8	58.5	58.3	61.5
Fethiye	39.8	39.5	37.2	41.5	41.7	38.5
Length of holiday						
Less than a week	0.4			1.7		
A week	10.9	9.6	14	8.5	10	20
8-14 nights	3.1			3.4	15	
15-20 nights	84.4	88.3	86	84.7	75	80
21 nights >	1.2	2.1		1.7		
How far in advance did you book the holiday						
Less than a week	1.2			5.1		
1-4 weeks	2.7	5.3			5	
1-3 months	11.2	14.7	12.2	11.9	5	
4-6 months	34.1	26.3	22.4	49.2	42.5	40
7 months and over	50.8	53.7	65.4	33.8	47.5	60
Type of accommodation used						
Hotel	42.1	42.1	30	55.9	31.7	57.1
Apartment	57.5	57.9	70	42.4	68.3	42.9
Other	0.4			1.7		
How many times have you been to Turkey before (excluding this trip)						
Never	52.5	45.7	44.9	67.8	50	69.2
Once	29	31.9	36.7	20.3	32.5	7.7
Twice	7.5	5.3	14.3		17.5	
Three times	2.7	6.4		1.7		
Four times	0.8		4.1			
Five times	2.4	3.2		5.1		
Six times and more	5.1	7.5		5.1		23.1

The five segments had varying motivations to travel. *Fuzzy tourists* enjoy tourist attractions and are highly motivated for entertainment and finding a different cultural environment based on value for money. They also seek a destination that is accessible. These tourists consider getting away from home a major priority. *Recreation seekers* enjoy tourist attractions and ease of access in destination. These tourists are active. They assign low rating to getting away from routine. *Active tourists* are interested in the diversity of entertainment and culture in Turkey. These tourists consider enjoying tourist attractions and a relaxed atmosphere as not very important. *Escape seekers* rate getting away and ease of access as most important.

These tourists consider enjoying tourist attractions or finding different cultural environments as the least important motivations. The last type of tourists, *relax seekers*, consider getting away to be a high motivation, but are not highly motivated to find diversity of entertainment and cultural environment, enjoying tourist attractions, and ease of access.

Andreu et al. (2005) has used nine variables (both demographic and behavioural) to further differentiate between the tourists. However, the two-step approach provides a much richer description of the tourists to the Fraser Coast region than Andreu et al. (2005) do for the British tourists to Turkey. Despite both studies using 10 variables, a major difference between the two models is that the three segments in the two-step approach are different, whereas the five segments defined by Andreu et al. (2005) showcase similar characteristics for the majority of the variables. In Table 5.7, it can be identified that all but three of the variables (gender, resort, length of holiday) had a dominant categorical response. For example, over 70 per cent of all five segments stay between 15-20 nights in Turkey. For the other six variables, four of the five segments had the same highest category. An additional benefit of the current study is that unlike Andreu et al. (2005), who segmented tourists based on their motivations in the initial phase, the two-step approach has treated all of the 10 variables equally. This ensures that a bias is not placed on a certain variable when segmenting tourists.

Based on these findings, and the fact that for market segmentation to be effective, there needs to be substantial differences between the segments (Kotler 1980; Kotler, Bowen & Makens 2003), the approach used in the Andreu et al. (2005) study does not sufficiently distinguish between the five segments. However, as outlined in Section 5.4.3, the two-step approach has 10 variables that clearly distinguish between the three segments. This approach also has motivations to guide marketing communication and three expenditure categories to guide pricing for tourism stakeholders. The two-step approach also highlights the domestic and international locations where marketing material can be promoted. Based on these findings, it can be concluded that a richer description of the segments (a more comprehensive tourist profile to guide managerial decision making) has been identified using the two-step approach to market segmentation.

5.6 Conclusion

This chapter has reported the results of the second stage of the two-step approach to segmentation. Descriptive statistics have firstly been presented, followed by the TwoStep® cluster analysis. It was acknowledged that tourists can be segmented into three segments using the proposed two-step approach to segmentation. Despite differences between the DMO segmentation method and the two-step approach, it was noted that the two-step approach yields a more holistic view of tourists travelling to a destination than the DMO segmentation approach. It was also identified that the two-step approach provides a much richer description of the segments when compared with the study by Andreu et al. (2005). The research now moves to Chapter 6 where discussion will be made based on the findings from this and the preceding results chapter.

Chapter 6: Discussion of findings

6.1 Introduction

This chapter will discuss the meanings of the results from Chapters 4 and 5 in terms of the fundamental argument of this thesis. It will position these results in terms of theory to clearly articulate the contribution this thesis makes to the tourism marketing literature.

It was concluded in the review of the tourism marketing literature that market segmentation has been extensively used to develop a better understanding of tourist characteristics and for creating marketing strategies. The literature review identified that an *a priori* or a *posteriori* approach can be used to profile tourists at a destination (e.g. Calantone & Mazanec 1991; Chandra & Menezes 2001; Dolnicar 2004a, 2004b; Sirakaya, Uysal & Yoshioka 2003). This was dependent on whether prior knowledge exists about the market (Calantone & Mazanec 1991; Dolnicar 2004a, 2004b; Sirakaya, Uysal & Yoshioka 2003), and/or the researcher believes that they are choosing the right method based on their judgment (Chandra & Menezes 2001).

The four bases of segmentation defined by Kotler (1980) as demographic, geographic, psychographic and behavioural were identified as the most popular within a review of 119 destination segmentation studies (see Appendix I). Additionally, many segmentation variables (e.g. age, motivations, expenditure) were commonly utilised in this review.

Whilst it was acknowledged that many studies have used primary (e.g. Beh & Bruyere 2007; Bogari, Crowther & Marr 2004; Frochot 2005; McKercher & Chan 2005; Yuksel & Yuksel 2002) or secondary visitor data (e.g. Bieger & Laesser 2002; Carmichael & Smith 2004; Dolnicar & Leisch 2003; Laesser & Crouch 2006; Lehto, O'Leary & Morrison 2004) to segment tourists at a destination, very little segmentation research has been conducted taking a stakeholder view to destination segmentation. This is despite many authors (e.g. Fyall & Garrod 2005; Jamal & Getz 1995; Morgan, Pritchard & Piggott 2003; Sheehan & Ritchie 2005; Sheehan, Ritchie & Hudson 2007) promoting the importance of utilising a stakeholder approach for destination management and marketing purposes.

It was further concluded that a multiple stakeholder approach has not been applied previously in segmentation research. In contrast to preceding tourist-focused segmentation studies, the recommended two-step approach detailed in this study considered both tourism stakeholders and tourists. This recommended two-step approach was compared to the current segmentation approach used by the Destination Marketing Organisation (DMO) at the regional destination. This study sought to determine whether the proposed two-step approach to segmentation was able to yield a more holistic view of tourists travelling to a destination than the current DMO segmentation approach. This approach is outlined in Table 6.1.

Table 6.1: Research questions and approach

Stage	Research Question	Research Approach
Step one	<i>RQ1: How do tourism stakeholders segment tourists at a destination?</i>	Case study with semi-structured interviews with 14 stakeholders.
Step two	<i>RQ2: Does the two-step approach yield a more holistic view of tourists travelling to a destination than the current DMO segmentation approach?</i>	Case study with 14 semi-structured interviews with stakeholders. Questionnaire survey with 852 tourists. Comparison with segments currently used by the DMO.

The next section will proceed by discussing the findings of this thesis and how they link back to the tourism marketing literature (Section 6.2). Section 6.3 outlines the theoretical contributions that this thesis presents to the tourism marketing literature. A final section (Section 6.4) provides a brief summary of the chapter.

6.2 Literature confirmations

The results of this study are reviewed in light of the literature. The use of the *posteriori* segmentation approach, segmentation bases and variables and the use of multidimensional motivation measures are confirmed by results of this study. Each will now be discussed in turn.

6.2.1 A *posteriori* segmentation approach

This thesis provides evidence that a *posteriori* segmentation approach is relevant for segmentation at a destination when no prior knowledge exists on how tourism stakeholders classify their tourists. Whilst it was acknowledged by Hsu and Lee (2002) that both approaches have been used extensively in tourism segmentation studies, Chandra and Menezes (2001) suggest the *posteriori* approach should be used when little is known about the tourism market and how it is currently segmented.

Through identifying segmentation methods relevant to the primary tourism stakeholders at a destination after analysing the findings of the semi-structured interviews, this study supports the literature (e.g. Chandra & Menezes 2001; Dolnicar 2004a, 2004b; Sirakaya, Uysal & Yoshioka 2003) that tourists can be segmented once initial data has been collected. As this thesis included only variables of interest to tourism stakeholders (Chandra & Menezes 2001) in the creation of the three segments, it can be concluded that this approach will be more beneficial for the primary tourism stakeholders. One of the greatest challenges faced by a DMO is that several stakeholders have different interests and objects for targeting tourists (e.g. Augustyn & Knowles 2000; Chandra & Menezes 2001; King, McVey & Simmons 2000; Laws, Scott & Parfitt 2002; Lebe & Milfelner 2006). Using variables that have been considered in the literature or other sources (e.g. lifestage in the DMO segmentation approach) but not applicable to tourism stakeholders may have these stakeholders uninterested in the destination's marketing approach. These tourism stakeholders may then promote to their potential tourists in a different manner from

the current DMO segmentation approach which sends an inconsistent message to tourists. Therefore, considering variables relevant to the primary tourism stakeholders (e.g. activities sought for tour operators) could enhance their participation and support of the marketing to tourists.

6.2.2 Segmentation bases

In Section 2.3, it was concluded that four segmentation bases had been used in segmentation research, namely demographic, geographic, psychographic and behavioural, to profile tourists at a tourism destination (e.g. Dolnicar 2007; Johns & Gyimothy 2002; Kolb 2006; Kotler, Bowen & Makens 2003; Murphy & Murphy 2004). This study is consistent with prior tourism segmentation research.

Firstly, this research suggests that no additional segmentation bases or variables are required when using the two-step approach. While some researchers in the tourism market literature have argued that other forms of segmentation such as involvement (e.g. Dimanche, Havitz & Howard 1993; Kim & Petrick 2004; McCleary, Weaver & Meng 2005) and lifestyle segmentation (e.g. Fuller & Matzler 2008; Laws, Scott & Parfitt 2002; Naylor & Kleiser 2002) may be useful, this research suggests that the four bases outlined by Kotler (1980) provide a sufficient base for classifying tourists at a destination³¹. The results of this study confirm the argument of authors such as Kolb (2006), Kotler, Bowen and Makens (2003), Murphy and Murphy (2004) that the four bases defined by Kotler (1980) are adequate for describing the needs, characteristics and behaviour of tourists at a destination.

Secondly, these four segmentation bases were identified as the most frequently used segmentation approaches by researchers (e.g. Beh & Bruyere 2007; Hsu & Kang 2007; Kozak 2002; Park et al. 2002; Swanson & Horridge 2006) in the review of 119 market segmentation studies (see Appendix I). This thesis provides further support that the combined usage of demographic, geographic, psychographic, and behavioural segmentation may be the best option when profiling tourists.

6.2.3 Segmentation variables

The results of this thesis are consistent with prior literature. All of the variables used to profile tourists at a destination using the recommended two-step segmentation approach have been used previously. Frequently identified variables such as *age* (e.g. Bloom 2005; Chang 2006; Kozak 2002), *travel party composition (TPC)* (e.g. Bieger & Laesser 2002; Sarigollu & Huang 2005; Williams & Dossa 2003), *income* (e.g. Bigne & Andreu 2004; Pike 2002; Swanson & Horridge 2006), *origin* (e.g. Chang 2006; Reisinger & Turner 2002; Woodside & Dubelaar 2002), *motivations* (e.g. Bogari, Crowther & Marr 2004; Jang & Cai 2002; Poria, Butler & Airey 2004), *trip purpose* (e.g. Diaz-Perez, Bethencourt-Cejas & Alvarez-Gonzalez 2005; Lehto, O'Leary & Morrison 2002; Mehmetoglu 2007), *activities sought* (e.g. Alipour et al. 2007; Chandler 2004; Hsu, Kang & Wolfe 2002), *nights (length of stay)* (e.g.

³¹ It was mentioned in Section 2.3.6 that these other forms of segmentation were classed under the four segmentation bases as their characteristics represented the bases defined by Kotler (1980).

McKercher & Chan 2005; Park et al. 2002; Wilton & Nickerson 2006), and *expenditure* (e.g. Fuller & Matzler 2008; Jang, Morrison & O'Leary 2002; Kozak 2002) were used in this study to create three segments.

The usage of the 10 variables indicates that the two-step approach considering both tourism stakeholders and tourists uses similar variables to academics that consider primary and/or secondary data in the development of their segments. Whilst the variables are consistent with the variables used previously by researchers, the method proposed in this thesis allows a richer description to be achieved and more tourists to be captured within the segments generated. This is discussed further in Section 6.3.2.

This thesis also confirms the findings of the literature by suggesting there is no correct way to segment a tourism market (e.g. Beane & Ennis 1987; Dolnicar & Laesser 2007; Kotler, Bowen & Makens 2003). Whilst several of the segmentation variables have been frequently applied to studies, for example, *gender* (e.g. Jang & Cai 2002; Mehmetoglu 2007; Prebensen 2005; Sung 2004; Yoo, McKercher & Mena 2004) and *education* (e.g. McKercher & Chan 2005; Petrick 2005; Poria, Reichel & Biran 2006; Reisinger & Mavondo 2002; Walker & Hinch 2006), these variables were not used to profile tourists for this study. This confirms the literature that the criteria used to segment a market will depend on the needs and situations of the organisation or entity (McKercher et al. 2003). Therefore, if a stakeholder approach is to be considered when segmenting tourists at a destination, choosing variables that are prominent in the literature may not mirror the requirements for the study at hand.

6.2.4 Motivation is multidimensional

Consistent with prior studies (e.g. Bansal & Eiselt 2004; Bogari, Crowther & Marr 2004; Kim & Lee 2002; Poria, Reichel & Biran 2006; Sirakaya, Uysal & Yoshioka 2003), the results of this thesis suggest that tourism motivation is multidimensional. Further, both push and pull motivations are required to adequately represent a tourist's motivation (e.g. Bieger & Laesser 2002; Crompton 1979; Sirakaya, Uysal & Yoshioka 2003; Uysal & Hagan 1993; Yuan & McDonald 1990). Push and pull motivations represent different aspects of tourists' motivation. For example, the most popular push motivation was *to go to a place where you have not been before* and *the weather* pulled tourists most frequently to the destination. Push motivations such as *to have fun* and *to go sightseeing* and pull motivations such as *it was recommended by someone* and *to experience a relaxed lifestyle* were also dominant.

However, motivations varied between segments. For example, *to experience a relaxed lifestyle* was considered by approximately a third of the *long stay travellers*, one-fifth of *wealthy travellers*, and less than 10 per cent of *young Europeans*. This suggests that destination marketers (e.g. DMOs) need to understand that tourists travel for a variety of different reasons and multidimensional measures of motivation can help researchers to understand this multitude of reasons.

6.3 Contributions to the literature

This thesis presents an alternative approach to the profiling of tourists at a destination. In being the first known study to consider both multiple tourism stakeholders and tourists in creating tourism segments, several literature contributions were identified. Each will now be discussed.

6.3.1 Multiple stakeholder segmentation

The first contribution of this thesis is that it presents a multiple stakeholder perspective to segmentation at a regional destination. Studies have focused on segmentation using primary (e.g. Bogari, Crowther & Marr 2004; Furr & Bonn 2006; Hyde 2006; Kim & Lee 2002; Park et al. 2002) or secondary visitor data (e.g. Bloom 2005; Jang 2004; Jang et al. 2007; Reece 2004; Williams & Dossa 2003). Whilst some studies (e.g. Bigne & Andreu 2004; Hsu & Lee 2002; Juwaheer 2007; Kim, Wei & Ruys 2003; Scott & Parfitt 2004) have considered stakeholders in their development of a questionnaire survey (see Table 2.3 in Chapter 2), this approach is the first to consider more than two types of stakeholders. This study considered multiple stakeholder types and did not rely on secondary sources (e.g. a literature review and/or guidebooks).

Some studies (e.g. Hudson & Ritchie 2002; Laws, Scott & Parfitt 2002; Scott & Parfitt 2004) have briefly considered tourism stakeholders, but these studies focused on one type of stakeholder (e.g. residents) that is generally not involved in the destination marketing process (Chandra & Menezes 2001). Other studies have considered two types of stakeholders (e.g. Kim, Wei & Ruys 2003; Lee & Zhao 2003; Obenour, Lengfelder & Groves 2005). However, these studies have utilised secondary sources in the development of their survey. While insights into variable importance was gained (e.g. a pull motivation such as the weather), researchers needed to resort to the literature to obtain a more detailed insight into measurement for the variable of interest (e.g. a pull motivation such as the untouched nature). Surveys relying on literature reviews rather than stakeholder views could have included variables irrelevant to tourism stakeholders. All 15 of these studies did not consider more than two of the possible primary stakeholders that were identified in Table 2.1.

Based on the above findings, it was concluded that a multiple stakeholder approach has not been previously employed in tourism segmentation research. A wide range of tourism stakeholders were selected to ensure that multiple insights could be obtained. Each stakeholder interviewed in the research can be considered a primary stakeholder (e.g. DMO, local government organisation, tour operator, accommodation provider) as per the categories listed in Table 2.1. Taking a stakeholder approach using many primary stakeholders ensures that all possible segmentation variables relevant to those stakeholders and the destination as a whole are considered.

The first finding from this multiple stakeholder approach is that not all stakeholders segment tourists at a destination. It was determined that less than half of the

stakeholders segment their tourists. The remaining stakeholders either did not target specific groups or they followed the DMO's segmentation. This finding suggests that only a small percentage of tourism stakeholders have defined segments that they actively target.

Six stakeholders have segments that they actively target. It was concluded that four of them consider the priority Fraser Coast segments (see Section 3.4.7) as defined by the state tourism organisation (DMO). Two stakeholders targeted different segments. These two tourism stakeholders segment their tourists using one segmentation variable (trip purpose), and consequently one base (psychographic), to profile their tourists. This confirms the tourism marketing literature (e.g. Bogari, Crowther & Marr 2004; Kim & Lee 2002; Kim & Petrick 2004) by identifying that a single base can be used to segment tourists at a destination when using a stakeholder approach.

It was also noted that the four tourism stakeholders that considered the priority Fraser Coast segments referred the researcher to the DMO when questions regarding specific tourist characteristics were required (see Section 4.3). This alludes to the literature by arguing that the DMO's marketing experience and coordination of marketing and sales efforts makes it a valuable resource for its tourism stakeholders at this destination (e.g. Blain, Levy & Ritchie 2005; Chandra & Menezes 2001; Dore & Crouch 2003). It was argued in the literature review that a key role for the DMO is to market a specific destination to potential visitors (e.g. Blain, Levy & Ritchie 2005; Chandra & Menezes 2001; Pike 2004). The results of this research suggest that many stakeholders do in fact rely on the DMO to market their destination; stakeholders that actively seek to attract tourists do not have their own defined segments. This finding is comparable to the tourism marketing literature (Dore & Crouch 2003; Pike 2004) by suggesting that the DMO at this regional destination is responsible for marketing a destination and identifying which tourism segments to prioritise.

As it was identified that two tourism stakeholders segment their tourists using a psychographic base, this demonstrates that tourism stakeholders segment their tourists differently from the current DMO approach (which uses demographic, geographic and behavioural segmentation). It is interesting to note that the psychographic base is the one base that is not applied in the DMO priority market segments. Whilst the DMO considers many variables (e.g. lifestage and source market), the one commonly identified base of psychographic in the literature is not considered by the DMO. Likewise, whilst demographics, geographics and behavioural tendencies are relevant for marketing purposes in the literature, these bases were not considered by the two tourism stakeholders in their segmentation approach.

Tourism stakeholders can gain a competitive advantage by using a unified approach. This would include all tourism stakeholders considering similar segmentation bases. Currently, the tourism stakeholders are considering different tourists that frequent the destination. Therefore, the tourism stakeholders are not working together to achieve a common goal (Buhalis 2000). Having all tourism stakeholders considering the same (or similar) tourism segments would ensure resources are allocated to targeting segments that all stakeholders have an interest in. Whilst not all segments may appeal to all tourism stakeholders (e.g. the young Europeans for a five star hotel), other segments (e.g. the wealthy travellers) will be of great interest to this

stakeholder. Therefore, resources need to be carefully allocated to identify which segment/s is of the greatest interest to the tourism stakeholders. This is further discussed in Section 6.3.2.

Another finding from the multiple stakeholder approach is that tourism stakeholders within a single tourist destination classify their tourists using different segmentation bases and variables. Despite not all 14 tourism stakeholders having defined segments, all were able to classify their tourists based on their activities sought, purchasing behaviour, TPC, origin, trip purpose, and motivations, but were less knowledgeable about other variables such as gender and income. This suggests that variables that are prevalent in the tourism marketing literature may not be relevant to tourism stakeholders when segmenting a market. Dolnicar (2007), Kotler, Bowen and Makens (2003) and Murphy and Murphy (2004) argue that segmentation is appropriate when a difference in the market is measurable (e.g. different origin or activities). The findings of this research suggest that tourism stakeholders are not segmenting their tourists when it is evident that there are differences between the types of tourists identified at this destination.

Both singular and multiple segmentation bases were used by different tourism stakeholders to classify their tourists. This study supports the tourism literature that a tourism market at a regional destination can be classified, firstly, in different ways, and, secondly, using singular or multiple segmentation bases as proposed by Kotler (1980). As mentioned in Section 6.2, no further variables or defining characteristics were considered by these stakeholders.

The number of bases varied between the tourism stakeholders when classifying their tourists. The dominance of three or four segmentation bases identified in the literature was not confirmed in this study. The most popular form of segmentation was a combination of three segmentation bases, but it was only considered by five of the 14 stakeholders. It was also determined that one base, two bases, and four bases of segmentation were chosen by three respondents. This confirms the literature that one (e.g. Bogari, Crowther & Marr 2004; Kim & Lee 2002; Scott & Parfitt 2004), two (e.g. Hsu & Lee 2002; Jang et al. 2007; Petrick & Sirakaya 2004), three (e.g. Furr & Bonn 2006; Hu & Yu 2007; Juwaheer 2007) and four (e.g. Beh & Bruyere 2007; Kozak 2002; Park et al. 2002) bases may be relevant for classifying tourists at a destination.

The dominance of demographics, psychographics and behavioural characteristics as identified in the review of 119 destination market segmentation studies (see Section 2.3.7) was not supported within the first step of the proposed two-step approach to segmentation. Whilst demographics and psychographics were identified most frequently in the literature and by tourism stakeholders in this study to classify tourists, the usage of behavioural variables differed. It was also noted that, despite over 80 per cent of segmentation studies have applied a behavioural variable (and base), only half of the tourism stakeholders in this study used behavioural variables to classify tourists who frequent the destination. Additionally, the three behavioural variables of nights, expenditure and purchasing behaviour were only identified once as important classifying variables by the tourism stakeholders (see Table 4.13).

Tourism stakeholders do not classify tourists as frequently with behavioural variables as the authors that have used visitor data (see Appendix I). This has marketing implications for tourism stakeholders, as many marketers argue that the best starting point for building profitable markets segments is through the usage of behavioural segmentation. This form of segmentation can differentiate segments based on their purchase rate or usage (e.g. expenditure levels and number of nights in accommodation) (Kotler, Bowen & Makens 2003). By not considering how tourists behave, tourism stakeholders may be missing an opportunity to better target their tourists in their marketing approach. For example, the tourism stakeholders will be unfamiliar with how much money their tourists spend on accommodation or food and beverages when at the destination.

An additional finding of using a multiple stakeholder approach is that different stakeholders attract different tourists. It was noted in the literature review (see Chapter 2) that many different categories were provided for each of the variables. For example, Stakeholder A had tourists of all ages, whereas Stakeholder L focused on people aged over 45, and Stakeholder J had tourists aged less than 25. Stakeholder L had tourists spending over \$150 on daily expenditure, whereas tourists that interacted with Stakeholder E spent less than \$25. This confirms the literature by suggesting that tourists of different characteristics come to the destination (e.g. Dolnicar 2007; Johns & Gyimothy 2002; Kolb 2006; Kotler, Bowen & Makens 2003; Murphy & Murphy 2004).

As different tourism stakeholders consider different tourists, the results of this research suggest that a 'one strategy fits all' approach to market segmentation may not always be appropriate. It is necessary for segmentation studies to consider the views of multiple stakeholders. Failure to do so will mean that only a portion of the market, and therefore, only some of the stakeholders will be catered to. For example, only considering hotels at the Fraser Coast would lead to a view that would suggest that this destination's tourists are high income earners travelling in families or couples. Conversely, only considering backpacker hostels would lead to a view that tourists to the Fraser Coast are young and European, and so on. A holistic view of the region under study is needed and this can only be obtained by considering the views of the multiple stakeholders in the market. Through the utilisation of the two-step segmentation approach, this thesis proposes a method that enables segmentation researchers to consider the views of multiple stakeholders.

6.3.2 Two-step segmentation approach

The second contribution of this thesis arises from the proposed two-step approach to segmentation. This thesis contends that the two-step approach to segmentation can provide a much richer description of the segments that frequent the destination when compared to the current DMO segmentation method for the destination under study. The segments currently defined by the DMO focus primarily on *lifestage* and *source market* segmentation (see Section 3.4.7), whereas the two-step approach considers 10 variables of equal importance.

In this study, each of the three segments identified had seven categorical variables and each variable had at least five categories providing a much deeper description of

each segment. As an example, whilst the DMO approach may have aimed to target people aged between 25-44 who come from Brisbane and earn \$60,000 per year, this segment can be identified as part of the wealthy travellers segment which also covers tourists from different regions with different ages. Therefore, more information was provided. In comparing the two-step approach to the study conducted by Andreu et al. (2005), it was noted that the two-step approach was able to distinguish the segments based on the 10 variables more clearly than this study. Whilst Andreu et al. (2005) were able to showcase the differences in motivations for British tourists to Turkey, the tourists had similar characteristics for the other nine variables utilised by the researcher.

This richness of the two-step approach can be applied to better frame management thinking. For example, geographic and demographic data can be used to select relevant media, while behavioural and psychographic variables can be utilised by tourism stakeholders to tailor tourism product offerings and pricing, and to inform promotion development. No psychographic variables were applied within the DMO segmentation, but push and pull motivations were clear descriptors for the two-step approach with differences in the number and type of motivations between segments. For each segment, motivations were multidimensional which (as mentioned in Section 6.2.4) confirmed the literature (e.g. Baloglu & Uysal 1996; Bieger & Laesser 2002; Dolnicar 2004a; Sirakaya, Uysal & Yoshioka 2003; Yuan & McDonald 1990). In contrast to previous studies, the method used in this paper enabled both the number and types of motivations to be considered. The type of motivation can assist marketers to develop creative messages for communication purposes, and the number of motivations can be used to assist marketers to distinguish between highly motivated and their less motivated counterparts.

This method is also capable of assisting tourism marketers to target more of the tourists frequenting the destination. It is argued in the tourism literature that market segmentation is used to target profitable segments (e.g. Dolnicar 2007; Johns & Gyimothy 2002; Kolb 2006; Kotler, Bowen & Makens 2003; Murphy & Murphy 2004). It is noted that the two-step approach has managed to capture two-thirds of the tourists to the destination. This approach could have captured a higher proportion of tourists travelling to the region if the missing data was included. Currently, the DMO segments target less than a quarter of the types of tourists visiting the destination. The results of this study suggest that many dollars may be wasted targeting tourists that are not likely to travel to the destination and not targeting those who would.

In Section 2.3 it was argued that for market segmentation to be purposeful it needs to be measurable, accessible, substantial, and actionable (Kotler, Bowen & Makens 2003). The segments derived in this research can be considered purposeful. For example, the largest segment, the wealthy traveller, shows similarities to three of the DMO's target segments, and it can be argued that the DMO is currently targeting this segment in its marketing campaigns (e.g. the Whale Watching promotion to Sydney and South East Queensland). The other two segments are also large segments that collectively spend a lot of money while in the region.

Young Europeans and the long stay travellers have different distinguishing characteristics to each other and the wealthy traveller segment (e.g. different ages and travel party compositions). These two segments also represent a large share of

the market. For example, the DMO (see Section 3.4.7) has listed the youth and backpacker (size of 320,000 for all of Queensland) as a market with opportunity. These young tourists travel from locations such as the United Kingdom, Germany (both Europe), the United States of America and New Zealand. The coastal city of Hervey Bay has a history of a tourist segment to the region (Whale Watching Australia 2004) which show similarities to the long stay traveller segment. This tourism segment is classed as caravanners by the DMO. Caravanners are older and travel domestically from the east coast of Australia (e.g. Queensland, New South Wales and Victoria). These tourists have travelled to Hervey Bay for the last thirty years and have represented a bulk of the tourists (Whale Watching Australia 2004).

As considering primary stakeholders in the development of planning has been found beneficial in many organisational settings (Agle, Mitchell & Sonnenfeld 1999; Berman et al. 1999; Post, Preston & Sachs 2002), it is crucial that segments relevant to all primary stakeholders are considered and ultimately targeted. The segments to prioritise should be chosen at the discretion of the tourism stakeholders. For this study, emphasising only wealthy travellers is likely to isolate the tourism stakeholders that wish to target the tourists with less daily expenditure (e.g. backpacker hostels, caravan parks, certain tour operators) from the other stakeholders (e.g. five star resorts). As several stakeholders in the semi-structured interviews argued that tourists with high income do not travel to the destination (see Section 4.3.4), this is a major consideration for the DMO. Based on targeting the higher end tourists, these stakeholders focusing on the lower earning and spending tourists are, therefore, likely to design their own marketing strategies to attract their potential tourists (Buhalis 2000) which indicates that a unified marketing strategy cannot be considered.

Despite both young Europeans and long stay travellers spending considerably less money than the other two segments, they dominated the tourist sample and are crucial segments for the Fraser Coast region. As Dolnicar (2007) argues tourists are attracted to a destination for different reasons and participate in different activities and utilise different facilities whilst at the destination, it needs to be noted that different types of tourists could be travelling to the destination to experience similar activities, yet spend different amounts of money on accommodation and food and beverages. Therefore, whilst expenditure may be relevant to accommodation and food and beverage providers, this tourist characteristic may be irrelevant for tour operators who charge similar prices for the same services.

It was identified in Section 3.4.7 that the regional DMO had a limited budget for promoting the Fraser Coast destination. Little advertising occurs internationally. Further, many communication efforts are joint. For example, the region participates in state wide brochures promoting destinations in Queensland (including the Fraser Coast) to international tourists. Insights gained in this research suggest the region can directly target young Europeans who are already travelling within Australia. As will be discussed in Section 7.4.2, accessible and actionable strategies to target these tourists will be provided. Despite this segment having the lowest income and expenditure levels, half of these tourists spend between \$50 and \$149 per day on activities which makes this segment attractive to the tour operators (e.g. whale watch operators, Fraser Island tour providers, fishing charters). Based on their size and their

activities expenditure, this segment should be considered a priority by the DMO in their future marketing plans.

Whilst the long stay travellers are also accessible (they can be targeted through domestic promotions listed in Section 3.4.7 such as billboard advertising and brochures) and the DMO can design effective marketing strategies to attract and serve the segment (accessible), a major reason why the long stay travellers may not be considered a target market by the DMO is that this segment spends less money on accommodation, activities and expenditure when compared with wealthy travellers (or segments 1, 2 and 5 of the DMO segments). However, while their daily expenditure may be lower, their visit duration is four times longer than the wealthy travellers, suggesting this segment is equally valuable to tourism stakeholders and the regional economy. These tourists have the potential to spend the most of the three segments over this time period³². These tourists dominate the low season and are a substantial segment. Therefore, the DMO should not overlook this segment as a primary segment when designing marketing strategies.

6.3.3 Three expenditure categories

A third contribution from this research is that it has created three expenditure items, each with five categories, based on the usage of the two-step approach. Activities expenditure, food and beverages expenditure, and accommodation expenditure differed between the three segments. It was noted in the review of 119 destination segmentation studies that whilst several studies calculated the overall expenditure of tourists (e.g. Becken, Simmons & Frampton 2003; Chen 2003b; Lee, Morrison & O'Leary 2006), or have chosen daily expenditure (e.g. Dolnicar & Leisch 2003; Mehmetoglu 2007; Molera & Albaladeo 2007), this study is the first to consider five categories for the three different types of expenditure chosen by the tourism stakeholders. Hong et al. (2005) was able to list categories for the three variables, as well as transportation and overall expenditure, but this was based on secondary data. It was also identified that Kang, Hsu & Wolfe (2003) used these three variables, but focused on the average expenditure for each of them.

The usage of the three variables is particularly relevant for tourism stakeholders. Stakeholders could refer to specific aspects of expenditure but they could not estimate daily expenditure as their knowledge was limited to their business type. This thesis contributes to the marketing approach to tourists by providing the different expenditure categories for each of the three segments. Therefore, tourism stakeholders such as backpacker accommodation providers can target the tourists that spend less than \$50 per night on accommodation. These tourists will be identifiable through also considering other characteristics such as age, origin and TPC. Consideration of expenditure categories in future tourism research is warranted as it is likely to be more managerially useful.

This thesis also contributes to the literature by arguing that income and expenditure are not linear. This finding confirms previous studies (e.g. Carmichael & Smith

³² It was difficult to determine the exact amount. Whilst the majority argue that they spend under \$50 per day on the three expenditure items, it is hard to determine whether this amount is at the low end (e.g. \$10 per day) or high end (e.g. \$49 per day) of each category.

2004; Hu & Yu 2007; Lee, Morrison & O'Leary 2006; Petrick 2005; Sung 2004). For example, Carmichael and Smith (2004) identified that a segment, *shopping enthusiasts*, spent more at a shopping destination despite not having the highest income. Tourists with higher incomes do not necessarily spend more while at the destination. It was identified that whilst the long stay travellers had an annual household income that was generally higher than the young Europeans, their daily expenditure was lower. This study shows support that both income and expenditure need to be considered as variables when considering the financial activity of tourists at a destination.

6.3.4 Simultaneous inclusion of motivations in cluster analysis

A fourth contribution of this research is that it is the first known study in the tourism marketing literature that has considered the number of push motivations and number of pull motivations in the creation of the segments. Tourism motivation has been considered multidimensional (e.g. Bieger & Laesser 2002; Dolnicar 2004b; Sirakaya, Uysal & Yoshioka 2003). This study proposes a method that enables researchers to simultaneously consider multidimensional motivation measures at the same time as considering a range of demographic, geographic and behavioural variables. Prior studies (e.g. Andreu et al. 2005; Chang 2006; Kim & Petrick 2004; Lee et al. 2006; Sirakaya, Uysal & Yoshioka 2003) have focused on factor analysing motivations to reduce the data to a more manageable size for inclusion in subsequent cluster analysis. This was required to ensure that motivations did not dominate the cluster solution derived. This thesis outlined a method whereby respondents were asked to indicate which motivations they had. The number of push and pull motivations expressed by each tourist was calculated, and these variables were included in cluster analysis. Once the final cluster solution was arrived at, the motivations were compared for each segment. This provided an understanding of both the degree of motivation (highly motivated versus few motivations to visit) and the types of motivation for each segment. It was noted that both the number and types of motivations varied between the segments.

The use of the chi-square analysis for the dichotomous variables within TwoStep® cluster analysis is also a useful contribution. Whilst the emphasis of the cluster analysis was to consider the collective nature of the motivations in the data analysis, the research also ensured that individual push and pull motivations could be compared amongst the three market segments to identify if they were significantly different from each other. It was determined that the majority of the individual push and pull motivations were highly significantly different from each other. This provides further argument that the segments were different from each other.

6.3.5 TwoStep® cluster analysis

A final contribution of this research is that it is the first known study to apply TwoStep® cluster analysis to all variables identified by tourism stakeholders. This clustering method is applicable for all of the segmentation bases as outlined by Kotler (1980) and different types of categorical and continuous variables. Additionally, this ensures that all variables in cluster analysis can be analysed

simultaneously. Most of the cluster analysis studies (e.g. Andreu et al. 2005; Chang 2006; Kim & Petrick 2004; Lee et al. 2006; Sirakaya, Uysal & Yoshioka 2003) have used a two stage format. Authors have usually clustered a continuous variable (e.g. motivations or activities) with multiple items then aimed to identify if differences existed among segments using tests such as Analysis of Variance (ANOVA), multiple discriminant analysis, student t-tests, and chi-square tests. This places an emphasis on a certain continuous variable, which is likely to occur at the expense of other variables.

While two studies have used TwoStep® cluster analysis to classify tourists (Hsu, Kang & Lam 2006; Laesser, Crouch & Beritelli 2006), the method was only applied to certain variables. TwoStep® cluster analysis has been used in several settings such as psychology (Stefurak & Calhoun 2007) and transportation (Chang & Yeh 2007) to classify respondents into segments based on relevant continuous and categorical variables. Findings from this research support the usage of TwoStep® cluster analysis in a tourism setting (e.g. Hu et al. 2005; Rosenbaum & Spears 2006).

It was acknowledged in the literature review that most variables such as age and income can be measured as either a categorical or a continuous variable. Whilst there has been an emphasis on using categorical data for differentiating segments (e.g. Andreu et al. 2005; Brey et al. 2007; Carmichael & Smith 2004; MacKay, Andereck & Vogt 2002; Sung 2004), this research suggests that a variable can be classed as either categorical or continuous depending on the tourism stakeholders' responses. This research demonstrates that the researcher can design questionnaires based on the tourism stakeholder approach. Often researchers will need to modify the questionnaire to suit their analysis. This is not required using the two-step segmentation approach.

6.4 Conclusion

This chapter has discussed the results of this study in light of the literature. The results of this study have been compared and contrasted with previous segmentation studies. Several literature confirmations were outlined through applying the two-step segmentation approach. The contributions to the literature were also outlined. This thesis now moves to the final chapter where contributions to theory and practice are detailed. Recommendations for future research and the limitations of this research are also presented.

Chapter 7: Conclusions, limitations and future research

7.1 Introduction

The major finding of this research is that the recommended two-step approach to segmentation, which first seeks stakeholder views before collecting tourist data, has yielded a more holistic view of tourists travelling to a destination when compared with the current DMO segmentation approach. The two-step approach to segmentation is capable of assisting tourism marketers to target more of the tourists frequenting the destination. This study has confirmed previous studies from the tourism marketing literature regarding tourism market segmentation, and it has contributed to the body of knowledge.

This chapter concludes this thesis. Section 7.2 provides a brief summary of the study. The next section presents the contributions to marketing theory (Section 7.3). Section 7.4 lists the practical implications arising from this research. The limitations of research are presented in Section 7.5. Section 7.6 lists the opportunities for future research. Section 7.7 then provides a brief conclusion.

7.2 Overview

This thesis proposed a two-step approach to segmentation. It is outlined in Figure 7.1.

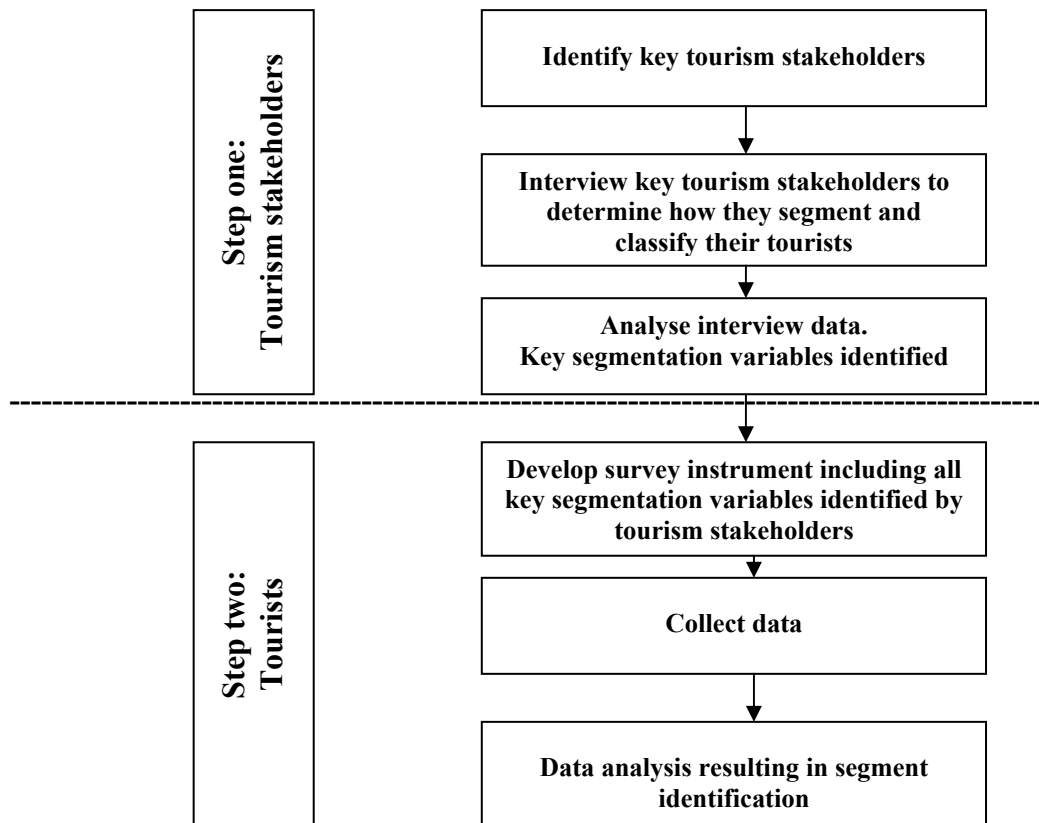


Figure 7.1: Two-step research approach

Guided by stakeholder theory, this thesis argued that consideration is required to be given to both 1) tourism stakeholders and 2) tourists. The first step of this approach was achieved in this study by employing a case study with semi-structured interviews to determine how destination stakeholders segment their tourists at a destination (see Chapter 4). Subsequently, a questionnaire survey was developed based on this multiple stakeholder view to market segmentation. It was then administered to tourists. Through applying TwoStep® cluster analysis, three segments were derived for the destination under study. These segments were then compared with the current market segmentation approach used by the Destination Marketing Organisation (DMO) to compare and contrast the segments derived through the proposed two-step approach to segmentation. The results were also compared with a prominent segmentation study to compare the research method. It was determined that the two-step approach to segmentation captured more of the tourists frequenting the destination (see Chapter 5). The implications for marketing theory are now provided.

7.3 Implications for marketing theory

This thesis has contributed to marketing theory in a number of ways. Table 7.1 lists the theoretical contributions which will be outlined in this section. These implications are based on the literature contributions listed in Section 6.3 of the previous chapter.

Table 7.1: Implications for marketing theory

Section	Contribution	Description
7.2.1	Multiple stakeholder view	<ul style="list-style-type: none"> ➤ Segmentation is not used by all tourist stakeholders. ➤ Tourism stakeholders within a single destination classify their tourists using different segmentation bases and variables. ➤ Different tourism stakeholders attract different tourists.
7.2.2	Two-step segmentation approach	<ul style="list-style-type: none"> ➤ A new method was proposed and detailed for destination segmentation. ➤ The two-step approach to segmentation provides a much richer description of tourists when compared with the DMO segments.
7.2.3	Three expenditure categories	<ul style="list-style-type: none"> ➤ Rather than considering expenditure as one global measure, researchers should consider the different types of expenditure. ➤ Income and expenditure are not linear. Tourists with higher incomes do not necessarily spend more while at the destination.
7.2.4	Simultaneous inclusion of motivations in cluster analysis	<ul style="list-style-type: none"> ➤ A new method for including motivations simultaneously with other segmentation variables was developed. This study considered both the number and types of push and pull motivations and the number of both.
7.2.5	TwoStep® cluster analysis	<ul style="list-style-type: none"> ➤ This data analysis method enabled both continuous and categorical data to be used simultaneously to create three segments.

7.3.1 Multiple stakeholder segmentation

To date, the majority of tourism market segmentation research has used a quantitative approach based on visitor data. By using a qualitative method based on the tourism stakeholders' perspective, this thesis contributes to the literature by extending our understanding of destination segmentation. It identified that not all tourism stakeholders segment their market; that different tourism stakeholders utilise different segmentation bases and variables; and that different tourism stakeholders attract different types of tourists.

This thesis firstly expands upon the body of knowledge of market segmentation as it is the first known study to take a multiple stakeholder approach to classifying tourists at a destination. It contributes to theory by identifying similarities and discrepancies between 14 primary stakeholders that each directly supports tourism within a single destination. This research was timely as little was known on how destination

stakeholders segment their tourists (e.g. Hudson & Ritchie 2002; Morgan, Pritchard & Piggott 2003; Scott & Parfitt 2004). The multiple stakeholder approach to segmentation contributes to marketing theory by arguing that stakeholder views should be sought to ensure that key variables are considered when seeking to segment the market. A stakeholder view is important because different stakeholders attract different tourists. Researchers need to consider primary stakeholders such as hotels, tour operators, and government bodies that support tourism (Blain, Levy & Ritchie 2005; Sautter & Leisen 1999; Sheehan & Ritchie 2005).

The case study method employed in this study yielded insights into how tourism stakeholders view their market. Whilst it has been acknowledged in the literature that market segmentation is a valuable tool for businesses to classify tourists into more homogeneous groups for which they can allocate scarce resources to target segments that are of most interest and competitive advantage to them (e.g. Aguas, Costa & Rita 2000; Dolnicar 2007; Kotler, Bowen & Makens 2003; Mykletun, Crofts & Mykletun 2001), segmentation was not used by all tourism stakeholders.

This research also confirmed the literature that the DMO is usually responsible for marketing a destination (e.g. Blain, Levy & Ritchie 2005; Chandra & Menezes 2001; Pike 2004) with only two stakeholders using their own segments (rather than the segments targeted by the DMO). Whilst tourism stakeholders will pay a fee to be an active member of the tourism board and have their material promoted in published resources such as brochures and on a website, it is possible that the tourists most relevant to a certain tourism stakeholder will not be targeted. DMOs are marketers of the destination, but are rarely operators of the product (Dore & Crouch 2003; Pike 2004). Therefore, dollars could be wasted by tourism stakeholders as tourists most relevant to their organisation are not being targeted by the DMO in their promotional campaign.

All tourism stakeholders were able to classify their tourists using a variety of segmentation bases and variables. This study supports the notion that multiple segmentation bases can be used to profile tourists at a regional destination. Whilst authors have used different segmentation bases such as demographic (e.g. Hong et al. 2005; Horneman et al. 2002; Reece 2004), geographic (e.g. Bonn, Joseph & Dai 2005; Hudson & Ritchie 2002; Moscardo, Pearce & Morrison 2001), psychographic (e.g. Bogari, Crowther & Marr 2004; Kim, Noh & Jogaratnam 2006; Kim, Jogaratnam & Noh 2006), or behavioural (e.g. Dolnicar et al. 2008; Frochot 2005; Johns & Gyimothy 2002) in their research, this study suggests that all four forms of segmentation are used by stakeholders to classify the tourists who patronise their businesses.

Consideration of how tourism stakeholders (e.g. accommodation providers, tour operators and other tourism stakeholders) segment their markets for marketing purposes yielded an interesting insight. To date, studies have profiled tourists for a destination/s (e.g. Andreu et al. 2005; Bloom 2005; Bonn, Joseph & Dai 2005; Jang & Wu 2006; Johns & Gyimothy 2002) with less emphasis on comparing tourism stakeholders (e.g. Laws, Scott & Parfitt 2002; Lee & Zhao 2003; Scott & Parfitt 2004). This research provides evidence to suggest that different tourism stakeholders within a single destination attract different tourists.

7.3.2 Two-step segmentation approach

Based on stakeholder theory, this thesis proposed and described a two-step approach to segmentation. Typically researchers seek to profile a market using some segmentation variables. As mentioned in Section 2.4, unless the researcher has a complete understanding of each tourism stakeholder, some variables that may be important may be missed. This indicates that the destination may not perform as well as they can, as they are not addressing the groups' interests effectively. The variables generated in these studies are likely to be guided by the researchers' own experience and their review of the literature. Such endeavours may not accommodate the variation within a single regional tourism destination.

As identified in Section 2.4, the approach recommended and detailed in this study considered both tourism stakeholders and tourists. From analysing the findings in the two analysis chapters, it was concluded that the proposed two-step method encompasses more of the tourists visiting the destination. This approach was also able to differentiate between the segments more effectively than the process used by Andreu et al. (2005), a prominent study in the tourism literature.

All four segmentation bases as defined by Kotler (1980) were utilised in this approach. In this study, *age, income, travel party composition (TPC)* (demographic), *origin* (geographic), *push motivations, pull motivations* (psychographic), *activities expenditure, food and beverages expenditure, accommodation expenditure, and nights* (behavioural) produced three segments.

It has been noted that several researchers (e.g. Cha, McCleary & Uysal 1995; Johns & Gyimothy 2002; Lehto, O'Leary & Morrison 2002; Morrison et al. 1996) have criticised demographic and geographic segmentation bases for their failure to predict future tourist behaviour. A key explanation for this failure lies in the insights gained in this study. It is possible that key segmentation variables (e.g. origin and income) are being omitted by researchers. Demographics are directly observable (Scott & Parfitt 2004) and tourists can be easily classified based on their geographic location (Kotler, Bowen & Makens 2003). Based on the findings of this research, demographics and geographics should be used for the purposes of guiding managerial decisions. This is mentioned in detail in Section 7.4.1. While demographic and geographic variables may not be able to predict which types of tourists will frequent a destination, they are likely to continue to play an important role in managerial decision making.

A further marketing implication gleaned from this thesis is that whilst questionnaire surveys were used for both the DMO segments and the proposed two-step approach, the tourism segments that were derived varied considerably. Only one of the two-step approach segments, *wealthy travellers*, was comparable with the segments currently defined by the DMO. The other two tourism segments identified from the two-step approach, *young Europeans* and *long stay travellers*, were not considered in the DMO segmentation. These segments represented approximately 60 per cent of the usable tourist sample for this study. It can be argued that the two-step approach may be a more appropriate segmentation method, as it is capable of assisting tourism marketers to target more of the tourists frequenting the destination. Currently, the DMO segments target less than a quarter of the types of tourists visiting the

destination. The results of this study suggest that many dollars may be wasted targeting tourists that are not likely to travel to the destination and not targeting those who would.

This research also concluded that whilst certain segments (e.g. wealthy travellers) may appear more economically purposeful for segmentation, consideration needs to be provided to all segments deemed relevant by the collective tourism stakeholders. Focusing on only tourists that show characteristics (e.g. high accommodation and food and beverages expenditure) that are relevant to certain tourism stakeholders (e.g. five star hotels) but not to others tourism stakeholders (e.g. backpacker hostels) is likely to ensure that not all tourism stakeholders will support the destination's marketing strategy.

An additional contribution arising from this study is that the two-step approach provides a much richer description of the segments when compared to the current DMO segments. This richness can be applied to better frame management thinking. For example, geographic and demographic data can be used to select relevant media while behavioural and psychographic variables can be utilised by tourism stakeholders to tailor tourism product offerings and pricing, and to inform promotion development.

7.3.3 Three expenditure categories

Another contribution of this research is the use of three expenditure items that produced findings of primary importance to tourism stakeholders. Economic injection is one of the main benefits of tourism for destinations (Gunn & Var 2002; Swarbrooke & Horner 1999; Weaver & Lawton 2006). Despite the DMO segmentation approach using income as a characteristic of the five segments, it was identified from this study that higher income did not automatically translate to higher expenditure. This finding confirmed the tourism market literature (e.g. Carmichael & Smith 2004; Hu & Yu 2007; Lee, Morrison & O'Leary 2006; Petrick 2005; Sung 2004). The wealthy travellers had the highest incomes and higher daily expenditure in all three categories than the other segments. Whilst it was acknowledged that young Europeans earned the least of the three segments, it was concluded that they spent more on daily activities than the long stay travellers. However, because long stay travellers stay at the destination almost four times as long as the other two segments, this segment spends considerably more money in all three expenditure categories during their overall stay. This suggests that destination marketers (DMOs) and researchers alike should consider both income and expenditure when classifying tourists.

This research has identified that these expenditure items developed from the first step of the research differed between the three segments. This suggests that whilst some studies (e.g. Hsu & Kang 2007; Williams & Dossa 2003; Wilson & Thilmany 2006) have considered total trip expenditure, there is a need to consider the different elements of expenditure as different types of tourists spend different amounts of money whilst at the destination. Also considering daily expenditure levels in combination with length of stay (e.g. Jang, Morrison & O'Leary 2002; Lee, Morrison

& O'Leary 2006; MacKay, Andereck & Vogt 2002) indicates that destination marketers can estimate the overall expenditure of the segments.

7.3.4 Simultaneous inclusion of motivations in cluster analysis

A fourth implication for marketing theory arises from this study. A new method for including motivations simultaneously with other segmentation variables was described in this thesis. This method allowed both the number of push and pull motivations to be considered simultaneously with all other segmentation variables. Once segments were derived, the types of push and pull motivations were analysed for each segment to obtain an understanding of what motivated tourists to visit the destination. Both push and pull motivations have been used previously (e.g. Bogari, Crowther & Marr 2004; Kim, Noh & Jogaratnam 2006; Kim, Jogaratnam & Noh 2006; Kim & Lee 2002; Sirakaya, Uysal & Yoshioka 2003) to profile tourists at a destination. However, the analysis procedures varied. By considering both the type and number of motivations researchers can identify highly (and lowly) motivated travellers and they can understand what motivates each segment.

7.3.5 TwoStep® cluster analysis

The final contribution is that the TwoStep® cluster analysis method can be applied when using the two-step segmentation approach. This data analysis method enabled both categorical and continuous data to be used simultaneously to create three segments. By using TwoStep® cluster analysis, researchers can concurrently use all types of variables to segment tourists at a destination providing tourism stakeholders with managerially useful segment descriptions. Whilst both categorical and continuous data have been used previously in cluster analysis there have been limitations. Firstly, there are instances where data has needed to be transformed prior to analysis (e.g. Dolnicar 2004a, 2004b). Secondly, segments have needed to be analysed in at least a two stage process instead of simultaneously (e.g. Becken, Simmons & Frampton 2003; Bieger & Laesser 2002; Hyde 2006; Jang 2004; Mehmetoglu 2007). This process places an emphasis on certain variables instead of treating them all equally.

7.4 Implications for practitioners

Significant managerial implications arise from this research. These are listed in Table 7.2. The major practical implication is that the two-step approach to segmentation has firstly identified how tourism stakeholders at a destination segment their tourists, and secondly, it has confirmed that this approach has provided a more holistic view to segmentation when compared with the current DMO segmentation approach.

Table 7.2: Implications for marketing practice

Section	Contribution	Description
7.4.1	Importance of segmentation for tourism stakeholders	<ul style="list-style-type: none">➤ Stakeholders vary considerably in how they classify their tourists. Management should focus on targeting tourists that have specific characteristics which appear prevalent at this destination.➤ The marketing approach used by tourism providers could be improved at this regional destination.
7.4.2	Two-step segmentation method is more managerially useful	<ul style="list-style-type: none">➤ This approach captures more of the tourists frequenting the destination than the current DMO segmentation approach.➤ All four bases of segmentation need to be considered when segmenting tourists at a destination.

7.4.1 Importance of segmentation for tourism stakeholders

It is recommended that all of the tourism stakeholders segment their market when there are identifiable differences in the tourists that are measurable, accessible, substantial, and actionable (Kotler, Bowen & Makens 2003). This study has identified three segments that vary based on the four segmentation bases and 10 segmentation variables. As there are differences in the segments, tourism stakeholders need to segment their tourists to ensure they are catering for their different tourists' needs efficiently and effectively.

It has been identified in the tourism marketing literature that segmentation provides a means to gain a competitive advantage (e.g. Aguas, Costa & Rita 2000; Dolnicar 2007; Kotler, Bowen & Makens 2003). Segmentation can also help tourism stakeholders efficiently allocate scarce resources (e.g. Kastenholtz, Davis & Paul 1999; Kotler, Bowen & Makens 2003; Mykletun, Crofts & Mykletun 2001). Understanding tourist segments will help tourism stakeholders to predict the type of tourist that will come to their organisation. Furthermore, if there is a tourism segment that the tourism stakeholder requires and the destination marketers are not targeting, the stakeholder may need to conduct their own marketing initiatives to ensure that they reach their target market if the DMO refuses to focus on this segment. Tourism bodies such as Tourism Queensland should conduct workshops to ensure that all tourism stakeholders consider segmentation and understand its benefits. Through this process, the DMO and tourism stakeholders can collaborate to create tourism segments that can be targeted. Alternatively, if these tourism stakeholders are not interested in considering segmentation, an option is for the DMO to communicate to all of the stakeholders which segments are currently being targeted based on the current DMO approach.

It was identified that the two tourism stakeholders that had defined segments which were not based on the current DMO segmentation approach only considered one variable as a basis for their segments. This has implications for marketing practice as this finding suggests that tourism stakeholders are limited in how they aim to classify their tourists. Whilst this thesis has confirmed the usage of one base of segmentation to classify tourists (e.g. Bogari, Crowther & Marr 2004; Kim & Lee 2002; Scott & Parfitt 2004), tourism stakeholders are limiting their ability to get information to

inform their strategy by using one segmentation variable. For example, they may be restricted in determining where to target and what tourist characteristics to focus on.

Tourism stakeholders vary in the way that they classify their tourists with variables such as income and purchasing behaviour considered necessary by some and irrelevant by others in this study. DMOs may have the objective of attracting visitors to a destination while some tourism stakeholders target tourists once they are in a destination. Collaborative efforts between tourism stakeholders and the DMO are required to maximise DMO and tourism stakeholders' resources (Fyall & Garrod 2005; Sheehan, Ritchie & Hudson 2007; Wang & Xiang 2007). Failure to develop a collective approach to marketing is likely to disadvantage destinations promoting themselves in a competitive market place, as stakeholders that are excluded from the marketing of the destination may not support the destination's marketing strategy (Blain, Levy & Ritchie 2005; Prideaux & Cooper 2002; Sheehan, Ritchie & Hudson 2007). Instead, these stakeholders may promote their organisation and the destination separately from the DMO.

Tourists travel to destinations for different needs (Dolnicar 2007; Kotler, Bowen & Makens 2003; Murphy & Murphy 2004). For the best return on investment, the DMO needs to attract the same tourist segments that various tourism stakeholders seek to attract once they have reached the destination. Whilst certain organisations, such as a tour operator for Fraser Island, will have tourists travelling to the destination consistently based on its World Heritage listing, other tourism stakeholders, such as smaller tour operators, may need to maximise advertising costs to promote to certain households or in relevant promotional materials such as a specialised magazine.

This research provides evidence to suggest that different tourism stakeholders within a single destination attract different tourists. These insights suggest that DMOs (in consultation with other primary stakeholders) may benefit from developing segments to cater for the different types of tourism stakeholders within their community. However, it needs to be considered that this depends on whether the purpose of the DMO is to describe visitor segments or target visitor segments. In considering this, this thesis suggests that the marketing approach used by tourism stakeholders could be improved. Several of the tourism stakeholders indicated that they did not segment using certain variables such as purchasing behaviour and expenditure. However, this study has identified that the different segments varied in their expenditure levels. This provides further justification for the usage of the two-step approach to segmentation. Tourism stakeholders can have interaction with the DMO as a first phase to express dialogue on the type of tourist that they wish to have targeted. This ensures that all relevant variables will be identified. These variables can then be employed in the development of a questionnaire survey and the data collection and analysis methods outlined in this thesis can be followed.

A further managerial implication is to ensure that all four of these bases of segmentation are considered by the tourism stakeholders when seeking to attract tourists to the destination. Whilst there have been criticisms directed towards demographic and geographic variables for their inability to predict tourist behaviour (e.g. Andereck & Caldwell 1994; Cha, McCleary & Uysal 1995; Morrison et al. 1996), this thesis suggests they are useful in marketing a destination. These bases are

used to guide key marketing decisions, for example, where best to allocate limited budgets such as targeting tourists with a high annual household income within a region of Sydney.

Demographic and geographic variables can be used to guide media selection for promotional campaigns, while psychographic variables (e.g. push and pull motivations) and expenditure can be applied to inform advertising strategy. For example, good weather should be emphasised in advertising material as it is one of the main reasons why all three segments are coming to the destination. The different accommodation locations such as backpacker hostels as opposed to five star resorts should also be promoted in the marketing material, as it was identified that the three segments spent varied amounts of expenditure on accommodation for their holiday. Therefore, tourists with lower levels of expenditure (e.g. young Europeans) may choose the cheaper options (e.g. backpacker hostels, caravan parks) as opposed to tourists with high levels of expenditure (e.g. wealthy travellers) who may consider more expensive options (e.g. five star resorts). The focus on this expenditure is justified due to the advantage of behavioural segmentation predicting behaviour (Johns & Gyimothy 2002). Emphasising these variables will enable marketers of the destination to predict whether tourists will travel to the destination based on what it has to offer (e.g. activities and accommodation).

7.4.2 Two-step segmentation method is more managerially useful

The DMO currently targets approximately one quarter of tourists travelling to the destination. A substantial segment that was identified using the proposed two-step approach to segmentation was young Europeans. DMOs have the objective of attracting visitors to a destination. Allocation of resources by the DMO to attract this segment may represent a better investment of resources as this segment is both accessible and substantial. Use of a two-step approach to segmentation suggests that some funds could be redeployed away from targeting tourist around the age of 45 years old residing in Queensland and Sydney towards European travellers. Redeployment of funds would assist the DMO to improve return on investment as the funds would be spent in areas where tourist response is more likely.

Whilst it may be argued that the DMO has limited funds and should focus on targeting the tourists that are the most economically measurable, accessible, substantial, and actionable (e.g. the wealthy travellers), it can be suggested that young Europeans and the long stay travellers are also relevant to the Fraser Coast. These tourists spend money at the destination and are being attracted to the destination with limited promotion. Further promotion to these tourists could increase the number of these types of tourists to the region. It is argued that because this destination does not have the funds to advertise internationally to the continent of Europe, funds could be used to target these European tourists in popular Australian tourist destinations such as Cairns, Melbourne and Sydney. As these tourists tend to spend very little on accommodation, it would be considered appropriate to promote the destination in backpacker hostels at such destinations. Further, a major pull motivation, *it was recommended by someone*, suggests that it would be useful for the DMO to build referral programs. For example, the DMO

could consider contacting tourist guides in neighbouring regions or promoting the destination in international traveller guides such as the Lonely Planet.

As the other segment, long stay travellers, represents tourists that may be considered 'grey nomads' defined as 'over-55s who travel independently in caravans, motorhomes, campervans or converted buses for between three months and three years' (Robson 2007), it may be useful to promote the destination in caravan parks throughout Australia. Whilst these tourists may see the Fraser Coast destination promoted on billboards along major highways in South Queensland, this segment is one that the DMO is currently overlooking. It is likely these billboards are being promoted to the primary market segments located in South East Queensland as identified in Section 3.4.7. Despite long stay travellers spending the least on the three expenditure items on a daily basis, their length of stay is considerably longer than the other segments (see Section 6.3.2 for a review). Accordingly, their overall expenditure is the highest and this makes them a valuable market for the destination. Focusing on this segment also ensures that the issues of seasonality at the destination can be minimised, as these tourists can choose to stay at the destination for long periods during the low peak seasons. As *to rest and relax* (push) and *the weather and relaxed lifestyle* (pull) are popular motivations for this segment, these characteristics of the destination need to be considered when promoting to these tourists.

A managerial implication is to subdivide some of the categories within the research. It was acknowledged that Europe was a large source market (and the semi-structured interviews identified many different locations) which represents many countries with populations in excess of 20 million people such as the United Kingdom, Spain, France and Germany. Identifying if the majority of tourists come from one country, region or state has marketing implications. Designing specific packages for tourists from European countries such as the United Kingdom or Germany may increase the growth of tourism from these countries to this destination. As many wealthy tourists travel from Europe, as well as those with limited incomes, this could be a financially attractive option.

A final marketing implication is to consider the usage of the discarded variables (number of activities sought, gender, and trip purpose) from step one of the two-step segmentation approach as a guide for decision making for all three segments. Most tourists in these segments (both genders) travelled to the Fraser Coast to have a holiday (trip purpose) and to experience Fraser Island (activity sought). Clearly, this should be emphasised in communications for all of the three segments. The 10 variables included in the two-step segmentation approach help to distinguish between groups. The destination can use these variables to create different messages for each segment – more targeted messages for specific media. For example, an advertisement in caravan travel planning media would emphasise unique actors for long stay travellers.

7.5 Limitations of this research

This research proposed and described a new approach to destination segmentation. However, three limitations were noted in this research which should be considered. Limitations regarding the research methodology were listed in Chapter 3.

The first limitation of this research is that it has only been conducted at one regional destination. Whilst this ensured that a recommended two-step approach could be outlined and compared with the current DMO segmentation method, the results of this study cannot be generalised to other destinations. Therefore, the external validity of this research is limited. This research is also limited in that it has considered a destination that is coastal³³. Results from this research may not be the same in other destinations such as rural locations (Frochot 2005; Kastenholz, Davis & Paul 1999), cities (Bloom 2005; Jang & Wu 2006; Lee & Zhao 2003), or at winter orientated destinations such as skiing resorts (e.g. Fuller & Matzler 2008).

A second limitation of this research is that it has used a cross-sectional research design. It was acknowledged in the literature review that tourism preferences are constantly changing (e.g. French 1999; Manente & Cerato 1999; Pike 2004) and that the competition for tourism is growing (e.g. Gunn & Var 2002; Swarbrooke & Horner 1999; Weaver & Lawton 2006). Despite research being collected over different months to cater for the different seasons, it is highly possible that these results can differ from year to year. In addition, new activities and/or motivations could be sought.

A third limitation of this research is that this research has employed a convenience sampling method using quota sampling. This allowed the researcher to proceed to identify three tourism segments by proportion of the total sample. This research was then compared to a critical review of segmentation utilised by the DMO. Whilst using this method has ensured a greater likelihood that all types of tourists to the Fraser Coast were captured, the sample may not be totally representative of the tourist population visiting the destination. One or more of these segments (e.g. wealthy travellers) may have used a particular form of transport (e.g. aeroplane), more frequently than others.

Despite the three major limitations raised in this chapter and the methodological limitations raised in Chapter 3, this study has made some valuable contributions to theory and practice. Several opportunities for future research are listed in the next section (Section 7.5), such as collecting longitudinal data over periods of time to examine whether these segments remain in time. This recommendation and others will be discussed in the next section.

³³ As mentioned in Section 1.7, the main locations are the coastal city of Hervey Bay and the World Heritage listed Fraser Island.

7.6 Future research

Six main areas for future research arise to extend our understanding of destination segmentation. Firstly, future research is recommended in a range of alternative destinations to further the understanding of the recommended two-step approach to segmentation. Future research is required in urban destinations, coastal destinations, ski resorts and theme parks. These endeavours would permit a more comprehensive understanding of how tourism stakeholders view their tourists at a variety of different destinations to emerge. Additionally, researchers could consider the usefulness of the two-step segmentation approach for state and country level marketing efforts. Such endeavours would require additional rigour in the first stage as considerably more stakeholders would be involved.

Secondly, future research should be conducted longitudinally to see if the segments described by the proposed two-step approach are better able to predict the types of tourists travelling to the destination. A longitudinal study would first require researchers to follow the recommended two-step approach to destination segmentation. Therefore, primary tourism stakeholders would need to be identified and interviewed using the case study method. The relevant variables would then be used in the development of a questionnaire survey. A researcher would then collect questionnaire surveys from tourists throughout the destination over a certain time period by applying the user survey method. The results would then be analysed using TwoStep® cluster analysis. This first study would result in the generation of segments for the destination under study. A subsequent study would be required to collect data on tourists visiting the area using the variables from the initial segmentation study.

In the case of this destination, researchers would collect data on tourists' accommodation expenditure, activities expenditure, age, food and beverages expenditure, income, nights, origin, push motivations, pull motivations and TPC. Data from the subsequent study would then be compared to understand the proportion of tourists captured by the segments derived from the proposed two-step approach to segmentation. If the majority of tourists visiting the destination in the subsequent study were described by the segments derived from the two-step approach to segmentation, it could be concluded that the two-step approach to segmentation offers destination marketers a better alternative than current practice.

Thirdly, to cater for the limitation that the sample may not be representative of the tourist population, a further research opportunity is to consider a more random sampling approach to improve the validity of the data. This would include going to the different destination locations at different times. This would ensure that dominant locations (e.g. airport departure lounge and/or bus terminal) would become more prevalent and better representative of the population.

A fourth opportunity for research is to consider comparing the differences between first and repeat visitors to the destination. It has been acknowledged in the literature review that satisfaction (e.g. Bigne & Andreu 2004; Fuller & Matzler 2008; Hallab & Kim 2006) and experience (Hsu & Lee 2002; Kozak 2002; Lau & McKercher 2004) have been frequently used as segmentation variables. It was also acknowledged in

this study that *it was recommended by someone* was a popular pull motivation. Whilst it has been argued that the segmentation bases and variables used in the two-step approach to segmentation provides a useful description of tourism at the destination, applying satisfaction and repeat intentions to classify tourists differently may be helpful for tourism stakeholders (e.g. accommodation providers and tour operators) in their future marketing. These stakeholders would benefit from knowing whether tourists were satisfied with their experience at the destination. This would also provide insight into what DMO's and stakeholders might need to improve to satisfy tourists.

A fifth research opportunity is for a researcher to determine the process of how the DMO and other stakeholders can collaborate to effectively target the three segments for the destination. Current research in the tourism marketing literature has focused on destination marketing alliances (Wang & Xiang 2007), tourism planning (Sautter & Leisen 1999), and promotion (Sheehan, Ritchie & Hudson 2007). By identifying the input from all primary stakeholders interviewed within this research, it can be determined if they have an influence in the decision-making process, and whether their priority markets are chosen.

A final research opportunity is to provide further consideration of the treatment of missing data. This can be tested using longitudinal research to identify which approach is more predictive of tourists visiting the destination. By comparing the segments derived with 1) missing data included and 2) missing data removed, researchers could conclude which approach may be best for segmentation purposes. In the present study, one-third of the visitors to the destination were excluded from analysis due to missing data, much of which was related to people not wishing to report income. Excluding such a high proportion of tourists from analysis may be less than ideal.

7.7 Conclusions

In conclusion, this chapter has outlined the theoretical and managerial implications arising from this research. The limitations arising from this research have been noted. Some opportunities for future research have also been provided. It was concluded that the recommended two-step approach to segmentation offers managerially useful segments with richer descriptions of the tourists frequenting the destinations. Further, the proposed two-step approach to segmentation may be capable of capturing more of the tourists travelling to the destination enabling marketers to maximise their return on investment.

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Appendix I: Destination segmentation studies

Author	Destination	Country	Sample	Instrument	Segmentation Variables																				
					Age	Gender	Education	Income	Employment	Marital Status	TPC	Household Stage	Region	Motivation/s	Trip Purpose	Perceptions	Satisfaction	Activities	Experience	Length Of Stay	Accommodation	Info Sources	Activities Undertaken	Transportation	Expenditure
Alipour et al. (2007)	6 beaches	North Cyprus	600	QS ~	Y	Y	Y	Y	Y					Y			Y	Y	Y						
Andreu et al. (2005)	Region (South West)	Turkey	260	QS (SA)	Y	Y		Y							Y						Y	Y			
Andriotis, Agiomirgianakis & Athanasios (2007)	Island (Crete)	Greece	870	QS (SA)	Y	Y	Y	Y	Y	Y	Y			Y							Y	Y	Y	Y	
Bansal & Eiselt (2004)	Province (New Brunswick)	Canada	588	QS (PI)							Y			Y	Y						Y				
Becken, Simmons & Frampton (2003)	West Coast of South Island	New Zealand	453	QS (SA)	Y	Y			Y		Y			Y	Y						Y	Y		Y	Y
Beh & Bruyere (2007)	3 Reserves	Kenya	465	QS (SA)	Y		Y							Y	Y				Y		Y				
Bieger & Laesser (2002)	Country#	Switzerland	1970*	QS (SA)	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y				Y		Y	Y	Y	Y	
Bigne & Andreu (2004)	City museums, theme park^	Spain	400	II + QS (PI)	Y	Y		Y				Y	Y				Y								
Bloom (2004)	~ (Western Cape)	South Africa	1630	QS (PI)	Y		Y	Y	Y					Y		Y	Y							Y	
Bloom (2005)	City (Cape Town)	South Africa	694*	QS ~	Y		Y		Y	Y		Y			Y				Y	Y				Y	Y
Bogari, Crowther & Marr (2004)	2 cities (Jeddah, Abra)	Saudi Arabia	505	QS (SA)										Y											
Bonn, Joseph & Dann (2005)	Region (Tampa Bay)	United States	53864*	QS (PI)	Y	Y	Y	Y		Y				Y											
Brey et al. (2007)	Country^	Canada	2470*	TI + QS (SA)	Y	Y		Y	Y						Y				Y	Y	Y	Y			
Carmichael & Smith (2004)	Country#	Canada	333428*	QS (TI)	Y	Y	Y	Y		Y	Y				Y					Y			Y		Y
Chandler (2004)	2 Regions (Nth Carolina)	United States	734	QS (SA)	Y	Y	Y		Y	Y		Y							Y		Y			Y	

Key:

Domestic

^ Destination not specified

~ Method of collection not specified

* Secondary data

CS- Case Study

FG- Focus Group

II- In-depth Interview

PI- Personal Interview

QS- Questionnaire Survey

SA- Self-Administered

TI- Telephone Interview

WI- Written Interview

Demographic



Geographic



Psychographic



Behavioural



Author	Destination	Country	Sample	Instrument	Segmentation Variables																			
					Age	Gender	Education	Income	Employment	Marital Status	TPC	Household Stage	Region	Motivation/s	Trip Purpose	Perceptions	Satisfaction	Activities	Experience	Length Of Stay	Accommodation	Info Sources	Activities Undertaken	Transportation
Chandler & Costello (2002)	Region (East Tennessee Hills)	United States	412	QS (SA)	Y	Y	Y		Y	Y		Y				Y		Y		Y				
Chang (2006)	Village (Wu-Tai)	Taiwan	315	QS (SA)	Y	Y	Y	Y	Y	Y			Y											
Chen (2003a)	Proposed vacation choice^		695	QS ^	Y	Y			Y	Y	Y				Y		Y					Y		
Chen (2003b)	State (Virginia)	United States	261	QS (SA)		Y	Y	Y		Y	Y				Y		Y		Y			Y		
Clotney & Lennon (2003)	Country	Lithuania	103	QS (PI)	Y	Y				Y				Y	Y				Y				Y	
Diaz-Perez, Bethencourt-Cejas & Alvarez-Gonzalez (2005)	Country	Canary Islands	795	QS (SA)	Y	Y			Y		Y		Y				Y	Y			Y	Y		
Dolnicar (2004a)	Country#	Austria	14571*	QS ^																Y				
Dolnicar (2004b)	Country#	Austria	14571*	QS (PI)		Y					Y		Y				Y	Y	Y		Y		Y	
Dolnicar & Leisch (2003)	Country	Austria	2961*	QS ^	Y	Y		Y			Y		Y				Y	Y	Y	Y	Y		Y	
Dolnicar & Laesser (2007)	Country (International travel outside of Switzerland)		6186*	QS (SA +WI)	Y	Y	Y	Y	Y		Y			Y				Y	Y	Y	Y	Y	Y	Y
Dolnicar et al. (2008)	Country^	Australia	1053	QS (SA)	Y	Y		Y				Y						Y	Y			Y	Y	
Fleischer & Pizam (2002)	Cities#	Israel	400*	QS (TI)	Y	Y	Y	Y	Y	Y							Y	Y						
Frochot (2005)	2 Rural Towns (Dumfries & Galloway)	Scotland	734	QS (SA)	Y						Y		Y					Y	Y		Y		Y	
Fuller & Matzler (2008)	Ski Resorts (10 Alpine)	Europe (e.g. Austria, Italy, Switzerland)	6172*	QS (SA)	Y	Y				Y					Y			Y				Y		
Furr & Bonn (2006)	City (Tampa)	United States	906	QS (PI)	Y								Y							Y	Y	Y		
Gonzales & Bello (2002)	Community#	Spain	400	QS (PI)							Y					Y		Y			Y			
Hallab & Kim (2006)	State (Mississippi)	United States	235	QS (SA)	Y	Y	Y	Y		Y				Y	Y		Y							
Hallab, Price & Fournier (2006)	Country	United States	74	QS (SA)	Y	Y	Y	Y		Y		Y					Y							

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Psychographic



Behavioural



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					Age	Gender	Education	Income	Employment	Marital Status	TPC	Household Stage	Region	Motivation/s	Trip Purpose	Perceptions	Satisfaction	Activities	Experience	Length Of Stay	Accommodation	Info Sources	Activities Undertaken	Transportation	Expenditure
Hong et al. (2005)	Country#	United States	6115*	QS ~			Y	Y	Y	Y	Y	Y	Y	Y		Y						Y	Y		
Horneman et al. (2005)	Country^	Australia	724	QS (SA)	Y	Y	Y	Y	Y	Y					Y				Y					Y	
Hsu & Kang (2007)	Region (Hong Kong)	China	1303	QS (PI)	Y	Y	Y	Y			Y			Y	Y	Y	Y		Y	Y			Y	Y	
Hsu, Kang & Lam (2006)	Region (Hong Kong)	China	464	QS (SA)	Y	Y	Y	Y		Y				Y		Y			Y						Y
Hsu, Kang & Wolfe (2002)	No destination specified. Focused on psychographics of tourists.		417	QS (TI)	Y	Y	Y	Y		Y						Y	Y		Y						
Hsu & Lee (2002)	State (Kansas)	United States	817	FG + QS (TI)	Y	Y	Y	Y	Y	Y						Y	Y								
Hu & Morrison (2002)	Country#	United States	168465*	QS (PI)	Y	Y	Y	Y			Y			Y				Y	Y						
Hu & Yu (2007)	State (midwest)	United States	199	QS (SA)	Y	Y	Y	Y	Y	Y				Y		Y	Y				Y	Y		Y	
Hudson & Ritchie (2002)	Province (Alberta)	Canada	3017	FG, QS (TI)	Y	Y		Y		Y				Y						Y					
Hyde (2006)	Country	New Zealand	528	QS (PI)	Y						Y							Y	Y	Y	Y	Y			
Jang (2004)	Country	Canada	249*	QS (PI)	Y	Y	Y			Y								Y			Y				
Jang & Cai (2002)	7 Countries	United States, Canada, Asia, Central/South America, West Indies/Caribbean, Oceania	964*	QS (PI)	Y	Y		Y		Y	Y							Y							
Jang, Morrison & O'Leary (2002)	Countries	Canada/United States	505*	QS (PI)	Y	Y	Y	Y	Y	Y	Y			Y		Y			Y		Y	Y		Y	
Jang, Morrison, O'Leary (2004)	Overseas Travel (not specified- outside of Europe and the Mediterranean)		496*	QS (PI)	Y	Y	Y	Y	Y	Y	Y			Y					Y			Y			Y
Jang et al. (2007)	Countries	Canada/United States	434*	QS (PI)	Y	Y	Y	Y	Y	Y											Y				
Jang & Wu (2006)	City (Taipei)	Taiwan	353	QS (SA)	Y	Y	Y			Y				Y											

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					Age	Gender	Education	Income	Employment	Marital Status	TPC	Household Stage	Region	Motivation/s	Trip Purpose	Perceptions	Satisfaction	Activities	Experience	Length Of Stay	Accommodation	Info Sources	Activities Undertaken	Transportation	Expenditure
Johns & Gyimothy (2002)	Island (Bornholm)	Denmark	1099*	QS (PI)	Y	Y					Y		Y			Y				Y					
Juwaheer (2007)	Country	Mauritius	410	PI + QS (SA)	Y	Y	Y				Y					Y							Y		
Kang, Hsu & Wolfe (2003)	State (Kansas)	United States	297	QS (SA)	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y				Y	Y	Y	Y		Y
Kim, Jogaratnam & Noh (2006)	10 Countries (10 international destinations)	Canada, UK, Mexico, Spain, Jamaica, Italy, Ireland, France, Asia, Germany	469	QS (SA)	Y	Y	Y			Y			Y	Y						Y					
Kim & Lee (2002)	National Parks (6 parks)	South Korea	2720	QS (SA)									Y												
Kim, Noh & Jogaratnam (2006)	States (10 US destinations)	United States	1488*	QS (SA)	Y	Y	Y			Y	Y	Y	Y	Y						Y	Y				
Kim & Petrick (2004)	Racecourse (Kwachen)	Taiwan	430	QS (SA)	Y	Y	Y	Y	Y	Y			Y										Y	Y	
Kim & Prideaux (2005)	Country	Korea	838	QS (PI)	Y	Y	Y			Y			Y	Y			Y		Y		Y				
Kim, Wei & Ruys (2003)	State (Western Australia)	Australia	720	QS (SA)	Y	Y		Y		Y	Y		Y												
Kozak (2002)	Countries	Mallorca and Turkey	1872	QS (SA)	Y			Y		Y		Y	Y				Y	Y	Y				Y		
Laesser & Crouch (2006)	Country	Australia	10066*	QS (PI)						Y		Y	Y	Y			Y		Y	Y				Y	
Laesser, Crouch & Beritelli (2006)	Country	Australia	10066*	QS (PI)	Y	Y			Y		Y	Y	Y				Y	Y	Y	Y					
Lau & McKercher (2004)	Region (Hong Kong)	China	412	QS (SA)	Y								Y				Y	Y	Y						
Laws, Scott & Parfitt (2002)	Region (Port Douglas)	Australia	890- 3 stages	II, FG, QS (PI)					Y		Y	Y	Y				Y	Y				Y			
Lee, Yoon & Lee (2007)	Region/area (DMZ)	Korea	416	QS (SA)	Y	Y	Y	Y		Y				Y		Y									
Lee et al. (2006)	Casino (in Kangwon)	Korea	399	QS (SA)	Y	Y	Y	Y		Y	Y			Y	Y		Y	Y		Y				Y	

Key:

Domestic

^ Destination not specified

~ Method of collection not specified

* Secondary data

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TI- Telephone Interview

WI- Written Interview

Demographic



Geographic



Psychographic



Behavioural



Author	Destination	Country	Sample	Instrument	Segmentation Variables																				
					Age	Gender	Education	Income	Employment	Marital Status	TPC	Household Stage	Region	Motivation/s	Trip Purpose	Perceptions	Satisfaction	Activities	Experience	Length Of Stay	Accommodation	Info Sources	Activities Undertaken	Transportation	Expenditure
Lee, Morrison & O'Leary (2006)	Country	Canada	307*	QS (PI)	Y	Y	Y	Y	Y	Y	Y		Y				Y		Y	Y			Y	Y	Y
Lee & Sparks (2007)	Countries	Australia, Korea	554	QS (SA)	Y	Y	Y	Y		Y	Y		Y				Y		Y	Y					
Lee & Zhao (2003)	Hotels (City-Miami)	United States	193	II (PI + TI) + QS (SA)	Y	Y		Y						Y											Y
Legoherel & Wong (2006)	Region (Hong Kong)	China	2124	QS (PI)	Y	Y	Y	Y			Y		Y	Y					Y	Y	Y		Y	Y	Y
Lehto, O'Leary & Morrison (2002)	Countries	US, Canada, Asia, Australia, New Zealand	850*	QS (PI)	Y	Y	Y	Y	Y	Y			Y	Y						Y				Y	
Lehto, O'Leary & Morrison (2004)	Country	United States	2284*	QS (PI)	Y	Y		Y			Y		Y	Y			Y	Y	Y		Y		Y	Y	
Lo, Cheung & Law (2002)	Region (Hong Kong)	China	885	QS (PI)	Y	Y	Y	Y					Y	Y					Y		Y				
Luo, Feng & Cai (2004)	Rural destinations (State of Iowa)	United States	716*	QS (PI)	Y	Y	Y	Y	Y		Y			Y						Y	Y	Y		Y	
MacKay, Andereck & Vogt (2002)	2 States (Manitoba, Arizona)	United States	1553	QS (PI)	Y	Y	Y	Y	Y		Y	Y	Y	Y		Y		Y	Y			Y		Y	
McCain & Ray (2003)	Region (France), State (Alaska), Country	Venezuela, Ecuador, Costa, Rica, United States, France	220	QS (SA)	Y	Y	Y	Y					Y	Y											
McCleary, Weaver & Meng (2005)	5 Dance events (in 5 US states)	United States	120	QS (SA)	Y	Y	Y	Y	Y	Y			Y					Y		Y	Y			Y	Y
McGuiggan & Foo (2004)	City (Sydney)	Australia	207	QS (SA)	Y	Y	Y	Y	Y	Y		Y	Y												
McKercher et al. (2003)	Region (Hong Kong)	China	760	QS (PI)	Y		Y						Y	Y	Y				Y	Y			Y		

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Demographic



Geographic



Psychographic



Behavioural



Author	Destination	Country	Sample	Instrument	Segmentation Variables																					
					Age	Gender	Education	Income	Employment	Marital Status	TPC	Household Stage	Region	Motivation/s	Trip Purpose	Perceptions	Satisfaction	Activities	Experience	Length Of Stay	Accommodation	Info Sources	Activities Undertaken	Transportation	Expenditure	Frequency
McKercher & Chan (2005)	Region (Hong Kong)	China	1304	QS (PI)	Y	Y	Y						Y	Y	Y		Y		Y	Y			Y		Y	
Mehmetoglu (2007)	2 nature-based attractions	Norway	162	QS (SA)	Y	Y		Y						Y	Y				Y		Y		Y	Y		
Molera & Albaladeo (2007)	Region (Murcia)	Spain	335	QS (SA)	Y	Y	Y	Y	Y			Y	Y	Y						Y		Y	Y	Y	Y	
Morrison et al. (2003)	Resorts (5 types in a country)	United States	3320*	QS (SA)	Y	Y	Y	Y	Y			Y	Y		Y					Y		Y	Y	Y	Y	
Moscardo (2004)	Region (Cairns)	Australia	1630	QS (SA)	Y	Y						Y					Y		Y	Y	Y		Y	Y		
Naylor & Kleiser (2002)	Resort^		477	QS (SA)	Y	Y											Y	Y								
Obenour, Lengfelder & Groves (2005)	Nature based destination (Ohio)	United States	610	QS (SA)		Y	Y	Y				Y	Y						Y				Y			Y
Onyx & Leonard (2005)	Country	Australia	634	QS (II)	Y	Y			Y			Y		Y					Y		Y	Y	Y	Y		
Park et al. (2002)	Town (Black Hawk)	United States	523	QS (SA)	Y	Y	Y	Y			Y	Y		Y	Y		Y	Y	Y	Y	Y	Y		Y		
Pennington- Gray, Fridgen & Stynes (2003)	Country	Canada	14000*	CS- QS (TI + PI)	Y																					
Petrick (2002)	Golf Resort (Southern USA)	United States	448	QS (SA)	Y	Y	Y	Y								Y			Y		Y					Y
Petrick (2005)	Voyage (Caribbean)	Caribbean	795	QS (SA)	Y	Y	Y	Y											Y		Y		Y			Y
Petrick & Sirakaya (2004)	Voyage (Caribbean)	Caribbean	792	QS (SA)															Y		Y					Y
Pike (2002)	5 Attractions in (Auckland)	New Zealand	763	QS (SA)	Y	Y	Y	Y			Y			Y		Y			Y							Y
Poria, Butler & Airey (2004)	2 Heritage sites (Wailing Wall, Massada)	Israel	398	QS (PI)	Y	Y	Y							Y		Y										

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Demographic



Geographic



Psychographic



Behavioural



Author	Destination	Country	Sample	Instrument	Segmentation Variables																			
					Age	Gender	Education	Income	Employment	Marital Status	TPC	Household Stage	Region	Motivation/s	Trip Purpose	Perceptions	Satisfaction	Activities	Experience	Length Of Stay	Accommodation	Info Sources	Activities Undertaken	Transportation
Poria, Reichel & Biran (2006)	Attraction (Anne Frank House)	The Netherlands	208	QS (PI)	Y	Y	Y				Y		Y			Y								
Prebensen (2005)	Outbound from Norway	Many potential countries	1222	QS (PI)	Y	Y	Y	Y	Y	Y	Y	Y				Y	Y	Y	Y			Y	Y	
Reece (2004)	State (South Carolina)	United States	40612*	QS (PI)	Y	Y	Y	Y	Y	Y		Y		Y					Y					
Reisinger & Mavonda (2002)	Potential destinations ^		708	QS (SA)	Y	Y	Y	Y	Y			Y	Y		Y									
Reisinger & Mavonda (2004)	Potential destinations ^		952	QS (SA)			Y					Y	Y				Y							
Reisinger & Turner (2002)	City (Gold Coast)	Australia	868	QS ~	Y		Y		Y			Y		Y	Y	Y		Y	Y					
Sarigollu & Huang (2005)	Region (Latin America)	Nth and Sth America	265	QS (SA)	Y	Y	Y	Y	Y		Y						Y		Y					Y
Scott & Parfitt (2004)	Region (North Queensland)	Australia	877	II + FG + QS (PI)									Y											
Seiler et al. (2002)	Country	United States	1097*	QS ~	Y	Y	Y	Y		Y	Y			Y				Y	Y			Y	Y	
Shin (2007)	Region (DMZ)	Korea	302	QS (SA + PI)	Y	Y						Y		Y	Y			Y						
Shoham, Schrage & van Eeden (2004)	Country (3)	United States, South Africa, Israel	558	QS (PI)	Y	Y		Y	Y	Y	Y	Y	Y						Y			Y	Y	
Sirakaya, Uysal & Yoshioka (2003)	Country	Turkey	313	QS (SA)	Y	Y	Y	Y	Y		Y		Y				Y	Y		Y				
Spurr et al. (2004)	Country#	Australia	27653*	QS (PI)				Y			Y	Y	Y		Y							Y	Y	
Stoekli, Greiner & Mayocchi (2006)	Region (Carpentaria)	Australia	510	QS (PI)	Y			Y	Y		Y	Y	Y			Y		Y			Y		Y	
Stynes & White (2006)	Parks	United States	7373*	QS (SA + PI)							Y			Y				Y	Y				Y	

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Demographic



Geographic



Psychographic



Behavioural



Author	Destination	Country	Sample	Instrument	Segmentation Variables																			
					Age	Gender	Education	Income	Employment	Marital Status	TPC	Household Stage	Region	Motivation/s	Trip Purpose	Perceptions	Satisfaction	Activities	Experience	Length Of Stay	Accommodation	Info Sources	Activities Undertaken	Transportation
Sung (2004)	Country	United States (+ Europe/Africa, Asia/Pacific)	892	QS (SA)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y		Y					Y	Y
Swanson & Horridge (2006)	State (Arizona, Colorado, Utah, New Mexico)	United States	398	QS (SA)	Y	Y	Y	Y					Y	Y	Y	Y		Y			Y			
Walker & Hinch (2006)	Casino (3-State, Country, elsewhere)	Alberta, Canada, United States, other	564	QS (TI)	Y	Y	Y				Y		Y					Y			Y	Y		
Wei & Milman (2002)	Potential destinations^		84	QS (SA)		Y	Y	Y	Y	Y								Y	Y					
Williams & Dossa (2003)	Province (British Columbia)	Canada	261*	QS (SA)	Y	Y	Y	Y	Y		Y		Y				Y	Y	Y		Y		Y	
Wilson & Thilmany (2006)	Golf courses (State, Colorado)	United States	675	QS (SA)	Y	Y		Y	Y				Y		Y						Y		Y	Y
Wilton & Nickerson (2006)	9 Attractions (State, Montana)	United States	4220	QS (SA)							Y		Y					Y	Y			Y	Y	
Woodside & Dubelaar (2002)	Island (Prince Edward)	Canada	2239*	QS (PI)	Y		Y	Y	Y	Y	Y	Y	Y					Y	Y	Y	Y	Y		Y
Yoo, McKercher & Mena (2004)	Region (Hong Kong)	China	1506*	QS (PI)	Y	Y	Y	Y			Y		Y	Y				Y	Y				Y	
Yuksel (2003)	Country	Turkey	449	QS (SA)		Y							Y			Y	Y							
Yuksel & Yuksel (2002)	Country	Turkey	500	QS (SA)		Y					Y		Y			Y								Y

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Demographic



Geographic



Psychographic



Behavioural



Appendix II: Case study protocol

Briefing the respondent

Thank you for agreeing to participate in this research. This interview is part of a university research project. Its *purpose* is to determine a stakeholder approach to market segmentation. The perspective adopted is that of an organisation that markets Fraser Coast tourism.

By taking part in this interview, you will assist tourism organisations, like yours, build on the opportunities available in marketing tourism.

Ethical conditions are important to me. This research is *confidential* and your firm will not be identified in the research report. You may also *withdraw* from the study at any time without any fear of the consequences.

I would like to *tape the interview* in order to help me with my data analysis. If you agree to this, you are welcome, at points during taping, to ask me to cease taping or to push the pause button yourself at any time during the interview. May I have your permission to tape the interview?

This protocol is not a questionnaire but provides a framework for the interview.

Stakeholder Details

Stakeholder Code.....Stakeholder Type.....

Interview Number.....Interviewee's title.....

Date.....Start time.....Finish time.....

Part A: Introduction

A1: Tell me the story of your organisation. What services does it offer? How has it developed over time and what are your future plans?

A2: Please tell me about the impact tourism has had on the Fraser Coast.

Part B: Own Business

B1: How do you segment your tourists? What are your defined tourism segments?

(Back up questions) With regard to your business, tell me about your customers in regards to these characteristics (list below). Are there any other variables you use to segment your tourists?

1. Age
2. Gender
3. Travel Party Composition
4. Income
5. Education
6. Origin (Nationality)
7. Push Motivations
8. Pull Motivations
9. Trip Purpose
10. Activities Sought
11. Nights (Length of Stay)
12. Expenditure
13. Purchasing Behaviour

Appendix III: Letter of interest

**Aaron Tkaczynski
Doctor of Philosophy Student
University of Southern Queensland
PO Box 910, Pinalba 4655**

**(name)
(position)
(organisation)
(organisation address)**

Dear **Name**,

My name is Aaron Tkaczynski and I am a Doctor of Philosophy student at the University of Southern Queensland, Fraser Coast Campus.

My research seeks to identify a recommended two-step approach to destination segmentation. I am using the Fraser Coast as the destination to research.

To answer my research objective, I am currently planning interviews with people who are knowledgeable about and/or are employed in tourism in the Fraser Coast. Therefore, I am inviting you to participate in a one-on-one, conversationally based interview in early March 2007.

Within the interview I am aiming for you to express your thoughts and opinions on the current tourism marketing strategies used by your organisation, and Fraser Coast in general. By participating in these interviews, you will help me to identify opportunities for growth and improvement for future tourism in the Fraser Coast.

I have attached a Consent form which outlines the interview purpose and procedure in much greater detail. Importantly, at the bottom of this form is a Consent section which needs to be read, signed and returned to me in the prepaid envelope before an interview can be organised.

If you have any further questions, please feel free to contact me on (07) 4120 6120 or via email at tkaczyns@usq.edu.au

Kind Regards,

Aaron Tkaczynski, B. Bus (Hons)

Appendix IV: Consent form

Title of the Research- Destination segmentation: A recommended two-step approach

Researcher- Aaron Tkaczynski, Doctoral Student at the University of Southern Queensland

Purpose of the Research- This research seeks to identify a recommended two-step approach to destination segmentation. I am using the Fraser Coast as the destination to research.

Your organisation has been selected for the contribution it can make to this study. You have been identified for your knowledge and experience in the subject area of tourism in the Fraser Coast, and accordingly, are invited to participate in a conversationally based interview that will require between 30 minutes and 90 minutes of your time.

In a private setting, preferably your workplace, you will be asked your thoughts and opinions on how tourism in the Fraser Coast is currently marketed by your organisation and the Fraser Coast in general. You will also be invited to answer questions relating to a tourist's Fraser Coast experience. There are no known physical or psychological harms associated with your participation.

The primary benefit to you by participating in this research is providing the researcher with an understanding of how the Fraser Coast is currently marketed. By utilising this information, the researcher can identify opportunities for growth and improvement for future tourism marketing strategies in the Fraser Coast.

Permission to make an audiotape of your discussion is requested and a separate consent form that needs to be separated from this section and returned to me as listed at the bottom of this page.

The data that will be collected in this interview will be kept as strictly confidential and anonymous. Any information given will not be made public or given to a third party. Participation in the interview will be completely voluntary and you can withdraw from the interview at any time you wish. There are no negative consequences associated with not participating. If you have any further questions or concerns about the research you can contact the Chief Researcher, Aaron Tkaczynski, via email at tkaczyns@usq.edu.au.

The interviews will be conducted in early March 2007. Draft results of the overall findings of the research will be made available to you for review by June 2007.

If you would like to take part in the study, please sign and date the form below. Once you have signed and dated the consent form, please cut the Consent form section off and put it in the pre-paid envelope to be sent to the Chief Researcher, Aaron Tkaczynski.

✂-----

Consent Form (to be returned to Aaron Tkaczynski)

This study has been explained to my satisfaction, and I agree to be interviewed. I also agree to have my interview taped. I understand that information will be kept confidential and I can withdraw from the interview at anytime I wish without any fear of consequences.

Participant's Confirmation (signature).....Date.....
Name.....Organisation.....Position.....

Appendix V: Semi-structured interview example

Interviewer: I was just wondering if you could point to me and put in order which one you would generally, you would focus on maybe on when considering a segment who what you'd actually look at first, the key segmentation variable.

Respondent: Age is probably. Oh actually, can I put those two together. Nationality (origin) can that also be split into state?

Interviewer: Definitely, definitely. Okay.

Respondent: Put those two together for sure.

Interviewer: Yup and then after that, What would be. Um Sorry, with state as well, is there a particular state that you are trying to segment them to or you just are or are that you are generally looking at your segments, that is how you are trying to list them? Is that the

Respondent: That's how I would list them. So nationality for our priorities would be South East Queensland, and Queensland, um Sydney, Melbourne, and then obviously their respective states. Um and then obviously nationality. So once again this goes into the international side of things as well. Um and I'm gonna to. You are going to hate me, but I'm going to group all sorts of things because it is kind of difficult to put them.

Interviewer: That is absolutely fine. As I said it is generally you will do them all.

Respondent: Trip purpose and motivations would be the next one.

Interviewer: Yep. If any of them don't relate to you, you can cast them aside.

Respondent: Activities and expenditure. And then I think the rest of it's not. Well actually I will group income them in there too. The rest of it is not really relevant. As I said we get a mixture of genders. Purchasing behaviour is always a challenge.

Appendix VI: Ethical clearance



The University of Southern Queensland

TODDWOOMBA QUEENSLAND 4350
AUS. KALIA
TELEPHONE 07: 4931 2100
www.usq.edu.au

Office of Research and Higher Degrees

Postgraduate and Ethics Office
Telephone: 0746 312056
Facsimile: 0746 312953
Email: ethics@usq.edu.au

19 February 2007

Mr A Tkaczynski
c/- University of Southern Queensland
PO Box 910
Dialba Q 4655

Dear Mr Tkaczynski

Re: Ethics Clearance for Research Project, *The Factors Influencing The Repositioning of Tourism Destinations*

The USQ Human Research Ethics Committee recently reviewed your application for ethics clearance. Your project has been endorsed and full ethics approval is confirmed. Reference number **H08TC622** is assigned to this approval that remains valid to **19 February 2008**.

The Committee is required to monitor research projects that have received ethics clearance to ensure their conduct is not jeopardising the rights and interests of those who agreed to participate. Accordingly, you are asked to forward a **written report** to this office after twelve months from the date of this approval or upon completion of the project.

A questionnaire will be sent to you requesting details that will include: the status of the project; a statement from you as principal investigator, that the project is in compliance with any special conditions stated as a condition of ethical approval; and confirming the security of the data collected and the conditions governing access to the data. The questionnaire, available on the web, can be forwarded with your written report.

Please note that you are responsible for notifying the Committee immediately of any matter that might affect the continued ethical acceptability of the proposed procedure.

Yours sincerely

Chris Bartlett
Postgraduate and Ethics Officer
Office of Research and Higher Degrees

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Appendix VII: Questionnaire survey



Fraser Coast Visitor Survey



The aim of this survey is to gather information on your experience of the Fraser Coast. By completing this questionnaire you will make a valuable contribution to this local study. Participation in the questionnaire survey is completely voluntary and you can withdraw from completing the questionnaire survey at any time you wish. The data that will be collected will be kept strictly confidential and anonymous. You do not need to put your name and address in the questionnaire. Any information given will not be made public or given to a third party.

PLEASE ANSWER THE QUESTIONNAIRE AS AN INDIVIDUAL RATHER THAN A COUPLE OR GROUP

If confirmation is needed on these details, please contact Wayne Pease, Associate Dean of Business, University of Southern Queensland, 161 Old Maryborough Road, Hervey Bay, Qld 4655.

I would like to learn about your current trip

1. What was your major trip purpose? (Tick ONLY one box)

- A) To have a holiday B) To visit your friends
 C) To visit your family
 D) Other (please specify).....

2. Why did you decide to travel? (Tick as many boxes as you like)

- A) To go sightseeing B) To rest and relax
 C) To escape from your everyday lifestyle D) To be together with your family
 E) To see something different F) To experience a different culture
 G) To go to a place you have not been before H) To spend time with your partner
 I) To get away from the demands at home J) To participate in recreational activities
 K) To have fun
 L) Other (please specify).....

3. Why did you choose to come to the Fraser Coast? (Tick as many boxes as you like)

- A) The weather B) To experience a relaxed lifestyle
 C) The competitive price D) The safe environment
 E) The friendly locals F) It is a family orientated destination
 G) There's a variety of things to see and do H) To go camping
 I) It was recommended by someone J) The untouched nature
 K) It is a convenient stop over point L) The luxury accommodation
 M) Other (please specify).....

4. What activities did you seek? (Tick as many boxes as you like)

- A) To go whale watching B) The beaches
 C) The nature activities (e.g. birdwalking, bushwalking) D) To see Fraser Island
 E) The beach activities (e.g. windsurfing, jet skiing) F) To go fishing
 G) Other (please specify).....

5. How many nights did you spend in the Fraser Coast?.....

6. Who are you travelling with?

- By myself
- Couple
- Family
- Adult Group
- Other (please specify).....

7. How much do you estimate that you spent (or intend to spend) daily on each of the following items during your Fraser Coast visit?

- | | | | | | | | | | | |
|-------------------|--------------------------|------------|--------------------------|-----------|--------------------------|-------------|--------------------------|-------------|--------------------------|---------|
| Accommodation | <input type="checkbox"/> | Under \$50 | <input type="checkbox"/> | \$50-\$99 | <input type="checkbox"/> | \$100-\$149 | <input type="checkbox"/> | \$150-\$199 | <input type="checkbox"/> | \$200 + |
| Activities | <input type="checkbox"/> | Under \$50 | <input type="checkbox"/> | \$50-\$99 | <input type="checkbox"/> | \$100-\$149 | <input type="checkbox"/> | \$150-\$199 | <input type="checkbox"/> | \$200 + |
| Food and beverage | <input type="checkbox"/> | Under \$50 | <input type="checkbox"/> | \$50-\$99 | <input type="checkbox"/> | \$100-\$149 | <input type="checkbox"/> | \$150-\$199 | <input type="checkbox"/> | \$200 + |

The following details about you are requested for statistical purposes

8. Age group 18-24 25-34 35-44 45-54 55-64 65 +

9. Household income

- | | | |
|--|--|--|
| <input type="checkbox"/> Under \$20,000 | <input type="checkbox"/> \$20,000-\$39,999 | <input type="checkbox"/> \$40,000-\$59,999 |
| <input type="checkbox"/> \$60,000-\$79,999 | <input type="checkbox"/> \$80,000-\$99,999 | <input type="checkbox"/> \$100,000 + |

10. Gender Male Female

11. Where do you live? Australia (postcode) Overseas (country).....

If you have any other comments or suggestions about your visit to the Fraser Coast, please tell me.....

.....

.....

.....

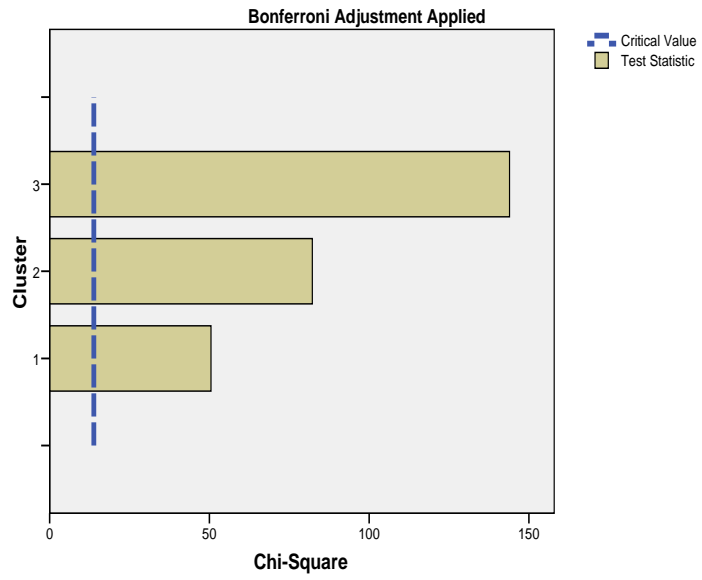
Thank you for completing this questionnaire

Appendix VIII: Missing cluster solution

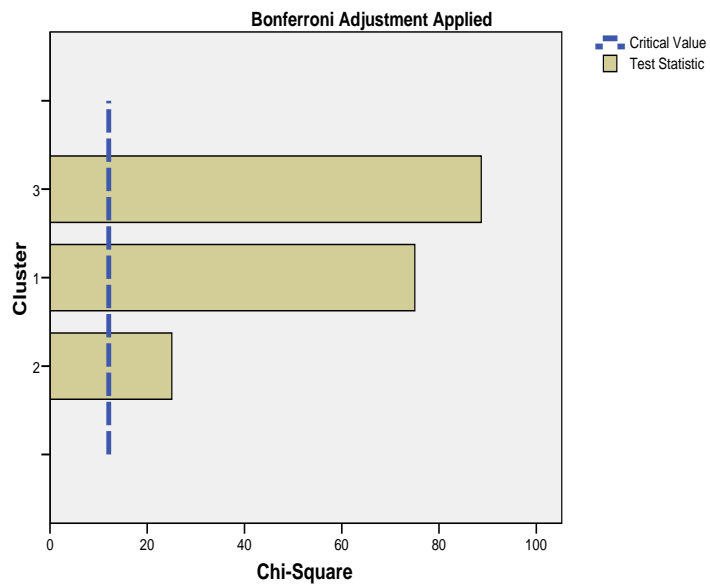
	Total		Cluster One		Cluster Two		Cluster Three	
Segment Size	N = 569		N = 255		N = 102		N = 212	
Segment %	100		44.8		17.9		37.3	
Continuous Variables	Overall Mean	Overall SD	Mean	SD	Mean	SD	Mean	SD
Push motivations	4.2	2.3	4.2	2.4	3.1	2	4.6	2.2
Pull motivations	1.7	1.5	1.7	1.3	2.7	1.6	1.4	1.3
Activities Sought	1.4	1	1.5	1	1.3	1.2	1.4	0.9
Nights	6.6	11.8	4.2	2.3	18.6	24.2	3.7	1.9
Categorical Variables	n	%	n	%	n	%	n	%
Age								
18-24	117	20.6	18	7.1	6	5.9	93	43.9
25-34	181	31.8	86	33.7	2	2	93	43.9
35-44	86	15.1	57	22.4	13	12.7	16	7.5
45-54	83	14.6	54	21.2	22	21.6	7	3.3
55-64	68	12	29	11.4	39	38.2	0	
65+	34	6	11	4.3	20	19.6	3	1.4
Gender								
Male	271	47.6	119	46.7	60	58.8	92	43.4
Female	298	52.4	136	53.3	42	41.2	120	56.6
TPC								
By myself	64	11.2	8	3.1	10	9.8	46	21.7
Couple	219	38.5	115	45.1	58	56.9	46	21.7
Family	102	17.9	79	31	16	15.7	7	3.3
Adult Group	168	29.7	47	18.4	8	7.8	113	53.3
Other	16	2.8	6	2.4	10	9.8	0	
Income								
< \$20,000	109	19.2	3	1.2	18	17.6	88	41.5
\$20,000-\$39,999	81	14.2	21	8.2	23	22.5	37	17.5
\$40,000-\$59,999	75	13.2	22	8.6	16	15.7	37	17.5
\$60,000-\$79,999	74	13	32	12.5	21	20.6	21	9.9
\$80,000-\$99,999	85	14.9	57	22.4	12	11.8	16	7.5
\$100,000+	145	25.5	120	47.1	12	11.8	13	6.1
Origin								
Nth America	38	6.7	13	5.1	3	2.9	22	10.4
Europe	208	36.6	64	25.1	3	2.9	141	66.5
Asia Pacific	14	2.5	5	2	0		9	4.2
Qld	92	16.2	45	17.6	44	43.1	3	1.4
NSW	135	23.7	90	35.3	13	12.7	32	15.1
VIC	53	9.3	29	11.4	22	21.6	2	0.9
Aus (not specified)	38	6.7	9	3.5	17	16.7	3	1.4
Trip Purpose								
To have a holiday	397	69.8	179	70.2	53	52	165	77.8
To visit your friends	80	14.1	27	10.6	26	25.5	27	12.7
To visit your family	74	13	39	15.3	19	18.6	16	7.5
For business purposes	18	3.2	10	3.9	4	3.9	4	1.9
Daily Accommodation Expenditure								
< \$50	289	50.8	23	9	82	80.4	184	86.8
\$50-\$99	88	15.5	48	18.8	13	12.7	27	12.7
\$100-\$149	77	13.5	72	28.2	4	3.9	1	0.5
\$150-\$199	55	9.7	53	20.8	2	2	0	
\$200+	60	10.5	59	23.1	1	1	0	
Daily Activities Expenditure								
< \$50	208	36.6	47	18.4	74	72.5	87	41
\$50-\$99	157	27.6	72	28.2	21	20.6	64	30.2
\$100-\$149	98	17.2	57	22.4	5	4.9	36	17
\$150-\$199	51	9	40	15.7	0		11	5.2
\$200+	55	9.7	39	15.3	2	2	14	6.6
Daily Food and Beverages Expenditure								
< \$50	285	50.1	34	13.3	78	76.5	173	81.6
\$50-\$99	163	28.6	106	41.6	22	21.6	35	16.5
\$100-\$149	82	14.9	77	30.2	2	2	3	1.4
\$150-\$199	16	8.4	15	5.9	0		1	0.5
\$200+	23	4	23	9	0		0	

Appendix IX: Attribute importance

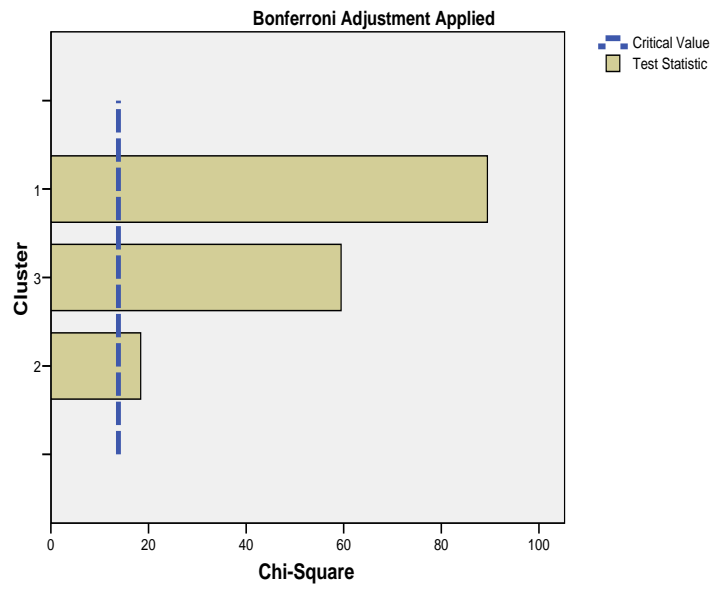
Age



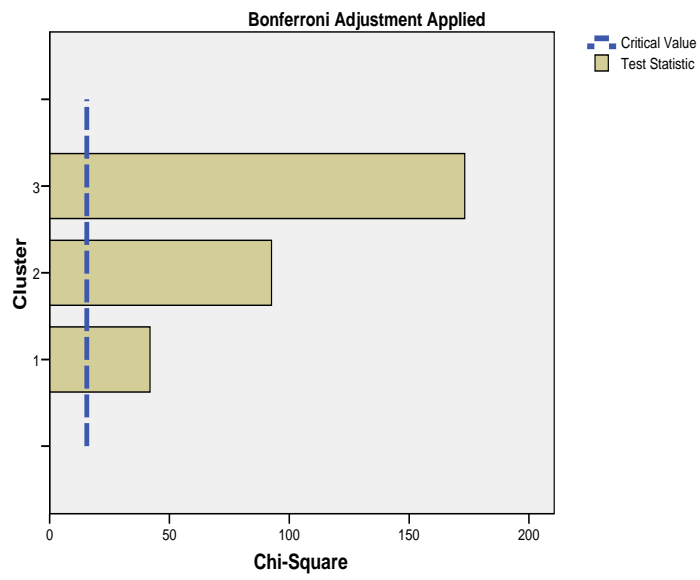
TPC



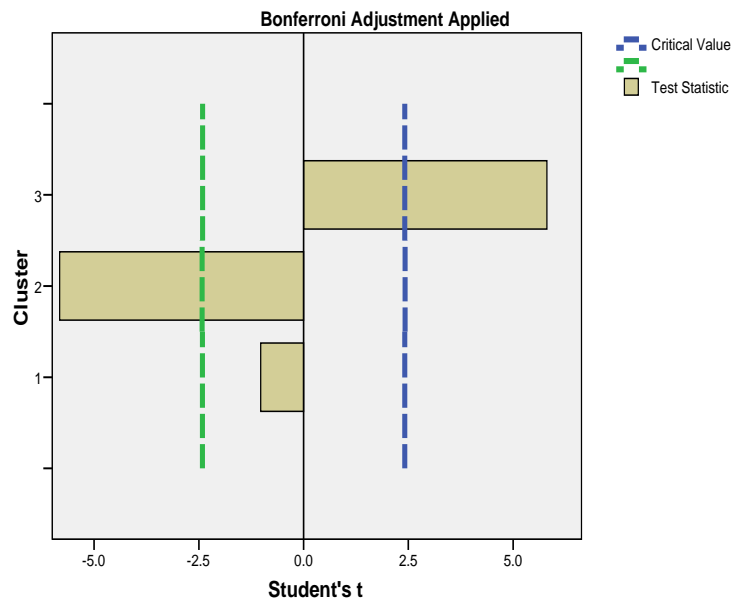
Income



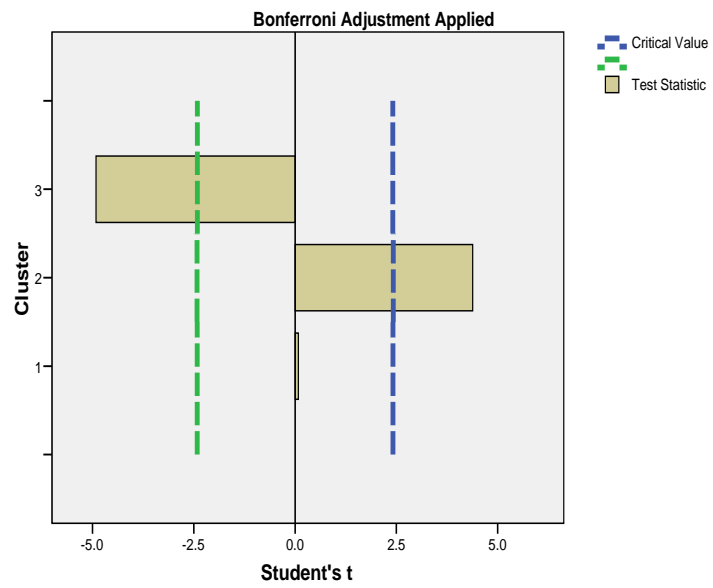
Origin



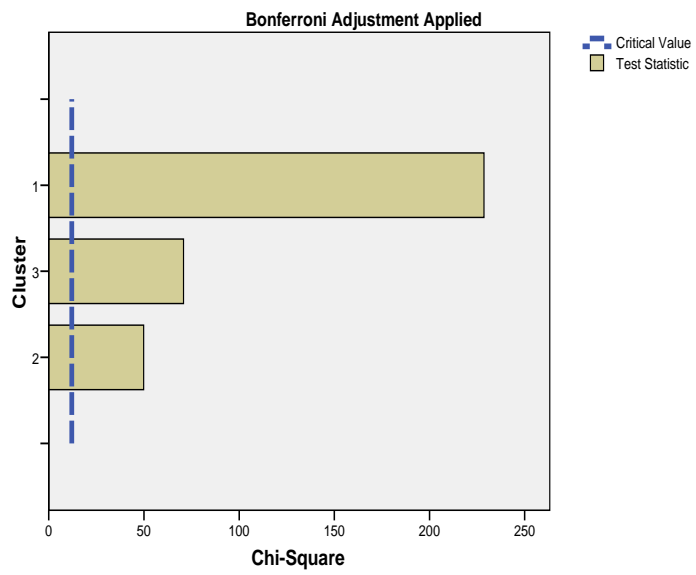
pushmotivations



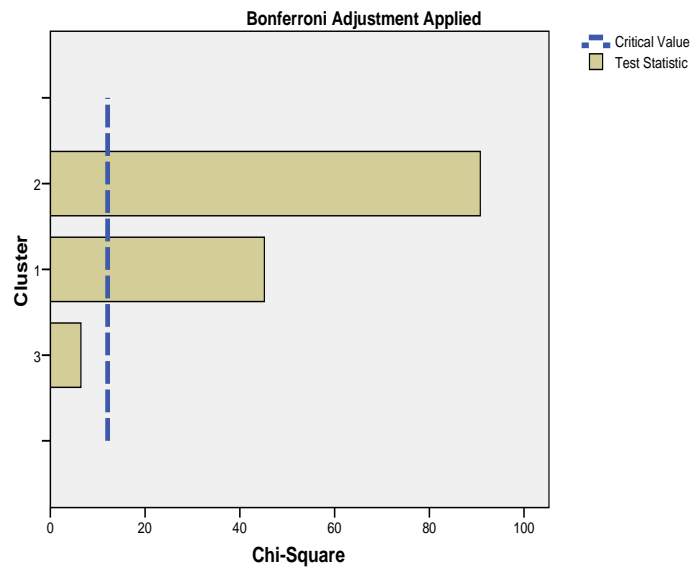
pullmotivations



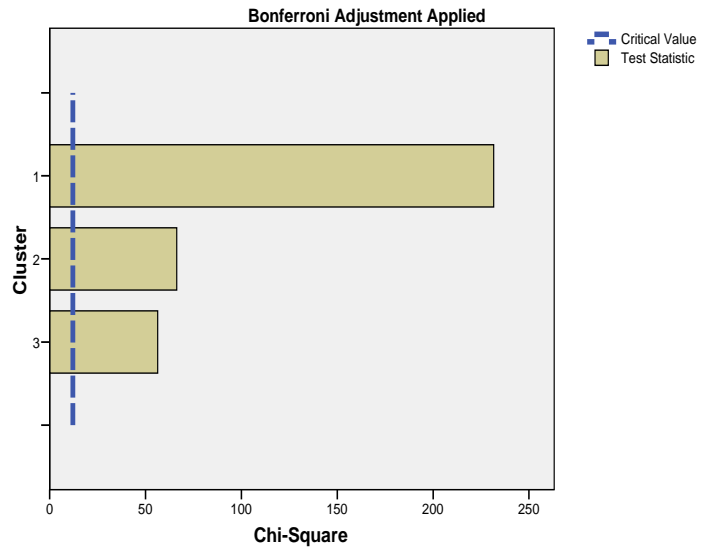
ExAccom



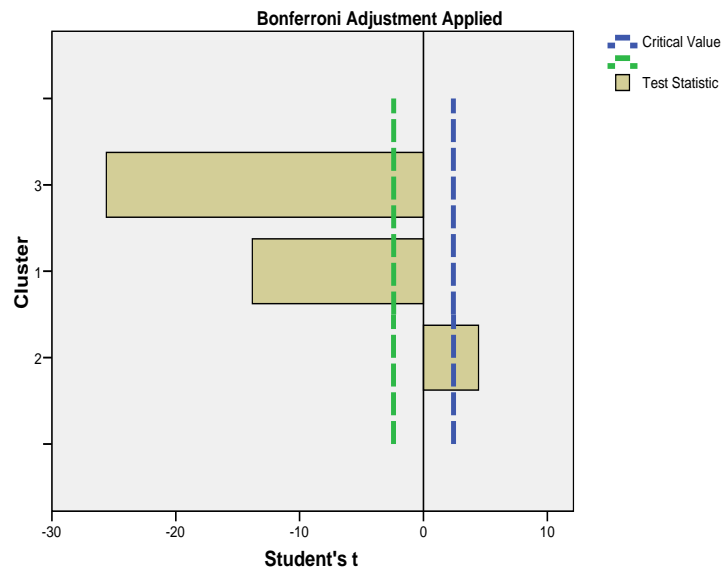
ExActiv



ExFood



Nights



Appendix X: Young Europeans

	Odd-month solution		Even-month solution		Final solution	
Segment Size	N = 100		N = 92		N = 224	
Segment %	39.5		37.4		39.4	
Continuous Variables	Mean	SD	Mean	SD	Mean	SD
Push Motivations	5	2	4.4	2.3	4.8	2.2
Pull Motivations	1.5	1.5	1.4	1.1	1.4	1.3
Nights	3.7	1.8	3.9	3	3.7	2.4
Categorical Variables	n	%	n	%	n	%
Age						
18-24	47	47	35	38	89	39.7
25-34	35	35	48	52.2	109	48.7
35-44	13	13	5	5.4	17	7.6
45-54	3	3	3	3.3	7	3.1
55-64	1	1	1	1.1	2	0.9
65+	1	1	0		0	
TPC						
By myself	21	21	11	12	39	17.4
Couple	19	19	22	23.9	63	28.1
Family	0		3	3.3	6	2.7
Adult Group	60	60	54	58.7	116	51.8
Other	0		2	2.2	0	
Income						
< \$20,000	42	42	29	31.5	85	37.9
\$20,000-\$39,999	8	8	23	25	35	15.6
\$40,000-\$59,999	21	21	8	8.7	35	15.6
\$60,000-\$79,999	9	9	9	9.8	24	10.7
\$80,000-\$99,999	4	4	17	18.5	24	10.7
\$100,000+	16	16	6	6.5	21	9.4
Origin						
Nth America	13	13	2	2.2	25	11.2
Europe	67	67	71	77.2	158	70.5
Asia Pacific	3	3	5	5.4	8	3.6
Qld	0		2	2.2	1	0.4
NSW	16	16	11	12	29	12.9
VIC	1	1	1	1.1	0	
Aus (not specified)	0		0		3	1.3
Daily Accommodation Expenditure						
< \$50	79	79	73	79.3	181	80.8
\$50-\$99	20	20	9	9.8	39	17.4
\$100-\$149	1	1	10	10.9	4	1.8
\$150-\$199	0		0		0	
\$200 +	0		0		0	
Daily Activities Expenditure						
< \$50	43	43	30	32.6	82	36.6
\$50-\$99	30	30	28	30.4	75	33.5
\$100-\$149	13	13	21	22.8	36	16.1
\$150-\$199	7	7	4	4.3	14	6.3
\$200 +	7	7	9	9.8	17	7.6
Daily Food and Beverages Expenditure						
< \$50	77	77	71	77.2	176	78.6
\$50-\$99	20	20	16	17.4	44	19.6
\$100-\$149	3	3	4	4.3	3	1.3
\$150-\$199	0		1	1.1	1	0.4
\$200 +	0		0		0	

Appendix XI: Wealthy travellers

	Odd-month solution		Even-month solution		Final solution	
Segment Size	N = 98		N = 117		N = 233	
Segment %	38.7		47.6		40.9	
Continuous Variables	Mean	SD	Mean	SD	Mean	SD
Push Motivations	4.3	2.5	4.1	2.3	4.1	2.3
Pull Motivations	1.7	1.3	1.8	1.4	1.7	1.4
Nights	4.4	2.4	4.6	3.9	4.3	2.4
Categorical Variables	n	%	n	%	n	%
Age						
18-24	12	12.2	1	0.9	16	6.9
25-34	22	22.4	38	32.5	68	29.2
35-44	22	22.4	29	24.8	50	21.5
45-54	27	27.6	24	20.5	56	24
55-64	12	12.2	18	15.4	30	12.9
65+	3	3.1	7	6	13	5.6
TPC						
By myself	2	2	6	5.1	5	2.1
Couple	35	35.7	60	51.3	99	42.5
Family	40	40.8	36	30.7	80	34.3
Adult Group	19	19.4	11	9.4	43	18.5
Other	2	2	4	3.4	6	2.6
Income						
< \$20,000	2	2	0		3	1.3
\$20,000-\$39,999	7	7.1	8	6.8	21	8.8
\$40,000-\$59,999	4	4.1	17	14.5	27	11.3
\$60,000-\$79,999	11	11.2	15	12.8	29	12.1
\$80,000-\$99,999	25	25.5	23	19.7	48	20.1
\$100,000+	49	50	54	46.2	111	46.4
Origin						
Nth America	8	8.2	4	3.4	10	4.3
Europe	20	20.4	32	27.4	50	21.5
Asia Pacific	2	2	3	2.6	6	2.6
Qld	20	20.4	23	19.7	45	19.3
NSW	32	32.7	31	26.5	81	34.8
VIC	13	13.3	15	12.8	31	13.3
Aus (not specified)	3	3.1	9	7.7	10	4.3
Daily Accommodation Expenditure						
< \$50	2	2	20	17.1	15	6.4
\$50-\$99	14	14.3	22	18.8	34	14.6
\$100-\$149	31	31.6	22	18.8	70	30
\$150-\$199	19	19.4	31	26.5	55	23.6
\$200 +	32	32.7	22	18.8	59	25.3
Daily Activities Expenditure						
< \$50	20	20.4	18	15.4	45	19.3
\$50-\$99	25	25.5	35	29.9	58	24.9
\$100-\$149	22	22.4	24	20.5	57	24.5
\$150-\$199	22	22.4	15	12.8	37	15.9
\$200 +	9	9.2	25	21.4	36	15.5
Daily Food and Beverages Expenditure						
< \$50	1	1	16	13.7	20	8.6
\$50-\$99	40	40.8	51	43.6	99	42.5
\$100-\$149	41	41.8	31	26.5	77	33
\$150-\$199	7	7.1	7	6	15	6.4
\$200 +	9	9.2	12	10.3	22	9.4

Appendix XII: Long stay travellers

	Odd-month solution		Even-month solution		Final solution	
Segment Size	N = 55		N = 37		N = 112	
Segment %	21.7		15		19.7	
Continuous Variables	Mean	SD	Mean	SD	Mean	SD
Push Motivations	3.1	2.1	2.6	1.7	3	1.9
Pull Motivations	2.2	1.7	2.2	1.5	2.5	1.7
Nights	12	20.3	21	27	17	23.5
Categorical Variables	n	%	n	%	n	%
Age						
18-24	6	10.9	3	8.1	12	10.7
25-34	13	23.6	0		4	3.6
35-44	3	5.5	8	21.6	19	17
45-54	13	23.6	8	21.6	20	17.9
55-64	13	23.6	10	27	36	32.1
65+	7	12.7	8	21.6	21	18.8
TPC						
By myself	10	18.2	6	16.2	20	17.9
Couple	29	52.7	17	45.9	57	50.9
Family	11	20	6	16.2	16	14.3
Adult Group	3	5.5	3	8.1	9	8
Other	2	3.6	5	13.5	10	8.9
Income						
< \$20,000	9	16.4	6	16.2	21	18.8
\$20,000-\$39,999	14	25.5	10	27	26	23.2
\$40,000-\$59,999	8	14.5	8	21.6	20	17.9
\$60,000-\$79,999	10	18.2	11	29.7	20	17.9
\$80,000-\$99,999	8	14.5	2	5.4	13	11.6
\$100,000+	6	10.9	0		12	10.7
Origin						
Nth America	3	5.5	0		3	2.7
Europe	0		0		0	
Asia Pacific	0		0		0	
Qld	19	34.5	18	48.6	46	41.1
NSW	12	21.8	10	27	25	22.3
VIC	11	20	6	16.2	22	19.6
Aus (not specified)	10	18.2	3	8.1	16	14.3
Daily Accommodation Expenditure						
< \$50	40	72.7	33	89.2	93	83
\$50-\$99	7	12.7	3	8.1	15	13.4
\$100-\$149	6	10.9	0		3	2.7
\$150-\$199	1	1.8	1	2.7	0	
\$200 +	1	1.8	0		1	0.9
Daily Activities Expenditure						
< \$50	39	70.9	31	83.8	81	72.3
\$50-\$99	14	25.5	5	13.5	24	21.4
\$100-\$149	2	3.6	1	2.7	5	4.5
\$150-\$199	0		0		0	
\$200 +	0		0		2	1.8
Daily Food and Beverages Expenditure						
< \$50	46	83.6	34	91.9	89	79.5
\$50-\$99	8	14.5	3	8.1	20	17.9
\$100-\$149	0		0		2	1.8
\$150-\$199	0		0		0	
\$200 +	1	1.8	0		1	0.9