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Chinese international students' travel information search behaviour in Australia

Manli Zhu
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Chinese international students’
travel information search behaviour
in Australia

Manli Zhu
BBus Tour & Hosp Mgt (Hons) (SCU)

A thesis submitted in fulfilment of the degree of
Doctor of Philosophy

School of Business and Tourism
Southern Cross University, Australia

November 2016
**Statement of originality**

I certify that the work presented in this thesis is, to the best of my knowledge and belief, original, except as acknowledged in the text, and that the material has not been submitted either in whole or in part, for a degree at this or any other university.

I acknowledge that I have read and understood the University’s rules, requirements, procedures and policy relating to my higher degree research award and to my thesis. I certify that I have complied with the rules, requirements, procedures and policy of the university (as they may be from time to time).

Print name: Manli Zhu

Signature: [Signature]

Date: 11 Nov. 2016
Abstract

This study explores the travel information search behaviour of Chinese international students in Australia. Chinese students form the largest international student group in Australia (Davidson et al. 2013). These students constitute an important tourist market for Australia’s tourism industry.

Information search behaviour is an important element of vacation planning, contributing to and even determining what travel products a person chooses. Therefore, it is important to understand how students search for travel information and what information search strategies they use. Specifically, this study examines Chinese international students’ information search strategies from three dimensions: where and when students search for travel information, and what sources they use for decision-making. The current study also examines if students can be segmented into homogeneous groups based on their information search behaviour. Furthermore, the research identifies the underlying factors influencing student travellers’ choice of information sources. Finally, the study explores, from respondents’ own perspectives, why students’ conduct information search the way they do.

The research uses a mixed method approach and collects data in two stages. The first stage takes a purely quantitative perspective, using an online survey to collect data from 311 Chinese international students in Australia. The second stage is qualitative in nature, using a snowball sampling method to access and interview 15 students.

The quantitative results indicate that student travellers’ information search is an ongoing process, with respondents using both internal and external information sources for vacation planning. The study found that online information sources dominate and there are three types of websites used by the respondents. It also identified that variations in information search were related to the attributes of sources, familiarity with the destination, and presence of parents in the travel party. The study also identified three tourist segments in the Chinese international student tourist market and ten source attribute variables that influenced student travellers’ information search strategies. Additionally, the study built a conceptual model integrating the main findings of the quantitative and qualitative studies which can be used as a theoretical structure for future research.

The findings of this research provide a comprehensive understanding of student travellers’
information search behaviour which, from a theoretical perspective, fills a gap in the literature on youth and students’ travel information search behaviour. From a practical perspective, it provides tourism companies targeting youth and student travellers, especially Chinese international student travellers, with an insight into what communication strategies are suitable for the market.
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I would also like to extend appreciation to my supervisor, Associate Professor Martin Young, especially for his insights into research methods and statistical analyses. Martin has also provided a lot of constructive comments and recommendations in building this thesis. I also want to thank Martin’s friend, Francis Markham, for his wonderful statistical assistance.

Special thanks to Dr Yun-lok Lee, who supervised me prior to his retirement. Yun-lok is the one who encouraged me to start this research journey. I remember five years ago when Yun-lok encouraged me to conduct an honours degree when I was not sure what to do after I completed my undergraduate degree. Yun-lok provided a lot of moral support during my PhD study, even after his retirement.

I would like to take this opportunity to acknowledge Associate Professor Erica Wilson and the School of Business and Tourism of Southern Cross University for giving me the opportunity to do this PhD in the first place.

Finally, I want to thank my family: my parents, my husband and my lovely son who is six months old now. They have supported me unconditionally through this long journey. Without their help and encouragement this would never have been possible. My husband has always been there for me. My mother helped me by looking after our baby so that I could focus on my study.
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<thead>
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<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ATLAS</td>
<td>Association for Tourism and Leisure Education</td>
</tr>
<tr>
<td>Big OE</td>
<td>Big Overseas Experience</td>
</tr>
<tr>
<td>CGC</td>
<td>Consumer-generated content</td>
</tr>
<tr>
<td>DET</td>
<td>Department of Education and Training</td>
</tr>
<tr>
<td>ELICOS</td>
<td>English Language Intensive Course for Overseas Students</td>
</tr>
<tr>
<td>ISANA</td>
<td>International Student Advisors Network of Australia Inc. (Australia and New Zealand)</td>
</tr>
<tr>
<td>ISTC</td>
<td>International Student Travel Confederation</td>
</tr>
<tr>
<td>KMO</td>
<td>Kaiser-Meyer-Olkin</td>
</tr>
<tr>
<td>MDS</td>
<td>Multidimensional scaling</td>
</tr>
<tr>
<td>PCA</td>
<td>Principal component analysis</td>
</tr>
<tr>
<td>PRISMS</td>
<td>Provider Registration and International Student Management System</td>
</tr>
<tr>
<td>SNS</td>
<td>Social networking site</td>
</tr>
<tr>
<td>UAI</td>
<td>Uncertainty avoidance index</td>
</tr>
<tr>
<td>UNESCO</td>
<td>United Nations Educational, Scientific and Cultural Organisation</td>
</tr>
<tr>
<td>UNWTO</td>
<td>United Nations World Tourism Organisation</td>
</tr>
<tr>
<td>VET</td>
<td>Vocational Education and Training</td>
</tr>
<tr>
<td>VFR (tourists)</td>
<td>Tourists whose primary purpose of travel is to visit friends and relatives</td>
</tr>
</tbody>
</table>
Chapter 1 Introduction and background

1.1 Background to the study

In 2016, International Consultants for Education and Fairs (ICEF) reported that approximately five million tertiary students were studying abroad, an increase of 67 per cent since 2005. ICEF also speculated that this number may increase to 8 million students by 2025 (Australian Government 2016). The growth in international student numbers over the last few decades is mainly due an expanding higher education system combined with economic and social globalisation (UNESCO 2009). In addition, the popularity of Western education has accelerated the expansion of international education, particularly among Asian students who are seeking educational experiences in English-speaking countries (Barron, Baum & Conway 2009). Chinese students had the highest share in 2014, accounting for 22 percent of international postgraduate tertiary students (Australian Government 2016).

International students bring numerous social, cultural, and economic benefits to the destination country (Australia-Educating Globally 2013). Studies indicate that these students constitute an important tourist market for destination countries’ tourism industries (Field 1999; King & Gardiner 2013; Ryan & Zhang 2007; Weaver 2004). It appears that there are two submarkets associated with these students: the students themselves, and their families and friends who come to visit (VFRs) (Davidson et al. 2013; Ryan & Zhang 2007). Each of these markets presents potential benefits for the country’s tourism industry.

On the one hand, students have a direct impact on domestic tourism by travelling regularly in the country. Because international students stay in the destination country for a long period of time they have a comparatively longer span of time to go on trips than most other tourist segments. As such, international students are expected to exert a considerable economic impact on the destination country’s tourism industry. Leiper and Hunt (1998) found that international students in Australia account for just 3% of all visitors, but around 20% of all tourist expenditures (Leiper & Hunt 1998). In addition, these students are more likely to become future repeat visitors for the destination country following their return home. One study found that over half (52%) of international students returned to Australia following their studies (Weaver 2004). A survey conducted by Victoria University of Australia on Chinese alumni found that Chinese students continue to contribute to the local economy after their graduation, as the
majority return at least once within the first five years post study, and over 90% intended to return (Hare 2013). There are many advantages of attracting repeat, compared with first-time, visitation. For instance, studies have found that repeat visitors have a stronger intention to revisit a destination in the future than first-time visitors (Petrick & Backman 2002; Sonmez & Graefe 1998). As such, repeat visitors constitute a stable source of revenue for tourism destinations (Li et al. 2008; Reid & Reid 1994). Research has also indicated that it is more cost effective for destination marketers to maintain repeat visitors than attract new customers (Lau & McKercher 2004). Additionally, repeat visitors are more likely to make recommendations to their social networks (e.g. friends, relatives), and bring potential travellers to the destination (Li et al. 2008; Reid & Reid 1994).

On the other hand, international students have an indirect impact on inbound tourism through bringing their friends and relatives from overseas (Shi et al. 2010; Weaver 2004). The proportion of VFR tourists is positively related to the population of international students (Min-En 2006). Weaver (2004) found that 80% of international students studying in Australia hosted visitors from other countries. These visitors, who are mainly travelling for the purpose of visiting friends and relatives locally or internationally, are called VFR tourists (Seaton & Palmer 1997). Though visiting friends and relatives is the primary purpose of their trip, these tourists are also likely to participate in other tourism activities, such as visiting places of interest (Langolis, Theodore & Ineson 1999; Moscardo et al. 2000).

As such, it is recommended that more attention should be given to the international student market, as it is on the rise and has an influential and ongoing effect on a host country’s tourism industry. However, there is limited research examining the various aspects of their travel behaviour despite the substantial scale and future opportunities for destination countries’ tourism industries.

Australia is one of the world’s leading exporters of higher education services for English-based instruction, following the United States (US) and the United Kingdom (UK) (Australia-Educating Globally 2013). According to Tourism Australia’s International Visitor Survey (2009), approximately 8% of all international visitors cited ‘education’ as their main purpose of visit. Although studying is their primary purpose to come to Australia international students are also motivated to undertake various tourism activities during their stay in the country (Michael, Armstrong & King 2004; Weaver 2004). The significance of international students as a tourist market has been highlighted in some industry-based research. For instance, Tourism
Australia (2007 p.3) reported that: ‘study tourism visitors stayed in Australia 63.1 million nights and were worth around $5.3 billion to the tourism industry in 2006’. Research has also indicated that: ‘international students stay much longer in Australia than the average international visitors (15 nights versus 32 nights) and spend four times more ($12,878 versus $2,838)’ (Tourism Australia 2007, p. 3).

Chinese students constitute the largest group of international students in Australia. In 2012 the number of Chinese students represented about one third of all Australian international students (Australian Education International 2013). The growth in the number of Chinese studying overseas is mainly the result of China’s rapid economic development and its ‘open door’ policies (Ryan & Zhang 2007). As a consequence, there is a growing number of wealthy middle-class who have some disposable income and are looking for opportunities to broaden their horizons from the outside world, mainly in forms of recreational travel to overseas countries and conducting international education (Ryan & Zhang 2007). In addition, the ‘one-child’ policy has allowed young Chinese adults to enjoy all their parents’ and grandparents’ attention and resources, which gives them more opportunities for international education (King & Gardiner 2013).

The pursuit of education has encouraged Chinese students to travel overseas, which is both socially and politically acceptable (King & Gardiner 2013). Studies have found that most Chinese international students conduct leisure trips at the destination country (e.g. Australia, New Zealand) during school holidays for two or more days at least once a year (King & Gardiner 2013; Ryan & Zhang 2007). By receiving financial support from their parents the Chinese students studying abroad are suggested to have considerable purchasing capacity, and constitute a potential economic phenomenon (King & Gardiner 2013).

It is suggested that Chinese international students constitute an important tourist market for the Australian tourism industry both immediately and in the future. Therefore, more research is needed to understand their attitudes and behaviours for travelling in Australia. Despite the substantial size and economic importance of the Chinese student market, only a few studies have examined the travel behaviour of this tourist market.

Existing findings show that most Chinese students travel independently during their study in a foreign country, organising trips by themselves. The propensity of Chinese students as pioneering, independent, outbound travellers is noteworthy (King & Gardiner 2013). This
makes them significantly different to the current main-stream Chinese outbound tourists who travel in package groups. It is suggested that Chinese international students constitute an early wave of China’s independent outbound travel market (King & Gardiner 2013). In addition, because they have more overseas travel experience and foreign language skills, and are looking for more individual, in-depth experiences related to local culture, Chinese students are likely to shape the future of China’s independent outbound travel (King & Gardiner 2013).

Whilst the tendency for independent travel and self-planning of Chinese international students is noted, it is essential to understand their first step of vacation planning: travel information search behaviour. Information search activities form the basis of vacation planning, and students’ choices of tourism product depend heavily on the information they use (Bieger & Laesser 2000; Fodness & Murray 1997; Gursoy & Umbreit 2004; Hyde 2009). As such, to influence students’ travel decisions, tourism operators will have to understand their process of information search to provide relevant information at the right times through appropriate channels (Bieger & Laesser 2000; Lo, Cheung & Law 2002). By using effective promotion strategies and distribution channels that are targeted at Chinese international student travellers, tourism companies may gain a competitive advantage and develop cultural understanding that allows them to capitalise on this emerging and already substantial market (Gardiner, King & Wilkins 2013).

However, studies that have investigated Chinese international students have focused mainly on several aspects of their travel behaviour: motivations for undertaking trips (e.g. exploring other cultures, relaxation) (Ryan & Zhang 2007), activities undertaken during trips (e.g. visiting historic sites, shopping, going to the beach, etc.) (King & Gardiner 2013; Ryan & Zhang 2007), and trip characteristics (e.g. destinations, trip duration, trip expenditure, choice of accommodation, transportation, etc.) (Wang & Davidson 2008; King & Gardiner 2013; Ryan & Zhang 2007). Some of the studies include the findings of their travel information search strategy; however, only on a brief basis. For instance, one study found that Chinese students mainly seek travel information from their family and friends and online information (Ryan & Zhang 2007). There is a lack of comprehensive and in-depth understanding in terms of how and when students search for travel information, and why they search for information in certain ways. As such, this research attempts to address this issue by providing a comprehensive picture of Chinese students’ travel information search behaviour when planning trips in Australia.
1.2 Research aim and objectives

It is the purpose of this research to gain a comprehensive understanding of Chinese international students’ information search behaviour for vacation planning. The search for tourism information is an ongoing process, during which travellers use internal and various external information sources for decision-making (Fodness & Murray 1997). This study systematically examines the Chinese students’ information search strategy from three dimensions, specifically where and when they search, and what information sources they use for decision-making. Additionally, it is also the purpose of this study to explore the extent to which Chinese students use online information for their vacation planning, and the type of websites that students are likely to use for each tourism service (e.g. accommodation, transportation, activities). It has been suggested that the Internet has become the most effective method to communicate with this young Chinese market.

A secondary aim of the current study is to identify potential tourist segments based on their information search strategy. Findings may contribute to the knowledge of students’ travel and tourism information search in terms of how student travellers can be segmented, and what groups may be generated based on their information search strategy. Evidence-based results will also help researchers and destination marketers to have a thorough understanding of the information search pattern and characteristics of each tourist group, and convert potential travellers into actual travellers by creating a personalised market strategy (Park & Kim 2009).

Additionally, the study seeks to determine the underlying personal and trip-specific variables that influence student travellers’ information search strategies. Travel behaviour always occurs within the context of some situation, and therefore travellers’ behaviour can be predicted on the basis of travel situations (Bieger & Laesser 2000; Fodness & Murray 1999). It should be noted that most of the personal and trip-specific (or situational) variables that are found to influence travellers’ information search behaviour are based on results of general inbound and/or outbound tourists. It is not known to what extent these variables influence international student travellers, especially the Chinese student market. Therefore, findings of the current study may also provide evidence in terms of whether the determinant factors identified based on general inbound and/or outbound tourists are also relevant to the international student market or Chinese student market specifically.
Finally, this study intends to explore the underlying reasons that influence Chinese international students’ travel information search behaviour from a qualitative perspective. Most studies examining travellers’ information search behaviour are quantitative in nature, and there is a lack of qualitative study in tourism information search literature. To gain an insight into why Chinese international students conduct their travel information search in certain ways and why they use or do not use certain information sources a qualitative approach is appropriate. A qualitative approach is used to understand the details of people’s experiences from their own point of view (Seidman 2006).

1.3 Significance of the study

First, this study seeks to contribute to the knowledge of information search behaviour of youth and students in general and Chinese international students in particular. The youth and student travel market is an increasingly important segment for the global tourism industry, with a rapid expansion in recent decades (Richards & Wilson 2003). Studies have found that young travellers tend to travel more frequently, for longer periods, and are also more likely to make repeat visits than their older counterparts (Richards & Wilson 2003, 2004). Despite the importance of the youth and student travel market, there is limited research in the area and it is difficult to have a comprehensive understanding of various aspects of their travel-related behaviour. There is especially a lack of study on youth and student travellers’ travel planning and information search behaviour.

Many previous studies are based on inbound and outbound tourists. There is also substantial research on US interstate travellers. However, these findings and theories may not fully apply to the youth and student tourist market, as each consumer market has certain characteristics that are different from others. Therefore, the current study seeks to contribute to the knowledge of consumer information search by providing evidence particularly based on that of young and student travellers.

From a practical perspective, marketing activities cannot work effectively by using established general approaches in leisure travel (Gardiner, King & Wilkins 2013). It is noted that tourism-related products developed for the international student market have often been criticised as poor positioning, failing to motivate potential travellers and delivering inadequate consumer experiences (Gardiner, King & Wilkins 2013). As such, it is necessary to examine student travellers as a single tourist market, especially on the basis of nationalities to develop effective
marketing strategies.

Second, this study provides a comprehensive understanding of travellers’ information search behaviour. Previous research on travellers’ information search behaviour has mostly focused on one or two aspects of their search activity. There is a lack of systematic research describing their search behaviour from several aspects. By incorporating both quantitative and qualitative research methods this study describes the search behaviour of Chinese student travellers from a more comprehensive perspective. Specifically, the research examines when and where respondents search for travel information, and what information sources they use for decision-making. In addition, the research explores various personal and trip-specific variables that potentially influence student travellers’ information search strategies.

In the tourism and hospitality context, information search is one of the most important elements of travel decision-making (Bonn, Furr & Susskind 1999; Hwang et al. 2006), influencing and determining consumer behaviour (Maser & Weiermair 1998). Thus, it is essential to have a better understanding of this initial-stage behaviour to gain a complete picture of a tourist’s travel behaviour. When making travel decisions travellers need a large amount of internal and external information for destination choices, accommodation, transportation and travel activities (Hwang et al. 2006). It follows then that tourism destination marketers are able to attract the youth and student travellers to the destination more efficiently by offering customised and appropriate information (Park & Kim 2009). In addition, travellers’ active information-searching and other travel-planning behaviours are important parts of their travel experience (Hwang et al. 2006). As such, an understanding of how student travellers search for information helps scholars and practitioners to both effectively manage the market and improve their travel experiences.

Third, the current study views independent travel by Chinese international students as a prototype for examining the future Chinese independent outbound travel market, and as a signal of future market development (King & Gardiner 2013). At a basic level, current Chinese international students are expected to become future repeat visitors for destination countries like Australia after they return home. At a broader level, the current youth travellers can be used as a prototype to understand travel behaviour of future generations. This is important, both due to the sheer size of the Chinese outbound tourist market and the shift from group to individual travel. These two points are discussed below.
The rapid development of China’s outbound travel has become a global phenomenon, which is driven by the country’s vast population of 1.35 billion and the considerable spending power of the wealthy middle-class consumers (National Bureau of Statistics of China 2011). Chinese outbound travel has been predominantly group-based to ensure tourists do not overstay their visa (Australian Government 2013). This travel mode has been welcomed by many destination countries (King & Gardiner 2013). However, recent studies show that Chinese travellers are increasingly desiring for independent travel, seeking more freedoms and individual experiences that suit their personal interests during the trip (King & Gardiner 2013; Tourism and Events Queensland 2012; Tourism Australia 2012; Xiang 2013). This phenomenon is also evidenced from a series of interconnected industry strategies; for instance, governments around the world are easing visa restrictions across many regions in China, the visa application procedure is getting simpler and faster, and direct flights from China to overseas countries are increasing (Tourism and Events Queensland 2012). Additionally, greater access to the Internet in China is also contributing to the increase in independent travel (Tourism and Events Queensland 2012).

As existing evidence suggests that independent travel will become more commonplace in China’s outbound travel in the future, more research is needed to understand this increasingly important tourist market. Chinese international students who conduct travel activities during their education in a foreign country are acknowledged as an earlier wave of China’s independent outbound travellers (King & Gardiner 2013). Findings of the current Chinese international student travellers may provide basis for understanding the attitude and behaviour of future Chinese independent outbound travellers.

Fourth, findings of the current study may help education institutions to better understand the Chinese student market, and work more effectively with them. On the one hand, a better understanding of their attitudes and behaviour helps institutions to work more efficiently and effectively with these students; on the other, education institutions can encourage Chinese students to visit local attractions and other places in Australia by cooperating with local tourism companies. These tourism activities may contribute to a better understanding of Australia, enhance the overseas study experience and encourage students to become advocates for future potential students (Glover 2011).

Glover (2011) notes that when assessing a country or destination to study, the ability to travel and explore a different culture is an important consideration for international students. This
suggests that study institutions need to provide students with a positive image of both the university and the study destination to attract potential international students (Glover 2011). Many Australian universities are looking for opportunities to attract more international students due to the increased economic pressure and reduced public funding for higher education (Schwartz 2009). Understanding their travel-related attitudes and behaviours will help universities to promote the institution using other advantages rather than solely relying on promoting academic benefits (Glover 2011).

1.4 Research methods

A descriptive and explanatory nature form the basis of the current research design. A mixed-method approach is adopted consisting of two separate stages. Stage one takes a quantitative perspective, using an online survey for data collection. The main objective of stage one is to gain a comprehensive understanding of Chinese international students’ travel information search behaviour in terms of where and when they search for travel information, and what information sources they are likely to use. It is also the purpose of this stage to find out the underlying personal and trip-specific factors that influence students’ information search strategies. 311 Chinese international students who are currently studying in Australia completed the online survey and 286 questionnaires were used for data analysis.

Stage two of the study is qualitative in nature and involved a series of in-depth interviews. This stage seeks to explain some of the findings of the stage one analysis by asking interview respondents why they conduct their information search in certain ways, and used or did not use certain information sources. Face-to-face and Skype interviews were conducted with 15 respondents.

1.5 Thesis structure

The thesis is presented in seven chapters, as depicted in Figure 1.1. The thesis begins with a discussion of the background to the research (Chapter 1). This is followed by two literature review chapters. Chapter 2 reviews literature on youth and student travel and Chapter 3 reviews literature on tourism information search behaviour (Chapter 3). A conceptual framework and research questions are developed in this stage. Chapter 4 then outlines the methods selected for this study, which involves a stage 1 quantitative approach (Chapter 5) and a stage 2 qualitative approach (Chapter 6). The results are presented for each stage, followed by a discussion of the
findings. Finally, Chapter 7 brings the quantitative and qualitative results together in a synthesised discussion. Implications and recommendations are also provided in this chapter.

Figure 1.1 Research design of thesis

1.6 Summary

This chapter has provided a background of the study and described the overall aims and research questions. It has also justified the significance of undertaking the research both theoretically and practically. The chapter then briefly described the method used to undertake the research and finally outlined the thesis structure for the research.
Chapter 2  Youth and student travel behaviour

2.1 Introduction

This chapter reviews relevant literature on youth and student travel and provides an overview of the travel-related behaviour of the youth and student travel market. It first provides an introduction to the chapter and a background on youth and student travel (section 2.1) and then discusses previous research conducted on youth and student travellers (section 2.2). This is followed by an overview of the characteristics of youth travellers (section 2.3). Comparisons are then made between submarkets of youth travellers (e.g. student travellers vs. backpackers, domestic vs. international students, and international students from different nationalities). The chapter then specifically reviews literature on Chinese international students’ travel, followed by a discussion of their travel behaviour and characteristics. The gaps that exist in youth travel literature are highlighted in section 2.4. Finally, section 2.5 provides a chapter summary.

Youth and student travellers are a fast-growing travel niche and an increasingly important segment of the global travel market (Richards & Wilson 2003). Statistics show that 20% of global travel is made up of youth tourism, and this number is expected to grow from 190 million trips in 2010 to 300 million trips by 2020 (United Nations World Tourism Organisation 2012). The growing demand from young people for travel is driven by ‘increased participation levels in tertiary education, labour mobility and overseas study programs, the emergence of backpacking as an element of global youth culture, and changing concepts of youthfulness’ (Richards & King 2003, p. 1).

It is suggested that young travellers have a long-term impact on the global tourism industry. Research shows that young travellers tend to travel for long periods and seek experiences that relate to local culture, adventure and relaxation, and often make repeat visits (Richards & Wilson 2003; King & Gardiner 2013). In addition, many young people are building a ‘travel career’, and tending to expand their horizons through travelling. As such, young travellers tend to plan their trips carefully (Richards & Wilson 2003). As young people get older and gain more travel experience they often opt for more challenging destinations and are likely to spend more and plan more for their trips (Richards & Wilson 2003). The importance of the student market suggests that more research is needed to provide evidence of their travel attitudes, behaviours and preferences. In addition, there is a need for solid research that can help underpin
the development of new products to meet the increasingly changing demands of this market (Richards & Wilson 2003).

Given the importance of youth and student travellers, this market has not been examined to a great extent. This may be due to the measurement issue and a misconception that young travellers, especially student travellers, are not a mainstream market and represent a less-profitable market associated with low-budget travel (Frost & Shanka 1999; Hsu & Sung 1996). It is only in recent decades that the tourism industry has started to pay attention to this market due to the increasing popularity of backpacking and the growth of the international student population (Richards & Wilson 2003).

### 2.2 Previous research on youth and student travel

An important study on youth and student travel was conducted by the International Student Travel Confederation (ISTC) and the Association for Tourism and Leisure Education (ATLAS) in 2002. It is the first study to focus on the profile and travel behaviour of youth and student travel at a global level, and involved 2,300 respondents from eight countries (Canada, the Czech Republic, Hong Kong, Mexico, Slovenia, South Africa, Sweden and the UK) (Richards & Wilson 2003). This research provides a comprehensive profile of youth and student travel behaviour, such as travel style, motivations, activity engagement, trip planning, etc.

Most previous studies examining youth and students’ travel have mainly focused on two submarkets: backpackers and leisure student travellers. On the one hand, the growth and importance of ‘backpacker’ tourism, including the ‘gap year’ and the Big Overseas Experience (‘Big OE’), phenomenon from Australia and New Zealand have attracted attention from researchers and destination marketers (Richards & Wilson 2004). It is noted that young people tend to take an extended overseas trip in the ‘gap year’ between school and university or university and work (O’Reilly 2006; Pearce & Foster 2007). This tendency is also evidenced from the increased number of working holiday visas being issued by some major student travel destinations such as Australia and New Zealand (Richards & Wilson 2005). Destination countries have also developed strategies to attract the backpacker market. For instance, Tourism Australia has implemented specific youth-oriented marketing campaigns and marketing tools (including brochures and websites) to attract working holidaymakers and backpackers to visit Australia (Davidson et al. 2013). Therefore, many studies have concentrated on identifying the

On the other hand, a growing body of research is targeting the college or university student travel market. Earlier studies were mostly conducted on US college students who undertake annual spring break travel and constitute an important tourist market for tourism destinations and businesses (Butts & Salazar 1996; Hobson & Josiam 1992, 1995). A series of studies have investigated their travel motivations (Babin & Kim 2001; Kim 2007, 2008; Kim, Jogaratnam & Noh 2006), activity preferences (Kim & Jogaratnam 2003), destination image and preferences (Chen & Kerstetter 1999), satisfaction and value perceptions (Babin & Kim 2001), and information searching (Park & Kim 2009). Findings from these studies indicate that college or university students are frequent travellers who have relatively extensive travel experience outside of their own world region, which suggests that college or university student travellers may be more experienced consumers than previously expected (Richards & Wilson 2004). However, most of these studies focus on US domestic college students or US college students without making a distinction between domestic and international students. Shoham, Schrage and Eeden (2004) found that nationality affects college students’ travel preferences (e.g. transport, food, leisure activities, accommodation). Therefore, findings and implications based on US domestic students may not be fully applicable to students from other countries.

In recent years the expansion of international students around the world has stimulated the interest of researchers to study international student travel behaviour and examine students in countries other than the US (Gardiner, King & Wilkins 2013; King & Gardiner 2013; Ryan & Zhang 2007; Weaver 2004). It is suggested that international students constitute a large and profitable tourist market for a destination country’s tourism industry (Gardiner, King & Wilkins 2013). International education is a global phenomenon, however, definitions of ‘international students’ are not consistent. The United Nations Educational, Scientific and Cultural Organisation (UNESCO) defines international students as ‘students who leave their country or territory of origin and move to another country or territory with the objective of studying’ (UNESCO 2009, p. 36). In Australia, the ‘international students’ is applied to those who are holding international student visa or whose country of birth, based on citizenship, is outside Australia (Australian Bureau of Statistics 2010). In spite of the different definitions, it is generally believed that international students are those living outside their home countries, staying in destination countries for a long period and mainly for study purposes. These students
arguably have more opportunities and free time to travel within the destination country than other international tourists (Hsu & Sung 1997).

Australia is one of the most popular destinations for international students behind the US and the UK, and a growing body of empirical research is being conducted on international students’ travel in Australia (Frost & Shanka 1999; Leiper & Hunt 1998; Michael, Armstrong & King 2004; Min-En 2006; Weaver 2004). These earlier studies have provided some preliminary market insights, indicating that international students generate a significant amount of direct and indirect tourism activity within Australia beyond their presence as ‘educational tourists’, and more attention should be paid to this market. Studies have found that international students have a great enthusiasm for travelling around Australia, and strong intentions for repeat visits after they graduate (Frost & Shanka 1999; Leiper & Hunt 1998; Michael, Armstrong & King 2004; Min-En 2006; Weaver 2004).

However, many of these studies have viewed international students as a single, homogeneous group without making distinctions between nationalities. In addition, most studies were conducted in only one region or city (e.g. Brisbane—Gold Coast region, Melbourne), with samples taken from one study institution in Australia. These studies are also limited by their small sample size (less than 250), which prevented analysis to differentiate relevant sub-segments (e.g. by country, gender and age). More importantly, the samples have been limited to only a few countries (e.g. Indonesia, Japan, Singapore and India), and some of the studies did not include the current mainstream market: Chinese students. Therefore, the findings may not be representative of the broader international student population in Australia.

The more recent studies have started to explore more detailed aspects of international students’ travel behaviour, for instance their travel motives, mode of travel and activity preferences (Bicikova 2014; Cavagnaro & Staffieri 2015; Gardiner, King & Wilkins 2013; Hughes, Wang & Shu 2015; King & Gardiner 2013; Wang & Davidson 2008). A large-scale investigation of international students’ travel behaviour was conducted in Australia in 2013 (Davidson et al. 2013), with almost 6,000 respondents from 29 universities in Australia. It is the first comprehensive study examines travel behaviour of international student on the basis of nationality. Findings of the study have provided some useful insights into international students’ travel behaviour. In addition, the research indicates that students’ travel behaviours differ by nationality, which is an important contribution to the understanding of students’ travel
behaviour. This evidence suggests that future research needs to examine international students’ travel behaviour on the basis of nationality.

Based on reviewing relevant literature, studies on students’ travel are summarised in Table 2.1. Various studies can be generally grouped into four research areas according to the primary focus of the studies: travel motivations; travel behaviours, including choice of destinations, travel activities and trip patterns, such as type of accommodation, transportation, travel party composition, etc.; perceived image for destinations; and travel planning and information search. The table shows that most studies examine students’ travel behaviour in terms of their preference for destinations, tourism products (e.g. accommodation, transportation) and travel activities. A few studies have investigated student travellers’ travel planning and/or information search behaviour. Specifically, Bai et al. (2004) investigated factors influencing college students’ satisfaction with online travel planning. Park and Kim (2009) explored how ‘previous experience, knowledge, and involvement’ influence students’ travel information search strategies. Kim et al. (2013), Davies and Cairncross (2013), and Kim and Kim (2011) investigated students’ use of social networking sites (SNSs) for destination selection and travel information search. Ryan and Gu (2007) focus on students’ trip planning in terms of how students draw a picture of their trip itineraries, with a purpose of assessing their preferred destinations, durations of stay, distance travelled, etc. It is argued that there is a lack of systematic analysis in terms of when, how and what information search strategies student travellers use.

The table also shows that many studies are conducted in the US and focus on US college students in general without making distinctions between domestic and international students. A growing number of studies are conducted on the international students based in Australia. Including the New Zealand-based studies, six studies particularly focus on the Chinese international students’ market, five of them examine Chinese international students’ travel behaviour and one focuses on the students’ perceived destination image. No research examines Chinese international students’ travel information search behaviour.
Table 2.1 Summary of students’ travel studies

<table>
<thead>
<tr>
<th>Main focus of research</th>
<th>Authors &amp; Year</th>
<th>Country conducted</th>
<th>Sample examined</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Travel motivation</strong></td>
<td>Kim &amp; Jogaratnam 2003</td>
<td>US</td>
<td>College students</td>
</tr>
<tr>
<td></td>
<td>Kim, Jogaratnam &amp; Noh 2006</td>
<td>US</td>
<td>College students</td>
</tr>
<tr>
<td></td>
<td>Kim 2007</td>
<td>US</td>
<td>College students</td>
</tr>
<tr>
<td></td>
<td>Kim 2008</td>
<td>US</td>
<td>College students</td>
</tr>
<tr>
<td></td>
<td>Liu &amp; Ryan 2011</td>
<td>New Zealand</td>
<td>Chinese international students</td>
</tr>
<tr>
<td></td>
<td>Zhang, Burgess &amp; Kerr 2009</td>
<td>Australia</td>
<td>Chinese international students</td>
</tr>
<tr>
<td></td>
<td>Bicikova 2014</td>
<td>UK</td>
<td>University students</td>
</tr>
<tr>
<td></td>
<td>Bufla 2015</td>
<td>Italy</td>
<td>Panel members of Italian association of student and youth tourism</td>
</tr>
<tr>
<td></td>
<td>Monterrubio 2015</td>
<td>US</td>
<td>College students</td>
</tr>
<tr>
<td><strong>Travel behaviour:</strong></td>
<td>Field, AM 1999</td>
<td>US</td>
<td>Domestic and international students (Latin America, Europe, Turkey, Soviet Union (USSR), Mid-East, other Asia, India, Africa, Australia/New Zealand</td>
</tr>
<tr>
<td>destination preference, travel activities, travel pattern (e.g. choice of accommodation, transportation, travel party composition, etc.)</td>
<td>Park &amp; Kim 2009</td>
<td>US</td>
<td>College students</td>
</tr>
<tr>
<td></td>
<td>Chhabra 2012</td>
<td>US</td>
<td>University students</td>
</tr>
<tr>
<td></td>
<td>Frost &amp; Shanka 1999</td>
<td>Australia</td>
<td>Australian and Asian students</td>
</tr>
<tr>
<td></td>
<td>Weaver 2004</td>
<td>Australia</td>
<td>International students: Hong Kong, Singapore, Indonesia, India, Japan</td>
</tr>
<tr>
<td></td>
<td>Michael, Armstrong &amp; King 2004</td>
<td>Australia</td>
<td>International students: Malaysia, Indonesia, Singapore, South Korea, Hong Kong</td>
</tr>
<tr>
<td></td>
<td>Carr &amp; Axelsen 2009</td>
<td>Australia</td>
<td>Domestic and international students (Japan, Taiwan, China, Malaysia, South Korea, Singapore)</td>
</tr>
<tr>
<td></td>
<td>Davidson et al. 2013</td>
<td>Australia</td>
<td>International students: China, Malaysia, Singapore, Hong Kong, India, and Other countries</td>
</tr>
<tr>
<td></td>
<td>King &amp; Gardiner 2013</td>
<td>Australia</td>
<td>Chinese international students</td>
</tr>
<tr>
<td></td>
<td>Gardiner, King &amp; Wilkins 2013</td>
<td>Australia</td>
<td>International students: China, Indian, North America, Europe, Other nationalities</td>
</tr>
<tr>
<td></td>
<td>Pyke, Jiang &amp; Delacy 2013</td>
<td>Australia</td>
<td>Chinese international students</td>
</tr>
<tr>
<td></td>
<td>Xu, Morgan &amp; Song 2009</td>
<td>UK, China</td>
<td>UK students Chinese students</td>
</tr>
<tr>
<td></td>
<td>Ryan &amp; Zhang 2007</td>
<td>New Zealand</td>
<td>Chinese international students</td>
</tr>
</tbody>
</table>
The following section discusses and compares travel characteristics and behaviours of youth travellers mainly from the three aspects: travel motivations, travel behaviours and information search. Specifically, it first compares leisure student travellers and backpackers, followed by submarkets of student travellers (domestic vs. international students, international students from different nationalities) and, finally, it specifically discusses the trip characteristics and travel behaviour of Chinese international students.
2.3 Characteristics and travel behaviour of youth and student travellers

2.3.1 Characteristics and travel behaviour of youth submarkets (backpackers vs. leisure student travellers)

Based on a review of existing literature on youth and student travel, some common characteristics of young travellers can be identified. Most youth travellers are students, aged under 26 and with a high education level (Richards & Wilson 2004). Because they are still studying or at an early stage in their careers, these travellers tend to have lower incomes, which require them to save for long periods before travelling or to work during the trip (Richard & Wilson 2003). Most young travellers prefer to organise their holidays independently (Buffa 2015; Linh 2015). The main purposes of their travelling are to explore other cultures, experience excitement, and increase their knowledge (Richards & Wilson 2003). Buffa (2015) found that the most important factors that influence students’ choice of destination are ‘discovery of new cultures and landscapes’, ‘contemplation of natural and artistic heritage’, and ‘contact with local community and nature’. Previous research has also found that fun, price, and safety are the main factors that influencing the travel behaviour of the youth travellers (Vukic et al. 2015). Recommendations from family and friends and online information are the most important information sources for their trip planning (Bai et al. 2004; Buffa 2015; Linh 2015; Park & Kim 2009). Two recent studies explored youth attitudes towards sustainability, and suggested that most young tourists have a sustainable travel attitude and behaviour (Buffa 2015; Cavagnaro & Staffieri 2015).

In spite of these common characteristics, youth travellers are not a homogenous market (Richards & Wilson 2003). In terms of travel style, youth travellers can be classified as backpackers, working holiday travellers and leisure student travellers. The ATLAS report shows that one third of respondents identified themselves as ‘backpackers’; the rest mostly labelled themselves as ‘travellers’ (Richards & Wilson 2003). The study indicates that the travel behaviour of backpackers is different from student travellers in terms of travel style, purpose of travel, preferences for activities and travel products, etc. Table 2.2 summarises the main differences between backpackers and leisure student travellers. Detailed discussions are provided in the following paragraphs.
Table 2.2 Travel behaviour of youth traveller (backpackers vs. leisure student travellers)

<table>
<thead>
<tr>
<th></th>
<th>Backpackers</th>
<th>Leisure student travellers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Travel style</strong></td>
<td>Flexible</td>
<td>Organised</td>
</tr>
<tr>
<td><strong>Travel motivation</strong></td>
<td>‘Gap year’</td>
<td>Vacation &amp; relaxation</td>
</tr>
<tr>
<td></td>
<td>Opportunity for fun &amp; independence</td>
<td>Explore other cultures</td>
</tr>
<tr>
<td></td>
<td>Self-development &amp; skill acquisition</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Explore other cultures &amp; meet other people</td>
<td></td>
</tr>
<tr>
<td><strong>Trip duration</strong></td>
<td>Long, extended trip</td>
<td>Short breaks &amp; day trips</td>
</tr>
<tr>
<td><strong>Travel party composition</strong></td>
<td>Alone or with one other person</td>
<td>In a group, with family/friends</td>
</tr>
<tr>
<td><strong>Destination</strong></td>
<td>‘Off the beaten track’ places</td>
<td>Rural places</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Iconic tourist attractions</td>
</tr>
<tr>
<td><strong>Activities preference</strong></td>
<td>Adventurous &amp; risk-taking activities</td>
<td>Sightseeing, shopping</td>
</tr>
<tr>
<td><strong>Trip planning &amp; Information searching</strong></td>
<td>Minimal advance planning</td>
<td>Information intensive &amp; consult a wide range of information sources</td>
</tr>
<tr>
<td><strong>Accommodation</strong></td>
<td>Youth hostels</td>
<td>Hotels, motels</td>
</tr>
</tbody>
</table>

Table 2.2 shows that one significant difference between backpackers and leisure student travellers is that backpackers are more *flexible* with itineraries and require minimal advance planning. Spontaneous and serendipitous are the main characteristics of backpackers’ travel (O’Reilly 2006). In contrast, student travellers—especially international students—appear to be relatively *information intensive*, using a *wide range of* information sources prior to their trips (Park & Kim 2009; Richards & Wilson 2003). Because of the flexible travel style, backpackers tend to travel alone or with one other person, typically stay at youth hostels and opt to share accommodation with other young travellers (King & Gardiner 2013; Richards & Wilson 2003). In contrast, student travellers typically travel with friendship or family groups of four people on average (Davidson et al. 2013; Weaver 2004), and mostly stay at hotels or motels for accommodation (Davidson et al. 2013; King & Gardiner 2013).

In terms of purpose of travel and activity preferences, backpackers are more likely to explore and experience other cultures, meet other people and make friends with other young travellers during the trip (Richards & Wilson 2003). They are more interested in adventurous and risk-taking activities, and tend to go to destinations that are ‘off the beaten track’ (Richards & Wilson 2004). Different from backpackers, student travellers mainly travel for vacation and
relaxation purposes (Richards & Wilson 2003). For instance, Xiao, So and Wang (2015) found that ‘to relax mentally’, ‘to relieve stress and tension’, ‘to rest’, and ‘to discover new things’ are the most important motivations for students to go trips. As such, student travellers particularly prefer leisure activities such as going to the beaches, going shopping and visiting famous attractions and going shopping (Davidson et al. 2013; King & Gardiner 2013; Xiao, So & Wang 2015).

Studies have also found that backpackers usually take long, extended trips (King & Gardiner 2013; Richards & Wilson 2003), whereas student travellers mainly take short breaks due to time and financial constraints (Davidson et al. 2013; Weaver 2004). Young backpackers are mainly from developed countries, taking an extended international travel has become a ‘rite of passage’ for them (King & Gardiner 2013; O’Reilly 2006). Such a trip is seen as an opportunity for fun and independence prior to the responsibility of adulthood (O’Reilly 2006), as well as an education experience that aids self-development and skill acquisition for future employment (Pearce & Foster 2007). Therefore, they are prepared to allocate time, energy and money to the trip.

In contrast, student travellers usually have time pressures to balance their time between study, work and social commitments, and therefore have limited time to conduct longer trips (Davidson et al. 2013). The time constraint is particularly a consideration for international students who pay high tuition fees to study abroad. Their overseas study is often made as a family investment and, therefore, students need to stay focused on their education (Gardiner, King & Wilkins 2013). As such, travel tend to be a second—order consideration, and short breaks have been the major travel type of international students (Weaver 2004). This suggests that when examining student travellers timing is an important factor that is likely to influence students’ travel behaviour. Timing is also an important consideration for tourism companies targeting young travellers, especially student travellers. For instance, research has found that students mainly travel during summer breaks and semester breaks (Field 1999; Michael, Armstrong & King 2004), therefore, a marketing campaign released a few months before the school holidays start is probably the most effective time.

It is evidenced that the travel behaviour of student travellers is different from that of backpackers. Therefore, findings and implications drawn from backpackers may not apply to the leisure student travel market. This also applies to the submarkets of student travellers. For instance, previous studies have found that international college or university students behave
differently to domestic students. Studies have found that domestic and international students in US colleges have different travel intentions, service-booking approaches and activity preferences (Field 1999; Kim & Jogaratnam 2003; Shoham, Schrage & Eeden 2004; Xu, Morgan & Song 2009). Specifically, studies have identified that Asian international students prefer travelling by planes or trains, while domestic American students are more likely to travel around by car (Field 1999; Kim & Jogaratnam 2003). Asian international students are more interested in iconic tourist attractions, while American students tend to visit rural places far away from the main tourist areas (Kim & Jogaratnam 2003). Xiao, So and Wang (2015) found that compared to domestic students in Australia, international students are more likely to engage in activities offering learning experiences about Australian culture such as attending festivals and cultural events, visiting historical and heritage buildings, and visiting museums and art galleries. The authors suggested that international students may have a greater deal of curiosity about Australia. Therefore, they are more likely to be motivated by new experiences such as learning new things and exploring new ideas. In contrast, trips within Australia may not offer domestic students much sense of novelty and learning (Xiao, So & Wang 2015). In addition, the study found that there is a stronger desire among international students for friendship and a sense of belonging than Australian students (Xiao, So & Wang 2015). These findings suggest that results based on domestic students have limited value in explaining the travel behaviour and preferences of international students (Field 1999; Kim & Jogaratnam 2003). It is also suggested that international student travellers are different from backpackers (Gardiner et al. 2013). Therefore, further research is needed to focus on the international student market.

2.3.2 Characteristics and travel behaviour of international students

Tourism scholars and marketers have given more attention to the international student market in recent years because of its substantial scale, growth and influence for the future tourism industry (Glover 2011; Weaver 2002). A growing body of research has examined travel and leisure behaviour of international students. Glover (2011) indicated that the travel behaviour of international students is similar to international tourists, who typically travel with families or friends for three to five nights. Min-En (2006) also found that the motivations and behaviour of international students is more akin to inbound tourism, as the students conduct various tourism activities within the country, purchase tourism products (e.g. accommodation, transportation) and spend money on souvenirs. However, international students generally stay
longer in the destination country than typical international travellers (Gardiner et al. 2013). International students are also different from domestic leisure travellers because of their limited length of stay in the country and higher tendency to travel to different destinations within the country before returning home (Gardiner et al. 2013). In addition, their lifestyle (combining study, work and play) and funding sources are also different from domestic travellers. On this basis, factors that influence the travel behaviour of international students may differ from those influencing other travel markets.

Studies have identified some common characteristics of international students’ travel behaviour. For instance, international students are noted as short-break travellers, and most of their travel is relatively brief, including day trips or short overnight trips from one to six nights (Davidson et al. 2013; Gardiner et al. 2013; Glover 2011; Weaver 2004). International students are most likely to travel with their family, friends or with other international students. They are also budget travellers, with most of the students spending less than AU$1000 per trip (Weaver 20014; Davidson et al. 2013). The low-budget travel is also reflected in their accommodation preference, for instance North Americans and Europeans have a strong propensity for cheaper, hostel-style accommodation, while Asian students such as Chinese and Indian students are opting for hotel/motels and share costs with friends or family (Davidson et al. 2013). Gardiner et al. (2013) note that it is difficult for international students to balance their study, work and travel aspirations while studying abroad. Besides monetary and timing constraints the lack of travel packages and discounts for international students also discourages their travel, especially in the case of Chinese and Indian students.

Acknowledging some common characteristics, international students from different countries or regions tend to exhibit different travel patterns and behaviours (Davidson et al. 2013; Gardiner et al. 2013). For instance, in terms of travel party composition, Chinese students are much more likely to travel with their friends who are also Chinese students, while Indian students are more likely to travel with their family. European and Korean students are more likely to travel with students of other nationalities. The authors note that these differences between China and India may be indicative of different family structures, with the prevailing Chinese one-child policy contrasting with the typically larger Indian family group, while students from European countries and Korea may demonstrate a more open-minded attitude towards the national cultures of developed countries (Davidson et al. 2013).
In terms of travel patterns, Chinese and Indian students are more likely to take *day trips* or *short overnight trips* from one to three nights, whereas students from North America and Europe are less likely to travel on day trips, and tend to take trips from one week to two weeks (Davidson et al. 2013). Lee and King (2016) noted that Asian students such as Chinese tend to be budget-conscious travellers and seek to minimise costs through day tripping. In addition, for international students who come from countries like China or India, their overseas study is often made as a family investment, and students need to be more focused on their education (Gardiner, King & Wilkins 2013). Therefore, these students are more likely to take short breaks, as travel tends to be a second-order consideration for them (Weaver 2004). For students from developed countries, such as European countries and the US, exploring another countries and experiencing their culture is an important purpose for them to study overseas and, in such circumstances, they are more likely to spend a longer time travelling in the country.

When choosing travel accommodation, students from Asian countries are more likely to use mainstream accommodation, such as hotels/motels and rented units and apartments, while European and North American students are more likely to stay at a backpacker hostel or go camping (Davidson et al. 2013). This may be explained by the travel pattern that Chinese and Indian students are more likely to travel within a friendship or family group, which is an opportunity to share costs of the trip such as accommodation (Davidson et al. 2013). Additionally, in terms of travel activities, Lee and King (2016) found that Asian students such as Chinese students are less likely than non-Asian students to return to tourist attractions that they have previously visited. The research has provided empirical evidence that students’ travel behaviours differ by nationality, which suggests that international students are not homogeneous and more attention should be given to *nationality-based* research.

### 2.3.3 Characteristics and travel behaviour of Chinese international students

The present study focuses on Chinese international student travellers in Australia. Chinese students constitute the largest international student market in the world and in Australia (Department of Education and Training 2016). As noted above, these students are important for host countries’ tourism industries as they travel regularly in the country and are joined by family and friends from overseas (King et al. 2013; Ryan & Zhang 2007). Although their trips tend to be short and expenditure is relatively low per trip, given the use of shared cars and accommodation and high average group size, the total party expenditure make this group a potential market of some value (Ryan & Zhang 2007).
This phenomenon has stimulated some tourism studies focused particularly on Chinese students. For instance, Shi et al. (2010) compared the travel behaviours of Chinese and non-Chinese students at a Japanese university. Wang and Davidson (2008) investigated Chinese students’ destination perceptions in Australia. King et al. (2013) compared the travel behaviour of Chinese international students in Australia with backpackers. Ryan and Zhang (2007) and Liu and Ryan (2011) studied Chinese international student travel in New Zealand. There are two studies that have compared the travel behaviour of Chinese university students with students from other countries; Ryan and Gu (2007) adopted a spatial perspective in their examination of the travel planning behaviour of Chinese and New Zealand students, while Xu et al. (2009) compared the travel behaviour and attitudes of undergraduates studying in the UK and China. It should be noted that the Chinese student samples of the two studies are taken from Chinese universities, which is different from Chinese students studying overseas. Therefore, findings of the two studies may have limited relevance to Chinese international student travel. More recently, Hughes, Wang and Shu (2015) investigated Chinese students’ preferences for, and perceptions of, Australian tourism products.

Results of these studies are generally consistent; that is, that most Chinese students conduct leisure trips in the studying country (e.g. Australia, New Zealand) during school holidays for two or more days at least once a year (King & Gardiner 2013; Ryan & Zhang 2007). Their primary motivations to travel were to ‘relax and have fun’, ‘go sightseeing’, ‘learn about the country’, ‘explore new places’ and ‘visit somewhere I had read about’ (Ryan & Xie 2003). Most Chinese students organised their trip by themselves (Ryan & Zhang 2007; King & Gardiner 2013), and the primary information sources used for vacation planning were friends and relatives and the Internet (Hughes, Wang & Shu 2015; Ryan & Xie 2003). The authors (Ryan & Xie 2003) provide some initial findings in terms of students’ travel information search behaviour. However, more systematic and in-depth understanding is needed in terms of when students search for information, how do they use each information source (e.g. for booking accommodation) and how they perceive travel information sources (e.g. why do they choose certain information sources over others)?

In terms of travel activities, Chinese students tend to go shopping and visit natural attractions such as beaches and national parks, fishing, whale watching and sightseeing (King & Gardiner 2013; Ryan & Zhang 2007). Most Chinese students prefer to stay at hotels or motels during travel. As noted above, students can share the cost of their accommodation. In addition, this
mainstream accommodation is perceived to be safer, cleaner, easier to book and more convenient (King et al. 2013). Existing findings suggest that the travel conducted by Chinese international students is similar to those of traditional tourists who follow a circuit tour, sightseeing and staying in mainstream accommodation (King & Gardiner 2013). Previous research also found that most Chinese international students are financially supported by their parents (Ryan & Zhang 2007).

The studies have also identified some unique characteristics of Chinese students’ travel behaviour. For instance, Xu et al. (2009) found that Chinese students perceive that it is more important to see the iconic places and learn about other cultures and history than British students; British students place a higher priority on having fun, socialising and taking outdoor adventure than their Chinese counterparts. The authors explain that this may be because their travel is funded differently. British students’ travel funding is mainly earned by themselves, and therefore they have more freedom in terms of how they spend it. On the contrary, for Chinese students, the main source of money for travelling is their parents. Hence, it is essential for them to show their parents the educational benefits of the trip. In addition, the high power distance of Chinese culture and respect for the wisdom of older generations may also encourage students to see famous sites and conduct culture-related activities. An alternative explanation is that Chinese students may have less travel experience than British students, and may be at an earlier stage of their travel career (Pearce 2004). Therefore, they are more likely to go to iconic sites and destinations to tick off the ‘must see’ places (Xu, Morgan & Song 2009).

Another significant feature of Chinese student travellers is that they tend to socialise primarily with other Chinese students (Ryan & Zhang 2007; King et al. 2013). For instance, Hughes, Wang and Shu (2015) found that Chinese students mostly seek travel advice from other Chinese students, and are less likely to consult non-Chinese students. Studies have also found that, compared to students from other nationalities, Chinese students are much more likely to travel with friends who are also Chinese students (Davidson et al. 2013; Gardiner, King & Wilkins 2013; Ryan & Zhang 2007). This may because such a travel mode provides ‘good company’ that might make the trip more enjoyable and memorable. In addition, it also provides students with a sense of reassurance and greater safety (Ryan and Zhang 2007).

Furthermore, Chinese students are highly safety conscious. Hughes, Wang and Shu (2015) found that safety is the most important concern for Chinese students when conducting travel activities in Australia. The study found that Chinese students are highly interested in viewing
Chapter 2 Youth and student travel behaviour

Australian animals, however, touching or holding them was less attractive. Immersive or more adventurous experiences such as swimming in the ocean and visiting the outback were also viewed as less important (Hughes, Wang and Shu 2015, p.17). Chinese students are concerned about their personal safety particularly in relation to threats from Australian wildlife (snakes and insects featured extensively), getting lost in wilderness environments, being exposed to environmental hazards such as heat-stroke, and sunburn and personal discomfort from camping and bushwalking (Hughes, Wang and Shu 2015). It is suggested ‘soft’ ecotourism activities are more appealing to Chinese students due to safety concerns for ‘hard’ ecotourism activities (camping, bush walking) (Hughes, Wang & Shu 2015).

From a culture perspective, Chinese culture is identified as being high collectivist and high uncertainty avoidance according Hofstede’s (2001) national culture dimension. The two dimensions may have encouraged Chinese students to build strong relationships with inner-group members and travel in large groups to avoid unknown risks. In addition, Chinese students may feel shy and lack confidence when coming to a new country, therefore may be reluctant to initiate friendships with people outside of their group (Pike, Jiang & Delacy 2013).

Beyond the general national culture background, the current young Chinese are particularly a result of the one-child policy, growing up without siblings. Therefore, friends and peers have a significant place in their lives (Luo & Lagerdahl 2011). This may also explain their high tendency for travelling with other Chinese international students. These young Chinese consumers have experienced the fast development of Internet technology and growing ownership of mobile devices. The technological advances have accelerated the pace of Chinese consumers to open their minds and learn about the outside world and have facilitated international travel (King & Gardiner 2013). In addition, younger Chinese have also benefited from ‘economic transformation and the opening up of self-expression through social media’ (King & Gardiner 2013, p. 1). One implication that can be drawn from these findings is that national culture and social background can be important factors influencing Chinese students’ travel behaviour. It is necessary for researchers and practitioners to understand these factors in order to better explain and predict their travel behaviour.

It should be noted that, in some respects, Chinese international students are not particularly different from the typical Chinese outbound travellers in terms of their activity preferences, with visiting iconic attractions and sites, outdoor/nature activities and shopping being the most preferred activities. Hughes, Wang and Shu (2015) found that the top three experiences of
Chinese students in Australia are ‘seeing natural landscapes’, ‘seeing famous Australian attractions’, and ‘seeing Australian animals’, which are similar to the travel preferences of the mainstream Chinese tourists. Another similar characteristic between Chinese tourists and Chinese student travellers is that both groups consider ‘show off’ to their family and friends as an important travel motivation. However, Chinese students are more likely to ‘show off’ by sharing their stories and photos in social media platform (Hughes, Wang & Shu 2015). It is suggested that the key difference between Chinese visitors and visitors from other countries is that ‘show off’ is more important than ‘learning’ and ‘relaxing’ (Hughes, Wang & Shu 2015). This may explain the typical travel patterns of busy scheduled trips with multiple destinations and activities, and go to iconic attractions.

One noticeable exception of Chinese international student travellers compared to general visitors from China is that young students are far less reliant on packaged travel. Studies have found that most Chinese international students conduct independent travel in the studying country and organise trips by themselves (King & Gardiner 2013; Ryan & Zhang 2007; Liu & Ryan 2010). Sparks and Pan (2009) note that young Chinese want more freedom and flexible time to explore the destination when travelling. The traditional all-inclusive package travel mode of ‘hopping on and off the coach’ with a busy itinerary is not appealing to these consumers.

The traditional, all-inclusive group travel has led to an oversimplified profile of Chinese outbound travellers as they mainly ‘travel on gruelling scheduled tours by bus’, ‘staying in budget hotels or motels’, ‘eating Chinese food’, ‘visiting iconic destinations and attractions’, ‘purchase local souvenirs and luxury consumer goods’ (Cai, Boger & O'Leary 1999; Cai, O'Leary & Boger 1999; Qu & Li 1997; Wang & Sheldon 1996).

In contrast, independent travellers have more diversified itineraries as they enjoy the freedom of following their own schedule and having greater control over what to do during the trip. As such, greater understanding is needed in terms of how independent travellers plan their trips and, more importantly, how they search for information and what information they use for vacation planning. It is noted that independent outbound travellers are ‘heavy’ trip planners who do a lot of research when planning (Richards & Wilson 2004).

In addition, it is expected that independent travel is becoming more commonplace in China’s outbound travel market. However, knowledge about Chinese independent outbound travellers
is scarce. Existing findings show that Chinese independent travellers in general have a younger profile, with most of them under 30 years old (Tourism and Events Queensland 2012). They are more educated (82.9% have at least a Bachelor’s degree) than the general population of Chinese outbound travellers (of whom 46.3% have a Bachelor degree) (Tourism and Events Queensland 2012; Xiang 2013) and are more likely to travel with friends or colleagues (Tourism and Events Queensland 2012). Natural attractions and world-famous sights are particularly preferred by this group of tourists (Tourism and Events Queensland 2012). One study also found that many of the young independent travellers have already been abroad either for education purposes or on packaged tours when they were younger (King & Gardiner 2013).

The similar characteristics between current Chinese independent travellers and Chinese student travellers provide further evidence that the current study is valuable in terms of using Chinese international students as an instructive example to understand and predict the behaviour of future Chinese independent outbound tourists.

Research has also identified some other characteristics of Chinese student travellers. For instance, the key barriers that constrain students travelling extensively in Australia are ‘expense of travel’, ‘study commitments’, and ‘distances’. Other constraints such as ‘difficulty getting information’, ‘not knowing where to go’, and ‘language barriers’ were considered moderate barriers to travel (Hughes, Wang & Shu 2015). Specifically, in terms of travel planning and information search, on the one hand, Chinese students expressed it is a bit difficult for them to understand tourist information and signage although their English is sufficient to obtain an offer to study in an Australian university. Therefore, it is recommended ‘more signs be written in Chinese and that tourist information centres provide translation services and travel itineraries specifically targeting the needs and preferences of the Chinese market’ (Hughes, Wang & Shu 2015, p.18). On the other hand, Chinese students expressed that due to their lack of knowledge and skills to plan trips and activities for their family and friends, travel agents might be preferable for arranging an itinerary with outdoor activities (including aspects such as tents, safety instruction, travel insurance and food) (Hughes, Wang & Shu 2015).
2.4 Gaps in research on youth and student travel

Based on reviewing the existing literature on youth and student travel, it is clear that the youth market—especially the student travel market—is not well understood yet. It seems that, in spite of this growing body of student and youth travel literature, research in the area remains fragmented. It is difficult to gain a thorough understanding of the youth and student traveller market and the tourism industry has not yet maximised the full market potential. Two major gaps are identified for the student travel literature.

First, there is a lack of research on international students’ travel on the basis of nationality. In addition, given the substantial size of the Chinese international student market and the potential opportunity it presents for the tourism industry, there is particularly a lack of research on this group of the market. To the extent that differences between submarkets of youth travellers are noted (e.g. backpackers vs. leisure student travellers, domestic vs. international students, and international students from different nationalities), the youth and student travellers are not homogeneous and each sub-market is associated with certain characteristics that is distinguishing from others (Gardiner, King & Wilkins 2013). However, most of the research on youth and students’ travel views college students, especially international students, as a single homogeneous group, and does not discuss the differences of students from different nationalities. In addition, as mentioned in the previous section, most studies are limited by small sample sizes for each individual nationality. It is suggested that future research should pay more attention to international students on the basis of nationality, rather than treat them as a homogenous market (Zhang, Burgess & Kerr 2009). Researchers examining youth and student travellers should account for the specific national cultural background, rather than standardising the market. The detailed, nationality-based analysis should provide academics and practitioners with more specific insights in terms of attitudes and behaviours of student travellers.

Chinese international students constitute an important tourist market for destination countries. This group of tourists can be a profitable segment for the tourism industry if it is appropriately positioned and handled, because a great deal of student travel for pleasure occurs during school holidays. However, limited research has focused on the various travel behaviours of this tourist group. It is suggested by this study that more research is needed to understand their travel-related attitudes and behaviours. Whilst their tendencies for independent travel and trip arrangements are noted, it is especially important to understand how students search for and
use travel information for trip planning, which highlights the value and importance of the current study.

Second, previous investigations into travel by students, especially the international student market, have provided some preliminary insights in terms of travel motivations, destination preference, travel patterns (e.g. type of accommodation, transportation, travel party composition, etc.) and activity preferences. However, there is a lack of research on other aspects of the students’ travel behaviour.

It is evidenced that college or university students prefer to travel independently and organise trip themselves (Carr 2002, 2003, 2007; Michael, Armstrong & King 2004; Richards & Wilson 2005), and packaged tour options are generally not considered by university students (Carr 2003). This feature suggests that it is vitally important to understand the vacation planning and associated information search behaviours of student travellers. However, there is a lack of research providing a systematic and comprehensive understanding in terms of how students search (where to search and when to search), and why students conduct their information search in certain ways (e.g. why they prefer certain information sources over others), and what are the underlying factors influencing their search activities.

A group of studies have examined students’ information search behaviour, providing some initial and basic results; however, only as a small part of their research. For instance, studies have found that friends and relatives and online information are the most important information sources for student travellers (Richards and Wilson 2004; Michael et al. 2004; Davidson et al. 2013). A few studies that have primarily examined the information search behaviour of student travellers mainly focus on a certain aspect, for instance students’ use of SNSs for travel information (Davies & Cairncross 2013; Kim & Kim 2011, Kim et al. 2013), their satisfaction with online information search processes (Bai et al. 2004), and the influence of previous experience and knowledge on travel information search (Park & Kim 2009).

It is suggested that more research is needed to understand the information search behaviour of youth and student travellers, especially with a comprehensive perspective in terms of when and how they search, what information they use, and why they search in certain ways. In addition, studies have already identified that college students are a significant online travel market segment, and that they have a higher tendency to use online information for vacation planning (Bai et al. 2004; Kim, Choi & Kim 2013; Richards & Wilson 2005). To the extent that the
Internet has an important influence on students’ vacation planning, there is limited understanding of students’ online information search behaviour, such as to what extent do students rely on online information for decision-making and what type of online information do students use?

2.5 Summary

This chapter has presented a review and discussion of previous literature on youth and student travel. It has discussed and compared characteristics of different youth submarkets, and focused particularly on the characteristics and travel behaviour of the Chinese international student market. Gaps in the literature were identified to inform potential areas that need to be further explored, which underpins the importance and significance of the current study. The next chapter reviews literature on tourism information search behaviour, proposes a conceptual framework for this study and presents the research questions.
3.1 Introduction

Chapter 3 presents a review of the literature on tourism information search behaviour, which constitutes the theoretical background of this study. This chapter begins with an overview of the basic terms used in travel information theory (section 3.2), followed by a summary of current literature in section 3.3. Following this, section 3.4 discusses the motivations for tourists to conduct an information search. Sections 3.5 to 3.7 provide an overview and discussion of the theory and relevant findings on travellers’ information search behaviour. Specifically, literature on travel information search strategy is first reviewed, followed by tourism information sources that are commonly used in the current marketplace. Tourist segmentation based on tourists’ information search strategies is discussed, and finally a review of various factors that influence travellers’ information search activities is presented. Section 3.8 proposes a study framework for the current research based on the review of relevant literature, and research questions are then presented.

A traveller’s purchase decision involves a series of steps that start with problem recognition, through to information search, evaluating the alternatives, making a purchase decision, and finally post-purchase evaluation (Crotts 1999; Schmidt & Sprang 1996). During the decision process the information search is one of the most important stages that significantly influences and determines the final purchase decision (Hwang et al. 2006). Marketers can influence consumers’ buying decisions during their information acquisition and, therefore, the information search behaviour has been examined widely in consumer literature (Gursoy & McCleary 2004; Schmidt & Sprang 1996).

To realise the full potential of the tourist market it is important for researchers and practitioners in the field to develop a thorough understanding of travellers’ information needs and the ways in which they search for information. Additionally, a traveller’s active search for travel information and planning their trip is an important part of their travel experience (Hwang et al. 2006). Thus, knowledge about how student travellers search for information and the underlying factors that influence their search behaviour provide some initial insights into their travel behaviour, and inform the strategies and factors that may be used to examine and predict their later-stage travel behaviour. In addition, such knowledge enables marketers and practitioners
to effectively design marketing campaigns, choose effective distribution channels and, finally, improve consumers’ travel experiences and satisfaction with the trip.

3.2 Terms and definitions of tourism information theory

Before reviewing relevant literature on tourism information search behaviour, it is necessary to understand some of the basic terms and definitions. These terms form the basis of travel information theories, and are frequently mentioned in the following literature review.

Moutinho (1987, p. 18) defines *information search* as ‘an expressed need to consult various sources prior to making a purchase decision’. Fodness and Murray (1997, p. 506) further extend this concept in the tourism context, stating that the *tourism information search* is ‘the result of a dynamic process wherein individuals use various amounts and types of information sources in response to internal and external contingencies to facilitate travel planning’.

In travel planning circumstances, *information source* refers to the system, person or organisation containing or providing various travel information that is communicated to potential travellers (Gronflaten 2009). For instance, ‘travel agency’ and ‘tourist information centre’ as information sources are organisations that are referred to, while ‘family and friends’ as an information source are the individuals that are referred to in terms of providing information. It should be noted that ‘information source’ is different from ‘information channels’, although some researchers tend to use the two terms interchangeably. Dance (1967) defines *information channel* as the means of sending messages such as by telephone, telegraph, radio, or couriers. In tourism situations, an information channel usually refers to the method used to communicate a piece of tourist information to travellers, such as face-to-face or by telephone (Gronflaten 2009). The current study mainly focuses on examining student travellers’ use of travel information sources for vacation planning rather than through what channels they gathered the information.

Travellers may consult a variety of information sources or a single source for a travel service (Snepenger et al. 1990). The way in which an individual uses one or a combination of information sources is one’s *information search strategy* (Snepenger et al. 1990). It should be noted that when discussing a tourist’s information search strategy, it usually means the *combination* of information sources the tourist uses, rather than ‘simply considering whether or not the tourist has used any one particular source of information’ (Hyde 2007, p.66). The
search strategy is the central part of one’s information search behaviour. Park and Kim (2009) note that the information search behaviour of potential travellers includes what they search and how they search. Therefore, information search behaviour is a macro level of the information search strategy, which includes the information search strategy and its associated aspects (e.g. when to search and, factors influencing the information search strategy such as demographic variables).

The current study is original in seeking to define and make distinctions between these terms that are frequently used in travel information literature. Some researchers who conduct tourism information search studies tend to use them interchangeably, which can be incorrect and misleading. Thus, it is important to clarify these terms before conducting a systematic review of the relevant literature.

### 3.3 Summary of literature on travellers’ information search behaviour

Previous studies have examined travellers’ information search behaviour from different perspectives. According to the primary focus of the research, these studies can be generally placed into several categories: motivation-focused studies, search strategy-focused studies, information search segmentation-focused studies, determinants-focused studies, and other-focused studies (Table 3.1). Table 3.1 summarises some of the important and more recent studies (mostly post-1990) in tourism information search behaviour. It can be seen from the table that most of these studies are conducted to understand the information search strategies of travellers. Some of the studies were located in more than one category, which is because the studies examined more than one aspect of tourists’ information search behaviour. It is also evident from the table that most of the studies conducted are quantitative in nature. Most of the studies focus on respondents from developed countries.
## Table 3.1 Summary of tourism information search behaviour literature

<table>
<thead>
<tr>
<th>Study focus</th>
<th>Author(s)</th>
<th>Year</th>
<th>Method approach</th>
<th>Respondents</th>
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<tbody>
<tr>
<td><strong>Search motivation</strong></td>
<td>Vogt &amp; Fesenmaier</td>
<td>1998</td>
<td>Quant</td>
<td>US inbound travellers</td>
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<td></td>
<td>Nishimura, Waryszak &amp; King</td>
<td>2006</td>
<td>Qual</td>
<td>Japanese outbound traveller</td>
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<td>Nishimura, Waryszak &amp; King</td>
<td>2007</td>
<td>Quant</td>
<td>Japanese outbound traveller</td>
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<td>Bieger &amp; Laesser</td>
<td>2004</td>
<td>Quant</td>
<td>Swiss travellers</td>
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<td>Fodness &amp; Murray</td>
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<td>US travellers</td>
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<td>Gronflaten</td>
<td>2008</td>
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<td>European &amp; US outbound travellers</td>
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<td>Gronflaten</td>
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<td>2006</td>
<td>Qual</td>
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<td></td>
<td>Chen</td>
<td>2000a 2000b Quant</td>
<td>Japan, South Korea, Australian outbound traveller</td>
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<td></td>
<td>Lo, Cheung &amp; Law</td>
<td>2002</td>
<td>Quant</td>
<td>Hong Kong inbound traveller</td>
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<td></td>
<td>Lo, Cheung &amp; Law</td>
<td>2004</td>
<td>Quant</td>
<td>Chinese travellers to Hong Kong</td>
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<td>Chen &amp; Gursoy</td>
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<td>DiPietro et al.</td>
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<td>Davies &amp; Cairncross</td>
<td>2013</td>
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<td>2004</td>
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<td></td>
<td>Arif, Du &amp; Lee</td>
<td>2015</td>
<td>Mixed</td>
<td>University staff and postgraduate students in Australia</td>
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<td></td>
<td>Korneliussen &amp; Greenacre</td>
<td>2017</td>
<td>Quant</td>
<td>Tourists from 27 member countries of the European Union</td>
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<td></td>
<td>Lu &amp; Chen</td>
<td>2014</td>
<td>Quant</td>
<td>Japanese, Chinese and American independent travellers to Taiwan</td>
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<td>Strategy-based segmentation</td>
<td>Woodside &amp; Ronkainen</td>
<td>1980</td>
<td>Quant</td>
<td>US inbound travellers</td>
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<td>1990</td>
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<td>Hyde</td>
<td>2007</td>
<td>Quant</td>
<td>International visitors to New Zealand</td>
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<td>Choi, Lehto, &amp; Morrison</td>
<td>2008</td>
<td>Quant</td>
<td>Chinese visitors to Macau</td>
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<td></td>
<td>Park &amp; Kim</td>
<td>2009, 2010</td>
<td>Quant</td>
<td>US college student</td>
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<td></td>
<td>Nishimura, Waryszak &amp; King</td>
<td>2007</td>
<td>Quant</td>
<td>Japanese outbound traveller</td>
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<td>Chen</td>
<td>2000 a</td>
<td>Quant</td>
<td>Japanese, South Korea, Australia outbound travellers</td>
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<td></td>
<td>Luo, Feng &amp; Cai</td>
<td>2004</td>
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<td>US travellers</td>
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<td>Quant</td>
<td>Hong Kong inbound traveller</td>
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<td>Lo, Cheung &amp; Law</td>
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<td>Quant</td>
<td>Chinese visitors to Macau</td>
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<td>Dey &amp; Sarma</td>
<td>2010</td>
<td>Quant</td>
<td>India inbound travellers</td>
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<td>Kim, Lehto, Morrison</td>
<td>2007</td>
<td>Quant</td>
<td>North America travellers</td>
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<td>Chiang et al.</td>
<td>2014</td>
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<td>Quant</td>
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<td>Quant</td>
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<td>Information value</td>
<td>Cho &amp; Jang</td>
<td>2008</td>
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<td></td>
<td>Cho &amp; Sung</td>
<td>2012</td>
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Note: Quant = quantitative research, Qual = qualitative research
Based on this table, the following sections review theories and relevant findings in the tourism information literature from four main aspects: 1. motivation of travel information search, 2. travellers’ information search strategy and tourism information sources, 3. tourists’ segmentation, and 4. determinants of travellers’ information search behaviour (Figure 3.1).

Figure 3.1 Fields of literature reviewed for this study

3.4 Motivation for the travel information search

Some scholars see motivation as the major antecedent of actual behaviour (Huang et al. 2007). This section focuses on motivation for the information search, defined as ‘the desire to expend effort in the collection and processing of information’ (Schmidt & Sprang 1996, p. 250). Fondness and Murray (1999) note that the primary motivation of travellers’ information search activities is the desire to make better consumption choices of travel products.

A vacation trip is usually a high-risk purchase as it involves purchasing multiple travel products that are mostly intangible, personal services encompassing personal interactions between customers and service providers (Lovelock & Wright 1999; Normann 2001). Furthermore, tourism products are mostly produced and consumed at the same time, creating high personal involvement (Bieger & Laesser 2004). To avoid the associated risks, potential travellers are likely to actively seek more external information about the service or products they would like to purchase (Gitelson & Crompton 1983, 1987).
Considering the motivation for the travel information search, most studies focus on the *functional needs* of consumers; that is, consumers search for travel information to solve certain problems in terms of *decision-making* (e.g. choices of accommodation, transportation, tourism activities). However, Holbrook and Hirschman (1982) and Hyde (2009) claim that sometimes consumers search for travel information for hedonic reasons (e.g. to create feelings, experiences, and emotions) rather than to solve problems (e.g. book accommodation). Vogt and Fesenmaier (1998) propose that tourists have a variety of information needs, identifying five distinct motives underlying the tourist information search: functional, hedonic, innovation, aesthetic and sign motives. The authors question focusing entirely on the functional perspective, and note that travellers are also pleasure seekers in their search activities. Hence, the *hedonic motive* considers the process of information search as a leisure pursuit and an experiential form of entertainment and pleasure (Vogt & Fesenmaier 1998). Cho and Kerstetter (2004) note that hedonic motives emphasises the desire for fun and entertainment. Consumers with hedonic motives tend to use information to imagine the destination and activities. *Innovation motive* means that individuals can have a strong propensity to adopt novel products and information (Hirschman & Holbrook 1982). It focuses on the desire for unique information and being original in destination choices (Cho & Kerstetter 2004). *Aesthetic motive* refers to obtaining information that stimulates imagery for fantasizing by looking at images of beautiful places (Vogt & Fesenmaier 1998). Travellers may also be motivated to gain knowledge about other countries and talk to families or friends, referred to as a *sign motive* (Cho & Kerstetter 2004).

Nishimura, Waryszak and King (2006a) also identified a few needs of travellers other than functional (e.g. learning needs). It is believed that consumers search for travel information beyond pre-purchase decision-making and this is not necessarily functional. The variation of consumers’ information search motives indicates that different travellers may exhibit different information search behaviour (Fesenmaier & Kingsley 1995). Therefore, when examining travellers’ information search behaviour, it is necessary to determine the *basic motives* of their information search activity.

That said, the present study does not seek to examine or measure motivation for the travel information search. The present study mainly focuses on the functional perspective of travellers’ information search; that is, tourists search for travel information with a purpose of *planning* their trip and *make decisions* about various travel products such as accommodation, transportation and tourism activities. It emphasises search activities directed at purchase
situations. It is believed that while consumers may have many motives to search for travel information the functional motives predominate (Vogt & Fesenmaier 1998).

3.5 Travel information search strategy

Most studies on travellers’ information search behaviour focus on the search strategy that tourists use for vacation planning. Some of these studies try to develop typologies of tourists’ information search strategies based on respondents’ use of information sources (e.g. Fodness & Murray 1998, 1999). Some of the studies focus on the process of a traveller’s information search (e.g. Bieger & Laesser 2004). There are also many studies that focus mainly on a marketing point of view, examining the specific sources that were consulted by certain tourist markets to certain destinations (Fesenmaier, Vogt & Stewart 1993; Nishimura, Waryszak & King 2006a). One study examines tourists’ collaborative information search behaviour including their search stages and information flow breakdowns (Arif, Du & Lee 2015). It is argued that, in general, there is a lack of a consistent measurement or construct in terms of examining travellers’ information search strategies.

Fodness and Murray (1998) use a multidimensional scaling (MDS) approach, providing empirical evidence that there are at least three distinct dimensions underlying travellers’ information search strategies: spatial, temporal, and operational dimensions. It is believed that the three dimensions form the basis of a traveller’s information search strategy. The spatial dimension of the information search emphasises the locus of search activity; that is, travellers can search and access relevant information from their internal memory or obtain information from the external environment. The temporal dimension represents the timing of the search activity. The information search can be: pre-purchase, in response to a current purchase problem; or ongoing, building up a knowledge base for an unspecified future purchase decision. The operational dimension indicates the specific source used for decision-making and problem-solving (Fodness & Murray 1998). More discussion in terms of the three dimensions is provided in the following sections.

3.5.1 Spatial dimension of the information search strategy

Engel et al. (1995) define information search as ‘the motivated activation of knowledge in memory or acquisition of information from the environment’ (p.176). Travellers usually start with searching relevant knowledge from their own memory, which is referred to as an internal
search activity. The internal information may have been actively acquired from past searches or experiences, or passively obtained through marketing media influence (Crotts 1999). In tourism situations, tourists’ internal information is usually obtained from their past experiences with the destination, recommendations from other people and exposure to mass media such as advertisements, newspaper/magazine articles and television programming (Vogt, Stewart & Fesenmaier 1998).

From a functional perspective, if the internal information is sufficient to make a decision then the external search for information is unnecessary. On the contrary, if internal information cannot provide adequate information to make a purchase decision then the search process moves on to the external environment (Crotts 1999). An external information search is the act in which consumers seek information outside personal experience (Kotler & Armstrong 1995; Murray 1991). The degree and amount of external information gathered is affected by the internal information stored in one’s long-term memory. As discussed in Chapter 2, Chinese students may still be at an early stage of their travel career and lack travel experience (Xu, Morgan & Song 2009). Therefore, it is proposed that Chinese students may place higher importance on external information sources than internal information when searching for travel information.

3.5.2 Temporal dimension of the information search strategy

In the consumer literature the pre-purchase search refers to an information search related to immediate problem-solving and decision-making. The primary motivation behind a pre-purchase search is in response to a current purchase problem; that is, the functional needs of consumers (Gursoy & Chi 2008). In contrast, an ongoing search is used to describe an information search that does not directly deal with an immediate purchase problem (Bloch, Sherrell & Ridgway 1986). Consumers may simply browse the information on the Internet, read magazines not for purchase intentions. This type of information search activity is independent of solving an immediate purchase problem (Kardes, Cronley & Cline 2011). The primary motivation for an ongoing search is the desire to build up a knowledge base for an unspecified future purchase decision (Bloch, Sherrell & Ridgway 1986).

In the tourism literature many researchers use the temporal dimension to describe the timing or stages of travellers’ information search activities (pre-trip, during-trip, post-trip), which is different from the pre-purchase vs. ongoing ‘temporal dimension’ used in consumer literature.
The current study mainly focuses on the functional motive of travellers’ information search behaviour; that is, travellers search for information for problem-solving and decision-making in terms of an intended trip. Therefore, the temporal dimension is used to describe the timing or stages of travellers’ information search activities in this study. In particular, the current study focuses on travellers’ pre-trip and during-trip information search behaviour. Specifically, it explores whether Chinese student travellers use information sources differently during the pre- and during-trip stages. If so, what information sources are more likely used at each planning stage?

The ongoing nature of the tourism information search implies that the tourism information search lasts until the end of the trip (Bieger & Laesser 2004), and travellers’ information search strategies may differ at each travel stage (e.g. pre-trip, during-trip, post-trip) (Bieger & Laesser 2004; Fesenmaier & Jeng 2000; Stewart & Vogt 1999; Woodside & King 2001). For instance, on the one hand, travellers may search for and are more likely to use certain information sources for air ticket and accommodation decisions prior to their actual trip, as these product categories are considered essential for most leisure trips and are less likely to change. On the other hand, tourists tend to search for travel information for activity decisions, such as where to eat and what to do and see, during the trip (Card, Chen & Cole 2003; DiPietro et al. 2007; Jun, Vogt & MacKay 2007). Some travellers are more likely to conduct a comprehensive search for activities and plan every detail before starting the trip, while others may have minimal pre-trip searches and planning, and prefer to have some freedom and act more impulsively during the trip (Choi, Lehto & Morrison 2008). Existing evidence suggests that the temporal dimension is an important component of a systematic analysis of travellers’ information search behaviour.

Given the importance of the temporal dimension (timing of the travel information search), it is surprising that most previous studies have focused exclusively on the pre-trip stage. Most of these studies assume that travellers make all trip decisions at home before starting the trip, with the decision not changing thereafter (Hwang & Fesenmaier 2004). This assumption neglects the dynamic process of travel decision-making, in that travellers face various situations during their trip and may need to adjust decisions and plans, and gather further information for new circumstances (DiPietro et al. 2007; Sirakaya & Woodside 2005). On the one hand, the current study suggests that future research should pay more attention to the temporal dimension of the tourism information search, and view travellers’ information search behaviour as an ongoing process. On the other hand, it is important for marketing managers to understand whether
promotion strategies employed are in accordance with the timing of tourists’ information needs and decision-making (Choi, Lehto & Morrison 2008). By adjusting promotions to the time when consumers need information and are receptive to the information, marketing managers are more likely to achieve a competitive marketplace (Choi, Lehto & Morrison 2008).

3.5.3 Operational dimension of the information search strategy

Consumers use various information sources for vacation planning; however, these information sources have different levels of influence on travellers’ decision-making. For instance, some information sources do not have a major impact on one’s decision-making; however, they may ‘stimulate awareness or interest and may broaden the user’s knowledge base’. These information sources are perceived ‘useful but not sufficient for decision-making’, and therefore are contributory (Fodness & Murray 1998 p.109). Some information sources have major influences on travellers’ decision-making, and are both necessary and sufficient for choosing a service, and therefore are decisive (Engel, Warshaw & Kinnear 1991). Fodness and Murray (1999) note that information from one’s own experience, friends or relatives, and travel agencies are more likely to be decisive, and have a major impact on travellers’ decisions. Jun, Vogt and MacKay (2007) found that online information was used more often for knowledge building rather than decision-making, and many online information searchers switch to offline for their purchase.

When examining the operational dimension of an information search strategy one important indicator is whether information sources were used in conjunction with other sources, or were used as the sole source for trip planning (Fodness & Murray 1999). Fodness and Murray (1998) found that commercial guidebooks, travel guides and brochures tended to be used in combination with three or more other sources. These sources are less likely to play a major role in travellers’ decision-making however, contribute to trip planning; therefore, are more likely to be contributory sources. Personal experience, travel agencies and friends or relatives were the three sources most likely to be used alone for decisions about where to go, what to do, where to eat, where to stay, etc., therefore are more likely to be decisive sources.

The operational dimension (specific source(s) used for travel decision-making) has been widely examined in travellers’ information search studies. However, most of these studies neglect to consider that the type of travel product influences the choice of specific information source. For instance, online information was found to be important for choosing airflights and
accommodation (DiPietro et al. 2007; Hyde 2007; Jun, Vogt & MacKay 2007); however, it is not so important for tourists to choose travel activities (Hyde 2007). Nishimura et al. (2006) investigated Japanese outbound travellers’ information search behaviour and found that the travel guidebook was used particularly heavily for destination, local transport, places to visit, meals and shopping information. A travel agent was used by the largest number of respondents for information about accommodation. These findings suggest that it is necessary to consider the type of travel product that consumers are purchasing when determining the operational dimension of their information search strategy.

Travel products in general can be categorised into four types: lodging/accommodation services; transportation services; recreational activities, such as visiting places of interest and sightseeing; and entertainment activities, such as finding places to eat or going to a nightclub (DiPietro et al. 2007). Pearce and Schott (2005) found that travel agents and online information are effective sources for transportation decisions, while guidebooks and word-of-mouth are primarily used for lodging and attraction decisions. Scholars suggest that, from both a theoretical and practical perspective, it is necessary to study the importance of specific information sources that tourists use for different tourism services (Fodness & Murray 1999; Seabra, Abrantes & Lages 2007).

In sum, the three dimensions describe the basic aspects of travellers’ information search behaviour: ‘where the search takes place’ (internal vs. external), ‘when the search takes place’ (pre-trip vs. during-trip), and ‘what specific sources are used for decision-making’ (decisive vs. contributory). The three dimensions have been supported by many tourism scholars who have investigated tourists’ information search behaviour. However, rarely have studies examined all three dimensions or used the three dimensions to describe the information search strategy of a tourist market. It is the purpose of the current study to examine and describe the information search strategy with the three dimensions to provide a comprehensive understanding of Chinese international student travellers’ information search behaviour.
### 3.6 Tourism information sources

#### 3.6.1 Information source typology

When examining tourists’ information search strategies, one important consideration is the available information sources at the marketplace. Travellers consult various sources of information prior to making various purchase decisions (Moutinho 1987). Whether internal or external, pre-purchase or ongoing, or some combination of these, one’s search activity is constrained by the actual sources of information available (Fodness & Murray 1998).

Various information sources can be grouped into several information source *typologies* based on their *nature* and *characteristics*. For instance, Gitelson and Crompton (1983) classify various travel information sources into five types: friends and relatives, destination-specific literature, consultants, broadcast and print media. Similarly, Snepenger and Snepenger (1993) note tourists generally use four types of external information sources: destination-specific literatures (e.g. travel books, magazines, brochures), personal sources (e.g. recommendations from family, friends and other social networks), travel consultants (e.g. travel agents, tour operators and destination information centres), and mass media (e.g. TV/radio commercials, documentaries, newspapers). This classification is relatively more advanced compared to Gitelson and Crompton (1983), as it eliminates the ambiguity between ‘destination-specific literature’ and ‘print media’. However, it brings another problem in that a ‘destination information centre’ provides not only consultants but also travel literature (e.g. brochures) to customers, therefore it is inaccurate to simply place ‘information centre’ under ‘travel consultant’. In addition, some authors believe that travel agents are credible and reliable personal information sources (Mitra, Reiss & Capella 1999; Murray 1991).

Vogt, Stewart and Fesenmaier (1998) propose four types of information sources: social, personal, marketing and editorial. Fodness and Murray (1997) divide information sources according to whether the source is commercial or non-commercial, and personal or impersonal. Common problems with these categorisations is that some information sources fit into more than one category. For instance, travel brochures can be commercial or non-commercial, while information centres can be personal or non-personal.

Carr (2007) generally classifies various information sources into two types: formal and informal sources. ‘on the one hand, formal information is purposefully designed to convey a consistent message about the qualities of a place or environment’ (Raitz & Dakhil 1989). On
the other hand, informal information is received from talking to friends, family or other travellers in a casual and unstructured way (Mathieson & Wall 1982). According to this classification, travel literature, travel consultants and mass media are formal information sources, while personal sources such as recommendations from family/friends and travellers’ personal experiences are informal sources. Carr (2007) suggests that people trust and prefer to utilise informal sources of information rather than formal ones. Baloglu and McCleary (1999) found tourists always start information searching from informal personal sources such as from family and friends. It seems that informal information sources are more influential in travel decision-making than formal sources. This classification brings less ambiguity; however, it is too broad in terms of information segmentation. For instance, travel agencies and travel brochures are both formal sources, but may play very different roles in terms of providing information to potential tourists. It is obvious that more studies are needed in terms of appropriate categorisation of various information sources.

One relevant consideration associated with the source categorisation is in which category or categories online information should be placed. Online information as an information source is significantly different to traditional sources in terms of its accessibility and convenience in updating, being a real-time information service and interactive communication (Bonn, Furr & Susskind 1999). It can be argued that websites with commercial travel content belong to the commercial or formal categories. However, some of these websites also contain personal comments from individual travellers, which is non-commercial and informal. Travel magazines and other publishers also use websites as a medium to publish travel stories that can be labelled as travel literature or editorial content (Tjøstheim 2002).

Thus, online information should not be simply categorised into a certain type of category. In addition, when examining travellers’ online information search strategies it is necessary to find out the specific types of websites travellers use for vacation planning. Researchers should note that different travel websites represent different types of information. However, this has been largely ignored by scholars investigating travellers’ information search behaviour. Most of the studies treat online information as one type of information without specifying the specific type of websites travellers used. The current study investigates both the type of information source and type of websites Chinese student travellers use for their vacation planning in Australia.
Another consideration in terms of classifying information sources is the way in which potential travellers search for and obtain information: *actively* and *non-actively* (Midgley & Graduate 1989). In the case of an active search, consumers seek for information with a *purpose*, such as to reduce uncertainty of purchasing a travel service (e.g. accommodation), and make better choices (Kotler & Armstrong 1995). Searching for travel brochures, going to travel agencies and seeking recommendations from family/friends are active information search strategies. In contrast, when consumers do not request the information and instead encounter mass-targeted messages from reading newspapers and watching TV, such information sources are known as mass media (Gensch 1970; Newman & Stealin 1973).

‘Mass media refers to information sources that broadcast at a wide level through television, press or radio’ (Seabra, Abrantes & Lages 2007, p. 1543). Previous studies have found that mass media, especially advertisements on TV and magazines, are not so important in terms of making a purchase decision for a travel product (Hyde 2007; Jun, Vogt & MacKay 2007), and are the least-trusted information sources by consumers (Crotts 1999). However, mass media plays an important role in influencing potential tourists to know about a destination and in image formation for the destination (Davies & Cairncross 2013; Moyle & Croy 2009; Sparks & Pan 2009). Similarly, Seabra, Abrantes and Lages (2007) found that mass media are important in terms of bringing potential tourists’ attention to a destination. However, when tourists plan their trips and make purchase decisions they tend to rely on *non-media information sources*. For instance, Sparks and Pan (2009) found that more than 60% of Chinese respondents sampled used television programs to learn about a destination. However, when making a decision regarding destination or travel services, tourists tend not to rely on such information.

The current study mainly focuses on students’ active information search strategies, therefore mass media are not included in the examination. The following literature discusses seven travel information sources that are commonly used by travellers in the current marketplace.
3.6.2 Travel agencies

Travel agencies are a source of information that are geographically close to the tourist and provide value to tourists by searching for various information on their behalf, and provide individualised information (Seabra, Abrantes & Lages 2007). Tourists consult travel agents about routes, accommodation and activities at the destination (Shoemaker 1984). Some tourists also prefer to book their trips or some of the travel items (e.g. flight, accommodation, tickets) through travel agents.

There is a suggestion that travel agencies will gradually be replaced by online information because of the convenience of online booking, while others posit that travel agencies will still be an important information source in the tourism industry (Connolly & Olsen 2001). This is because many tourists prefer the human interaction and personal advice when booking services through travel agents (Morrison & King 2002). However, some tourists consider that ‘travel agents are business-minded and place their financial incentives higher than the interests and needs of their customers’ (p.61). Therefore, they are less likely to use this information for travel planning (Chiappa 2013). Ryan and Xie (2003) found that travel agents are highly used by package and group travellers and less used among independent travellers. Researchers indicate that business travellers are more likely to rely on information from a travel agency than people travelling for other purposes (Chen 2000a; Gursoy & Chen 2000; Lo, Cheung & Law 2002). Gronflaten (2009) investigated European travellers’ information search behaviour and found that travellers prefer travel agents under the following conditions: on an organised tour, on business or holiday (not visiting friends or relatives), when older than 59, and/or from Holland. It seems that travel agencies may not be a popular information source for Chinese international students who are younger in age, mainly independent travellers and who prefer making their own travel arrangements (King et al. 2013; Ryan & Zhang 2007; Liu & Ryan 2011).

3.6.3 Travel guidebooks and travel brochures

Travel guidebooks and brochures are print information sources, traditionally known as travel literature. However, guidebooks are different from tour brochures in that service and attraction providers can pay to advertise or be listed in commercial brochures, while they have no direct control over the content published in guidebooks. The service providers need to provide a quality service and product, and perhaps be willing to host book writers to be acknowledged in the book (Pearce & Schott 2005). These non-commercial characteristics make guidebooks a
more reliable information source than other commercial literature.

On the one hand, a travel guidebook generally provides information for travellers to a particular destination (city, region, country or continent) (Nishimura, Waryszak & King 2006a). Guidebooks provide value to potential travellers by delivering comprehensive information about destinations and travel components, which help potential tourists to imagine and experience the likely atmosphere to be encountered (Nishimura, Waryszak & King 2006b). Carter (1998, p. 351) also noted that travel guidebooks are important because ‘they construct a sense of place for travellers before they have experienced it themselves’.

Nishimura, Waryszak and King (2006a) found that Japanese travellers use guidebooks for various purposes, prior to, during and even after travel. Hyde (2007) found that first-time travellers to New Zealand perceive guidebooks as a useful information source for destination sites and tourism activities. Guidebooks are more popular among certain groups of tourists. For instance, it is an important information source for younger travellers and during the trip, particularly among backpackers. Lonely Planet is the most commonly used guidebook, and is perceived as the ‘backpackers’ bible’ (Richards & Wilson 2003). The research (Richards & Wilson 2003) indicates that travellers over 26 years old were significantly more likely to use guidebooks during their trip than younger respondents. Experienced travellers are also more likely to use guidebooks with them during their trip than inexperienced travellers. It is noted that these travellers (e.g. backpackers, older travellers, experienced travellers) are more likely to plan longer visits to more ‘difficult’ destinations which require higher levels of planning, and a guidebook can be an effective information source for such trips (Richards & Wilson 2003).

On the other hand, a travel brochure is a conventional communication tool frequently used by tourism services (Getz & Sailor 1994; Wick & Schuett 1991, 1993). Travel agencies and operators typically use this type of information source to provide customers information about hotels, destinations and recreation parks (Gursoy & Umbreit 2004). It is regarded as one of the major sources used by tourists for trip planning (Fodness & Murray 1999; Gursoy & Umbreit 2004; Raitz & Dakhil 1989; Snepenger et al. 1990).

Brochures can be institutional or commercial (Seabra, Abrantes & Lages 2007). Institutional brochures come from tourism organisations or local public organisations, while commercial brochures come from private tourism service companies (e.g. hotels, restaurants) (Seabra, Abrantes & Lages 2007). One study found that tourists often use commercial brochures to
choose a travel destination (Bieger & Laesser 2000). However, they are more likely to use institutional travel brochures as a key source of information when planning their trips. Compared to commercial brochures, institutional brochures are more informative and reliable as public organisations produce them and are non-commercial in nature (Bieger, Laesser & Gallen 2000; Nolan 1976).

### 3.6.4 Destination tourist information centres

Fesenmaier, Vogt and Stewart (1993) note that tourist information centres are an important information source used by a state to encourage travellers to stay and sightsee within the destination. They provide the opportunity for travellers to obtain various types of information such as local maps, tourist brochures on accommodation, attractions and recreation activities. Most destination information centres are staffed to provide travel suggestions to travellers or to assist travellers with the execution of their itineraries.

The ultimate purpose behind the information products offered at a tourist information centre is to influence a travel group by creating attention and interest in destinations and attractions (Fesenmaier, Vogt & Stewart 1993). Many small attraction providers depend on disseminating brochures at tourist information centres to generate local awareness (Pearce & Tan 2004). Fesenmaier, Vogt and Stewart (1993) found that travellers on a ‘close-to-home leisure trip’, a ‘touring trip’, or an ‘outdoor recreation trip’ were much more likely to be influenced by the information obtained at an information centre. Travellers on other types of trips, such as ‘visits to family or friends’, ‘business trips’, ‘city trips’, ‘resort trips’, ‘theme park or special event trips’ or ‘personal/family-related trips’, were less likely to be influenced by information centres’ services.

### 3.6.5 Personal recommendations

A recommendation from family and/or friends is positive word-of-mouth communication between consumers, and is acknowledged as one of the most effective communication tools affecting consumers’ purchase decisions (Bansal & Voyer 2000; Wang, Severt & Rompf 2006). Studies have indicated that consumers purchasing products for pleasure and fantasy are more likely to seek the advice of those with similar experiences because of the emphasis on the experiential aspects of the products (Assael et al. 2007). As a result, travellers are more likely to rely on the recommendations of their friends and relatives than other consumer groups.
Tourism services are perceived as high-risk purchase products, and consumers are more likely to rely on personal information sources to make purchase decisions. (Mitra, Reiss & Capella 1999). It is believed that informal personal sources ‘are often credited with greater reliability and authenticity than more formal sources’ (Laing 1987, p. 275), therefore consumers place a greater level of trust on information obtained from their family and friends (Carr 2003). In addition, one study found personal information sources are more important when travellers perceive higher risk of a purchase decision (Murray 1991). The preference for personal recommendations is mainly due to two reasons: flexibility and credibility (Mitra, Reiss & Capella 1999).

3.6.6 Online information

The growth of the Internet and the increasing adoption of smartphones has had a strong impact on tourists’ information search and planning behaviour (Hyde 2007; Lo, Cheung & Law 2004; Tjøstheim 2002). The Internet has become one of the main preferred and credible sources of information for travellers (Law, Buhalis & Cobanoglu 2014; Xiang, Magnini & Fesenmaier 2015). This is especially true for younger travellers who are noted as being technology savvy and are identified as the ‘net-generation’ (Bai et al. 2004). Many studies have indicated that online information is the most important information source for younger travellers, especially university students (Michael, Armstrong & King 2004; Richards & Wilson 2003; Ryan & Xie 2003; Xu, Morgan & Song 2009). As such, online information can be used as an effective information source to target and communicated with the university student market.

The Internet not only has changed travellers’ behaviour but also brought great transformation to the tourism industry (Amaro & Duarte 2015). Before the emergence of the Internet, tourism companies such as airline, cruise, hotels, and car rentals had been heavily reliant on travel intermediates (e.g. travel agents) to disseminate information and sell their products and services. With the wide use of the Internet, travel suppliers can bypass intermediaries and reach consumers and communicate to them directly (Amaro & Duarte 2015). This suggests that tourism companies can be more proactive in terms of effectively communicate to and manager their customers, and increase their business by fulling consumers’ need and want (e.g. provide lower prices or discount).

There is a proposition that the use of online information may replace the use of traditional offline information sources as it is becoming easier for tourists to gather travel-related
information from the Internet (Luo, Feng & Cai 2004; Oorni 2004). Research has found that 50% of US leisure travellers purchase their personal travel online (Gronflaten 2009). Others claim that online information is not likely ever to become a sole information source for travellers due to its limitation of providing personalised and face-to-face service to customers (Gronflaten 2009). Studies have found that many consumers like to search and purchase products offline to enjoy the opportunity for social interaction (Beliveau & Garwood 2001; Forman & Sriram 1991). Xiang et al. (2015) found that while the Internet has become the most important information source of travel, traditional media such as TV, newspaper/magazines, radios, and even movies remain relevant and some of them have grown to become more important in the past several years. The authors suggest that this may be because ‘these traditional sources are complementary to the Internet in many different ways, and travellers are consciously seeking a variety of information in order to form a more comprehensive, less biased judgment of the targeted travel products’ (p.522). Therefore, researchers suggest that online information cannot fully replace traditional offline information sources, and tourists who use online information also make use of other offline information sources (Hyde 2007; Oorni 2004).

Compared to traditional offline information sources there are several advantages associated with online information, making it an increasingly popular information sources for vacation planning. First, there is an enormous amount of information available online, which covers various aspect of information needed by travellers (Hyde 2009). Second, online information provides up-to-date information on inventories and price for consumers to compare different suppliers (Hyde 2009; Kah, Vogt & MacKay 2008; Pan & Fesenmaier 2006; Tjøstheim 2002), making it easier for travellers to make a purchase decision. Third, travellers can reduce total search time and cost by having greater control over various aspects of the information acquisition process (Anckar 2003; Hyde 2009). Different from traditional offline information sources, online information eliminates the temporal and spatial limits of information search activities (Hyde 2009; Tjøstheim 2002). With the adoption of high-tech technology, particularly the use of mobile devices such as smartphones, tablets, and other handheld devices, travellers can search information from anywhere at any time when there is access to the Internet. This makes the information search and travel planning more flexible for travellers. The flexibility allows tourists to have less prior planning and more en-route planning. They can also change their plans if the planned activities did not meet their expectation (Wang, Xiang & Fesenmaier 2014). The smartphone is particularly useful for during trip planning, and it is the most
convenient solution to search information about destination geographic environment, arrange activities and cope with the unexpected situations (Wang, Xiang & Fesenmaier 2014). Travellers can also decide which website to visit, when to visit the website, and how long to stay on the website. Wang, Xiang & Fesenmaier (2014) concluded that the use of the mobile devices for information acquisition led to the perceptions such as ‘more informative’, ‘getting better value from trips’, ‘more confident about travel’. Finally, interactive communication that links travellers with travellers, and travellers with suppliers, provides new opportunities for tourism distribution, thereby restructuring the entire tourism industry (Gronflaten 2009; Inkpen 1998). In addition, Xiang et al. (2015) suggest that ‘today’s Internet offers information with higher quality, higher economic value, and richer experiences for travellers’ (p.522). This could be attributed to ‘information providers’ improved knowledge of website design, strengthened security measures, and increasingly sophisticated strategies to offer personalised products and services’ (p.522).

When examining consumers’ use of online information for vacation planning, most previous research treats online information as a single source, and does not distinguish between the different types of websites that travellers used. Gronflaten (2009) notes that when a choice of online information is reported it is unclear whether the respondents have used the online travel agent, service provider or other information sources. Many travel services sold online are still sold by travel agents or other tourism companies. Therefore, it is inadequate and misleading simply to imply that consumers searched for and purchased services using a travel agent or online information (Gronflaten 2009). In Europe, most of the airline tickets and accommodation sold online were booked directly from the airline companies and travel agencies (European Online Travel Report 2008). It is suggested that when examining travellers’ use of online information researchers should note that different travel websites represent different types of information.

One study concluded that travellers mainly use nine types of websites to search for travel-related information on the Internet: official destination websites, travel agency/tour operator websites, airline or other transportation websites, hotel or other accommodation websites, travel magazine websites, online travel guides, travelogues or online travel communities, consumer magazines and news media websites, maps or weather sites (Choi, Lehto & Morrison 2008).
3.6.6.1 Consumer generated content websites

In recent years various forms of consumer-generated content (CGC) or user-generated content (UGC), such as blogs, social networks and media such as YouTube, have become increasingly popular among travellers who use online information (Gretzel 2006; Pan, MacLaurin & Crotts 2007; Xiang & Gretzel 2010). The emergence of UGC has deeply changed consumer behaviour and marketing approaches on the Web (Ayeh, Au & Law 2013). The impact of UGC and SNSs on tourism and hospitality industry and tourists’ information search behaviour are reflected in many ways. For instance, the UGC sites and SNSs has had great impacts on the customers relationship development by firms (Amaral, Tiago & Tiago 2014). Mizrachi and Sellitto (2015) suggest that social media has become a major information platform allowing business to engage with tourists. Simultaneously, social networking sites (SNS) are shifting the methods of social communication and interaction (Amaral, Tiago & Tiago 2014). For travellers, the UGC sites and SNSs offer an unequalled platform to share their experiences and opinions online using text, photographs and videos through consumer review sites, social networking sites, blogs, and media sharing sites (Ayeh, Au & Law 2013). As O’Connor (2010) described, ‘the Internet is evolving from a push marketing medium to one where peer-to-peer generation and sharing of data are the norm’ (p.754). It also allows consumers to gather information and plan their own trips (Amaral, Tiago & Tiago 2014). It is suggested that the UGC travel websites and social network sites (SNSs) are increasingly becoming a major source of travel information.

Many recent studies have investigated the role of UGC and SNSs in travel information search and travel planning process, and the extent to which travellers use UGC for information search and vacation planning. Findings support the proposition that consumers in tourism and hospitality industry use UGC and SNSs widely for information search. In addition, these are a major source of information for travel planning and decision-making. A number of studies indicated that user generated travel reviews are useful for travellers when deciding where to go (destination), there to stay (accommodation) and what to do at the destination (activities) (Chen et al. 2015; Hernandez-Mendez, Muñoz-Leiva & Sanchez-Fernandez 2015; Jin & Phua 2016). Furthermore, there is evidence to suggest that UGC significantly impacts consumers’ decisions on hotel and restaurant choosing and booking (Amaral, Tiago & Tiago 2014; Amaro & Duarte 2015; Chiappa 2013; Ladhari & Michaud 2015; Mauri & Minazzi 2013). Savolainen (2015) found that UGC provide three main types of information support for consumers’ leisure travel planning: providing factual information, providing advice, and providing personal opinion. The
using of social media ultimately impacts travellers’ buying behaviour. In terms of the extent to which consumers use this type of information, Amaral Tiago and Tiago (2014) found that tourists use social media before the trip to search information and choose travel destinations and get ideas and information about the destination. They also use social networks during trip to seek additional information about the ‘place, events in the tourist local and also to contact friends and comment the holiday experience’ (p.141). In the post trip stage, consumers use social media networks to share photos and experiences to family and friends. In addition, the study found that 60% of respondents use TripAdvisor to check online reviews before buying tourism product or service, and 80% of them are influenced by the reviews or electronic word of mouth (eWOM).

The increasingly importance of social media in travel planning has drawn some scholarly attention regarding the credibility of user-generated content (UGC) on such Web sites (Law, Buhalis & Cobanoglu 2014). Finding suggest that consumers in tourism and hospitality in general consider UGC sites and SNSs as a credible source of information, and are likely to make decisions based on this type website. In addition, Fotis, Buhalis and Rossides (2012) found that social media are acknowledged as a more trustworthy source of holiday’s information than other resources by travellers. Sparks et al. (2013) found that tourists treat specific information posted by customers as most useful and trustworthy. These user generated contents include ‘positive or negative comments made by potential, current or former customers regarding a brand, product or service that is available to other clients and or organisations via the Internet’ (p.140), and are regarded as e-WOM (Amaral, Tiago & Tiago 2014). Traditional WOM and eWOM are similar in nature (Leung et al. 2013). However, eWOM differs from traditional WOM mainly by its convenience, scope, source, and speed of interactions (Cantallops & Salvi 2014; Ladhari & Michaud 2015; Luo & Zhong 2015). eWOM could provide information with an access beyond the boundaries of one’s immediate social circle. When searching information on social media, consumers can not only get travel information from their social networks such as family and friends, but also acquire more extensive information from Internet users around the world (Ladhari & Michaud 2015; Leung et al. 2013). It is noted that compared to traditional WOM, online WOM is more influential due to its ‘speed, convenience, one-to-many reach, and its absence of face-to-face human pressure’ (Cantallops & Salvi 2014, p. 41).

Studies have also investigated the factors or elements that influence travellers use of UGC or
SNSs for information search and decision making. For instance, Tham, Croy and Mair (2013) report that perceived enjoyment and ease of use of UGC are two important factors determining the use of UGC for trip planning purposes. Ayeh, Au and Law (2013) confirmed this finding, and identified the significant roles of perceived usefulness, perceived ease of use, and perceived enjoyment in predicting travellers’ attitude and intention to use CGM for travel planning. In addition, it is suggested that hedonic value can be predominant in driving the utilitarian use of CGM (Ayeh, Au & Law 2013). Therefore, perceived enjoyment is the strongest predictor of consumers’ attitude toward UGC sites (Ayeh, Au & Law 2013). Similarly, Chen, Shang and Li (2014) found that interest of blogs’ content affect tourists’ attention and influence their decisions. Another key element that influence consumers’ use and trust of UGCs is the commonalities among the consumers who generate the comments and reviews and those who use them (Ayeh, Au and Law 2013). Ayeh, Au and Law (2013) suggest that this relationship may be explained by the theory of homophily that is, people often regard others who are similar to them as credible sources. In addition, the authors noted, homophily not only describes similarity in terms of demographic characteristics and lifestyle, but also refer to shared interest and shared mind-set. Consumers who search for travel information are more likely to trust the source of CGC that is similar to their interests, and then use it for travel planning (Ayeh, Au & Law). Studies have also identified other factors that affect consumers’ intention to use UGC sites for travel planning. For instance, Chen, Shang and Li (2014) examines travellers’ use of travel blogs and found that novelty, understandability, and interest of blogs’ content affects consumers’ usage and enjoyment of the blog. Filieri and McLeay (2013) found that product ranking, information accuracy, information value-added, information relevance, and information timeliness are strong predictors of travellers’ adoption of information from online reviews on accommodations. Nusair et al. (2013) examine the contribution of Generation Y travellers to online tourism-related social communities and found that there is a positive relationship between perceived utility and trust and commitment.

All the evidence suggest that consumers rely increasingly on UGC for travel information search and decision-making. However, most of these studies are based on findings of general consumers of tourism and hospitality industry (Amaral, Tiago & Tiago 2014; Amaro & Duarte 2015; Ayeh, Au & Law 2013; Chen et al. 2015; Chiappa 2013; Hernandez-Mendez, Muñoz-Leiva & Sanchez-Fernandez 2015; Jin & Phua 2016; Mizrachi & Sellitto 2015; Sparks, Perkins & Buckley 2013). A number of studies particularly focus on young travellers or university students. However, these are mostly based on consumers from US or other developed countries.
Although many studies have indicated that online information is the most effective source to reach university student markets (Michael, Armstrong & King 2004; Richards & Wilson 2003; Xu, Morgan & Song 2009), there is limited understanding in terms of to what extend Chinese student travellers use various types of travel websites, especially the extent to which these students use and trust UGC or SNSs for travel information search and trip planning. Therefore, the current study also attempts to examine the extent to which Chinese students use different types of travel websites. In addition, by using in-depth interviews, it is expected to find out students’ perceptions toward UGC and SNSs as an information source for travel planning and decision-making.

3.7 Tourist segmentation based on the information search strategy

Using the combinations of information sources tourists use, researchers have identified some homogeneous groups of travellers. For instance, Snepenger (1990) found three types of first-time visitors to Alaska: visitors who use travel agents as the sole source of information, visitors who use a travel agent plus other sources, and visitors who use sources other than a travel agent. Fodness and Murray (1997), using multivariate cluster analysis, found three types of tourists: active searchers, passive searchers, and possessive searchers. The active searcher is characterised as using a variety of information sources, the passive searcher focuses on consulting friends and relatives and highway information centres, and the possessive searcher mainly uses personal experience and consultation with friends and relatives (Fodness & Murray 1997).

It is argued that travellers’ search behaviour should be categorised in a more comprehensive way, and there is a scarcity of multi-indexes to classify travellers into unique categories (Park & Kim 2009). Snepenger and Snepenger (1993) and Choi et al. (2008) segmented tourists using both direction of search (specific sources consulted) and degree of search (number of information sources and/or time spent on search activity) to distinguish the specific search behaviour of a tourist market. Snepenger and Snepenger (1993) found three types of tourists: routine, limited and extensive information seekers. An extensive information seeker employs an information search strategy that has both internal and external components, and tends to spend a longer time on information searching, processing and evaluating (Snepenger & Snepenger 1993). This type of tourist tends to perceive higher financial, social and/or psychological risks associated with vacations, involving an elaborate purchasing process.
Specifically, these travellers make significant use of destination-specific literature (e.g., travel brochures, maps, travel guides) and travel consultants (e.g., travel agents, tour operators) (Snepenger & Snepenger 1993). At the other extreme, a routine information seeker incorporates much less effort and time, and makes decisions on a regular basis. Routine decision-making is usually for travellers who take vacations such as repeat visits to family and friends or trips made to the same destination each year. The information search is limited to travellers’ previous experiences, with little or no external information search involved (Snepenger & Snepenger 1993). Finally, limited decision-making lies in between extensive and routine decision-making, having an internal search component and limited external component (Snepenger & Snepenger 1993).

Using a similar segmentation approach, Choi, Lehto and Morrison (2008) identified four unique groups of first-time Chinese tourists to Macau: minimal information seekers, active seekers, package travellers, and independent travellers. The minimal information seeker exhibited the lowest usage of most information sources. On the contrary, the active seeker searched information from almost every source and across all decision stages. Package travellers were more dependent upon information from travel agents and tour operators. Finally, and of most relevance to the present study, the independent travellers from China were more focused on searching for information using specific sources, such as travel guidebooks and printed travel brochures (Choi, Lehot & Morrison 2008).

Whilst the tourist segments have been identified, it is necessary to evaluate the relative performance of the segmentation approach. Fodness and Murray (1997, p.508) noted there are three evaluative criteria: 1) ‘how well does each segmentation mode discriminate across the total sample on the descriptor variables?’, 2) ‘does each segmentation mode generate segments of sufficient size to be of consequence?’, and 3) ‘do the segments created make “good marketing sense?” An effective segmentation approach provides useful insights into tourist market in terms of the personal and/or trip characteristics, which is important for destination marketers.

Fodness and Murray (1997) compared approaches to segmenting leisure tourists using the degree of search (number of sources used and amount of time devoted to search activity) versus the direction of search (specific sources used). The results suggest that the degree-based approach is more appropriate and superior than the direction-based approach in providing insights into tourist behaviour. Specifically, while both approaches generated segments based
on their search behaviour only the degree-based segments show a statistically significant difference in terms of demographic, socioeconomic and trip variables (Fodness & Murray 1997).

An effective segmentation approach provides more insight into the characteristics of tourist markets and helps with a better understanding of their associated information search behaviours. For instance, Cho and Jang (2008) found that active seekers in particular are younger in age (less than 30 years old), stay longer at the destination and start planning their trips earlier than other segments. Most of the package travellers visited Macau on all-inclusive package tours and were relatively older and less educated. In contrast, independent travellers were more likely to arrange trips themselves and were better educated and younger in age. In addition, they are more experienced in international travel than other tourist groups and are more confident to travel to unfamiliar places and find the desired information from preferred sources. This group of tourists also more likely to conduct ongoing information search activities, seeking more information after arriving in Macau.

It is evident that each subgroup of the tourist segment exhibits specific search patterns and preferences for information sources, and the groups of tourists (e.g. active searchers, passive searchers) can be predicted based on their demographic and/or trip-specific characteristics with an effective segmentation approach. Effective market segmentation, requiring a full understanding of travellers’ information search behaviour, is fundamental for practitioners to position and communicate to the tourists efficiently. It helps the tourism marketer to turn potential travellers into actual travellers by using personalised market strategies (Park & Kim 2009).

However, there is no widely-accepted answer in terms of which is the best segmentation approach. Fodness and Murray (1997) note that the most appropriate segmentation approach depends on the purpose of the research. For the current study, the primary purpose is to have a comprehensive understanding of student travellers’ information search behaviour. Specifically, it is the purpose of the current study to find out if and how student travellers can be segmented on the basis of their information search behaviour. Thus, segmenting tourists using both degree and direction of information search is probably more appropriate and useful than using just one of the variables. In addition, it is important to understand the characteristics of each segment in order to better understand the market and offer customised and appropriate information (Park & Kim 2009).
3.8 Factors influencing travellers’ information search strategies

There are a series of factors that may influence or are associated with differences in tourists’ choice of information sources. These can be generally categorised as travellers’ personal characteristics and trip-specific factors. On the one hand, travellers’ personal characteristics such as nationality, age, gender, education level, socio-economic status and personal values, have been found to influence the choice of search strategy (Fodness & Murray 1999; Luo, Feng & Cai 2004). On the other hand, a number of trip-specific variables have been discussed mostly in the context of the travel information search: purpose of trip, travel party composition and previous travel experience. The findings are, however, sometimes inconsistent.

3.8.1 Travellers’ personal variables

It is important to note that different consumer segments can exhibit very different search patterns for the same product (Quester et al. 2014). Travellers’ personal characteristics affect perceptions of expected search benefits and costs, and therefore affect a traveller’s preference for specific information sources (Quester et al. 2014).

3.8.1.1 National culture background

Culture has been considered a key factor that is likely to influence travellers’ behaviour in the decision-making process (Cho & Sung 2012; Kim & Mckercher 2011). In terms of travel information search, scholars suggest that culture directs an individual’s thinking and determines what forms of communication are acceptable; therefore, culture influences the nature and the degree of external search a traveller conducts (Chen 2000b; Chen & Gursoy 2000; Engel, Blackwell & Miniard 1995; Gursoy & Chi 2008; Gursoy & Umbreit 2004).

There are different ways to define culture such as national, regional, corporate and professional culture (Trompenaars & Hampden-Turner 1998). The most relevant to the present study is national culture. Kluckhohn (1954, p. 86) defines national culture as ‘patterned ways of thinking, feeling, and reacting, acquired and transmitted; …the essential core of culture consists of traditional (i.e. historically derived and selected ideas and especially their attached values’.

Hofstede (1980) developed five dimensions of national culture, which have been widely used to describe it. Briefly, the five dimensions are: (1) power distance (a tolerance for class differential in society), (2) individualism vs. collectivism (the degree to which welfare of the individualism is valued more than the group), (3) the uncertainty avoidance index (UAI; intolerance of risk), (4) masculinity vs. femininity (achievement orientation, competition and
materialism), and (5) long-term orientation (stability, thrift, respect for tradition and the future).

A number of studies found that national culture plays an important role in travellers’ information search behaviour (Chen 2000b; Gronflaten 2009; Gursoy & Chen 2000; Gursoy & Umbreit 2004; Schul & Crompton 1983; Uysal, McDonald & Reid 1990). Specifically, Chen (2000b) employed the collectivism/individualism construct to explain the unique preferences for external information sources by Japanese, South Korean and Australian visitors to the US. The author notes that business travellers from the highly collectivistic Japanese and Korean societies rely heavily on tour companies, corporate travel offices, travel guides and advice from friends and relatives, while business travellers from the individualistic Australian society prefer gaining their information directly from the airlines and US state/city travel offices. Money and Crotts (2003) investigated the influence of uncertainty avoidance on consumer information search behaviour, and found that consumers from a high uncertainty avoidance national culture are more likely to use non-marketer-dominated information to minimise the perceived risk associated with a purchase (Money & Crotts 2003). Interpersonal word-of-mouth is an effective information source for consumers from high uncertainty avoidance cultures (Money 2000; Rosen & Olshavsky 1987). One study also suggests that a higher level of uncertainty avoidance not only influences the type of information source used but also increases the time consumers spend on decision-making (Money & Crotts 2003). Korneliussen and Greenacre (2017) investigate information sources used by European tourists. They found systematic differences in how information sources are related to one another and that the various countries within the European Union differ in their tourists’ use of information sources. The authors suggest that economic development and culture of the European nations can be factors influence tourists’ information search behaviour. Lu and Chen (2014) also conducted a cross-national comparison of independent travellers’ information search behaviour between Chinese, Japanese, and American travellers who travel to Taiwan. The study found that the Internet is the most important external information source for independent travellers from the three nations followed by newspapers, magazines, and books. Chinese travellers use underground (subway) advertisement boxed, advertisement on buses, TV, radio, international travel exhibitions, outdoor advertisements or billboards more frequently than both Japanese and American travellers. The culture difference suggests that communication strategies and communication tools should be adjusted to the specific cultural background of the target market to work effectively (Gursoy & Chi 2008).
According to Hofstede (2001), China has the lowest individuality score in Asia. On the one hand, this highly collectivist society stresses strong relationships with family and other group members. This culture dimension has a strong impact on travel behaviour of Chinese consumers. For instance, Chinese international students are found to be much more likely to travel with students from their own country (China) than other international students, which may be largely attributed to the Chinese collectivist culture. The impact of collectivist culture on Chinese consumers also presents in their perceptions that social norms are weighted higher than personal attitudes (Chan & Lau 2001). Sparks and Pan (2009) found that social networks (friends, relatives, co-workers) are influential in travel intentions for the Chinese, which implies that recommendations from family and friends may be considered highly important by Chinese tourists when planning a vacation.

On the other hand, China scores high on the uncertainty avoidance index (UAI) (Hofstede 2001). It is suggested consumers from high UAI cultural backgrounds are not comfortable with unstructured situations, and are more likely to feel threatened by the unknown and the ambiguous (Money & Crotts 2003). One study proved that consumers from a high uncertainty avoidance national culture were more likely to use non-marketer-dominated information to minimise their risk (Money & Crotts 2003). As such it is suggested that non-marketer-dominated information sources are perceived more important than marketer-dominated sources by Chinese student travellers.

It is not known to what extent these cultural dimensions influence international students’ information search behaviour for vacation planning. Some have suggested that, as part of the process of globalisation, people may adopt the local culture when they temporarily or permanently move to a different location rather than maintain their original social and cultural values (Pritchard & Morgan 1996; Shields 1990). For instance, Field, AM (1999) found that international students behave similarly to American students during vacation trips, and suggests that international students may have abandoned some behaviour associated with their home environment to a certain degree. On the contrary, Carr and Axelsen (2009) claim that national culture influences leisure behaviour even when people are away from their home country. Carr (2002) notes that people take their original culture with them as a form of ‘baggage’, consciously or sub-consciously, when they move outside of their home place, and their home culture keeps influencing their attitude and behaviour when they are at the new place. Therefore, people from different countries of origin may demonstrate different leisure behaviour even
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when they are living in the same place (Carr & Axelsen 2009). A third proposition is that global cultures and destination cultures may exist at the same time at the individual level (Friedman 1988; Morley & Robins 1995), in particular among international students (Carr & Axelsen 2009). This suggests that the information search strategy performed by Chinese students in Australia may be a result of the impact of both Chinese culture and Australian culture. Therefore, it may be different to both domestic Australian travellers and typical Chinese outbound tourists.

3.8.1.2 Demographic characteristics

Travellers’ demographic characteristics have also been found to determine their information search strategy (Fodness & Murray 1999; Luo, Feng & Cai 2004). Early studies that examine different demographic groups’ use of travel information mainly focus on traditional offline information sources, with the results being inconsistent. For instance, Gitelson and Crompton (1983) found that people over 50 years old are more likely to use travel agents for travel planning, in contrast to Capella and Greco (1987) who report that travel agents are not an important information source for this group of travellers. Luo, Feng, and Cai (2004) investigated occupation as a personal independent variable but found no significant association between this variable and the choice of information search strategy.

Recent studies have started to pay more attention to online information use by different demographic groups, as the use of the Internet is greatly changing travellers’ information search behaviour. Earlier findings in terms of demographic characteristics of consumers who use online information for travel planning are relatively consistent. Results show that these consumers tend to be younger, male and college-educated (Bonn, Furr & Susskind 1999; Weber & Roehl 1999). Even relatively recent studies show that consumers who search travel information on the Internet are mostly males and from high-income households (Luo, Feng & Cai 2004). Kim, Lehto and Morrison (2007) observed that females are more likely to use Internet search information about travel activities, restaurants, and entertainment than males, while males are more likely to use online information for airlines, accommodation and car rental services than females. A general conclusion from these studies is that younger and higher-educated consumers are more likely to use online information for vacation planning than consumers who are older in age and have less education.

In terms of travellers’ level of information search and attitude toward information sources, Kim, Lehto and Morrison (2007) found that females spent more time to search travel information
online, and are more likely to use various online and offline information source than males. Meyers-Levy (1988) and Meyers-Levy and Sternthal (1991) suggest that males are ‘selective processors’ who tend to engage in limited information search activity with less information sources for decision-making. In contrast, females tend to be ‘comprehensive processors’ who try to review all available information before decision-making. In addition, females process information in a more extensive and elaborative way, and rely on a wide range of external information. As such, males make decisions more quickly than females. Additionally, males rely more on their own opinions for decision-making, while females give equal or higher weight to information external to their own opinion (Meyers-Levy & Sternthal 1991). It is commonly acknowledged that men and women are different in terms of various behavioural aspects; however, it is not clear whether the differences are caused by biological make-up or social factors (Kim, Lehto & Morrison 2007). In conclusion, it is believed that females are more information-intensive than males, and perceive higher value for various information sources than males.

3.8.1.3 Other personal variables

Studies also identified other personal variables that influence consumers’ travel information search and planning behaviour. For instance, Arif, Du and Lee (2015) investigated tourists’ collaborative information search behaviour, and found that related personal knowledge and experiences of the group members appeared important in trip planning and collaborative information search. Chiang et al. (2014) compared international tourists’ preferences for travel information sources between four generational groups, and identified that each generational group has its specific preferences for certain information sources. The authors suggest that the core values or beliefs of generations can be used to explain travellers’ preference of information sources. For instance, the study found that ‘silent-generation’ (ages over 65) tourists are conservative and are likely to use traditional travel information sources, such as travel agencies or tour suppliers. In contrast, generation Y (ages 18-29 years) grew up during a period of relative worldwide stability. ‘As children, Generation Y participated in team sports, play groups and other group activities. They value teamwork and seek the input and affirmation of others’ (p.80). As such generation Y tourists are more likely to get travel information from their family and friends. It is noted that generational groups grew up with ‘similar formative experiences, technologies, and cultural and environmental changes’ (p.83). Therefore, they have similar beliefs and core values, which significantly impact their attitudes and behaviours (Chiang et al.)
3.8.2 Trip-specific variables

Previous research and experience suggest that compared to using socio-demographic characteristics to indicate travellers’ information search behaviour trip-specific variables have better explanatory value (Bieger & Laesser 2004). Travel behaviour always occurs within the context of some situation and therefore travellers’ behaviour can be predicted on the basis of the travel situation (Bieger & Laesser 2000; Fodness & Murray 1999). Studies indicate that trip-specific differences influence individuals’ information search activities in terms of the particular sources used, effort spent on searching, number of sources consulted and search outcomes (Bieger & Laesser 2004; Fodness & Murray 1999; Schul & Crompton 1983; Woodside & MacDonald 1994).

3.8.2.1 Purpose of trip

The trip purpose has a significant influence on travellers’ information search behaviour (Fodness & Murray 1999; Gronflaten 2009). Studies have found that the information search strategy varies as a function of the trip purpose (Chen 2000a; Fodness & Murray 1999). The primary purpose of travel for tourists is mainly business or leisure. Leisure travel includes those travelling to visit friends or relatives (VFR travellers) and those travelling for pleasure (Chadwick 1987). Studies have found that the information needs, wants and behaviours are quite different between business and leisure travellers (Chen 2000a; McIntosh & Goeldner 1990). This dimension also applies to the leisure travel submarkets of pleasure travellers and VFR travellers (Fodness & Murray 1999). For instance, studies have found that travellers whose primary purpose is to vacation are more likely to engage in extensive, pre-purchase and external search behaviour, which involves a longer pre-trip search time and multiple external information sources (Fodness & Murray 1997, 1999; Lo, Cheung & Law 2002). In contrast, business and VFR travellers in general spend less time on information search activities and use fewer information sources (Lo, Cheung, & Law 2002). In terms of specific sources consulted, studies have found that business travellers rely more on travel agents than leisure travellers (Chen 2000a; Gronflaten 2009; Gursoy & Chen 2000; Lo, Cheung & Law 2002), while leisure travellers are more likely to search and rely on online information than business travellers (Lo, Cheung & Law 2002; Luo, Feng & Cai 2004).

Trips to visit family or friends tend to involve minimal information search, as family and
friends at the destination are often the predominant source of information for these vacationers (Gitelson & Crompton 1983). Research conducted in Canberra, Australia, investigating international students’ leisure behaviour, found that students’ family and friends did not search for travel information to any great extent before coming to Australia, and mainly relied on the students to help them organise their trip itinerary. Min-En (2006) also found that international students had a major influence on where their friends and family visited in Australia. This suggests that investigating the information search behaviour of international students is not only important for understanding the student market but also the associated VFR market.

3.8.2.2 Previous experience

Prior experience with a destination is one of the most commonly examined factors that influences individuals’ information search behaviour. Previous experience with a destination determines travellers’ internal knowledge, and therefore influences the amount and type of external information that they need for decision-making (Gursoy & McCleary 2004). Studies have also found that the extent of previous participation in travel activities can be utilised as an indicator of the amounts and types of internal sources that an individual needs to make decisions for leisure activities (Chen & Gursoy 2000; Schreyer, Lime & Williams 1984). It is noted that prior experience with the destination or activities provides a consumer with a wealth of information that is not available to first-time visitors (Crotts 1999).

There are significant differences in the utilisation of external information sources between first-time and repeat travellers (Chen & Gursoy 2000). Studies have found that inexperienced travellers to a destination tend to conduct more information search activities than repeat visitors to minimise the perceived risk of visiting an unfamiliar place (Van Raaij 1986). Inexperienced travellers have also been found to use different information sources from those used by experienced travellers. For instance, Sneyenger et al. (1990) define first-time visitors to a destination who are not VFRs as being destination-naïve, and found that these consumers are more likely to conduct extensive information search and use promotional information provided by destination markers. Inexperienced tourists are also more likely to rely on professional sources than experienced tourists (Sneyenger et al. 1990; Woodside & Ronkainen 1980). It is noted that experienced tourists have higher innovation needs (a desire for newness and variety) (Hwang et al. 2006), and are more likely to search for a variety of information and more novel information than inexperienced tourists (Vogt & Fesenmaier 1998). Previous studies have also indicated that destination-naive tourists have a great tendency to rely on personal information
sources, such as recommendations from their family and friends, because personal information is perceived to be more reliable than other sources of information (Gursoy & Chi 2008; Gursoy & McCleary 2004; Gursoy & Umbreit 2004).

Park and Kim (2009), investigating the relationships between travellers’ previous experiences and information search behaviour, found that respondents who have more past experience and prior knowledge are more likely to use previous experience and travel guidebooks to obtain information. While respondents with medium past experience and prior knowledge tend to use portal websites and online travel agencies. Those with low prior knowledge and past experience are more inclined to use recommendations and travel agencies as their main information source. The authors explain that respondents who possess knowledge and experience may prefer detailed and refined information, such as travel guidebooks, that include more direct and rich information on attractions, activities, maps, food, and so forth than other information sources. Conversely, respondents with medium past experience and prior knowledge do not have sufficient information and experience; therefore tend to get more general information from sources like portal websites and travel agencies to decrease the risk for travel decisions. Beginners who have limited knowledge of a destination and the way to find information might be expected to rely on suggestions of family, friends and travel agents.

Studies have also found the differences between first-time and repeat visitors in the type of online information used. For instance Lehto, Kim and Morrison (2006) indicate that first-time visitors to a destination are more frequent users of websites such as airlines, travel operators, visitors centres, maps and travel guides, while Jun, Vogt and MacKay (2007) note that destination-naïve travellers are less likely to search for accommodation and transportation information online. Conversely, more experienced travellers exhibit stronger behaviour for searching and purchasing online, especially for accommodation and transportation.

Although the differences between first-time and repeat visitors in terms of information search strategy has been discussed extensively, there are contradictory findings regarding their information search strategy (Lo, Cheung & Law 2002, 2004). Gursoy and McCleary (2004) propose a third assumption that there is a U-shaped relationship between travellers’ prior experience and external search behaviour. The authors note that in the early stage of information acquisition, when individuals are ‘low familiar’ with a destination or activity, they have a high tendency to use external information sources. Concurrently, when travellers become more familiar with and have high levels of expertise regarding the destination or leisure
activities, external search behaviour once again becomes important for decision-making. Travellers in the mid-range of destination or activity knowledge have a lower level of external information search than the other two groups and are more likely to use their personal experience to make travel decisions (DiPietro et al. 2007).

A rational explanation for the U-shaped relationship is that destination-naïve travellers who are not familiar with a destination tend to use external information sources to collect ‘simple and general information’ about a destination, while experienced travellers who are high in expertise tend to gather ‘specific and detailed information’ about the destination and its attributes (Gursoy & Chi 2008, p. 283). The controversial findings and U-shape relationship of travel experience and information search strategy suggest that the relationship between travellers’ previous trip experience and their information search strategy is complex. Researchers should not simply view the relationship between two variables as positive or negative.

3.8.2.3 Composition of travel party
Leisure travel is a product that is often jointly consumed, and when travelling in a group the behaviour of leisure travellers is heavily influenced by the composition of the travelling party (Chadwick 1987; Fodness & Murray 1999; Luo, Feng & Cai 2004; McIntosh & Goeldner 1990). Travelling parties can be generally concluded as ‘single individuals’, ‘persons from different households travelling together’, and ‘persons from the same household travelling together’ (Fodness & Murray 1999). When travelling in a group, knowledgeable family or friends have an important influence on vacationer information gathering (Snepenger et al. 1990). Previous research indicated that travellers’ information search behaviour is influenced by the composition of the travel group in many ways. For instance, individuals who travel with family are more likely to get information from media (Schul & Crompton 1983); families with children tend to use travel agents and auto clubs for pre-purchase decision-making (Fodness & Murray 1999); travellers who travel with nonfamily members have a lower level of online information usage than those in other travel party compositions (Luo, Feng & Cai 2004).

Davidson et al. (2013) note that international students in Australia conduct travel generally with five types of people: ‘international students from their nationality’, ‘international students from other nationalities’, ‘other friends or relatives who are not students’, ‘Australian students’ and ‘by themselves’. Chinese international students typically travel with other international students from their nationality. However, the research did not further investigate to what extent the travel party composition influences students’ various travel behaviour, in particular their
information search behaviour. The present study intends to fill this gap and investigate whether travel party composition influences students’ information search strategies.

3.8.2.4 Other trip-specific variables

Studies have also examined other variables that may influence travellers’ information search behaviour; however, these have only been discussed in one or a few studies. For instance, Richards and Wilson (2003) found personal experience influences youth and student travellers’ information search behaviour. It should be noted that this personal experience is different from previous experience with the destination discussed in section 3.8.2.2; previous experience with the destination mainly indicates the familiarity with a certain destination, while personal experience indicates an individual’s general travel experience or travel skills.

On the one hand, Richards and Wilson (2003) found that more-experienced travellers consult significantly more sources pre-departure. In addition, they are more likely to use guidebooks, and Lonely Planet is the most frequently used guidebook. Similarly, Vogt et al. (1998) indicate that travel skills are positively associated with consumers’ use of books and magazines for travel information. On the other hand, Richards and Wilson (2003) found that less-experienced travellers rely more heavily on travel agents and the Internet as an information source when planning their trip. This can be explained by the fact that experienced travellers are more likely to be planning longer visits to more ‘difficult’ destinations that are often located further ‘off the beaten track’, which require higher levels of planning (Richards and Wilson 2003). It is suggested that increased travel experience does not necessarily lead to lower information requirements and less-detailed trip planning (Richards and Wilson 2003).

In Vogt et al.’s (1998) study the authors also found that the strength of an individual’s intent to visit a destination is positively related to their use of newspaper and magazine advertisements and TV. Cai, Feng and Breiter (2004) examined the relationship between travellers’ information search strategy and purchase decision involvement, indicating that individuals who are highly involved in purchase decisions were more likely to use online information for destination planning than other sources. Studies also found that travellers’ choice of information sources are influenced by the type of trip, distance travelled and expense (Fodness & Murray 1997; Gitelson & Crompton 1983). For instance, those travelling with an organised tour are almost three times more likely to use travel agents than are independent travellers (Gronflaten 2009). The longer a trip tends to become, the more professional sources are used by travellers (Bieger & Laesser 2004). The relationships between these variables and travellers’ information search
behaviour need to be tested by more research and in different tourist markets.

3.8.3 Source-attribute variables

With the exception of the demographic and trip-specific (or situation) variables that have been examined by most researchers, a few studies have also identified a series of variables that relate to the characteristics or features of certain information sources, noted as source-attribute variables. For instance, Pearce and Schott (2005) found that ease and simplicity was the single most important factor influencing how visitors choose information sources for their transportation and accommodation bookings. The authors also found that one important reason many respondents use the Internet for arranging transport is because often the cheapest fares are only available online. Kersetter and Cho (2004) found credibility is also an important predictor of information source selection. Wolfe, Hsu and Kang (2004) identified a series of variables that seem to play an important role in the choice of travel agent: reputation, knowledge, lowest fares, courtesy, friendliness, customer/personal service, corporate image, price competitiveness, and reliability.

All the variables (personal, demographic and source attribute variable) identified are important in terms of understanding and predicting a traveller’s information search strategy. However, most of the variables measured in previous research are recorded in parallel to the respondent’s information search strategy with a quantitative method and are, according to Gronflaten (2008), antecedent variables. The author criticised that there is a lack of qualitative reasons that are report by tourists from their own accounts in terms of decision-making (Gronflaten 2008).

Only a few qualitative studies have been found in the area of travel information search. For instance, Nishimura, Waryszak and King (2006b) investigated the motivations of Japanese travellers’ use of guidebooks by using in-depth interviews with respondents, finding a variety of purposes, such as seeking product knowledge, search efficiency, avoid uncertainty, etc. Pearce and Schott’s study (2005) also involves qualitative elements however, it mainly focuses on consumers’ use of distribution channel rather than information sources. Gronflaten (2008) used a qualitative approach to investigate factors influencing travellers’ choices of information sources and channels. An important contribution made by Gronflaten (2008) is that the study indicates that factors such as search context and characteristics associated with the source or channel are more important in terms of decisions surrounding the information search strategy. It seems that more qualitative studies are needed in order to better understand the underlying
reasons for a tourist’s information search strategy.

Beyond these common areas, studies have also explored other areas of travellers’ information search behaviour. For instance, Cho and Jang (2008) and Cho and Sung (2012) investigated information values that travellers seek from information search and processing. The studies found that consumers generally seek five types of value from travel information sources: utilitarian, risk avoidance, hedonic, sensation seeking and social value. Moyle and Croy (2009) and Seabra, Abrantes and Lages (2007) investigated the function of information sources as a tool for image creation and expectation fulfilment for travellers. Specifically, Moyle and Croy (2009) found that certain information sources (e.g. tourist information centres, travel agents) are particularly important in terms of forming the motivating image to visit the destination. While Seabra et al. (2007) indicate that different information sources play different roles in terms of expectation fulfilment of a destination. For instance, travel agents are important in terms of expectation fulfilment of regional characteristics. Hyde (2008) examined the relationship between information search, vacation plans and vacation bookings, and identified four tourist groups based on their pre-vacation behaviour: ‘low search, low plan, low bookings’; ‘high search, low plan, low bookings’; ‘high search, high plan, low bookings’; and ‘high search, high plan, high bookings’ group.

3.9 Gaps in tourism information literature

This chapter has reviewed relevant literature on several aspects of travellers’ information search behaviour: motivation of search, information search strategy and information sources, tourist segments, and determinants or factors influencing travellers’ information search behaviour. Three major gaps are identified based on a broad review of relevant literature.

First, there lacks a systematic and comprehensive examination of travellers’ information search behaviour. Most previous studies mainly focus on one or two aspects of travellers’ information search behaviour. Therefore, a systematic analysis incorporating the three dimensions of search strategy, various determinant factors, and tourist segmentation is needed.

Second, most previous studies examining tourism information search behaviour are quantitative in nature and there is a lack of qualitative studies, especially with regard to the reasons why tourists use particular information search strategies.

Third, most studies focus on the information search behaviour of general inbound and/or
outbound tourists. There is a lack of research examining youth and student travellers, particularly the Chinese international student market. It was discussed in Chapter 2 that Chinese international students are an important tourist market for destination countries. Most of these students are independent travellers and prefer to organise trips themselves; however, there are limited findings in terms of how they search for travel information, what sources are effective for decision-making, and what factors influence their search behaviour, etc.

3.10 Conceptual framework and research questions

This chapter mainly reviews and discusses four aspects of tourists’ information search behaviour: motivation for travel information search, travel information search strategy, tourist segments based on their information search strategy, and variables influencing tourists’ information search. The current study focuses on examining three areas and a conceptual model is proposed based on the relationships between each area (see Figure 3.2).

Figure 3.2 Conceptual framework for the study

![Conceptual framework for the study](image-url)
Figure 3.2 shows that a traveller’s information search strategy is underpinned by three dimensions (A): spatial (internal vs. external search), temporal (pre-trip vs. during trip search), and operational (specific sources consulted). Based on each respondent’s information search strategy, tourists can be segmented into homogenous groups (B). Each group is usually associated with certain personal and/or trip characteristics that are distinguishable from other segments. In other words, tourist segments can be predicted based on the personal and/or trip-specific characteristics (E). A traveller’s information search strategy is influenced by two types of variables: personal variables (age, gender, education level) and trip-specific variables (travel party composition, previous trip experience, travel expenditure, length of trip) (D).

Based on the identified gaps in the literature and proposed conceptual framework, four research questions have been developed for the current research. They are:

1. What information search strategy do students use in terms of:
   a. Spatial dimension?
   b. Temporal dimension?
   c. Operational dimension?
2. Can student travellers be segmented on the basis of their information search behaviour? How can they be segmented?
3. How does the information search strategy vary according to students’ personal and trip-specific variables?
4. Why do student travellers use specific information sources and conduct information search the way they do?

3.11 Summary

This chapter has presented the main concepts and theories in the tourism information search literature, which forms the theoretical basis of the current study. Specifically, it discussed travellers’ information search behaviour from three dimensions (spatial, temporal, and operational), identified tourist markets based on their information search strategy; the underlying factors that influence travellers’ information search behaviour; and the information sources that are used by tourists in the current marketplace. Relevant findings from previous literature were presented with discussion that underpins the current research. Following this, gaps in the tourism information search literature were identified. Finally, a conceptual model
was built for the research, and five research questions were proposed. The next chapter describes strategies used for data collection and data analysis.
Chapter 4  Methodology

4.1  Introduction

The current chapter describes the research strategies and processes used to empirically answer the research questions set out in Chapter 3. The research objectives and associated methods selected are summarised in Table 4.1. The chapter begins by presenting a discussion of, and justification for, adopting a mixed-method approach for the present study (section 4.2). It then describes the stage one quantitative data collection, which involved the administration of an online survey to the target population of the research (section 4.3). Following this, section 4.4 describes the procedures associated with the stage two qualitative data collection, which involved conducting interviews with a small sample group. Sections 4.5 and 4.6 conclude the chapter by presenting a discussion of ethical considerations and methodological limitations of the research.

Table 4.1 Research questions and associated research method

<table>
<thead>
<tr>
<th>Research objective</th>
<th>Research method</th>
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</thead>
<tbody>
<tr>
<td>1. What information search strategies do students use in terms of spatial, temporal, and operational dimensions?</td>
<td>Quantitative</td>
</tr>
<tr>
<td>2. Can student travellers be segmented on the basis of their information search behaviour? How can they be segmented?</td>
<td></td>
</tr>
<tr>
<td>3. How does students’ use of information sources vary according to personal and trip-specific variables?</td>
<td>Qualitative</td>
</tr>
<tr>
<td>4. Why do student travellers use specific information sources and conduct information search the way they do?</td>
<td></td>
</tr>
</tbody>
</table>
4.2 Mixed-method approach

This study adopts a mixed-method approach to investigate the research questions developed in Chapter 3. Mixed methods has been defined as ‘research in which the investigator collects and analyses data, integrates the findings, and draws inferences using both qualitative and quantitative approaches or methods in a single study or program of inquiry’ (Tashakkori & Creswell 2007, p. 4). The primary purpose of the current research is to have a comprehensive understanding of student travellers’ information search behaviour. Thus, adopting a mixed method seems appropriate, as the premise of this approach is that the combination of qualitative and quantitative approaches provides more comprehensive evidence for studying a research problem than either research approach alone (Creswell & Clark 2007).

On the one hand, in the current study, some aspects of the research problem require a quantitative approach. Specifically, research questions 1, 2 and 3 are multivariate data reduction and relationship testing exercises, which demand multivariate statistics. In addition, these research questions intend to describe general behaviours or patterns of the target sample, and using quantitative methods helps to generalise findings to a wider population (Creswell 2014). On the other hand, research question 4 explores the details and meaning of respondents’ reasons towards their specific behaviours determined in the quantitative stage. The main purpose of this research question is to use a series of why questions to examine the relationships between respondents’ information behaviour and various personal and trip-specific variables identified in the stage one quantitative research. The complexity of research questions of the current study (e.g. examining both relationships and meanings) demands both numbers in a quantitative sense and words in a qualitative sense (Creswell & Clark 2007). Therefore, a mixed-method design was determined as the best strategy to address the research problem.

Advocacy for mixed-method research is relatively new. The dominant view within the social sciences for most of the latter part of the 20th century was that the two research perspectives and their corresponding paradigms were incompatible because of their inherent ontological, axiological and epistemological differences (Denzin & Lincoln 1994). Later researchers argued that all methods to some extent exhibit biases and weaknesses, and that the collection of both quantitative and qualitative data offers the possibility of neutralising the weaknesses of each other (Creswell & Clark 2007). During this stage researchers still viewed qualitative and quantitative approaches as rigid, polar opposite or dichotomies. More recently, a pragmatic acceptance sees mixed-method research as an approach of systematic convergence of
quantitative and qualitative databases (Creswell 2014), rather than approaches that simply offset the weaknesses of either approach. It is believed that quantitative and qualitative approaches represent different ends on a continuum (Creswell 2014; Newman & Benz 1998), and the mixed method resides in the middle of this continuum as it combines both qualitative and quantitative elements and balances the two approaches (Creswell 2014).

The mixed-method perspective is adopted for this research. It is believed that by incorporating both quantitative and qualitative elements a mixed method is the most desirable approach to answer the current study’s research questions, and provide a comprehensive understanding of respondents’ information search behaviour. On the one hand, to answer the study’s research questions it was felt that the students’ search behaviours and relationships between search behaviour and personal and situational variables needed to be measured quantitatively to assess how student travellers search for travel information and to what extent various variables influence students’ search behaviour. On the other hand, the underlying reasons that explain a specific behaviour and relationships are best identified through qualitative interviews with the respondents. A basic tenet of the mixed-method approach is that this combination equals more than the sum of its quantitative and qualitative parts because it can: 1) answer research questions that the other methodologies cannot; 2) provide better, stronger inferences; and 3) provide the opportunity to present a greater diversity of divergent views (Tashakkori & Teddlie 2003).

4.2.1 Mixed-method research design

The current study applied an explanatory sequential mixed-method design, where the researcher first conducted quantitative research, analysed the results and then built on the results to explain them in more detail with qualitative research (Creswell 2014). A research design refers to the strategy that the researcher uses to collect the information needed in the most appropriate way (Churchill 1995). Three types of design that are commonly used in mixed-method research are: (1) convergent parallel design (or embedded design), (2) explanatory sequential design, and (3) exploratory sequential design (Creswell 2014; Tashakkori & Teddlie 2010). The three typologies are mainly different in ‘type of implementation process’ and ‘priority of methodological approach’ (Teddlie & Tashakkori 2009). In a convergent parallel (or embedded) design the researcher gathers quantitative and qualitative data at roughly the same time and then incorporates the findings in the interpretation of the overall results (Creswell 2014; Tashakkori & Teddlie 2010), while for explanatory and
exploratory sequential designs researchers collect quantitative and qualitative data in tandem, and the results of the first stage of data analysis determine the conduct and build of the second stage of data collection (Creswell 2014; Tashakkori & Teddlie 2010).

An explanatory design is appropriate when the primary purpose of the research is to describe a phenomenon and characteristics of a certain issue or subject, and examine the interrelationships between variables (Churchill 1995). The primary purpose of this study is to describe and understand how student travellers search for travel information, the underlying relationships among variables and their search behaviour. Therefore, an explanatory design seems the most appropriate for this purpose.

A two-stage data collection procedure was conducted. In the first stage the researcher collected quantitative data using an online survey to explore student travellers’ information search behaviour and relationships between search behaviour and various trip and personal variables. Post-analysis these results were followed up with a series of qualitative interviews to help explain why student travellers use information sources and conduct their information search the way they do. This mixed-method design emphasised a strong quantitative orientation in that the stage one results directly informed the types of participants selected for the qualitative stage as well as the specific questions that were asked of the participants (Creswell 2014). The overall intent of this design was to have the qualitative data help explain in more detail the initial quantitative results and provide more depth and insight into why student travellers behave in certain ways in terms of their information search (Creswell 2014).

The stage one quantitative data collection involved the administration of an online survey to a sample of 311 Chinese international students who were studying in Australia. Section 4.3 describes and justifies the procedures and methods adopted for the quantitative approach. The second stage of data collection adopted an entirely qualitative perspective, and involved face-to-face and Skype interviews with 15 respondents. Section 4.4 provides a description of the details and procedures utilised in the data collection.
4.3 Stage one quantitative data collection

The stage one quantitative research was designed to answer research questions 1, 2 and 3. Specifically, this stage investigates behaviours (e.g. students’ search strategies in terms of spatial, temporal, and operational dimensions), attitudes (e.g. importance of each information source for vacation planning) and relationships (e.g. influence of trip-specific and personal variables on information search strategy). As stated above, ‘a quantitative approach provides numeric description of trends, attitudes or opinions of the population by studying a sample of that population’ (Creswell 2014, p.153). Therefore, adopting a quantitative method seems appropriate for these research questions.

4.3.1 Questionnaire techniques

When designing a survey-based study the researcher firstly needs to decide whether to use a self-completed questionnaire or interviews to collect the data, and the type of survey to be undertaken, for example a mail survey, telephone interview, web survey, etc. (Veal 2006). A self-completed questionnaire was deemed the most appropriate and efficient way to collect quantitative data for the current research. First, it is relative easy to use because of its highly structured format with pre-set, standardised questions. Second, a questionnaire is the most suitable instrument for measuring unobservable constructs, such as respondents’ attitudes toward tourism information sources, their information source preferences and intentions for information search, etc. (Moorman & Podsakoff 1992). Third, it is appropriate to use a questionnaire for data collection when the purpose is to collect quantitative data with a large sample size to test research questions (Tharenou, Donohue & Cooper 2007).

Consideration was then given to the advantages and disadvantages of a number of survey approaches. The researcher decided that an online (web) survey was the most appropriate option for the present study given the financial and time constraints surrounding extensive travel to collect data. An online survey was considered appropriate for accessing students since every student has a university email account and a list of the address can be obtained from the central administration of the institution (Bischoff & Koenig-lewis 2007). In addition, the Internet is one of the most important methods to reach the younger travellers and most of students have Internet access either at home or through a university account (Bischoff & Koenig-lewis 2007).

Several scholars note that online survey tend to have a lower response rate than other types of
survey (e.g. face-to-face interview) (Cobanoglu, Warde & Moreo 2001; Ilieva, Baron & Healey 2002; Tse 1998). Nonetheless, for the present study several key advantages of using an online survey outweighed the risk of a low response rate. These include: 1) that it is cost-effective, and the distribution is quick and dispersed (King & Gardiner 2013; Neuman 2006); 2) that it is convenient for respondents in that they can choose a convenient time to answer the survey, and can take as much time as they need to answer individual questions (Evans & Mathur 2005); 3) that researchers can ask respondents to answer questions in certain orders and prevent them from jumping to later questions to reduce survey bias; 4) that it can be constructed to reduce non-response items by requiring respondents to answer certain questions before advancing to the next question or completing the survey; 5) ease of data entry (Evans & Mathur 2005; Ilieva, Baron & Healey 2002; Schaefer & Dillman 1998).

4.3.2 Questionnaire development and content

Survey questions of the present study informed key objectives driving the research and were based on previous literature. Jennings (2010, p. 244) notes that when designing the questionnaire ‘the construction of a questionnaire is paramount to the success of data collection and analysis’. The researcher needs to consider how to collect data that effectively fulfil the study aims or test the hypotheses. As such, the researcher of the current study started the development of the questionnaire by reviewing the research questions. In addition, survey questions are developed from a theory of the construct so that they are consistent (Tharenou, Donohue & Cooper 2007). Table 4.2 summarises the theoretical background, question sources, level of measurement of each survey question, and what research question it relates to. A copy of the final questionnaire is presented in Appendix A.
<table>
<thead>
<tr>
<th>Research question</th>
<th>Survey question</th>
<th>Theoretical foundation</th>
<th>Source</th>
<th>Level of measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What information search strategy do students use in terms of:</td>
<td>5,6,7</td>
<td>Travellers’ use of internal, external, or mixed internal and external search strategies vary across consumers (Fodness &amp; Murray 1998, 1999). Travel information search is an ongoing process (Fodness &amp; Murray 1998, 1999).</td>
<td>Adapted from Bieger and Laesser (2004) and Hyde (2007)</td>
<td>5 point scale</td>
</tr>
<tr>
<td>a. spatial dimension &amp;</td>
<td></td>
<td></td>
<td>Adapted from Fodness and Murray (1998), Hyde (2007) and Dipetro et al. (2007)</td>
<td>Nominal</td>
</tr>
<tr>
<td>b. temporal dimension</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. operational dimension</td>
<td>3, 8-15</td>
<td>A travel information source can be decisive or contributory in terms of decision-making. (Fodness &amp; Murray 1998, 1999). Travel products influence the choice of information source (Hyde 2007; Dipetro et al. 2007).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Can student travellers be segmented on the basis of their information search strategy? How can they be segmented?</td>
<td>3, 4, 5, 6</td>
<td>Travellers’ search behaviour can be categorised into homogeneous groups based on direction and/or degree of search activity (Fodness &amp; Murray 1997; Snepenger et al. 1993).</td>
<td>Adapted from Snepenger (1993) and Choi (2008)</td>
<td>Ordinal &amp; interval</td>
</tr>
<tr>
<td>3a. How do students’ information search strategies vary according to their demographic variables (age, gender, education level)?</td>
<td>18, 19, 20</td>
<td>There are various personal and situational variables that influence travellers’ information search behaviour in terms of degree and direction of information search (Engel et al. 1995; Gronflaten 1998; Gursoy &amp; McCleary 2004).</td>
<td>Items adapted from King and Gardiner (2013)</td>
<td>Nominal/Ordinal</td>
</tr>
<tr>
<td>3b. How do students’ information search strategies vary according to their trip variables (composition of travel party, travel experience, length of trip, travel budget)?</td>
<td>1, 2, 16, 17</td>
<td>Trip-specific variables have a better explanatory value than demographic variables (Bieger &amp; Laesser 2004; Gronflaten 2009).</td>
<td>Items adapted from Davidson et al. (2013); King and Gardiner (2013)</td>
<td>Nominal</td>
</tr>
</tbody>
</table>
The questionnaire consisted of two parts, both using mainly closed questions to minimise respondent load and provide a suitable set of items for quantitative data analysis (Bryman & Cramer 2005).

4.3.2.1 Part one of the survey (Q1-Q15)

Part one had 15 questions, mostly relating to respondents’ travel information search behaviour (see Table 4.2). Specifically, questions 5, 6 and 7 were developed to answer research question 1a and 1b: ‘What information search strategy do Chinese students use in terms of spatial and temporal dimensions?’ Respondents were asked to indicate the importance of the seven information sources at the before- and during-trip stages, and to rate the importance of seven types of travel websites. Each information source and travel website was measured on a rating scale from 1 to 5, with 1= not at all important, 2=somewhat important, 3=quite important, 4=very important and 5=extremely important. The ‘importance’ is a surrogate of used/relied upon.

These three survey questions (question 5, 6, 7) about information search strategies were adapted from studies by Bieger and Laesser (2004) and Hyde (2007). However, Bieger and Laesser used a four-point scale, while Hyde (2007) adopted a five-point rating scale. A five-point scale was preferred by the current study because previous research has shown these scales more sensitively measure variation and hence improve data validity (Adelson & McCoach 2010).

The information sources examined were: online information, travel agency, travel guidebooks, travel brochures, destination tourist information centre, friends’ recommendations and personal experiences. The tourism websites examined included: travel agency websites, official destination websites, airline or other transportation websites, hotel or other accommodation websites, travel magazine websites, online travel guides, travelogues or online travel communities. The selection of information sources and travel websites were based on a broad review of travel information literature. The seven sources and websites selected were those used most frequently by travellers in the current marketplace.

Survey question 3 and questions 8-15 related to research question 1c: ‘What information search strategies do Chinese students use in terms of the operational dimension?’ Specifically, survey question 3 asked respondents to indicate all the information sources they used during the pre-trip stage from the seven information sources listed above. By examining the combination of
sources respondents used the research is able to identify *contributory* and *decisive* information sources used by respondents. According to Fodness and Murray (1999), when examining the operational dimension of an information search strategy one important indicator is whether information sources were used in *conjunction* with other sources or were used as the *sole* source when planning trips.

Survey questions 8-15 asks respondents to select the primary information source and travel website used for each travel service (i.e. accommodation, transportation, recreational activity and entertainment activity). Previous research indicates that travel products influence travellers’ use of information sources (Hyde 2007; Diptro et al. 2007). Respondents were firstly asked to select the primary information source for the service. If online information was selected, respondents were further asked to select the primary website used for the service.

Survey questions 3-6 relate to research question 2: ‘Can Chinese international student travellers be segmented on the basis of their information search strategy, and if so how?’ literature noted, tourists can be segmented into homogeneous groups based on their direction (specific source consulted) and/or degree of search (e.g. time spend on search, number of sources consulted) (Fodness & Murray 1997). Specifically, questions 5 and 6 examine respondents’ direction of search and questions 3 and 4 relate to the degree of search. The number of information sources used by respondents were gathered from the number of sources selected by respondents in question 3. Questions 4 asked respondents to select the time spent on information search for their most recent overnight trip in Australia. Two choices are provided: less than 1 month, and 1 month or longer. According to Fodness and Murray (1997), travellers spending less than 1 month for trip planning are more likely to be routine and time-limited searchers, while those who spend 1 month or longer are more likely to be extended and source-limit searchers. Therefore, 1 month was selected as the measurement level.
4.3.2.2 Part two of the survey (Q16-Q20)

Part two mainly designed to answer research question 3: ‘how do students’ information search strategy vary according to their personal and trip-specific variables?’. This section had 5 questions that enquire about respondents’ demographics: gender, education level, and age (Q18-Q20); and information about their most recent overnight trip in Australia. Including survey questions 1 and 2, the survey collects information about respondents’ travel party composition (Q1), previous experience with the destination (Q2), nights spent at the destination(Q16) and trip expenditure(Q17). The questions and items used in part two were adapted from Davidson et al. (2013) and King and Gardiner (2013) in order to compare if the samples collected in the current study were consistent with the larger population in the aforementioned two studies.

The study by Davidson et al. (2013) provided the first large-scale tourism study of international students in Australia. The research profiled the tourism behaviour of international students studying in Australia to inform tourism management on the service gaps and opportunities associated with this market (Davidson et al. 2013). Samples were taken from students who were currently studying in Australia in higher education, vocational education and training (VET), and institutions offering English language Intensive Course for Overseas Students (ELICOS), as these programs represent the largest number of international student enrolments in Australia. It was a nationwide research project that achieved a sample of almost 6,000 respondents. The project was designed in consultation with key senior managers from Australia’s tourism and international education industries, and was undertaken by researchers with in-depth experience in the industry. King and Gardiner (2013) were part of the project, however have a specific interest in the Chinese international students. Given the large scale and comprehensiveness of the study, the respondents’ characteristics in terms of trip behaviours and personal variables are considered representative of international students, and are useful as a point of comparison.

In addition, to make the sample reliable and representative, respondents’ characteristics (e.g. age, gender, education level) were compared to the international student enrolment data obtained from the Australian Government’s Department of Education and Training (DET). These data were derived from the Provider Registration and International Student Management System (PRISMS) database, which counts enrolments by students studying in Australia on a student visa. Post-stratification weight could then be conducted if the distribution of some
groups were over-represented or under-represented compared to the source population.

Qualtrics software was used to design and distribute the questionnaire for the present study. Qualtrics is a comprehensive online survey tool that creates and distributes surveys and provides a range of surveying capabilities. Free access to the software was provided by Southern Cross University.

Other specific design considerations for the questionnaire included:

1. The purpose of the survey was stated in the first page of the questionnaire, including the goal of the survey and, what the survey hoped to achieve. This was to help potential respondents to have a better understanding of the study and motivate them to respond and provide useful answers.
2. Five-point scales were consistently used for all rating questions. The meaning of high and low points also stayed consistent. This was to avoid confusing respondents by switching rating scales around that may lead to untrustworthy responses.
3. Definitions and explanations were provided when necessary to help respondents understand the questions. For instance, in rating questions, it was stated that ‘important’ is surrogate for ‘used or relied upon’, and for information sources that they never used ‘1= not at all important’ should be selected.
4. Questions used were generally short and focused to maximise response rate and decrease the chance of respondents dropping out of the survey. The target time was no more than 15 minutes, again to avoid unnecessary respondent load and dropout (Dillman 2000; Neuman 2006). Therefore, some techniques were used to help respondents read and understand the questions easily and quickly, for instance using bold or underlining some of the key words in sentences, using simple language and short questions when possible, and utilising mostly close-ended questions to diminish detailed responses (ref Appendix A).
5. The questionnaire was translated into the native language of the target sample to increase the response rate. The questionnaire was developed in English with the intention of administering it to a sample who, being university-educated, were sufficiently fluent in English to complete the survey even though it is not their native language. However, it was suggested by a students’ advisor from the International Office of Southern Cross University that using the students’ mother language (e.g. Chinese) would make it easier to get their attention and a response. Therefore, the questionnaire was translated into Chinese by the researcher, whose first language is Chinese. Back translation was conducted by a friend.
who had completed a Master’s degree in translation and interpretation to ensure accuracy and no bias of translation. A copy of the questionnaire translation is presented in Appendix B.

6. The order of the survey questions was designed to aid respondents in recalling past events. Respondents were asked to recall their most recent overnight trip in Australia, and relevant trip planning and information search behaviour. Neuman (2006) notes that it takes a longer for respondents to accurately recall an event than the seconds that they have to answer survey questions. Therefore, respondents often need special instructions and extra thinking time to help them recall past events (Neuman 2006). To fulfil this need, two trip-specific questions were placed at the beginning of the questionnaire, for instance asking respondents to think about who they travelled with and place(s) visited during the last trip. Using these trip-related variables to help respondents recall the relevant experience and behaviour of the trip helped to provide more accurate answers.

7. Other protocols suggested by Dillman (2000) were also adopted when constructing the questionnaire for the quantitative stage, for instance:

- ‘Sensitive’ questions such as personal information (e.g. age, education level) were placed in the final section of the questionnaire.
- Blank spaces were provided for additional answers and comments adjacent to the placement of actual questions (e.g. provide choice of ‘other’ followed by space for respondents to put additional answers or comments).
- Respondents were thanked for their time at the end of the questionnaire.
- Each question was clearly numbered to aid navigation.
- The pilot study was conducted prior to the actual data collection (discussed in the following section).
4.3.3 Pilot test and amendments to instrument

A pilot study was conducted for the current research. It was useful in terms of helping the researcher to determine whether: the questions proposed would be easy to understand by respondents; the categories used would be a valid and reliable measure, and suitable for data analysis; and question orders and the time spent on the questionnaire would be suitable for respondents (Jennings 2010).

The researcher invited 10 Chinese students from Southern Cross University to participate in the pilot study and provide feedback during March 2014. These students were studying in an Australian university or had completed a university degree in Australia in the past year. Jennings (2010) notes that pilot studies should be conducted with respondents who reflect the sample characteristics. With consent, an email containing a hyper-link to the draft online survey was sent to the 10 students. The researcher then contacted participants after they submitted the online survey to obtain feedback. As a result of this procedure two main amendments were made to the questionnaire:

1. Question 2 asked respondents to select the number of times they had visited the destination of their most recent trip. Several respondents expressed that they visited several places in the trip (including destinations they had already been to and new destinations). Therefore, question 2 was modified to read ‘The primary city/region you visited on this most recent trip in Australia, is it your first-time visit to the city/region?’ Three choices were given: ‘yes’, ‘no’, and ‘I went to several places, and cannot pick a primary city/region’.
2. Questions 5–7 asked respondents to rate the importance of each of the information sources and websites from 1 to 5. A few respondents were confused with how to evaluate sources or websites that they did not use. To solve this issue, a note was added after the question, reading ‘for information sources you did not use, please choose ‘1 Not at all important’.

The questionnaire was also reviewed by the researcher’s supervisors to ensure that questions designed fulfilled the purpose of the quantitative data collection and would be effective in answering the research questions.
Chapter 4 Methodology

4.3.4 Stage one sample selection

Researchers typically use a sampling method when circumstances constrain them from reaching the entire population being studied (Veal 2006). Most methodologists recommend using systematic sampling (or probability sample) in quantitative research, in which each study unit (or case) has an equal opportunity to participate (Jennings 2010). This method increases the representativeness of the sample collected, given the primary goal of quantitative data collection is to get a representative group so that results can produce accurate generalisations about the larger population (Jennings 2010). However, the use of online surveys for data collection constrains the current study from using a systematic sampling method. In addition, a mailing list of Chinese students is not available or could not be obtained for the research. To achieve a representative sample size, efforts have been made by the researcher and supervisors using several procedures as discussed below.

First, the researcher’s supervisor contacted the International Education Association ISANA [International Student Advisors Network of Australia Inc. (Australia and New Zealand)] by email, and kindly asked the institution to forward a letter of request to the list of their members. ISANA is an association of Australian and New Zealand international education professionals whose members mainly work in international student services, advocacy, teaching and policy development in international education. The letter addressed the purpose of the study and potential benefits that may be generated for educational institutions and the tourism industry. A copy of the email request is presented in Appendix C. For instance, the letter noted that the results of the study were expected to help university travel offices and other travel companies to better service Chinese students in the future, which can help improve their business and students’ holiday experiences. The letter also addressed that findings of the study may provide useful insights for educational institutions from both educational and tourism perspectives, and may help them better understand and work more effectively and efficiently with Chinese students. Ethical considerations were also mentioned in the letter, such as anonymity of respondents and voluntary participation. The letter contained a short message from the researcher, which invited Chinese students to participate in the study and a link to the online survey (Appendix D). Permission and cooperation was received from ISANA, and the letter was forwarded to its members. As a result, three institutions agreed to forward the survey message to their students.
The researcher then found a contact list of ‘director of international service’ of 38 universities on the website of *Universities Australia*. Requests were sent individually to the list of contacts. One month later, a second round of the requests were sent to persons who did not respond to the first email as a last reminder of the survey request. As a result, four universities replied and rejected the request. The reasons for rejection included: not interested in the study, the research does not seem to help with their enrolment, and the institution has strict rules in terms of accessing their students. One university accepted and forwarded the letter of invitation to the list of their Chinese international students.

Further, the researcher contacted five Chinese student associations of the universities. Four associations agreed to help, and either forwarded the email to their list of members or posted the message on their public notice board. The researcher also posted a message of participation for the research on Facebook, Weibo and Wechat (Chinese social network) pages, and invited Chinese international students in Australia who were interested and qualified for the study to complete an online survey. The timeframe and procedures used for the survey are summarised in Table 4.3.

Table 4.3 Procedures and timeframe for quantitative survey

<table>
<thead>
<tr>
<th>Date</th>
<th>Procedure</th>
<th>Response from institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 2014</td>
<td>Request sent to ISANA by email.</td>
<td>3 institutions participated in the study</td>
</tr>
<tr>
<td>April 2014</td>
<td>Post survey message on websites of Facebook, Weibo and Wechat (Chinese</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>Social network sites).</td>
<td></td>
</tr>
<tr>
<td>May-July 2014</td>
<td>Requests sent to directors of international service of 38 universities in</td>
<td>4 universities rejected the request</td>
</tr>
<tr>
<td></td>
<td>Australia. (Due to exams and session break, some of the requests were sent</td>
<td>1 university participated in the study</td>
</tr>
<tr>
<td></td>
<td>out in July when second semester starts.)</td>
<td></td>
</tr>
<tr>
<td>Aug 2014</td>
<td>Second round of the requests were sent to same person as a last reminder</td>
<td></td>
</tr>
<tr>
<td></td>
<td>of the survey request.</td>
<td></td>
</tr>
<tr>
<td>Aug 2014</td>
<td>Contacted 5 Chinese international students’ associations through email or</td>
<td>4 associations agreed to help</td>
</tr>
<tr>
<td></td>
<td>by phone.</td>
<td></td>
</tr>
</tbody>
</table>

4.3.5 Data analysis

Quantitative data were collected in the stage one data collection. The following sections describe the procedures and techniques used to process and analyse the data collected. Quantitative data were automatically transferred into SPSS data analysis software from Qualtrics (web-survey software). Before proceeding with any data analysis to test the research questions, several preliminary steps were taken.

First, distributive analyses were undertaken to describe the characteristics of variables.
Frequency tables were produced for each variable to profile the sample’s demographics and trip-specific characteristics. Means and standard deviations were included when variables were measured at an interval level. The frequency tables identified any out-of-range values. As the questions in the present study were designed with closed questions that require respondents to select nominal or ordinal categories, no outlier values were uncovered. Frequency distributions were also used to check invalid codes and errors of data entry by examining the means and minimum and maximum values. Categories were collapsed-categories with several variables to highlight patterns in the data and to eliminate categories with few cases (e.g. travel party composition, age of respondents).

Second, missing data were identified during the process of analysing the frequency distribution of variables. Missing data should be avoided as they reduce sample size and are a source of error (Tharenou, Donohue & Cooper 2007). Hence, data ‘cleaning’ procedures were undertaken to deal with this issue. According to Tharenou, Donohue and Cooper (2007), there are five main techniques that can be used in statistical analysis to deal with missing quantitative data: listwise deletion, pairwise deletion, mean substitution, maximum likelihood and multiple imputation. Given the number of missing values was small in the current study, and the complexity of conducting maximum likelihood and multiple imputations, the researcher decided to use listwise deletion and mean substitution methods for missing values. First, cases with large numbers of missing values were deleted. Then, cases with only a few missing values in interval measure questions were substituted using the mean score of the variable.

Third, to use a parametric data analysis method, the sample needs to be normally distributed. However, the current study uses 5-point rating scales (Likert-type scale) to measure respondents’ use of each information source. Technically, Likert scale data are ordinal, requiring non-parametric tests for statistical analysis. Strictly speaking, parametric tests require interval data (Sullivan & Artino 2013). However, most experts assert that parametric tests can be used with Likert scale ordinal data if there is an adequate sample size (n>30). Norman (2010) suggests that parametric tests not only can be used with ordinal data, such as data from Likert scales, but also that parametric tests are generally more robust than nonparametric tests. Given the sample size of the current study (n= 286), it is sufficient to use parametric tests for data analysis regardless of the distribution of the data.

Linearity is another important assumption required by many statistical tests. Linearity means that there is a straight-line relationship between two variables. It can be checked by inspecting
the scatterplot between pairs of variables. *Homoscedasticity* (also referred to as homogeneity of variance) is the assumption that the variability in scores for one variable is approximately the same at all values of another variable. Many statistical techniques assume homoscedasticity, such as Pearson correlation coefficients, multiple regression, t-test, ANOVA, etc.

For the present study, linearity and homoscedasticity were checked before conducting specific statistical techniques that required these two assumptions; these results are reported in Chapter 5. Homogeneity of variance in t-test/ANOVA were tested through Levene’s test of equality of variance. When Levene’s homogeneity of variance is violated Welch’s t was utilised along with Games-Howell’s post-hoc procedures (Field, A 2009).

It should be noted that most techniques are relatively robust to moderate violations of these two assumptions. Unless the two assumptions are seriously violated, the researcher may consider transforming the data or using other tests that do not assume the two assumptions (Kline 2005; Tabachnick & Fidell 2001). Additionally, violation of linearity does not invalidate the analysis but rather weakens the power of the statistical test to detect an effect (Tabachnick & Fidell 2001).

After the preliminary steps from the descriptive results the researcher will need to choose the correct techniques to analyse the data and answer the research questions. To choose the appropriate analysis method the researcher will need to consider the type of research question proposed and the type and number of variables being analysed. Some basic techniques used to answer the research questions are described in Table 4.4. Detailed discussions of each data analysis technique are also provided.
Table 4.4 Determining quantitative data analysis techniques for research questions

<table>
<thead>
<tr>
<th>Research question</th>
<th>Related survey questions</th>
<th>Variables measured</th>
<th>Data analysis plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a. What information search strategy do students use in terms of spatial dimension?</td>
<td>Q5</td>
<td>‘My personal experience’ vs. 6 external information sources</td>
<td>1. Calculate mean for each information source</td>
</tr>
<tr>
<td></td>
<td></td>
<td>None</td>
<td>2. One-way within-subject ANOVA (‘my personal experience’ is the base reference category)</td>
</tr>
<tr>
<td>1b. What information search strategy do students use in terms of temporal dimension?</td>
<td>Q5, Q6</td>
<td>7 source used at pre-trip stage vs. 7 sources used at during-trip stage</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td></td>
<td>None</td>
<td>Paired sample t-test for each information source (pre-trip compared to during-trip)</td>
</tr>
<tr>
<td>1c. What information search strategy do students use in terms of operational dimension?</td>
<td>Q7, Q8-Q15</td>
<td>Primary information source selected for each travel services</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td></td>
<td>None</td>
<td>1. Frequency distribution, estimate sampling confidence interval with bar 2. Chi-square test if the differences are significant</td>
</tr>
<tr>
<td>2. Can student travellers be segmented on the basis of their information search behaviour? How can they be segmented?</td>
<td>Q3, Q5</td>
<td>7 information sources used at pre-trip stage</td>
<td>1. Calculate number of information sources respondents consulted based on their selected information sources</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Number of information sources consulted before the trip</td>
<td>2. K-means cluster analysis to determine the most appropriate segments of respondents based on the number and type of information sources consulted</td>
</tr>
<tr>
<td>3. How does students’ use of information sources vary according to personal and trip-specific variables?</td>
<td>Q1, Q2, Q16-Q20, Q5, Q6, Q7</td>
<td>Typologies of information sources determined by respondents’ information use behaviour</td>
<td>1. Principle component analysis to determine the underlying dimensions within 7 information sources based on respondents’ information use behaviour</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 demographic variables &amp; 5 trip-specific variables</td>
<td>2. Descriptive statistics with crosstab to compare the mean score of subgroups of demographic and trip-specific variables</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3. Multiple regression analysis to examine if and how well 3 demographic and 5 trip-specific variables predict respondents’ information search strategy</td>
</tr>
</tbody>
</table>
Rationale for the use of each analysis method:

- A one-way within-subjects (or repeated measures) ANOVA was conducted in order to compare if there is a significant difference between respondents’ internal search (use of personal experience) and external search (use of external information sources) for the spatial dimension. An ANOVA with repeated measures was used to compare three or more group means where the participants are the same in each group (Field, A 2009). In this case, the mean score of the internal information source (personal experience) was compared to the mean of each of the six external information sources. Significant results would indicate that respondents’ internal searches are significantly different from their external search activity.

- Paired sample t-tests (or dependent t-test) were conducted to compare whether there are significant differences between respondents’ use of each information source during the pre-trip and during-trip search stages (temporal dimension). The paired sample t-test is a ‘within-subjects’ or ‘repeated-measures’ statistical test. It is used when the same participant is measured twice (e.g. at two different points in time or at two experimental conditions) (Field 2009; Manning & Munro 2007). In this case, respondents’ use of each information source is measured at two different time points (pre-trip vs. during-trip). Significant results would indicate that respondents are significantly more likely (or less likely) to use certain information sources for trip planning prior to the trip than during the trip.

- Frequency distribution analyses were conducted to explore the primary information source respondents used for each travel service (accommodation, transportation, recreational activities and entertainment activities) for the operational dimension. Chi-square tests were then used to test if the distribution differences found are a real difference or due to sampling variations. The Chi-square test is usually used to determine whether there is a significant difference between the expected frequencies and the observed frequencies in one or more categories (Field, A 2009).

- Cluster analysis was used to explore whether there are natural subgroups in the sample based on their information search behaviour. It intends to maximise similarity within groups and maximise difference between groups (Manning & Munro 2007). Thus cluster analysis is appropriate to identify groups of respondents who have similar information search behaviour. In this study, cluster analysis is performed based on two criteria: the degree of respondents’ information search (number of information sources used) and direction of their search (the extent they consulted each information source). The number of
segmentations is judged subjectively by comparing similarities within groups and
differences between groups of each solution. More discussion is provided in Chapter 5.

- Principle component analysis was conducted to explore the underlying dimensions of seven
  information sources based on respondents’ information usage at the pre-trip and during-trip
  stages. Factor analysis with principal components is an appropriate statistical approach for
  the purpose as it can be used to analyse ‘interrelationships among a number of variables
  and to explain these variables in terms of their common underlying dimensions’ (factors)
  (Hair, Black & Babin 2010). The factors generated are used in the subsequent analysis that
  examines relationships between trip-specific and demographic variables and the underlying
  dimensions identified in regards to respondents’ information search strategies.

- Multiple regression analyses were conducted to examine the relationships between
  demographic and trip-specific variables and respondents’ usage of information sources
  (dimensions identified from the principle component analysis). Multiple regression
  analysis is a general statistical technique used to analyse the relationship between a single
  dependent variable and several independent variables (Hair, Black, Babin & Anderson
  2010). Each factor generated from the principle analysis is a dependent variable, and all the
  demographic and trip-specific variables are independent variables in the multiple
  regression analyses. Significant regression would indicate a significant relationship
  between some (or all) independent variables and the dependent variable.

4.3.6 Reliability and Validity

Irrespective of the type of design or type of data gathered, the measures applied in a study need
 to be reliable and valid (Tharenou, Donohue & Cooper 2007). Reliability and validity are
 essential and fundamental for all measures, and both ideas help to establish the truthfulness and
 credibility of the findings (Neuman 2006). In general, reliability refers to the consistency and
 stability of the measuring instrument and is closely related to objectivity, which is the extent to
 which the interpretations of the results are based on the data itself, as opposed to subjective or
 emotional interpretations (Jennings 2001). The validity of the data refers to the extent to which
 they accurately reflect what they are meant to reflect (Veal 1997). Specifically, in quantitative
 studies, reliability refers to the consistency of measurements; that is, ‘whether or not the same
 results would be achieved if the test or measure was applied repeatedly’ (Lewin 2004, p. 216).
 Validity refers to the extent to which an empirical measure adequately reflects the real meaning
 of the concept under consideration (Babbie 2007, p. 143). According to Neuman (2006), several
methods can be employed to increase the reliability of a measure. Discussions of what was done in this research in relation to the three strategies are provided below:

1. Clearly conceptualise relevant theories and questions: all concepts under investigation are defined and clarified with relevant literature (presented in Chapter 3). Survey questions were carefully designed and constructed to avoid ‘double-barrelled’ measures. In addition, the questions were designed as simply as possible to make sure that they were understood by everyone. The questionnaire was translated into Chinese by the researcher whose native language is Chinese, and back translation was conducted by a Chinese student who has completed a Master’s degree in translation and interpretation of Chinese–English to ensure accuracy of the questionnaire content.

2. Maximised the level of measurement: the level of measurement used for each variable was based on previous studies, and the main variables used to measure respondents’ information search behaviour (Q5–Q7) were measured at the interval level, which is the highest level possible according to the research design.

3. Use of pilot studies: a pilot study was conducted, which was described in section 4.3.3.

Validity is part of a dynamic process that grows by accumulating evidence over time (Neuman 2006). To achieve a valid questionnaire for measurement the researcher reviewed all relevant literature and research conducted on relevant topics. All the questions designed and generated were based on a careful review of previous literature and relevant research. Table 4.2 shows all the resources and theoretical rationale for the design of each question. Other aspects, such as measuring scales and way of expression (section 4.3.2), were also considered during the questionnaire development process. A pilot study was also conducted to ensure the validity of questionnaire design.

Additionally, this research adopted a mixed-method approach, which offers the chance to assess the reliability and validity of each method in the light of other methods (Brewer & Hunt 1989). The development of the questionnaire, and the process of data gathering and analysis were all conducted under the review and supervision of the researcher’s supervision team to confirm adherence to sound research practices.
4.4 Stage two qualitative data collection

The primary objective of stage two is to get respondents’ own accounts of why they had or had not used various sources of information about their trip and thus elicit the choice factors associated with these decisions. The only way to find out why respondents behave the way they reported in the quantitative stage was to conduct interviews with respondents. Hence, to acquire an insight into some of the key findings or relationships uncovered in the quantitative stage, a qualitative stage was appropriate and necessary.

To gain insight into the criteria relevant to travellers’ choices of information sources, data were collected through a series of in-depth interviews with 15 Chinese international students. Walle (1997) notes that the complexity and subtleties of the tourist experience cannot be adequately captured by scales and questionnaires. One of the advantages of in-depth interviewing is that through it one can come to understand the details of people’s experiences from their own point of view. Open-ended questions are generally preferred in qualitative interviews as they establish the territory to be explored while allowing the participant to take any direction they want (Seidman 2006).

Face-to-face interviews were conducted for respondents based on the Gold Coast and in Brisbane. Online interviews via Skype were conducted for respondents based in other regions. By getting the respondents to articulate the reasons for their own choice of information search strategy the aim was to get an idea of which of the factors discussed in the existing literature mattered from the travellers’ point of view. It was also anticipated that the interviews would result in the identification of additional choice factors not previously considered in this context.

4.4.1 Sample selection

An important step in qualitative research is to find people or places to study and to gain access to and establish rapport with participants so that they will provide good quality data (Creswell 2014). A purposeful sampling strategy was used in the current research; that is, the researcher intentionally selected participants who have experience with the central phenomenon or the key concept being explored (Creswell & Clark 2007). In the current study, the researcher started the sampling process by inviting Chinese students who are currently studying at Southern Cross University. Two criteria needed to be fulfilled by participants before starting the interviews: (1) have had an overnight travel experience in Australia within the last 12 months, and (2) have used at least one of the information sources in the list provided by the researcher.
It is ideal to select the same individuals for both quantitative and qualitative data collection, so the data can be easily converged or compared (Creswell & Clark 2007). However, for the current study, it proved impossible to approach the same participants who had conducted the online survey due to the anonymous requirement of ethics. Therefore, the researcher decided to use a purposeful sampling strategy to select participants from the universities that had participated in the first-stage online survey data collection.

Participants were recruited with a snowball technique, whereby interview participants were asked to identify other informants. A total of 15 interviews were conducted for this study during September 2015. The principle adopted for the number of interviews conducted is saturation; that is, the researcher continued interviewing until gathering new data no longer provides new insights or reveals new properties Charmaz (2006). This principle is commonly used in interview research (Seidman 1998).

Although the sample size is small for the current research, the primary intention is to collect ‘rich’ information from a small number of respondents. McCracken (1988) notes that eight interviews is the threshold sufficient for generating themes or categories in the process of conducting qualitative research. In addition, the sample size of a qualitative study is usually not determined with the goal of generalisability. For such reasons, 15 interview respondents should not be an issue for the stage two study, and is considered sufficient for data analysis and theme generating.

The length of interview varied from 20 minutes to 70 minutes. All the interviews were recorded, transcribed and then translated into English. It should be noted that recall bias may be generated as some of the trips occurred up to 12 months previously. However, for qualitative research, general impressions and how these may have affected overall consciousness were considered a valid contribution to understanding consumer recollection (Nishimura, Waeyszak & King 2006).
4.4.2 Interview structure

Pilot interviews were conducted with three Chinese students to establish an interview protocol that could be used for subsequent interviews. A semi-structured interview format was used to guide the interview process and to ensure that information gathered was useful and relevant to the issue (see Interview guideline in Appendix F). Sub-questions were ordered and structured using wording to guide the interview and were adjusted depending on responses. The questions were open-ended to gain spontaneous opinions and avoid potential researcher bias. Wengraf (2001) suggests designing semi-structured interviews to have a number of questions prepared in advance, but these questions are designed to be sufficiently open to enable subsequent questions to be improvised in a planned and theorised way.

In terms of interview places, participants were asked to nominate where they would like the interview to be undertaken and whether they wanted to conduct a face-to-face or Skype interview. Ten interviews were conducted face-to-face, of which five were at coffee shops that respondents selected and the rest were conducted in the student lounge area of Southern Cross University. Two respondents were interviewed online via QQ (Chinese version of Skype), and three respondents were interviewed over the telephone. To make the results more valid and reliable the researcher included respondents from six universities.

At the start of each interview the researcher briefly explained the research background and objective in undertaking the research. During the interview process, the researcher tended not to discuss the issues discussed with informants to make sure that the interview was not influenced by the researchers’ own values and beliefs. Fontana and Frey (2003) and Merriam (1998) note that it is important for the interviewer to adopt a neutral stance towards the interviewee and avoid debate, arguing or letting their personal opinions be known. Interviews were conducted in Chinese to make sure participants could express their opinions and experiences fully and freely.
4.4.3 Data analysis

In qualitative research data analysis generally involves three main steps: 1) preparing and organising the data for analysis; 2) reducing the data into themes through a process of coding and condensing the codes; and 3) representing the data in figures, tables and a discussion (Creswell 2013, p. 180). Analysis of the stage two qualitative data followed this process. The researcher started the analysis by organising the text data into word files and converting the files to appropriate text units (e.g. a word, a sentence, and an entire story) for analysis. Some computer programs such as NVivo were considered for qualitative data analysis. Given considerations, such as the time spent on learning a program and the small sample, the researcher felt that using a software program was unnecessary and unsuitable for the purpose of this research. Auld et al. (2007) note that when choosing instruments and resources for data analysis it is essential for the researcher to consider the input elements, such as training time, number and length of the documents to be analysed, and the structure of the coding.

Following the organisation of the data, the researcher continued the analysis by forming codes or categories by examining the interview transcripts. The process of coding involved aggregating the text into small categories of information, seeking evidence for the code from transcripts, and assigning labels to the codes (Creswell 2013). Coded blocks of text were then put into separate word documents under each theme. Finally, the researcher made interpretations of each theme based on respondents’ answers and direct quotes were included to support the findings.

For the current study, answers of interview respondents in terms of their use and non-use of specific information sources are summarised in concept maps. Each idea stated by interview respondents is presented in a branch. The main branches of the maps reflect the most common ways that interviewees responded to interview questions. After summarising the main points and forming concept maps for each information source, commonalities and themes that describe the essence of the choice criteria can be identified. Finally, a conceptual model is built based on all the themes found.
4.4.4 Reliability and validity

Establishing reliability and validity are important steps in the process of research, regardless of whether the research is qualitative or quantitative. However, the two approaches have different procedures in terms of achieving reliability and validity. Reliability and validity in qualitative studies emphasises on researchers’ truthful reflection of reality during interpretation of the raw data (Merriam 1998), and the accuracy of the final report or account (Creswell & Clark 2007).

In this study the researcher used two techniques to ensure the reliability and validity of the qualitative data collection and analysis. First, peer reviews were conducted by the researcher’s supervisors to provide external checks of the research process. Creswell (2013) notes that peer reviews can keep the researcher honest and provide the researcher with the opportunity for catharsis by asking questions about methods, meanings and interpretations.

Second, member-checking was conducted for preliminary analyses. Participants play a major role directing and acting in qualitative research (Creswell 2013). They should be asked to examine rough drafts of the researcher’s work and to provide alternative language, ‘critical observations or interpretations’ (Stake 1995, p. 115). The researcher of this study invited five interview participants to read the preliminary analyses consisting of a description of the themes. Participants were asked to reflect on the accuracy of the account and their view of the written analyses, as well as what was missing. As a result of the process the respondents generally agreed with the conclusions drawn.

4.5 Ethical considerations

When conducting research the researcher needs to assess the design, the implementation and reporting of the study to determine if it follows ethical procedures. Measures taken for ethical issues are summarised in Table 4.5. Ethical issues of a research study mainly refer to honesty and respect for the rights of respondents. Ethical issues need to be considered at every stage of the research process (Jennings 2010).

Prior to conducting research, the researcher needs to make sure that the project is valid and able to yield reliable information according to accepted principles and research practice, concerning the hypotheses being tested or research aims being examined. This study was presented to a group of panel members from academic and research divisions of Southern Cross University in the first year of commencement, regarding the rationale of the theoretical
background, validity of methodology and contributions that may be generated in relation to tourism academia and industry. Approval was received from the Higher Degree Research Division of Southern Cross University, indicating that the study was valid to conduct and worthy of carrying out.

Many ethical issues can arise during the data collection stages. Main considerations in conducting a survey include preserving respondents’ confidentiality and obtaining voluntary and informed consent (Tharenou, Donohue & Cooper 2007). For the present study, formal permission to conduct the study was obtained from the Southern Cross University Human Research Ethics Committee. Explanatory statements were provided in the cover letter (see Appendix D and E) for respondents according to the requirement of the ethics committee and recommendation of Tharenou, Donohue and Cooper (2007), and included:

- the purpose of the study
- the anticipated benefits
- procedures
- duration
- risks of harm
- participants’ freedom to refuse to participate or to withdraw
- how to get the results of the study
- the contact name and number of the researcher, and the contact detail of the ethics committee (refer to Table 4.5).
Table 4.5 Measures undertaken to ensure the ethical conduct of research

<table>
<thead>
<tr>
<th>Ethical consideration</th>
<th>Stage one data collection</th>
<th>Stage two data collection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant protection</td>
<td>Use of an online survey enabled respondents to choose the time and place to complete the questionnaire to suit their own convenience and safety, therefore no expected environmental danger or harm arose from completing survey.</td>
<td>For face-to-face interviews, participants were asked to nominate where they would like the interview to be undertaken. This was to ensure that participants felt safe and comfortable in taking the interview.</td>
</tr>
<tr>
<td>Informed consent</td>
<td>Respondents were informed in the cover letter that by clicking on a link taking them to the first page of the survey, they have given their consent to participate.</td>
<td>A consent form was given to participants and participants were required to sign the form before conducting the interview.</td>
</tr>
<tr>
<td>Privacy, anonymity, and confidentiality</td>
<td>The survey was completely anonymous, no identifying information was collected, and only de-identified group data is reported. Data are electronically stored on a secure password-protected web-link of Qualtrics that is only accessible by the researcher.</td>
<td>Recordings of interviews were transferred into word documents and stored in the researcher’s personal computer.</td>
</tr>
<tr>
<td>Protection of minors</td>
<td>Only respondents 18 years old or above were eligible for the survey. Those under 18 years old were automatically filtered out by the online survey in the first research question ‘Are you 18 years old or above’.</td>
<td>Only respondents 18 years old or above were eligible for an interview.</td>
</tr>
</tbody>
</table>

4.6 Methodological limitations

This section discusses and explains the limitations of the methods used for the present study. The following also includes considerations regarding results and implications of the current study, and their impact on theory and practice.

1. **Sampling approach**: due to the time and resource constraints, and issues of accessing respondents, the current research adopted a non-probability sampling approach when accessing participants for the quantitative and qualitative data collection. Non-probability sampling refers to the selection of participants for a study based on their proximity to the researcher and the ease with which the researcher can access the participants (Jennings 2010, p.139). As such, the representativeness of the findings from this study cannot be established.

    However, the collected samples were compared to the general population using the data obtained from DET, Australia. The researcher also requested stratified data from the department to make detailed, specific comparisons of sample characteristics. Post-stratification weights were employed where the sample over- or under-represented the broad population of Chinese students studying in Australia. This makes the results less biased and closer to the real sample distribution.
2. Different participants in two research approaches: some of the informants interviewed in the qualitative stage did not participate in the first-stage quantitative online survey. The use of different individuals for quantitative and qualitative data collection may introduce personal characteristics that confound the comparison (Creswell & Clark 2007).

3. Sample size: considering the overall size of the studied population, the sample size collected for the present study is small. A large sample size in quantitative studies is important in terms of obtaining more accurate results and ensuring findings are representative of the population being studied. Therefore, the researcher is not confident regarding the application of the findings to the wider population.

4. Sample bias to respondents based in regional universities: the non-probability sampling method had a further side effect in that samples obtained for the study are highly represented by respondents from regional universities, while respondents from universities based in urban areas were very much under-represented. Therefore, bias may be generated in the results if respondents based in urban areas and regional areas have different information search behaviour.

5. Wider application: the findings reported in this study are applicable only to Chinese students who are currently studying in Australia; the results and implications may not be applicable to other groups of students or Chinese students studying in other countries.

6. Trustworthiness of data: due to the anonymous data collection and use of an online survey, there is a possibility that raw data provided by respondents are not fully truthful. However, the information collected is not of a sensitive nature and was not onerous on the respondent; as such, bias is not suspected.

4.7 Chapter summary

This chapter has described and justified the method and procedures used for this research. It first presented a rationale for choosing a mixed-method approach for the present study. The design and administration of a quantitative questionnaire were presented in order to satisfy the research questions, followed by justification of the techniques used in the quantitative data analysis. The procedures for conducting the qualitative data collection and analysis were then presented. Ethical considerations of the research and limitations of the chosen methods were discussed in the last section of this chapter. The next two chapters present and discuss the quantitative and qualitative findings from each data collection stage.
Chapter 5  Quantitative results and discussion

5.1  Introduction

Chapter 4 described and justified the methods and procedures chosen to undertake the research. Chapter 5 presents and discusses the findings for research questions 1, 2 and 3 of this study. Firstly, demographic findings of respondents are described (section 5.2), followed by the procedures and results of the post-stratification weighting (section 5.3). Section 5.4 profiles the characteristics of the respondents’ most recent overnight trips in Australia. Where possible, respondents’ characteristics are compared with the general population data obtained from DET and the largest study of Australia and with the largest study of Chinese international students’ travel behaviour to date in Australia (King & Gardiner 2013). The chapter then presents the basic results and findings in relation to the three research questions:

Question 1  What information search strategy do students use in terms of (section 5.5):

   a. Spatial dimension?

   b. Temporal dimension?

   c. Operational dimension?

Question 2  Can student travellers be segmented on the basis of their information search behaviour, and how? (section 5.6)

Question 3  How do information search strategies vary according to students’ personal and trip-specific variables? (sections 5.7 and 5.8)

Finally, the findings in relation to research questions 1, 2 and 3 are discussed in relation to the literature (section 5.9).

The results and discussion in relation to research question 4, ‘Why do student travellers use specific information sources and conduct information search the way they do?’, are presented in Chapter 6.
5.2 Demographic characteristics of the respondents

This section provides a descriptive overview of the demographic characteristics of respondents to the stage one survey. Specific information collected here included age, gender and education level. It should be noted that 311 participated in the survey. After data screening 286 were retained for the quantitative data analysis.

5.2.1 Age of respondents

Figure 5.1 provides an overview of the age distribution of respondents, with data as recorded in ordinal categories. Persons aged under 30 years accounted for 95% of the sample, and half of the respondents were 22 to 25 years of age. This result is consistent with the sample collected by King and Gardiner (2013) in their study of 1,407 respondents, who were Chinese international students in Australia, in which almost 55% were between 22 and 25 years (see Figure 5.1). The result is also in accordance with the studied population in general. According to data obtained from DET, of 114,119 Chinese students studying in Australia in 2014, 97% were under 30 years. Additionally, more than 50% were between 22 and 25 years. (It should be noted that this number does not include Chinese international students under 18 years old). Not surprisingly, Chinese international students in general have a younger profile than the typical Chinese outbound visitors, and most of them are under 25 years.

Figure 5.1 Age distribution of Chinese international students
5.2.2 Gender distribution of Chinese international students

Within the sample, the majority of respondents were female, accounting for almost 65% (n=185) of respondents, while males made up 35% (n=101) of the sample (Figure 5.2). King and Gardiner (2013) noted in their report that almost 60% of their respondents were female. According to DET 2014 statistics, 52% of the total Chinese students studying in Australia were female. Thus, compared to DET’s figures in particular, the current study under-represents male respondents.

Figure 5.2 Gender distribution of Chinese international students

![Gender distribution chart]

- Study sample 2014 (n=286)
- DET data 2014 (n=114,119)
- King & Gardiner 2013 (n=1407)
5.2.3 Education in which students are enrolled

Most of the respondents are currently conducting an undergraduate degree (59%) followed by a postgraduate degree (29%) (Figure 5.3). This result is slightly different to King and Gardiner (2013), who report that most of their respondents were undertaking a postgraduate degree 44%, followed by an undergraduate degree (31%). DET statistics show that more than 110,000 Chinese students were studying in Australia in 2014, of which 37% were undertaking an undergraduate degree and 24% were undertaking a postgraduate degree. In general, most of the Chinese students were undertaking a higher education degree (undergraduate and postgraduate) in Australia. The samples collected in the current study under-represent postgraduate, VET and ELICOS students.

Figure 5.3 Education level of Chinese international students

- Study sample 2014 (n=286)
- DET data 2014 (n=114,119)
- King & Gardiner 2013 (n=1407)
5.2.4 Number of respondents by states

Eight universities accepted the survey request (four international office, four student association), two of which were based in NSW (one of which has multi-state campuses), three were based in Vic, and three were based in Qld) (one of which has multi-state campuses), and 1 was based in the ACT. Including the social media respondents, most of the 286 respondents were from NSW (51%), Qld (28.7%) and Vic (9.4%). According to the ABS statistics (2014) the dominant states and territories in terms of international students’ enrolment was NSW, followed by Vic, and Qld. In addition, most of the respondents were based in regional areas (74%) according to the universities they enrolled. Therefore, samples of the current study underrepresent students based in urban areas.
5.3 Post-stratification weight

Having a representative sample is necessary in order to generalise the findings to the population. In the current study some of the demographic categories were oversampled (e.g. female and undergraduate respondents). The oversampling of some groups and under-sampling of others may cause bias in that statistical procedures and will give greater weight to those people oversampled. Therefore, post-stratification weighting was conducted to correct the biases mathematically, making the sample more representative of the population in general. Post-stratification weighting can improve the accuracy of survey estimates, both by reducing bias and by increasing precision (Little 1993).

The weight variable is the quotient of the relevant population’s marginal proportion divided by the relevant sample’s marginal proportion. Respondents outside the variable range are assigned a weight. The weighted sample distribution is identical to the population distribution for in-scope respondents. The resulting weight variable does not change the overall sample size.

Weight scores were calculated according to data obtained from DET. As higher education student numbers by level of study were not obtainable, undergraduate and postgraduate respondents in the current study were collectively coded as higher education students. In addition, some cells were collapsed for age categories with small sample sizes. The number of respondents in each age group of VET and ELICOS is small (less than 10), and all the age groups in VET and ELICOS were collapsed to one group. A weight score was calculated for each subcategory and created in the data set in SPSS with Syntax commands (Table 5.1). The weighted sample data were then used in all subsequent data analyses.

Table 5.1 Post-stratification weight of sample

<table>
<thead>
<tr>
<th>Sector</th>
<th>Gender</th>
<th>Age</th>
<th>Population N</th>
<th>% of population</th>
<th>Sample N</th>
<th>% of sample</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Higher education</td>
<td>Male</td>
<td>18-21</td>
<td>7,885</td>
<td>6.5</td>
<td>21</td>
<td>7.3</td>
<td>0.89</td>
</tr>
<tr>
<td></td>
<td></td>
<td>22-25</td>
<td>23,174</td>
<td>19.1</td>
<td>50</td>
<td>17.5</td>
<td>1.09</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt;25</td>
<td>8,022</td>
<td>6.6</td>
<td>17</td>
<td>5.9</td>
<td>1.12</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>18-21</td>
<td>10,452</td>
<td>8.6</td>
<td>47</td>
<td>16.4</td>
<td>0.52</td>
</tr>
<tr>
<td></td>
<td></td>
<td>22-25</td>
<td>26,127</td>
<td>21.5</td>
<td>83</td>
<td>29.0</td>
<td>0.74</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt;25</td>
<td>7,729</td>
<td>6.4</td>
<td>34</td>
<td>11.9</td>
<td>0.54</td>
</tr>
<tr>
<td>VET &amp; ELICOS</td>
<td>Male</td>
<td>≥18</td>
<td>19,165</td>
<td>15.8</td>
<td>13</td>
<td>4.5</td>
<td>3.51</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>≥18</td>
<td>18,518</td>
<td>15.3</td>
<td>21</td>
<td>7.3</td>
<td>2.10</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>121,318</td>
<td></td>
<td>286</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5.4 Respondents’ trip profile

The following section describes the trip characteristics of respondents’ most recent overnight trip in Australia, including their travel party composition, whether they were first-time or repeat visitors to the destination, number of nights travelled, trip expenditure and pre-trip planning time.

5.4.1 Travel party composition

Most of the respondents travelled with other Chinese international students (64%) in their most recent overnight trip, followed by ‘friends or relatives who are not students’ (18%) (Figure 5.4). According to the largest study of international student travel behaviour to date in Australia, Chinese students in Australia tend to travel with their friends, and are much more likely to travel with friends who are also Chinese students as opposed to other nationalities (Davidson et al. 2013). Davidson et al. (2013) also found that Chinese students are likely to encourage their friends and family to visit Australia, and almost 50% of the respondents have already had family and/or friends visit them. Results of the current study and previous literature together suggest that Chinese students are likely to travel with people who are considered to be their group members (Chinese students, family/friends). The travel party composition of respondents also supports previous findings that Chinese students contribute to the local tourism economy by not only travelling themselves, but also by receiving visits from family and friends from overseas (King & Gardiner 2013; Liu & Ryan 2011).

Figure 5.4 Distribution of Chinese international students by travel party composition
5.4.2 Previous experience with the destination

To examine ‘whether previous experience with the destination influenced student travellers’ information search behaviour’, respondents were asked to indicate if the most recent overnight trip conducted in Australia was their first visit to the primary destination. Results show that most of the respondents were first-time visitors to the destination (62%), and almost 30% were on repeat visits (Figure 5.5). About 10% of respondents chose ‘other’, as they went to several destinations during their last trip and could not pick one city/region as a primary destination. This variable was not measured by King and Gardiner (2013), therefore a comparison cannot be made.

Figure 5.5 Travel experience of respondents (n=286)
5.4.3 Trip duration

About 85% of respondents took overnight trips less than a week, with more than 50% taking a trip of less than four nights (Figure 5.6). Only about 12% of respondents took a trip over seven nights. This finding was also consistent with previous findings that Chinese students mostly take day trips or short breaks of one to three nights (Davidson 2013; King & Gardiner 2013). However, the current study only surveyed Chinese students who had overnight trips in Australia, while King and Gardiner’s (2013) study also included day trip travellers and therefore parallel comparisons cannot be made.

Figure 5.6 Distribution of respondents by length of trip (n=286)
5.4.4 Trip expenditure

Given that most of the respondents took relatively short overnight trips, it is not surprising that most of them spent less than AU$1000 on their last trip (72%), and less than 30% of the sample spent more than AU$1000 (Figure 5.7). Davidson et al. (2013) investigated travel behaviour of international students in Australia and found that 85% of Chinese international students (n=1414) spent less than AU$1000 on their last trip in Australia, and only 15% spent more than AU$1000.

It should be noted that Davidson et al. (2013) included both students who took day trips and those who took overnight trips, while the current study examines only those who conducted an overnight trip in their most recent travel in Australia. Not surprisingly, a higher percentage spent less than AU$1000 in the Davidson et al. study. Davidson et al. (2013) also found that the funding that Chinese students use for travel and recreation activities is mainly contributed by their family (58%), while some students use income from working (32%) and personal savings (30%). This may partially explain their relatively tight budget for travelling.

Figure 5.7 Distribution of Chinese international students by trip expenditure
5.4.5 Pre-trip planning time

More than 70% of respondents spent less than one month planning their most recent overnight trip in Australia (Figure 5.8). Both Davidson et al. (2013) and King and Gardiner (2013) did not investigate pre-trip planning time; as such this result cannot be compared to previous findings of Chinese student travellers.

Figure 5.8 Respondents’ pre-trip planning period (n=286)

The collected sample (n=286) constitutes a small portion of the entire population of Chinese students in Australia. However, based on the findings above, it is concluded that the characteristics of respondents in the current study are, for the most part, consistent with the studied population in terms of both demographics and trip features, and therefore their responses - especially after weighting the samples as per Table 5.1 - should be indicative, if not entirely representative, of Chinese students.
5.5 Respondents’ information search behaviour

5.5.1 Descriptive results of respondents’ information search behaviour

This section provides an examination of respondents’ general behaviour with regard to information searching for their most recent trip in Australia. This section aims to answer the first research question, ‘what information search strategy do students use in terms of spatial, temporal and operational dimensions?’ All the analyses were conducted on weighted data (see section 5.3). It should be noted that the results are based on pre-trip information selection of respondents.

The information sources used by Chinese international students surveyed are summarised in Table 5.2. Results show that 76 respondents (27%) used only one source for trip planning, which indicates that most of the respondents (73%) surveyed reported using more than one information source. ‘Online information’ is the most frequently used source (75%) and ‘Tourist information centres’ the least used source (17%). When only one source was used, as was the case with 27% of the respondents, it was most likely to be ‘Online information’ (43%), followed by ‘Friends’ recommendations’ (35%). Other information sources were less likely to be used on their own for vacation planning.

When two information sources were used (24% of total respondents), they were most likely to be ‘Online information’ and one offline information source (85%). Specifically, most of these respondents used ‘Online information’ and ‘Friends’ recommendations’ (52%). Respondents who used three information sources constituted 30% of the total sample, and were most likely to use ‘Online information’, ‘Friends’ recommendations’ and one other offline information source (69%).

Users of four or more information sources constitute 19% of total respondents. Specifically, most of these respondents used ‘Online information’, ‘Travel brochures’, ‘Friends’ recommendations’ and other information source(s) (56%). It is clear that the use of information sources in combination (e.g. online information and recommendations from friends) is due to the frequency with which respondents used each individual source of information.
Table 5.2 Respondents’ information search strategy

<table>
<thead>
<tr>
<th>Information Source</th>
<th>Total sample (N=286)</th>
<th>Used only that source (n=76)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online information</td>
<td>216 75.4</td>
<td>33 42.9</td>
</tr>
<tr>
<td>Friends’ recommendations</td>
<td>185 64.5</td>
<td>27 35.1</td>
</tr>
<tr>
<td>Travel brochures</td>
<td>80 28.0</td>
<td>4 -</td>
</tr>
<tr>
<td>Travel agency</td>
<td>67 23.3</td>
<td>4 -</td>
</tr>
<tr>
<td>Travel guidebooks</td>
<td>55 19.4</td>
<td>3 -</td>
</tr>
<tr>
<td>My experience</td>
<td>60 20.9</td>
<td>3 -</td>
</tr>
<tr>
<td>Tourist information centres</td>
<td>48 16.9</td>
<td>1 -</td>
</tr>
<tr>
<td>Other offline information</td>
<td>3 1.1</td>
<td>1 -</td>
</tr>
</tbody>
</table>

In terms of understanding how reliant respondents were on each information source and each type of travel website, respondents were asked to indicate to what extent they relied on each of the information sources and each type of travel website on a five-point rating scale, with 1 indicating ‘not at all important’ and 5 indicating ‘very important’. In this case, an ‘important’ rating is a surrogate measure for how much the respondent used and relied upon this information source. It should be noted that the data is based on pre-trip selection of respondents. Mean scores were calculated for each information source and each type of travel website and are presented in bar graphs, where the error bar represents a 95% confidence interval for the mean (Figures 5.9 and 5.10). A confidence interval for the mean is a range of scores constructed such that the population mean falls within this range for 95% of the sample (Field, A 2009, p.45).

Results show that ‘Online information’ was the most important information source for respondents, followed by ‘Friends’ recommendations’ and ‘My personal experience’. ‘Travel agency’ was the least used source for their vacation planning. In terms of travel websites, ‘Airline and other transportation websites’ and ‘Hotel and other accommodation websites’ were used mostly by respondents, followed by ‘Online travel guides’ and ‘Travelogues or online travel communities’. travel magazine websites’ showed the lowest use by respondents.
Figure 5.9 Respondents’ use of each information source (n=286)

![Figure 5.9](image)

Figure 5.10 Respondents’ use of each type of travel websites (n=286)

![Figure 5.10](image)
5.5.2 Spatial dimension of respondents’ information search strategy

To answer the research question 1a, ‘what information search strategy do students use in terms of the spatial dimension (internal search vs. external search)?’, a one-way within-subjects (or repeated measures) ANOVA was conducted in order to compare whether the differences between internal information (personal experience) and any of the six external information sources are statistically significant (Figure 5.9). An ANOVA with repeated measures is used to compare three or more group means where the participants are the same in each group. Assumptions of ANOVA were checked. Sampling distribution is normally distributed. Variances in populations are roughly equal (homogeneity of variance).

The results of the ANOVA indicate a significant difference, Wilk’s Lambda = .49, F (6, 340) = 58.19, p< .05 (Table 5.3).

Table 5.3 Multivariate tests of one-way within-subject ANOVA

<table>
<thead>
<tr>
<th>Effect</th>
<th>Value</th>
<th>F</th>
<th>Hypothesis df</th>
<th>Error df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information Pillai's Trace</td>
<td>.51</td>
<td>58.19b</td>
<td>6.00</td>
<td>340.00</td>
<td>.00</td>
</tr>
<tr>
<td>Wilks' Lambda</td>
<td>.49</td>
<td>58.19b</td>
<td>6.00</td>
<td>340.00</td>
<td>.00</td>
</tr>
<tr>
<td>Hotelling's Trace</td>
<td>1.03</td>
<td>58.19b</td>
<td>6.00</td>
<td>340.00</td>
<td>.00</td>
</tr>
<tr>
<td>Roy's Largest Root</td>
<td>1.03</td>
<td>58.19b</td>
<td>6.00</td>
<td>340.00</td>
<td>.00</td>
</tr>
</tbody>
</table>

a. Design: Intercept
Within Subjects Design: Information
b. Exact statistic

Six paired samples t-tests were used to make post hoc comparisons between groups. Each of the six external information sources is compared with ‘My personal experience’, and three pairs had statistical significant results (see Tables 5.4 and 5.5). Specifically,

- there was a significant difference between respondents use of ‘Online information’ (M = 3.79, SD = 1.20) and ‘My personal experience’ (M= 3.41, SD = 1.15); t (285) = 16.29, p = .00.

- there was a significant difference between respondents use of ‘Travel brochures’ (M = 2.74, SD = 1.08) and ‘My personal experience’ (M= 3.41, SD = 1.15), t (285) = 2.04, p = .04.

- there was a significant difference between respondents use of ‘Friends’
recommendations’ (M = 3.63, SD = 1.04) and ‘My personal experience’ (M= 3.41, SD = 1.15), t (285) = 11.64, p = .00.

The significant results suggest that respondents were significantly more likely to use ‘Online information’ and ‘Friends’ recommendations’ than ‘My personal experience’; and were significantly less likely to use ‘Travel brochures’ than ‘My personal experience’.

Table 5.4 Respondents’ use of travel information sources before trip

<table>
<thead>
<tr>
<th>Source</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online information</td>
<td>3.79</td>
<td>1.20</td>
<td>286</td>
</tr>
<tr>
<td>Travel agency</td>
<td>2.57</td>
<td>1.07</td>
<td>286</td>
</tr>
<tr>
<td>Travel guidebooks</td>
<td>2.63</td>
<td>1.01</td>
<td>286</td>
</tr>
<tr>
<td>Travel brochures</td>
<td>2.74</td>
<td>1.08</td>
<td>286</td>
</tr>
<tr>
<td>Tourist information centres</td>
<td>2.96</td>
<td>1.29</td>
<td>286</td>
</tr>
<tr>
<td>Friends’ recommendations</td>
<td>3.63</td>
<td>1.04</td>
<td>286</td>
</tr>
<tr>
<td>My personal experience</td>
<td>3.41</td>
<td>1.15</td>
<td>286</td>
</tr>
</tbody>
</table>

Table 5.5 Paired samples t-test of respondents use internal information vs. external information sources before trip

<table>
<thead>
<tr>
<th>Pair</th>
<th>Paired Differences</th>
<th>t</th>
<th>df</th>
<th>Sig.(2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online information – Personal experience</td>
<td>.55 .57 .03 .48 .61</td>
<td>16.29</td>
<td>285</td>
<td>.00**</td>
</tr>
<tr>
<td>Travel agency – Personal experience</td>
<td>.03 .56 .03 -.04 .09</td>
<td>.77</td>
<td>285</td>
<td>.44</td>
</tr>
<tr>
<td>Travel guidebooks – Personal experience</td>
<td>-.02 .56 .03 -.08 .05</td>
<td>-.47</td>
<td>285</td>
<td>.64</td>
</tr>
<tr>
<td>Travel brochures – Personal experience</td>
<td>.07 .59 .04 .00 .14</td>
<td>2.04</td>
<td>285</td>
<td>.04**</td>
</tr>
<tr>
<td>Tourist information centres – Personal experience</td>
<td>-.04 .56 .03 -.11 .03</td>
<td>-1.21</td>
<td>285</td>
<td>.23</td>
</tr>
<tr>
<td>Friends’ recommendations – Personal experience</td>
<td>.44 .63 .04 .36 .51</td>
<td>11.64</td>
<td>285</td>
<td>.00**</td>
</tr>
</tbody>
</table>
5.5.3 Temporal dimension of respondents’ information search strategy

To examine research question 1b, ‘what information search strategy do students use in terms of the temporal dimension (pre-trip search vs. during trip search)?’, respondents were asked to indicate the extent to which they used each information source before-trip and during-trip on five-point rating scales, with 1 indicating ‘not at all important’ and 5 ‘very important’. The aim of this was to examine respondents’ ongoing information search strategy and assess whether the use of each information source changes during the trip. Mean scores were calculated for each information source at both stages with error bars representing the 95% confidence interval for mean (Figure 5.11).

Figure 5.11 Respondents’ rating of importance of information sources at two trip stages (n=286)

Paired-sample t-tests were conducted to compare whether the differences found were significant or due to chance variance. Significant differences were found on ‘Travel agency’, ‘Travel brochures’ and ‘Friends’ recommendations’. Specifically, respondents were significantly more likely to use ‘Travel agency’ and ‘Travel brochures’ during their trip than before the trip, while ‘Friends’ recommendations’ was more likely to be used before the trip than during the trip:

a. ‘Travel agency’, before-trip (M = 2.51, SD = 1.05) was statistically significantly lower than during-trip (M= 2.65, SD = 1.19), t (285) = -2.45, p< .05,

b. ‘Travel brochures’, before-trip (M = 2.72, SD = 1.11) was statistically significantly lower than during-trip (M =2.88, SD = 1.15), t (285) = - 2.68, p< .05,
c. ‘Friends’ recommendations’, before-trip (M = 3.62, SD = 1.01) was statistically significantly higher than during-trip (M = 3.50, SD = 1.05), t (285) = 2.91, p< .05.

It should be noted that, with the exception of ‘Friends’ recommendations’, there was no significant decrease in the use of any information sources, which suggests that respondents would continue using the information sources during the trip. This confirms the ongoing nature of travellers’ information search activities.

5.5.4 Operational dimension of respondents’ information search strategy

The operational dimension concerns whether the information sources used by respondents are contributory or decisive in terms of decision-making. An important indicator of the operational dimension is whether information sources were used in conjunction with other sources or were used as the sole source for trip planning (Fodness & Murray 1999). Section 5.5.1 showed that Online information and Friends’ recommendations are mostly used solely for trip planning, which suggests that these two sources are more likely to be decisive sources. While other information sources (e.g. travel agency, travel guidebooks) are mostly used in combination with other sources and therefore are more likely to be contributory sources.

When examining the operational dimension of a traveller’s information search strategy, it is also important to consider the specific travel products that the consumer purchases. Therefore, to have an in-depth understanding of the operational dimension of student travellers’ information search strategies, respondents were asked to select the primary information source they used for each type of travel services (accommodation, transportation, recreational activities and entertainment activities). Those who selected ‘Online information’ as their primary source for the service were then asked to select the primary type of website used for that service.

Descriptive statistics with frequencies were conducted to examine respondents’ primary information sources for each of the travel services. Results are reported in bar graphs (Figures 5.12 and 5.13).
Figure 5.12 Primary information source for travel services

![Bar chart showing the primary information source for travel services.](image)

Figure 5.13 Primary website for travel services

![Bar chart showing the primary website for travel services.](image)
Results indicate that, in general, ‘Online information’ and ‘Friends’ recommendations’ were mainly used as primary sources for the four travel services (Figure 5.12), which is consistent with the above finding that ‘Online information’ and ‘Friends’ recommendations’ are more likely to be decisive sources for student travellers:

- 186 respondents used ‘Online information’ primarily for accommodation services (65% of total respondents), of which 70% primarily used ‘Hotel or other accommodation websites’ (Figure 5.13).
- 126 respondents chose ‘Online information’ as their primary information source for transportation services (44% of total respondents), of which half used ‘Airline or other transportation websites’ (Figure 5.13).
- 109 and 113 respondents selected online information as a primary source of information for recreational and entertainment activities services respectively. ‘Online travel guide’ was used most often as a primary website for travel activities, followed by ‘Travelogue or online travel communities’ (Figure 5.13).

Chi-square statistics were conducted to determine if distribution differences found were significant or due to chance variations. Results indicate that the distribution differences found are significant (Table 5.6). It can be concluded that, in general, respondents are significantly more likely to use ‘Online information’ and ‘Friends’ recommendations’ as primary information for the four major travel services examined for decision-making. This result further confirms that ‘Online information’ and ‘Friends’ recommendations’ tend to be decisive sources in terms of vacation planning. Regarding specific travel websites, respondents are significantly more likely to use service-specific sites (e.g. accommodation and transportation website) primarily for lodging and transportation services. For travel activities (including recreational and entertainment activities), ‘Online travel guide’ and ‘Travelogue or online travel communities’ were used significantly more often as primarily websites for decision-making than other travel websites.
Table 5.6 Chi-square results for the primary information source and type of website for each travel service

<table>
<thead>
<tr>
<th></th>
<th>Chi-Square</th>
<th>df</th>
<th>Asymp. Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary information source for accommodation</td>
<td>768.25</td>
<td>6</td>
<td>.00</td>
</tr>
<tr>
<td>Primary information source for transportation</td>
<td>351.99</td>
<td>7</td>
<td>.00</td>
</tr>
<tr>
<td>Primary information source for recreational activity</td>
<td>227.32</td>
<td>7</td>
<td>.00</td>
</tr>
<tr>
<td>Primary information source for entertainment activity</td>
<td>306.99</td>
<td>7</td>
<td>.00</td>
</tr>
<tr>
<td>Primary website for accommodation</td>
<td>654.97</td>
<td>7</td>
<td>.00</td>
</tr>
<tr>
<td>Primary website for transportation</td>
<td>174.91</td>
<td>7</td>
<td>.00</td>
</tr>
<tr>
<td>Primary website for recreational activity</td>
<td>72.19</td>
<td>7</td>
<td>.00</td>
</tr>
<tr>
<td>Primary website for entertainment activity</td>
<td>100.88</td>
<td>7</td>
<td>.00</td>
</tr>
</tbody>
</table>

5.5.5 Section summary

In summary, section 5.5 described respondents’ information search behaviour. Specifically, sections 5.5.2–5.5.4 discussed students’ information search strategy in terms of the spatial dimension (internal vs. external search), temporal dimension (pre-trip vs. ongoing search) and operational dimension (specific source for decision-making). Results indicate that respondents’ use of internal sources (‘My personal experience’) was significantly different from external information sources (‘Online information’, ‘Friends’ recommendations’ and ‘Travel brochures’). Examination of the temporal dimension confirmed the ongoing nature of the tourism information search; that is, respondents conduct information search prior to their trip as well as during the trip. ‘Friends’ recommendations’ was significantly more important before the trip, while ‘Travel agency’ and ‘Travel brochures’ were significantly more important during the trip than before the trip. In terms of decision-making, ‘Online information’ and ‘Friends’ recommendations’ were significantly more likely to be used as primary information sources for the four main travel services, and were more likely to be decisive in terms of travel decision-making than other information sources.
5.6 Respondents segmentation based on their information search behaviour

5.6.1 Cluster analysis for respondents’ information search behaviour

This section refers to research question 2, ‘can student travellers be segmented on the basis of their information search behaviour, and if so, how?’ To answer this research question cluster analysis was conducted to form the respondents into homogenous groups based on the degree of search (number of information sources used) and direction of search (specific sources consulted).

Cluster analysis is used when there is limited a priori knowledge about the number of groups that will be generated and who the members of these groups will be (Churchill 1995). The main purpose of cluster analysis is to divide a set of objects into two or more groups according to the similarity of the objects for a set of specified characteristics (Hair 2006). It intends to maximise the similarity of respondents within groups and maximise the difference between groups. It should be noted that there is no single best solution to a clustering problem, and the number of clusters are determined subjectively (Fodness & Murray 1997). Usually a three to six cluster solution is the most manageable and the easiest to interpret (Fodness & Murray 1997).

K-means cluster analysis was conducted on respondents’ use of seven information sources and ‘the number of information sources respondents consulted before the trip’. Some researchers suggest using ‘factor-cluster analysis’ if there are too many variables to deal with in the cluster analysis. This means that the original variables are first subjected to factor analysis and the subsequent factor scores are used as the segmentation base. However, this approach is not recommended for the current research. First of all, eight variables were used in the cluster analysis, which is not considered ‘too many’. Secondly, when raw data are reduced to factors a substantial amount of information is lost. If the proportion of variance explained is 60%, for example, that means 40% of information in the data is dumped before even commencing the segmentation analysis (Dolnicar 2013). Finally, the relations of variables to each other are changed after factor analysis, differences between segments can be reduced and segments are identified in a different space than originally postulated (Arabie and Hubert 1994; Milligan, 1996; Ketchen and Shook 1996).

Therefore, it was decided to use raw data in the cluster analysis. This also follows the recommendation by Sheppard (1996) who points out that ‘cluster analysis on raw item scores,
as opposed to factor scores, may produce more accurate or detailed segmentation as it preserves a greater degree of the original data’.

In terms of the cluster analysis approach, a K-means cluster is superior to hierarchical methods. On the one hand, a K-means cluster is less affected by outliers and the presence of irrelevant clustering variables; on the other, the procedure of K-means is less computationally demanding than the hierarchal method and therefore can be applied to large data sets (Mooi & Sarstedt 2011).

Two assumptions should be met before conducting the analysis. First, multicollinearity among variables in the cluster variate should be avoided, as highly correlated variables (> .90) will be over-represented on specific aspects in the cluster solution. Bivariate correlation analysis was conducted on the eight variables, and high correlation was not detected between any of the two variables. Therefore, the first assumption was met. Second, strictly speaking, only interval or ratio-scaled data can be used in a K-means cluster, as the procedure relies on Euclidean distances (Hair 2006; Mooi & Sarstedt 2011). The extent respondents used each information source was measured on a five-point rating scale, and the number of information sources consulted was counted numerically, therefore the second assumption was met.

Alternative three, four, five and six solutions were generated. By examining and comparing the results of all the solutions with a qualitative approach it was deemed that three clusters was the most reasonable solution. This solution clearly identified three unique groups of tourists who demonstrated similar information search behaviours (Table 5.7). It is important to emphasise here that ‘both the application and interpretation of cluster analysis is more art than science’ (Fodness & Murray 1997, p. 511).
Table 5.7 Segmentation of respondents by information use patterns

<table>
<thead>
<tr>
<th>Information sources</th>
<th>Segment 1 Focused searcher (N=105)</th>
<th>Segment 2 Passive searcher (N=84)</th>
<th>Segment 3 Extensive searcher (N=97)</th>
<th>F-value</th>
<th>Sig.</th>
<th>Post Hoc test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online information</td>
<td>4.44</td>
<td>2.48</td>
<td>4.05</td>
<td>116.92</td>
<td>.00</td>
<td>1&gt;3&gt;2</td>
</tr>
<tr>
<td>Travel agency</td>
<td>2.21</td>
<td>2.07</td>
<td>3.21</td>
<td>42.44</td>
<td>.00</td>
<td>3&gt;1, 2</td>
</tr>
<tr>
<td>Travel guidebook</td>
<td>2.35</td>
<td>2.05</td>
<td>3.48</td>
<td>84.35</td>
<td>.00</td>
<td>3&gt;1&gt;2</td>
</tr>
<tr>
<td>Travel brochure</td>
<td>2.30</td>
<td>1.95</td>
<td>3.85</td>
<td>174.12</td>
<td>.00</td>
<td>3&gt;1&gt;2</td>
</tr>
<tr>
<td>Destination information centre</td>
<td>2.32</td>
<td>1.99</td>
<td>4.30</td>
<td>196.14</td>
<td>.00</td>
<td>3&gt;1&gt;2</td>
</tr>
<tr>
<td>Recommendation from friends</td>
<td>3.85</td>
<td>3.10</td>
<td>3.84</td>
<td>17.77</td>
<td>.00</td>
<td>1,3&gt;2</td>
</tr>
<tr>
<td>My personal experience</td>
<td>3.84</td>
<td>2.51</td>
<td>3.58</td>
<td>44.91</td>
<td>.00</td>
<td>1,3&gt;2</td>
</tr>
<tr>
<td>Type of websites</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Travel agent or tour operator websites</td>
<td>2.24</td>
<td>2.08</td>
<td>2.82</td>
<td>9.88</td>
<td>.00</td>
<td>3&gt;1, 2</td>
</tr>
<tr>
<td>Official destination websites</td>
<td>2.87</td>
<td>2.77</td>
<td>3.57</td>
<td>11.03</td>
<td>.00</td>
<td>3&gt;1, 2</td>
</tr>
<tr>
<td>Airline or transportation websites</td>
<td>3.68</td>
<td>3.01</td>
<td>3.92</td>
<td>14.44</td>
<td>.00</td>
<td>1,3&gt;2</td>
</tr>
<tr>
<td>Hotel or other accommodation websites</td>
<td>3.88</td>
<td>3.24</td>
<td>4.02</td>
<td>12.73</td>
<td>.00</td>
<td>1,3&gt;2</td>
</tr>
<tr>
<td>Travel magazine websites</td>
<td>2.24</td>
<td>2.22</td>
<td>2.99</td>
<td>15.61</td>
<td>.00</td>
<td>3&gt;1, 2</td>
</tr>
<tr>
<td>Online travel guides</td>
<td>3.26</td>
<td>2.54</td>
<td>3.81</td>
<td>31.72</td>
<td>.00</td>
<td>3&gt;1&gt;2</td>
</tr>
<tr>
<td>Travelogues or online travel communities</td>
<td>3.24</td>
<td>2.55</td>
<td>3.58</td>
<td>17.82</td>
<td>.00</td>
<td>1,3&gt;2</td>
</tr>
<tr>
<td>No. of sources consulted</td>
<td>2.6</td>
<td>2.07</td>
<td>2.75</td>
<td>7.51</td>
<td>.00</td>
<td>1,3&gt;2</td>
</tr>
</tbody>
</table>

Segment 1 contained the largest number of respondents (n=105), and consists of 36.7% of total respondents. Members of this segment showed the highest use of ‘Online information’, ‘Friends’ recommendations’ and ‘My personal experience’ than the other two segments, with relatively low use of other information sources. The mean number of information sources consulted was 2.6. As discussed in section 5.5, ‘Online information’ and ‘Friends’ recommendations’ were more likely to be decisive sources in terms of decision-making. ‘My personal experience’ represents the knowledge and experience stored in one’s long-term memory, which also has an influential effect on one’s decision-making. Respondents in this group mainly focus on using decisive sources to plan their trip; therefore, the cluster is labelled as ‘focused searcher’.

Segment 2 (n= 84) accounts for 29.4% of the total respondents. This segment showed the lowest level of information usage for almost all information sources. ‘Friends’ recommendations’ was particularly preferred by this segment. The number of information sources consulted was also the lowest. Fodness and Murray (1997) suggest that tourists’ heavy
reliance on recommendations from friends represents a passive information search strategy. Due to their relatively less-active involvement in external searches than the other two tourist segments, and their primary reliance on ‘Friends’ recommendations’, this segment is labelled as ‘passive searcher’.

Segment 3 (n=97) consists of 33.9% of total respondents. Members of this segment appear to be more actively involved in information acquisition from a wide range of information sources. These respondents also had the highest number of information sources consulted. Compared to the other two segments, they were significantly more likely to use formal offline information sources, such as travel agencies, travel guidebooks, travel brochures and destination information centres. The active search behaviour suggests that this segment is appropriately labelled ‘extensive searcher’.

A one-way ANOVA was conducted to determine how well the segmentation discriminated among tourists grouped on the basis of their information search behaviour. Significant differences were found between the three segments in using seven information sources, seven types of websites and the number of sources consulted. Due to the sample sizes being roughly equal for the three segments, Turkey’s test and REGWQ were used for post hoc tests, and the Games-Howell procedure was used to check the findings (Field 2009). Results are presented in Table 5.7.

5.6.2 Demographic and trip profile of the three segment groups

The distributions of the three segments in terms of trip-specific and demographic variables are presented in Table 5.8. The table shows that for travel with other Chinese students, with an overnight stay of 1–3 nights, expenditure less than AU$500, to a destination previously visited we can expect a ‘focused search’ approach to travellers’ information search behaviour on their trip. For travel with VFRs, with an overnight stay of over 7 nights, expenditure more than AU$1000, visiting multiple destinations, who were male and undertaking undergraduate degrees we can expect a ‘passive search’ approach to travellers’ information search behaviour on their trip. Finally, for those travelling by themselves, with an overnight stay of 4–6 nights, expenditure between AU$500 to AU$1000, who were older than 25 years old, were female and were undertaking VET and ELICOS or postgraduate study we can expect an ‘extensive search’ approach to their information search behaviour on their trip.
Table 5.8 Characteristics of three segments

<table>
<thead>
<tr>
<th>Variables</th>
<th>Segment 1 Focused searcher (N=105)</th>
<th>Segment 2 Passive searcher (N=84)</th>
<th>Segment 3 Extensive searcher (N=97)</th>
<th>Total</th>
<th>Chi-square</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n.</td>
<td>% within item</td>
<td>n.</td>
<td>% within item</td>
<td>n.</td>
<td>% within item</td>
</tr>
<tr>
<td>Travel group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>With Chinese students</td>
<td>70</td>
<td>66</td>
<td>54</td>
<td>65.1</td>
<td>60</td>
<td>61.9</td>
</tr>
<tr>
<td>With other nation students</td>
<td>9</td>
<td>8.5</td>
<td>2</td>
<td>2.4</td>
<td>7</td>
<td>7.2</td>
</tr>
<tr>
<td>With friends or relatives</td>
<td>19</td>
<td>17.9</td>
<td>21</td>
<td>25.3</td>
<td>15</td>
<td>15.5</td>
</tr>
<tr>
<td>By myself</td>
<td>8</td>
<td>7.5</td>
<td>6</td>
<td>7.2</td>
<td>15</td>
<td>15.5</td>
</tr>
<tr>
<td>Night travelled</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1–3</td>
<td>65</td>
<td>61.9</td>
<td>41</td>
<td>48.8</td>
<td>51</td>
<td>52.6</td>
</tr>
<tr>
<td>4–6</td>
<td>29</td>
<td>27.6</td>
<td>29</td>
<td>34.5</td>
<td>36</td>
<td>37.1</td>
</tr>
<tr>
<td>Over 7</td>
<td>11</td>
<td>10.5</td>
<td>14</td>
<td>16.7</td>
<td>10</td>
<td>10.3</td>
</tr>
<tr>
<td>Expenditure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;500</td>
<td>46</td>
<td>43.8</td>
<td>21</td>
<td>25.3</td>
<td>38</td>
<td>38.8</td>
</tr>
<tr>
<td>501–100</td>
<td>30</td>
<td>28.6</td>
<td>33</td>
<td>39.8</td>
<td>38</td>
<td>38.8</td>
</tr>
<tr>
<td>&gt;1000</td>
<td>29</td>
<td>27.6</td>
<td>29</td>
<td>34.9</td>
<td>22</td>
<td>22.4</td>
</tr>
<tr>
<td>Experience</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First time</td>
<td>65</td>
<td>61.9</td>
<td>51</td>
<td>60.7</td>
<td>61</td>
<td>62.9</td>
</tr>
<tr>
<td>Repeat</td>
<td>33</td>
<td>31.4</td>
<td>21</td>
<td>25.0</td>
<td>29</td>
<td>29.9</td>
</tr>
<tr>
<td>Multiple destinations</td>
<td>7</td>
<td>6.7</td>
<td>12</td>
<td>14.3</td>
<td>7</td>
<td>7.2</td>
</tr>
<tr>
<td>Planning period</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 1 month</td>
<td>86</td>
<td>41.1</td>
<td>63</td>
<td>30.1</td>
<td>60</td>
<td>28.7</td>
</tr>
<tr>
<td>1 month or longer</td>
<td>19</td>
<td>24.7</td>
<td>21</td>
<td>27.3</td>
<td>37</td>
<td>48.1</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>51</td>
<td>48.6</td>
<td>49</td>
<td>58.3</td>
<td>37</td>
<td>38.1</td>
</tr>
<tr>
<td>Female</td>
<td>54</td>
<td>51.4</td>
<td>35</td>
<td>41.7</td>
<td>60</td>
<td>61.9</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>18–21</td>
<td>30</td>
<td>28.6</td>
<td>15</td>
<td>28.6</td>
<td>27</td>
<td>27.8</td>
</tr>
<tr>
<td>22–25</td>
<td>54</td>
<td>51.4</td>
<td>44</td>
<td>51.4</td>
<td>45</td>
<td>46.4</td>
</tr>
<tr>
<td>&gt;25</td>
<td>21</td>
<td>20.0</td>
<td>25</td>
<td>20.0</td>
<td>25</td>
<td>25.8</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VET &amp; ELICOS</td>
<td>29</td>
<td>27.6</td>
<td>27</td>
<td>32.1</td>
<td>33</td>
<td>34.0</td>
</tr>
<tr>
<td>Undergraduate</td>
<td>53</td>
<td>50.5</td>
<td>43</td>
<td>51.2</td>
<td>36</td>
<td>37.1</td>
</tr>
<tr>
<td>Postgraduate</td>
<td>23</td>
<td>21.9</td>
<td>14</td>
<td>16.7</td>
<td>28</td>
<td>28.9</td>
</tr>
</tbody>
</table>
Chi-square statistics were conducted to determine if distribution differences found were significant or due to chance variations. Results show that the distribution of the three segments only shows statistically significant differences on two variables: gender and planning period. Specifically, female respondents were significantly more likely to be ‘extensive searchers’ than male respondents. While male respondents were significantly more likely to be ‘passive searchers’ than female respondents. Respondents who are ‘extensive searchers’ were significantly more likely to spend a longer time for vacation planning (>1 month), and ‘passive searchers’ tended to spend less time on vacation planning (<1 month). The distribution of the other variables was statistically insignificant.

Fodness and Murray (1997, p.508) noted three criteria for evaluating the relative performance of the segmentation approach: a) how well does each segmentation mode discriminate across the total sample on the descriptor variables, b) does each segmentation mode generate segments of sufficient size to be of consequence, and c) do the segments created make ‘good marketing sense’?

Results show that the three segments identified are of roughly equal size and are statistically significantly different in terms of information search behaviour (sources used and number of sources consulted). However, in terms of using descriptor variables (demographic and trip variables) to distinguish the characteristics associated with each segment, only two variables had significant results. This means that the sub-markets (segments) generated cannot be clearly distinguished on the basis of various descriptive variables, which raises issues for an effective marketing strategy. However, this clustering is an exercise in an insightful interpretation of respondents’ information search behaviour. From this perspective, this is a successful approach. However, the statistically significant validity across all descriptive variables would need further investigation with larger samples. More discussion on this issue is presented in section 5.9.2.
5.7 Information source and travel website typologies

5.7.1 Principal component analysis for information sources

Various information sources can be grouped into several typologies based on respondents’ information search strategies (used/relied upon information sources prior to and during the trip). This section explores the underlying dimensions of the seven information sources and seven travel websites based on respondents’ information search strategies. The underlying factor structures identified are used in the subsequent multi-variate analyses (e.g. section 5.8 multiple regression analyses).

To explore the underlying dimensions of the seven information sources, the researcher first conducted separate PCA analysis for pre- and during-trip IVs, and identical results were found for the two separate analysis. Therefore, it was deemed that combining pre- and during-trip IVs together for PCA analysis was appropriate.

A principal component analysis (PCA) with orthogonal rotation (varimax) was conducted on Question 5 (‘How important was each information source for planning at the pre-trip stage?’) and Question 6 (‘How important was each information source for planning at the during-trip stage?’) As noted above, the rating of ‘important’ here is surrogate for ‘used and relied upon’. PCA is an appropriate statistical approach for this purpose as it can be used to analyse interrelationships among a number of variables and to explain these variables in terms of their common underlying dimensions (factors) (Hair, Black & Babin 2010). Analyses were conducted on weighted data.

Results show that the Kaiser-Meyer-Olkin (KMO) measure verified the sampling adequacy for the analysis, KMO = .73 (‘good’ according to Field, 2009). Bartlett’s test of sphericity, $\chi^2$ (91) = 2077.47, p<.001 (Table 5.9), indicated that correlations between items were sufficiently large for PCA. An initial analysis was run to obtain eigenvalues for each component in the data. Four components had eigenvalues over Kaiser’s criterion of 1 and in combination explained 69.91% of the variance (Table 5.10).

Four components were retained in the final analysis. Table 5.11 shows the factor loadings after rotation. Varimax rotation (orthogonal rotation) was selected as it is mainly used when the purpose is to load a smaller number of variables highly onto each factor, resulting in more interpretable clusters (Field, A 2009). The items that cluster on the same components suggest
that component 1 represents ‘Offline industry information’, component 2 ‘Friends’ recommendations’, component 3 ‘Personal experience’, and component 4 ‘Online information’.

Table 5.9 KMO and Bartlett's Test for respondents’ information search strategies

| Kaiser-Meyer-Olkin Measure of Sampling Adequacy | .73 |
| Bartlett's Test of Sphericity | 2077.47 |
| df | 91 |
| Sig. | .000 |

Table 5.10 Total variance explained for respondents’ information search strategies

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigenvalues</th>
<th>Extraction Sums of Squared Loadings</th>
<th>Rotation Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
<td>Cumulative %</td>
</tr>
<tr>
<td>1</td>
<td>4.78</td>
<td>34.148</td>
<td>34.148</td>
</tr>
<tr>
<td>2</td>
<td>2.58</td>
<td>18.435</td>
<td>52.583</td>
</tr>
<tr>
<td>3</td>
<td>1.33</td>
<td>9.493</td>
<td>62.076</td>
</tr>
<tr>
<td>4</td>
<td>1.10</td>
<td>7.831</td>
<td>69.907</td>
</tr>
<tr>
<td>5</td>
<td>.94</td>
<td>6.691</td>
<td>76.597</td>
</tr>
<tr>
<td>6</td>
<td>.66</td>
<td>4.710</td>
<td>81.307</td>
</tr>
<tr>
<td>7</td>
<td>.64</td>
<td>4.532</td>
<td>85.840</td>
</tr>
<tr>
<td>8</td>
<td>.55</td>
<td>3.897</td>
<td>89.736</td>
</tr>
<tr>
<td>9</td>
<td>.34</td>
<td>2.422</td>
<td>92.158</td>
</tr>
<tr>
<td>10</td>
<td>.28</td>
<td>1.987</td>
<td>94.146</td>
</tr>
<tr>
<td>11</td>
<td>.27</td>
<td>1.942</td>
<td>96.088</td>
</tr>
<tr>
<td>12</td>
<td>.20</td>
<td>1.448</td>
<td>97.536</td>
</tr>
<tr>
<td>13</td>
<td>.18</td>
<td>1.261</td>
<td>98.797</td>
</tr>
<tr>
<td>14</td>
<td>.17</td>
<td>1.203</td>
<td>100.000</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.
Reliability analysis was undertaken on the factors to determine their suitability for use in summed scales in subsequent analysis. Due to ‘Friends’ recommendations’, ‘Personal experience’ and ‘Online information’ having fewer than three items, Cronbach’s alpha could only be performed on ‘Offline industry source’, for which the Cronbach’s $\alpha = .89$ indicates good reliability according to Field, A (2009).

The results in Table 5.11 suggest that, based on respondents’ choice of information source before the trip and during the trip, the seven information sources can be generally classified into four types of information (‘Offline industry information’, ‘Friends’ recommendation’, ‘Personal experience’, ‘Online information’). It is interesting to note that the same information sources loaded onto the same factor (before-trip and during-trip), which makes sense, as respondents’ use of most information sources did not change significantly before the trip (BT) or during the trip (DT) (see section 5.5.3).

Component 1 includes travel brochures (BT and DT), destination information centres (BT and DT), travel guidebooks (BT and DT), and travel agencies and tour operators (BT and DT). These information sources are generally formal information sources that are purposefully

<table>
<thead>
<tr>
<th>Item</th>
<th>Offline industry</th>
<th>Friends’ recommendations</th>
<th>Personal experience</th>
<th>Online information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travel brochures DT</td>
<td>.79</td>
<td>.06</td>
<td>.02</td>
<td>-.04</td>
</tr>
<tr>
<td>Travel brochures BT</td>
<td>.78</td>
<td>.06</td>
<td>.13</td>
<td>-.01</td>
</tr>
<tr>
<td>Destination information centre DT</td>
<td>.77</td>
<td>-.09</td>
<td>.30</td>
<td>-.00</td>
</tr>
<tr>
<td>Travel guidebook DT</td>
<td>.76</td>
<td>.15</td>
<td>-.15</td>
<td>.12</td>
</tr>
<tr>
<td>Destination information centre BT</td>
<td>.76</td>
<td>-.09</td>
<td>.32</td>
<td>-.02</td>
</tr>
<tr>
<td>Travel guidebook BT</td>
<td>.74</td>
<td>.05</td>
<td>.06</td>
<td>.17</td>
</tr>
<tr>
<td>Travel agency DT</td>
<td>.72</td>
<td>.02</td>
<td>-.19</td>
<td>.21</td>
</tr>
<tr>
<td>Travel agency BT</td>
<td>.64</td>
<td>.04</td>
<td>-.22</td>
<td>.19</td>
</tr>
<tr>
<td>Friends’ recommendations BT</td>
<td>.04</td>
<td>.90</td>
<td>.18</td>
<td>.09</td>
</tr>
<tr>
<td>Friends’ recommendations DT</td>
<td>.07</td>
<td>.89</td>
<td>.21</td>
<td>.08</td>
</tr>
<tr>
<td>My personal experience BT</td>
<td>.04</td>
<td>.26</td>
<td>.82</td>
<td>.14</td>
</tr>
<tr>
<td>My personal experience DT</td>
<td>.02</td>
<td>.19</td>
<td>.81</td>
<td>.22</td>
</tr>
<tr>
<td>Online information DT</td>
<td>.12</td>
<td>.09</td>
<td>.13</td>
<td>.89</td>
</tr>
<tr>
<td>Online information BT</td>
<td>.12</td>
<td>.09</td>
<td>.19</td>
<td>.87</td>
</tr>
<tr>
<td>Cronbach’s $\alpha$</td>
<td>.89</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>
designed by tourism industry companies and organisations. Consequently, it is appropriate to name component 1 ‘Offline industry information’. As noted above, these information sources tend to be contributory rather than decisive sources in terms of decision-making (section 5.5.4). Therefore, it is not surprising that respondents exhibited similar behaviours when using these information sources.

Components 2, 3 and 4 were each represented by one type of information source. Specifically, ‘Online information’ and ‘Friends’ recommendations’ were found more likely to be used as decisive information when making travel decisions. ‘My personal experience’ is the internal knowledge that is stored in one’s long-term memory, with an emphasis on internal search activities. These characteristics may distinguish them from other information sources.

5.7.2 Principal component analysis for travel websites

Online information is complex and includes different types of websites. Respondents were asked to indicate their use of each type of website for vacation planning. PCA was conducted to collapse the websites into smaller groups. Results are presented below.

The KMO measure verified the sampling adequacy for the analysis, KMO = .63 (‘mediocre’ according to Field, 2009). Bartlett’s test of sphericity, $x^2 (21) = 499.65$ $p < .001$ (Table 5.12), indicated that correlations between items were sufficiently large for PCA.

Analysis was run to obtain eigenvalues for each component in the data. Three components had eigenvalues over Kaiser’s criterion of 1 and in combination explained 71.91% of the variance (Table 5.13). Therefore, three components were retained in the final analysis. Table 5.14 shows the factor loadings after rotation, and Varimax rotation (orthogonal rotation) was selected (Field 2009). The items that cluster on the same components suggest that component 1 represents ‘Service-specific site’, component 2 ‘UGC (User-generated-content) travel site’, and component 3 ‘Generic tourism industry sites’.

Table 5.12 KMO and Bartlett's Test for respondents’ perceived importance of travel website

| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. |   |
| Bartlett's Test of Sphericity | Approx. Chi-Square | df | Sig. |
|                               |  .63      | 499.65 | 21 | .000  |
Table 5.13 Total variance explained for respondents’ perceived importance of travel website

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigenvalues</th>
<th>Extraction Sums of Squared Loadings</th>
<th>Rotation Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% of Variance</td>
<td>Cumulative %</td>
<td>% of Variance</td>
</tr>
<tr>
<td>1</td>
<td>2.49</td>
<td>35.57</td>
<td>35.57</td>
</tr>
<tr>
<td>2</td>
<td>1.43</td>
<td>20.46</td>
<td>56.03</td>
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<tr>
<td>3</td>
<td>1.11</td>
<td>15.88</td>
<td>71.91</td>
</tr>
<tr>
<td>4</td>
<td>.70</td>
<td>10.05</td>
<td>81.96</td>
</tr>
<tr>
<td>5</td>
<td>.61</td>
<td>8.72</td>
<td>90.67</td>
</tr>
<tr>
<td>6</td>
<td>.41</td>
<td>5.83</td>
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</tr>
<tr>
<td>7</td>
<td>.25</td>
<td>3.50</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.

Table 5.14 Factor loading for respondents’ perceived importance of travel website

<table>
<thead>
<tr>
<th>Item</th>
<th>Service-specific sites</th>
<th>UGC travel sites</th>
<th>Generic tourism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hotel or other accommodation website</td>
<td>.92</td>
<td>.11</td>
<td>.07</td>
</tr>
<tr>
<td>Airline or other transportation websites</td>
<td>.91</td>
<td>.74</td>
<td>.13</td>
</tr>
<tr>
<td>Travelogues or online travel communities</td>
<td>.08</td>
<td>.87</td>
<td>-.03</td>
</tr>
<tr>
<td>Online travel guides</td>
<td>.11</td>
<td>.84</td>
<td>.20</td>
</tr>
<tr>
<td>Travel agent or tour operator websites</td>
<td>.00</td>
<td>.07</td>
<td>.83</td>
</tr>
<tr>
<td>Official destination websites</td>
<td>.34</td>
<td>-.01</td>
<td>.69</td>
</tr>
<tr>
<td>Travel magazine websites</td>
<td>-.02</td>
<td>.45</td>
<td>.56</td>
</tr>
<tr>
<td>Cronbach’s α</td>
<td>-</td>
<td>-</td>
<td>.55</td>
</tr>
</tbody>
</table>

Reliability analysis was undertaken on the factors to determine their suitability for use in summated scales in subsequent analysis. Due to ‘Service-specific site’ and ‘UGC travel site’ having less than three items Cronbach’s alpha could only be performed on ‘Generic tourism industry sites’ (Cronbach’s α = .55). The result shows relatively low reliability. However, further examination of ‘Cronbach’s Alpha if item deleted’ show that all three had values lower than .55, therefore deleting any items would not increase the reliability. This indicates that all three items are positively contributing to the overall reliability, therefore should be kept for further analysis.
As illustrated in Table 5.14 component 1 includes ‘Hotel or other accommodation websites’ and ‘Airline or other transportation websites’. These two types of websites are mainly designed and used for specific travel services (lodging and transportation), therefore it is appropriate to name component 1 ‘Service-specific site’. Component 2 includes ‘Travelogue or online travel communities’ and ‘Online travel guides’. These websites mainly assist consumers by providing travel-related personal comments, opinions and experiences posted and shared by other tourists. Therefore, component 2 is named ‘UGC travel site’. Component 3 includes ‘Travel agent or operator websites’, ‘Official destination websites’, and ‘Travel magazines websites’. These websites are mainly controlled by official tourism companies or organisations, and generally provide formal tourism information on their websites, therefore component 2 is labelled as ‘Generic tourism industry sites’.

In general, based on respondents’ information search strategies, the seven information sources and seven tourism websites can be classified into four source and three website factors. The seven underlying dimensions (factors) are used in the subsequent multiple regression analyses to examine factors influencing respondents’ information search strategies.

5.8 Relationships between respondents’ information search strategies and demographic and trip-specific variables

5.8.1 Respondents’ information search strategies and their trip-specific and demographic variables

To answer research question 3, ‘How does the information search strategy vary according to students’ personal and trip-specific variables?’, multiple regression analyses were conducted to examine to what extent demographic and trip-specific variables predict respondents’ use of each type of information source.

The mean scores were calculated for each individual group of independent variables (five trip-specific variables and three demographic variables) against each of the four information source factors (Table 5.15). All the analyses were conducted on weighted data (see section 5.3).
Table 5.15 Respondents’ information search strategies (information sources) and descriptive variables

<table>
<thead>
<tr>
<th></th>
<th>Offline industry information</th>
<th>Friends’ recommendation</th>
<th>Personal experience</th>
<th>Online information</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean (95% CI)</td>
<td>Mean (95% CI)</td>
<td>Mean (95% CI)</td>
<td>Mean (95% CI)</td>
<td>Mean (95% CI)</td>
</tr>
<tr>
<td><strong>Travel party</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chinese international students</td>
<td>2.69 (2.56, 2.83)</td>
<td>3.61 (3.47, 3.74)</td>
<td>3.37 (3.23, 3.52)</td>
<td>3.78 (3.62, 3.95)</td>
<td></td>
</tr>
<tr>
<td>Students from other nationalities</td>
<td>2.94 (2.54, 3.34)</td>
<td>3.47 (3.02, 3.93)</td>
<td>3.62 (3.08, 4.16)</td>
<td>3.76 (3.32, 4.21)</td>
<td></td>
</tr>
<tr>
<td>Friends or relatives</td>
<td>2.59 (2.40, 2.78)</td>
<td>3.57 (3.32, 3.83)</td>
<td>3.20 (2.89, 3.51)</td>
<td>3.55 (3.25, 3.85)</td>
<td></td>
</tr>
<tr>
<td>By myself</td>
<td>3.19 (2.89, 3.49)</td>
<td>3.29 (2.83, 3.74)</td>
<td>3.39 (2.99, 3.80)</td>
<td>3.35 (3.29, 3.76)</td>
<td></td>
</tr>
<tr>
<td><strong>Travel experience</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First-time visit</td>
<td>2.78 (2.65, 2.90)</td>
<td>3.60 (3.45, 3.75)</td>
<td>3.23 (3.06, 3.39)</td>
<td>3.79 (3.63, 3.95)</td>
<td></td>
</tr>
<tr>
<td>Repeat visit</td>
<td>2.76 (2.58, 2.95)</td>
<td>3.53 (3.33, 3.73)</td>
<td>3.70 (3.51, 3.88)</td>
<td>3.54 (3.29, 3.80)</td>
<td></td>
</tr>
<tr>
<td><strong>Nights travelled</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1–3 nights</td>
<td>2.68 (2.54, 2.81)</td>
<td>3.68 (3.54, 3.82)</td>
<td>3.40 (3.23, 3.56)</td>
<td>3.73 (3.55, 3.91)</td>
<td></td>
</tr>
<tr>
<td>4–6 nights</td>
<td>2.81 (2.63, 2.99)</td>
<td>3.42 (3.20, 3.63)</td>
<td>3.19 (2.97, 3.41)</td>
<td>3.71 (3.48, 3.95)</td>
<td></td>
</tr>
<tr>
<td>≥7 nights</td>
<td>2.83 (2.57, 3.10)</td>
<td>3.42 (3.10, 3.73)</td>
<td>3.61 (3.28, 3.95)</td>
<td>3.49 (3.09, 3.88)</td>
<td></td>
</tr>
<tr>
<td><strong>Travel expenditure</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤500</td>
<td>2.76 (2.58, 2.94)</td>
<td>3.67 (3.50, 3.85)</td>
<td>3.50 (3.30, 3.69)</td>
<td>3.78 (3.57, 4.00)</td>
<td></td>
</tr>
<tr>
<td>500–1000</td>
<td>2.81 (2.63, 2.99)</td>
<td>3.50 (3.30, 3.70)</td>
<td>3.23 (3.02, 3.44)</td>
<td>3.70 (3.47, 3.94)</td>
<td></td>
</tr>
<tr>
<td>&gt;1000</td>
<td>2.63 (2.46, 2.79)</td>
<td>3.49 (3.28, 3.70)</td>
<td>3.33 (3.10, 3.56)</td>
<td>3.56 (3.32, 3.81)</td>
<td></td>
</tr>
<tr>
<td><strong>Planning time</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;1 month</td>
<td>2.66 (2.55, 2.78)</td>
<td>3.52 (3.38, 3.65)</td>
<td>3.38 (3.23, 3.52)</td>
<td>3.67 (3.51, 3.83)</td>
<td></td>
</tr>
<tr>
<td>≥1 month</td>
<td>2.96 (2.75, 3.16)</td>
<td>3.68 (3.48, 3.88)</td>
<td>3.30 (3.07, 3.54)</td>
<td>3.75 (3.53, 3.97)</td>
<td></td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>2.60 (2.45, 2.74)</td>
<td>3.56 (3.41, 3.71)</td>
<td>3.36 (3.19, 3.53)</td>
<td>3.58 (3.39, 3.76)</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>2.87 (2.74, 3.01)</td>
<td>3.56 (3.39, 3.73)</td>
<td>3.35 (3.18, 3.53)</td>
<td>3.80 (3.61, 3.99)</td>
<td></td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18–21</td>
<td>2.85 (2.67, 3.04)</td>
<td>3.39 (3.15, 3.62)</td>
<td>3.33 (3.06, 3.59)</td>
<td>3.73 (3.50, 3.96)</td>
<td></td>
</tr>
<tr>
<td>22–25</td>
<td>2.67 (2.52, 2.82)</td>
<td>3.61 (3.45, 3.77)</td>
<td>3.44 (3.27, 3.61)</td>
<td>3.65 (3.45, 3.84)</td>
<td></td>
</tr>
<tr>
<td>&gt;25</td>
<td>2.77 (2.57, 2.96)</td>
<td>3.63 (3.42, 3.84)</td>
<td>3.23 (2.98, 3.47)</td>
<td>3.75 (3.47, 4.03)</td>
<td></td>
</tr>
<tr>
<td><strong>Education level</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VET &amp; ELICOS</td>
<td>2.78 (2.60, 2.96)</td>
<td>3.52 (3.33, 3.70)</td>
<td>3.22 (3.01, 3.43)</td>
<td>3.67 (3.43, 3.91)</td>
<td></td>
</tr>
<tr>
<td>Undergraduate</td>
<td>2.65 (2.52, 2.79)</td>
<td>3.47 (3.30, 3.64)</td>
<td>3.39 (3.21, 3.57)</td>
<td>3.61 (3.40, 3.81)</td>
<td></td>
</tr>
<tr>
<td>Postgraduate</td>
<td>2.86 (2.62, 3.10)</td>
<td>3.81 (3.58, 4.04)</td>
<td>3.48 (3.21, 3.75)</td>
<td>3.90 (3.66, 4.14)</td>
<td></td>
</tr>
</tbody>
</table>

*Note: CI = confidence interval*
Hierarchical multiple regression analyses were conducted twice for four dimensions (‘Offline industry information’, ‘Friends’ recommendations’, ‘Personal experience’, ‘Online information’). The first round of analyses was conducted with only five trip-specific variables. Three demographic variables were then added in the second round of analysis to examine the variance explained by demographic variables. Each independent variable was entered into each step of the regression. All independent variables were dummy coded. Model summaries are presented in Table 5.16.

Table 5.16 Model summary of multiple regressions for four information source dimensions

<table>
<thead>
<tr>
<th>Model</th>
<th>Outcome variables</th>
<th>Predicted variables</th>
<th>R</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>Std. Error of Estimate</th>
<th>Regression F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td>Offline industry information</td>
<td>Trip-specific</td>
<td>.30</td>
<td>.09</td>
<td>.05</td>
<td>.97</td>
<td>2.39</td>
<td>.01</td>
</tr>
<tr>
<td>Model 2</td>
<td>Offline industry information</td>
<td>Trip specific &amp; demographic</td>
<td>.36</td>
<td>.13</td>
<td>.08</td>
<td>.96</td>
<td>2.65</td>
<td>.00</td>
</tr>
<tr>
<td>Model 3</td>
<td>Friends’ recommendations</td>
<td>Trip-specific</td>
<td>.23</td>
<td>.05</td>
<td>.02</td>
<td>.99</td>
<td>1.41</td>
<td>.17</td>
</tr>
<tr>
<td>Model 4</td>
<td>Friends’ recommendations</td>
<td>Trip specific &amp; demographic</td>
<td>.25</td>
<td>.06</td>
<td>.02</td>
<td>.99</td>
<td>1.30</td>
<td>.20</td>
</tr>
<tr>
<td>Model 5</td>
<td>Personal experience</td>
<td>Trip-specific</td>
<td>.29</td>
<td>.08</td>
<td>.05</td>
<td>.98</td>
<td>2.24</td>
<td>.01</td>
</tr>
<tr>
<td>Model 6</td>
<td>Personal experience</td>
<td>Trip specific &amp; demographic</td>
<td>.31</td>
<td>.09</td>
<td>.04</td>
<td>.98</td>
<td>1.87</td>
<td>.03</td>
</tr>
<tr>
<td>Model 7</td>
<td>Online information</td>
<td>Trip-specific</td>
<td>.20</td>
<td>.04</td>
<td>.00</td>
<td>1.00</td>
<td>1.04</td>
<td>.41</td>
</tr>
<tr>
<td>Model 8</td>
<td>Online information</td>
<td>Trip specific &amp; demographic</td>
<td>.23</td>
<td>.05</td>
<td>.00</td>
<td>1.00</td>
<td>1.06</td>
<td>.40</td>
</tr>
</tbody>
</table>

For ‘Offline industry information’ the $R^2$ and adjusted $R^2$ figures indicate that approximately 9% of variance in respondents’ use of offline industry information ($F = 2.39, p < .05$) is explained by five trip-specific variables. After adding three demographic variables the $R^2$ increased to .12. This indicates that three demographic variables are able to explain an additional 3% ($F = 2.65, p < .05$) of the observed variations of use of ‘Offline industry information’ above the effects of trip-specific
variables. Although the $R^2$ value is low, a significant $p$ value still indicates a real relationship between the significant predictors and outcome variable. Three predictors made a significant contribution to the final model (Table 5.18).

Table 5.17 ANOVA for Model 2

<table>
<thead>
<tr>
<th>Model 2</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>36.61</td>
<td>15</td>
<td>2.44</td>
<td>2.65</td>
<td>.00(^i)</td>
</tr>
<tr>
<td>Residual</td>
<td>248.57</td>
<td>270</td>
<td>.92</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>285.18</td>
<td>285</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5.18 Significant predictors for Model 2

<table>
<thead>
<tr>
<th>Model 2</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-.17</td>
<td>.17</td>
<td>-.97</td>
<td>.34</td>
<td></td>
</tr>
<tr>
<td>Travel by myself vs. travel with other Chinese international students</td>
<td>.54</td>
<td>.20</td>
<td>.16</td>
<td>2.69</td>
<td>.01</td>
</tr>
<tr>
<td>22-25 vs. 18-21</td>
<td>-.31</td>
<td>.15</td>
<td>-.16</td>
<td>-2.12</td>
<td>.03</td>
</tr>
<tr>
<td>Gender</td>
<td>.33</td>
<td>.12</td>
<td>.16</td>
<td>2.77</td>
<td>.01</td>
</tr>
<tr>
<td>Planning period</td>
<td>.30</td>
<td>.14</td>
<td>.13</td>
<td>2.13</td>
<td>.03</td>
</tr>
</tbody>
</table>

a. ‘Myself vs. Chinese students’, $t$ (270) = 2.69, $p < .01$, which indicates that the extent of using ‘Offline industry information’ by respondents is predicted by whether students travelled by themselves or travelled with other Chinese students. Respondents who travelled by themselves were more likely to use ‘Offline industry information’ than those who travelled with other Chinese students ($b = .54$).

b. Planning period, $t$ (270) = 2.13, $p < .05$, which indicates that the extent of using ‘Offline industry information’ by respondents is predicted by the length of their planning time. Respondents who had longer than a 1-month planning period were
more likely to use ‘Offline industry information’ than those who had a shorter planning period (< 1 month) (b = .30).

c. Gender, t (270) = 2.77, p < .01, which indicates that the extent of using ‘Offline industry information’ by respondents is predicted by gender; that is, female respondents were more likely to use ‘Offline industry information’ than male respondents (b = .33).

d. 22–25 vs. 18–21 years old, t (270) = -2.12, p < .05, which indicates that the extent of using ‘Offline industry information’ by respondents is predicted by age group ‘22–25 years’ compared to ‘18–21 years’. Respondents between 22 and 25 years were less likely to use ‘Offline industry information’ than those between 18 and 21 years (b = -.31).

In terms of respondents’ use of ‘Friends’ recommendations’, 5% of the variance was explained by trip-specific variables (F = 1.41, p > .05) and 6% of the variance was explained by trip-specific and demographic variables together (F = 1.30, p > .05) (Table 5.19). Results indicate that the regression model was not statistically significant, and no predictors are significant in terms of predicting respondents’ use of the ‘Friends’ recommendations’ information source.

Table 5.19 ANOVA for Model 4

<table>
<thead>
<tr>
<th>Model 4</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>17.99</td>
<td>15.00</td>
<td>1.20</td>
<td>1.30</td>
<td>.20</td>
</tr>
<tr>
<td>Residual</td>
<td>267.19</td>
<td>270.18</td>
<td>.99</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>285.18</td>
<td>285.18</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In terms of respondents’ use of ‘Personal experience’, 8% of the variance was explained by trip-specific variables (F = 2.24, p < .05) and 9% of the variance was explained by trip-specific and demographic variables together (F = 1.87, p < .05). Two predictors made a significant contribution to the final model (Table 5.21).
Table 5.20 ANOVA for Model 6

<table>
<thead>
<tr>
<th>Model 6</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>26.79</td>
<td>15.00</td>
<td>1.79</td>
<td>1.87</td>
<td>.03</td>
</tr>
<tr>
<td>Residual</td>
<td>258.39</td>
<td>270</td>
<td>.96</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>285.18</td>
<td>285</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5.21 Significant predictors for Model 6

<table>
<thead>
<tr>
<th>Model 6</th>
<th>Unstandardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>(Constant)</td>
<td>.02</td>
<td>.17</td>
<td></td>
<td>.11</td>
</tr>
<tr>
<td>Repeat visit vs. first-time visit</td>
<td>.50</td>
<td>.13</td>
<td>3.73</td>
<td>.00</td>
</tr>
<tr>
<td>$500-$1000 vs. &lt; $500</td>
<td>-.33</td>
<td>.15</td>
<td>-2.25</td>
<td>.03</td>
</tr>
</tbody>
</table>

a. Repeat visit vs. first-time visit, $t (270) = 3.73, p< .01$, which indicates that the extent of using ‘Personal experience’ by respondents as an information source is predicted by whether respondents were repeat visitors or first-time visitors to the destination. Respondents on a repeat visit to a destination are more likely to use ‘Personal experience’ than those on a first-time visit ($b = .50$).

b. AU$500-1000 vs. < AU$500, $t (270) = -2.25, p< .05$, which indicates that the extent of using ‘Personal experience’ by respondents is predicted by trip expenditure. Respondents who spent between AU$500 to AU$1000 are less likely to use ‘Personal experience’ than those who spent less than AU$500 ($b = -.33$).

In terms of respondents’ use of ‘Online information’, 4% of the variance was explained by trip-specific variables ($F = 1.04, p > .05$) and 5% of the variance was explained by trip-specific and demographic variables together ($F = 1.06, p > .05$). Results indicate that the regression model was not statistically significant; however, one predictor made a significant contribution to the model: repeat visit vs. first-time visit, $t (270) = -2.03$, $p < .05$ (Table 5.23). This indicates that respondents on a repeat visit to the destination are less likely to use ‘Online information’ than those on a first-time visit ($b = -.28$).
Table 5.22 ANOVA for Model 8

<table>
<thead>
<tr>
<th>Model 8</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>15.47</td>
<td>15.00</td>
<td>1.03</td>
<td>1.06</td>
<td>.40</td>
</tr>
<tr>
<td>Residual</td>
<td>269.71</td>
<td>270.18</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>285.18</td>
<td>285.18</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5.23 Significant predictors for Model 8

<table>
<thead>
<tr>
<th>Model 8</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>(Constant)</td>
<td>.13</td>
<td>.18</td>
<td>.72</td>
<td>.47</td>
<td></td>
</tr>
<tr>
<td>Repeat visit vs. first-time visit</td>
<td>-.28</td>
<td>.14</td>
<td>-.13</td>
<td>-2.03</td>
<td>.04</td>
</tr>
</tbody>
</table>

5.8.2 Relationship between respondents’ use of travel websites and demographic and trip-specific variables

To further examine the extent that various trip-specific and demographic variables predict respondents’ choice of travel website, mean scores were calculated for each individual group of independent variables (trip-specific variables and demographic variables) against each of the travel website segments (Table 5.24). All the analyses were conducted on weighted data (see section 5.3).
Table 5.24 Respondents’ information search strategies (travel websites) and descriptive variables

<table>
<thead>
<tr>
<th>Demographic variables</th>
<th>Service-specific site</th>
<th>UGC travel site</th>
<th>Generic tourism industry sites</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>95% CI</td>
<td>Mean</td>
</tr>
<tr>
<td><strong>Trip-specific variable</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Travel party</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Chinese students</td>
<td>3.69</td>
<td>[3.52, 3.85]</td>
<td>3.27</td>
</tr>
<tr>
<td>Students from other nationalities</td>
<td>3.41</td>
<td>[2.91, 3.91]</td>
<td>3.51</td>
</tr>
<tr>
<td>Friends or relatives</td>
<td>3.78</td>
<td>[3.49, 4.08]</td>
<td>2.95</td>
</tr>
<tr>
<td>Travel experience</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repeat visit</td>
<td>3.47</td>
<td>[3.20, 3.74]</td>
<td>3.10</td>
</tr>
<tr>
<td>Nights travelled</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1–3 nights</td>
<td>3.66</td>
<td>[3.49, 3.83]</td>
<td>3.14</td>
</tr>
<tr>
<td>≥7 nights</td>
<td>3.79</td>
<td>[3.42, 4.17]</td>
<td>3.06</td>
</tr>
<tr>
<td>Travel expenditure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planning time</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;1 month</td>
<td>3.67</td>
<td>[3.52, 3.82]</td>
<td>3.15</td>
</tr>
<tr>
<td>≥1 month</td>
<td>3.60</td>
<td>[3.35, 3.85]</td>
<td>3.31</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>3.84</td>
<td>[3.67, 4.02]</td>
<td>3.41</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22–25</td>
<td>3.60</td>
<td>[3.41, 3.79]</td>
<td>3.21</td>
</tr>
<tr>
<td>&gt;25</td>
<td>3.74</td>
<td>[3.47, 4.02]</td>
<td>3.25</td>
</tr>
<tr>
<td>Education level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VET &amp; ELICOS</td>
<td>3.80</td>
<td>[3.61, 3.98]</td>
<td>3.17</td>
</tr>
</tbody>
</table>
Hierarchical multiple regression analyses were conducted twice for three website components. The first-round analyses were conducted with only five trip-specific variables. Three demographic variables were then added in the second round of analysis to examine the variance explained by demographic variables. Each independent variable was entered into each step of the regression. All independent variables were dummy coded. Model summaries are presented in Table 5.25.

Table 5.25 Model summary of multiple regressions for three travel website dimensions

<table>
<thead>
<tr>
<th>Model</th>
<th>Outcome variables</th>
<th>Predicted variables</th>
<th>R</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>Std. Error of Estimate</th>
<th>Regression F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 9</td>
<td>Service-specific site</td>
<td>Trip-specific</td>
<td>.21</td>
<td>.04</td>
<td>.01</td>
<td>.99</td>
<td>1.21</td>
<td>.29</td>
</tr>
<tr>
<td>Model 10</td>
<td>Trip specific &amp; demographic</td>
<td>Trip specific &amp; demographic</td>
<td>.28</td>
<td>.08</td>
<td>.03</td>
<td>.98</td>
<td>1.54</td>
<td>.09</td>
</tr>
<tr>
<td>Model 11</td>
<td>UGC travel site</td>
<td>Trip-specific</td>
<td>.25</td>
<td>.06</td>
<td>.03</td>
<td>.98</td>
<td>1.77</td>
<td>.07</td>
</tr>
<tr>
<td>Model 12</td>
<td>Trip specific &amp; demographic</td>
<td>Trip specific &amp; demographic</td>
<td>.31</td>
<td>.09</td>
<td>.04</td>
<td>.97</td>
<td>1.87</td>
<td>.03</td>
</tr>
<tr>
<td>Model 13</td>
<td>Generic tourism industry sites</td>
<td>Trip-specific</td>
<td>.22</td>
<td>.05</td>
<td>.01</td>
<td>.99</td>
<td>1.41</td>
<td>.17</td>
</tr>
<tr>
<td>Model 14</td>
<td>Trip specific &amp; demographic</td>
<td>Trip specific &amp; demographic</td>
<td>.23</td>
<td>.05</td>
<td>.00</td>
<td>.99</td>
<td>1.09</td>
<td>.42</td>
</tr>
</tbody>
</table>
For ‘Service-specific site’ the $R^2$ and adjusted $R^2$ figures indicate that approximately 4% of the variance in respondents’ use of this type of website ($F = 1.21, p > .05$) is explained by five trip-specific variables. After adding three demographic variables the $R^2$ increased to .08. This indicates that three demographic variables are able to explain an additional 4% ($F = 1.54, p > .05$) of the observed variations of use of ‘Service-specific website’ above the effects of trip-specific variables. Only one variable made a significant contribution to the final model (Table 5.27)

Table 5.26 ANOVA for Model 10

<table>
<thead>
<tr>
<th>Model 10</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>22.49</td>
<td>15.00</td>
<td>1.50</td>
<td>1.54</td>
<td>.09</td>
</tr>
<tr>
<td>Residual</td>
<td>262.69</td>
<td>270.18</td>
<td>.97</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>285.18</td>
<td>285.18</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5.27 Significant predictors for Model 10

<table>
<thead>
<tr>
<th>Model 10</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>(Constant)</td>
<td>-.05</td>
<td>.18</td>
<td>-.29</td>
<td>.77</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>.30</td>
<td>.12</td>
<td>.15</td>
<td>2.47</td>
<td>.01</td>
</tr>
</tbody>
</table>

a. Gender, $t (270) = 2.47$, $p < .05$, which indicates that the extent of using a ‘Service specific site’ by respondents is predicted by gender; that is, female respondents are more likely to use a ‘Service specific site’ than male respondents ($b = .30$).
Trip-specific variables explain 6% of the variance in respondents’ use of ‘UGC travel sites’, and an additional 3% was explained by demographic variables. Two variables made significant contributions to the final model (Table 5.29).

Table 5.28 ANOVA for Model 12

<table>
<thead>
<tr>
<th>Model 12</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>26.77</td>
<td>15.00</td>
<td>1.78</td>
<td>1.87</td>
<td>.03</td>
</tr>
<tr>
<td>Residual</td>
<td>258.41</td>
<td>270.18</td>
<td>.96</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>285.18</td>
<td>285.18</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5.29 Significant predictors for Model 12

<table>
<thead>
<tr>
<th>Model 12</th>
<th>Unstandardized</th>
<th>Standardized</th>
<th>t</th>
<th>Sig.</th>
<th>Collinearity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coefficients</td>
<td>Coefficients</td>
<td></td>
<td></td>
<td>Statistics</td>
</tr>
<tr>
<td>(Constant)</td>
<td>-.13</td>
<td>-.75</td>
<td>.46</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Travel with friends &amp; relatives vs. travel with other Chinese students</td>
<td>-.36</td>
<td>-.14</td>
<td>-2.20</td>
<td>.03</td>
<td>.81 1.23</td>
</tr>
<tr>
<td>Gender</td>
<td>.33</td>
<td>.16</td>
<td>2.72</td>
<td>.01</td>
<td>.93 1.07</td>
</tr>
</tbody>
</table>

a. Friends and relatives vs. Chinese students, t (270) = -2.20, p< .05, which indicates that the extent of using a ‘UGC travel site’ is predicted by whether respondents travelled with friends or travelled with other Chinese students. Respondents who travelled with their friends or relatives were less likely to use a ‘UGC travel site’ than those who travelled with other Chinese students (b = -.36).

b. Gender, t (270) = 2.72, p < .05, which indicates that the extent of using a ‘UGC travel site’ by respondents is predicted by gender; that is, female respondents are more likely to use a ‘UGC travel site’ than males (b=.33).
Respondents’ use of a ‘Generic tourism industry sites’ was able to be explained by 5% variance of the trip-specific variables, and one variable made a significant contribution to the model; respondents’ demographic variables did not make any contribution to the model (Table 5.31).

Table 5.30 ANOVA for Model 14

<table>
<thead>
<tr>
<th>Model 14</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>15.47</td>
<td>15.00</td>
<td>1.03</td>
<td>1.03</td>
<td>.42</td>
</tr>
<tr>
<td>Residual</td>
<td>269.71</td>
<td>270.18</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>285.18</td>
<td>285.18</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5.31 Significant predictors for Model 14

<table>
<thead>
<tr>
<th>Model 14</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-.21</td>
<td>.18</td>
<td>-1.16</td>
<td>.25</td>
<td></td>
</tr>
<tr>
<td>Planning period</td>
<td>.33</td>
<td>.15</td>
<td>.15</td>
<td>2.25</td>
<td>.03</td>
</tr>
</tbody>
</table>

a. Planning period, \( t(270) = 2.25, p < .05 \), which indicates that the extent of using ‘Generic tourism industry site’ by respondents was predicted by the length of their planning time. Respondents who had a longer than 1–month planning period are more likely to use a ‘Generic tourism industry site’ than those whose planning period was shorter (< 1 month) (b= .33).
5.9 Summary of quantitative results and discussion

This section summarises and discusses the results of the quantitative stage, which intends to answer research questions 1, 2 and 3. Table 5.32 provides a summary of the main findings for each research question.

Table 5.32 Summary of research questions and main results for quantitative stage

<table>
<thead>
<tr>
<th>Research questions</th>
<th>Main findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What information search strategies do students use in terms of the:</td>
<td>1. Chinese student travellers’ information search strategies can be summarised as follows:</td>
</tr>
<tr>
<td>a. Spatial dimension?</td>
<td>a. Students use both internal and external information sources for vacation planning, and there are significant differences between Chinese students’ use of internal vs. external information sources.</td>
</tr>
<tr>
<td>b. Temporal dimension?</td>
<td>b. Chinese student travellers conduct information search both prior to as well as during the trip, and three information sources show statistically significant differences at the two stages.</td>
</tr>
<tr>
<td>c. Operational dimension?</td>
<td>c. Online information and friends’ recommendations tend to be used as decisive sources for decision-making, while other information sources were more likely to be used as contributory information. In addition, online information and friends’ recommendations were mostly used as primary information sources for the four major travel services (accommodation, transportation, recreational activity and entertainment activity).</td>
</tr>
<tr>
<td>2. How can student travellers be segmented on the basis of their information search behaviour?</td>
<td>2. Chinese student travellers can be classified into three tourist groups based on their information search behaviour: focused searcher, passive searcher, and extensive searcher.</td>
</tr>
<tr>
<td>3. How does the information search strategy used vary according to students’ personal and trip-specific variables?</td>
<td>3. Four trip-specific variables (previous experience, travel expenditure, planning period, and travel party) and two personal variables (age and gender) significantly influence Chinese students’ use of information sources and travel websites</td>
</tr>
</tbody>
</table>
5.9.1 Discussion of respondents’ information search strategies

In general, respondents used few information sources (two to three) and spent a relatively short time (less than 1 month) to search for travel information for their most recent trip in Australia. This may be due to the fact that most respondents conducted short (1–3 nights) overnight trips, which do not require extensive information for trip planning. It suggests that Chinese international students tend not to conduct extensive search activities when they travel within Australia.

Previous studies found that student travellers, especially international students, are mainly short-break travellers as they have limited time to conduct longer trips due to the time pressure to balance study, work and social commitments (Weaver et al. 2004; Davidson et al. 2013). Chinese international students who pay high tuition fees to study abroad need to focus on their education; therefore short breaks predominate (Davidson et al. 2013; King & Gardiner 2013). This evidence suggests that destination marketers targeting student travellers, especially international students (e.g. Chinese students), need to consider the timing of their marketing communication. As students have only limited time for travel activity, which is mostly during school holidays, marketing information released a few months prior to school holidays may be most appropriate.

In addition, because students do not conduct extended trips and may not require higher levels of planning, information sources that contain extensive information, such as travel guidebooks, may not be popular among these travellers.

Although Chinese international students have been suggested as constituting an early wave of China’s independent outbound travel, the time respondents spend on information search and vacation planning is much shorter than that of current independent Chinese outbound travellers. Xiang (2013) found that most Chinese independent outbound travellers spend more than two months to plan their overseas trip. This may be explained by two reasons. Firstly, the sample in the present study comprise of students who are currently studying in Australia and therefore travel in Australia is a
domestic trip rather than overseas travel for them, as compared to independent travellers from China for whom travel to an overseas country is a long-haul and expensive journey. It is not surprising that they need a longer time to plan. Secondly, international students have overseas travel experience and more foreign language skills compared to independent outbound travellers based in China. Therefore, they may be more confident in handling uncertainties and language barriers when travelling overseas.

Results also show that most respondents used more than one information source for trip planning, with online information and recommendations from friends being the most commonly used sources. This result confirms previous literature, which has found that travellers do not rely solely on one type of information source, but typically use more than one (Fodness & Murray 1998). In addition, the finding is consistent with previous studies that indicate that recommendations from family and friends and online information are the most important information sources for youth and student travellers (Bai et al. 2004; Park & Kim 2009).

5.9.2 Discussion of three dimensions of the information search strategy

First, respondents use both internal and external information sources for their vacation planning. Previous literature (Crotts 1999) suggests that the degree and amount of external information gathering is affected by the internal information stored in one’s long-term memory. If internal information is sufficient to make a decision then an external search of information is unnecessary. However, if internal information cannot provide adequate information then the search activity moves on to the external environment (Crotts 1999). Results of the current study show that most respondents mainly rely on external information sources (online information, friends’ recommendations) for their decision-making. This suggests that students examined in this study may still be at an early stage of their travel career and lack travel experience and, therefore, mainly rely on external information sources. As they gain travel experience, internal information may become more important in their trip planning and
Chapter 5 Quantitative results and discussion

decision-making.

Second, the temporal dimension examined in this study refers to the timing or stage of travellers’ information search activities. Results of the current research confirm that travel information search for Chinese international students are an ongoing process and, like other travellers, they conduct information search prior to travel as well as during travel (Nishimura, Waryszak & King 2006b). With the exception of ‘Friends’ recommendations’, there was no significant decrease in the use of any other information sources. This finding is consistent with the findings of other studies and confirms the ongoing nature of travellers’ information search behaviour (Bieger & Laesser 2004; Crotts 1999; Fodness & Murray; Choi et al. 2008).

The ongoing nature of tourists’ information search strategies suggests that some previous studies that have focused exclusively on pre-trip searches are limited, as they neglect the dynamic process of travellers’ responses to situations as they arise during a trip. Future studies need to examine tourists’ information search behaviour from a multi-stage perspective. Understanding when the sources are used is critical to effectively and efficiently promoting a travel product (Choi, Lehto & Morrison 2008; Crotts 1999). Adjusting promotion strategies to the time when travellers search for and require the information are more likely to success (Choi, Lehto & Morrison 2008).

Third, with respect to the operational dimension, online information and friends’ recommendations are most likely used by Chinese international student travellers as decisive sources for vacation planning. This was indicated by the fact that these two information sources were more likely to be used alone for vacation planning. According to Fodness and Murray (1999), one important indicator of this operational dimension is whether information sources were used in combination with other sources or were used as the sole source for trip planning. ‘Online information’ and ‘Friends’ recommendations’ were most likely to be used alone, which suggests that these two sources are necessary and sufficient for making travel decisions and are therefore more
likely to be *decisive* information sources.

Other offline industry sources, such as ‘Travel agencies’, ‘Travel books/magazines’, ‘Travel brochures’ and ‘Destination information centres’, are more likely to be used in conjunction with three or more other sources, which were perceived useful but not sufficient for decision-making. These sources clearly serve to complement other sources or, in other words, are *contributory* to decision-making.

The findings are partially consistent with Fodness and Murray (1998) finding that friends and relatives are more likely to be decisive sources; however, they contrast with their finding that travel agencies tend to be a decisive source for tourists. The results of the current study show that travel agencies are more likely to be contributory for Chinese international student travellers when searching for travel information. The current study indicates that online information is likely to be used as a decisive source for respondents’ decision-making. This result is also different from that of Jun, Vogt and MacKay (2007), who found that online information was used more often for knowledge-building rather than decision-making.

Clearly, the popularity of the Internet has had a strong impact on tourists’ information search behaviour, changing the way travellers search for travel information (Hyde 2007; Lo, Cheung & Law 2004; Tjøstheim 2002). Online information is becoming an important information source for travellers nowadays, especially younger and more-educated travellers. Respondents in this study are mostly university students who are younger in age and undertaking higher education degrees. These consumers are noted as the ‘net generation’ who are familiar and skilled with Internet technology. Therefore, it is not surprising that online information has become the most important information source for these consumers, and that the importance of traditional offline information sources, such as travel agents, has decreased.
5.9.3 Discussion of tourist segmentation

The Chinese international student respondents in this study can be generally classified into three types of information searchers based on their information search behaviour (information sources used and number of information sources consulted): focused searchers, passive searchers and extensive searchers. A focused searcher is characterised as focusing on decisive sources of information, such as online information and friends’ recommendations, with relatively low use of other information sources. A passive searcher shows the lowest level of information usage for almost all information sources; however, they have a particular preference for recommendations from friends. In contrast, an extensive searcher employs an information search strategy that has both online and various offline components, and respondents tend to spend more time on information searching. In addition, these travellers are more likely to use various offline industry sources (e.g. travel books/magazines, travel brochures, travel agencies). This result is consistent with the study by Snepenger and Snepenger (1993), who identified a group of tourists noted as extensive information seekers who are likely to use both internal and various external information sources and tend to spend longer on information searching, processing and evaluating. The authors found that these tourists have a significantly greater use of destination-specific literature (e.g. travel brochures, maps, travel guides) and travel consultants (e.g. travel agents, tour operators), which is similar to the extensive searcher of the current study (Snepenger & Snepenger 1993).

Fodness and Murray (1997) identified three tourist groups (active, possessive and passive searchers) based on their information search strategy, and the three groups show some similarities with the three groups found in the current study in terms of information search strategy. For instance, similar to extensive searchers, the active searcher tends to use a variety of information sources. The passive searcher focuses on consulting friends and relatives and highway information centres, and the possessive searcher mainly uses personal experience plus consultation with friends and relatives. These two groups are similar to the passive searcher (who focuses on friends’
recommendations) and the focused searcher (who mainly uses online information and consultation with friends) found in the current study. It should be noted that Fodness and Murray (1997) did not include online information in their study, and the information sources examined in both studies are not exactly the same. Therefore, it is understandable that the respondents in the two studies have some differences in terms of the choice of certain information sources.

The main difference between Fodness and Murray (1997) study and the current study is that former used only direction of search (specific sources respondents consulted) to segment tourists, while segmentation in the current research is based on both direction as well as degree of search (number of sources consulted). However, the finding of the current study is consistent with previous research in that at least three types of tourists can be identified based on their information search strategy. Specifically, the first group shows an extensive and active search behaviour, in that travellers tend to use a wide range of information sources and spend a longer period of time on information search activities and evaluation. This group of tourists are also more likely to use various travel literature and travel consultants than other groups. The second group consists of limited or passive searchers who normally have the lowest use of most information sources. This group of tourists usually rely on their personal experience or consult family or friends for travel decisions (Cho & Jang 2008; Fodness & Murray 1997; Snepenger & Snepenger 1993). The third group can be noted as focused searchers, who are more likely to focus on specific information sources. For instance, the current study identified a group of tourists who mainly rely on decisive sources; Cho and Jang (2008) found two focused groups labelled as package travellers, who mainly depend upon information from travel agencies or tour operators, and independent travellers, who mainly use travel guidebooks and printed travel brochures for their vacation planning. This finding of three tourist segments implies that certain information sources mainly influence specific tourist groups, for instance travel literature (e.g. travel books/magazines) is more likely to be used by tourists who conduct extensive search
activities and spend a longer time on their vacation planning.

Whilst the tourist segments have been identified, it is necessary to explore the demographic and trip characteristics associated with each segment to have a thorough, meaningful and useful understanding of the three tourist markets. In fact, Clancy and Roberts (1984) note that one important criterion to evaluate the performance of the segmentation approach is to examine ‘how well each segmentation mode discriminates across the total sample on the descriptor variables’. In other words, how well do descriptor variables provide insights into understanding the market and provide a basis for developing a marketing strategy (Fodness & Murray 1997)?

However, results of the current study show that the three groups in general are not statistically differentiated on demographic and trip behaviour variables. The only significant variable that distinguishes the three groups is gender: female respondents are more likely to be extensive searchers.

The insignificant results in terms of group characteristics may be explained by the relatively homogeneous group examined in the study. For instance, they are all international students from China, relatively younger in age, and undertaking higher education. In terms of travel patterns, most respondents take short trips, spend relatively little on their vacations, and travel with other Chinese international students. Therefore, while respondents have different information search behaviours they cannot be distinguished by their demographic and trip characteristics. It seems that this segmentation method may not be effective in a relatively homogenous tourist group.

None-the-less, the findings empirically confirm the existence of three types of information seekers, which is an important contribution to the travel information literature. More importantly, the findings provide more insights into Chinese international student travellers’ information search pattern; that is, they indicate that respondents are not homogenous in terms of information search and source preferences. Therefore, certain information sources (e.g. travel consultants, travel literature) may
only be effective for some student travellers (e.g. female students). Fodness and Murray (1997) note that the most appropriate segmentation approach depends on the purpose of the research. The primary objective of this study is to have a comprehensive understanding of student travellers’ information search behaviour. From this perspective, the current finding is valuable.

5.9.4 Discussion of information source typology

It is evident that each tourist segment has certain preferences for travel information sources. Based on respondents’ reported information search strategies across both pre-trip and during-trip stages, the seven information sources examined in this study can be classified into four types: online information, friends’ recommendations, personal experience, and offline industry sources. This result is not fully consistent with any previously reported segmentations, in part because the information sources examined in this study are not exactly the same as in previous studies. In addition, due to the influence of Internet technology, consumers’ information search behaviour is undergoing a structural change, as online information becomes increasingly important in consumers’ information search activities. Finally, the population of the current study is very different to previously published studies on information search behaviour.

The factor analysis shows that online information, friends’ recommendations, and personal experience each loaded separately, while the remaining information sources (travel agencies, travel guidebooks, travel brochures, tourist information centres) loaded onto one factor. This suggests that respondents’ use of and perceptions toward each of the first three information sources is different from the remaining information sources.

Online information is a comprehensive information source that contains various travel websites. This finding confirms that online information should be viewed and examined as a distinct information source rather than mixed with other information sources. Furthermore, some previous studies tend to group recommendations from friends and
traveller’s personal experience as one type of source as they both relate to an individual’s personal experience and are informal (Fodness & Murray 1997; Vogt & Fesenmaier 1998). However, the current results show that there is a significant difference between respondents’ use of their personal experience and recommendations from friends, as the former is generated from one’s internal memory while the other is obtained from the external environment. This suggests that future researchers may need to examine the two sources separately.

The other four information sources loaded onto one factor based on respondents’ search strategies. The common characteristics of these sources are that they are all offline sources and are all provided by formal tourism companies or organisations. Previous researchers mostly classify these sources into different groups. For instance, Snepenger and Snepenger (1993) categorised travel agents and destination information centres as travel consultants, and travel books/magazines and travel brochures as destination literature or print information. Fodness and Murray (1997) divided these sources based on being commercial or non-commercial. However, results of the current study indicate that, regardless of whether the source is commercial or non-commercial, or consultant or literature, respondents showed similar attitudes and behaviours when using these information sources. This may be explained by ‘the Internet effect’ as noted above; the popularity of the Internet has had a strong impact on tourists’ information search behaviour, and is changing the way travellers search for information (Hyde 2007; Lo, Cheung & Law 2004; Tjøstheim 2002). In fact, results with respect to the operational dimension indicate that these sources are all likely to be used as contributory sources, mainly for knowledge-building rather than decision-making.

5.9.5 Discussion of relationships between trip-specific and personal variables and respondents’ information search strategies

A key objective of this study was to find the underlying personal or situational (trip-specific) factors that influence or determine respondents’ information search strategies. Multiple regression analyses were conducted to find predictor variables of respondents’
information search strategies. Results show that only a few trip-specific variables and personal variables have statistically significant results in terms of respondents’ use of four types of information sources and three types of travel websites. Significant results are summarised in Figure 5.14.

Figure 5.14 Significant relationships between trip-specific and personal variables and respondents’ choice of information sources and websites (Quantitative results)

Gender significantly influences respondents’ use of three types of information (offline industry information, UGC travel sites and service-specific sites). Results show that female respondents are significantly more likely than male respondents to use offline industry information, UGC travel sites and service-specific sites. It was discussed above that female respondents are more likely to be extensive searchers who spend longer and use a wider range of online and offline information sources. These findings all together support previous literature that females spend more time searching for travel information, and have more positive attitudes toward both on/offline information sources than males (Kim, Lehto & Morrison 2007). Meyers-Levy (1988) and Meyers-
Levy and Sternthal (1991) suggest that women are ‘comprehensive processors’ who attempt to assimilate all available information before decision-making, which is different from males who are mostly ‘selective processors’ and who do not engage in comprehensive processing of all available information before judgment. Therefore, it is understandable that female respondents are more likely to spend longer on their information search activities and use a wider range of sources than male respondents. It seems that offline industry sources, as well as websites such as UGC travel sites and service-specific sites, are more likely to influence female respondents. Tourism organisations may need to pay more attention to female travellers’ preferences when designing travel information.

In addition to gender, the use of offline industry information was also influenced by three other variables: travel party composition, planning period and age. Specifically, respondents who travelled by themselves were more likely to use offline industry information than those who travelled with other Chinese international students. Respondents who spent more than 1 month to plan their vacations were more likely to use offline industry information sources than those who spent less than 1 month on planning. Respondents between 18 and 21 years were more likely to use offline industry information sources than those between 22 and 25 years. Some explanations for these results are provided below.

First, respondents who travelled by themselves may have perceived higher risks and uncertainty for the trip compared to those who travelled in a group (e.g. with other Chinese students). The current study and previous researchers have found Chinese international students mostly travel with their friends who are also Chinese students (Davidson et al. 2013; Gardiner et al. 2013; Ryan & Zhang 2007). This travel mode provides a sense of re-assurance and greater safety. In contrast, students travelling alone may feel more insecure and uncomfortable with unstructured situations for the trip (Money and Crotts 2003). Chinese international students come from a higher uncertainty avoidance national culture background, and are more likely to feel
threatened by the unknown and the ambiguous (Money & Crotts 2003). Literature suggests that higher perceived risk increases travellers’ information searching, as one way of reducing risk is to obtain more information (Bieger & Laesser 2004; Schmidt & Sprang 1996). Therefore, respondents who travel by themselves are more likely to consult a wider range of information sources to reduce the perceived risks and uncertainties for the trip.

Second, respondents who spent longer than 1 month searching for travel information may have been planning for a longer trip or ‘difficult’ destinations which require higher levels of planning. Some offline industry sources, such as guidebooks, provide more comprehensive and detailed information about various travel components and destinations, including the likely atmosphere encountered (Nishimura, Waeyszak & King 2006), which can be an effective information source for extended trips and ‘difficult’ destinations.

Third, respondents between 18 and 21 years old are mostly undertaking undergraduate degrees and may have stayed in Australia only a short period of time; therefore, they may have limited knowledge and experience about travelling in the country. In addition, these respondents may have just started or are still at an early stage of their independent travel career and lack travel experience and are therefore more likely to get information from a wide range of sources.

Figure 5.14 also shows that previous experience with a destination is more likely to influence respondents’ use of online information and their personal experience. On the one hand, first-time visitors who have less destination experience are more likely to conduct external search activities and use online information for vacation planning than repeat visitors. On the other hand, repeat visitors who believe they know about the destination are more likely to rely on their previous experience (internal information) than first-time visitors. This result is consistent with previous findings that travellers who have more past experience and prior knowledge are more likely to use previous
experience for information (Part & Kim 2009). It has been noted that previous trip experience influences tourist information search behaviour, and that the utilisation of external information sources are determined by the amount and type of internal information stored in their long-term memory (Gursoy & McCleary 2004).

For travel websites, respondents who spent a longer time (> 1 month) planning their trips were more likely to use ‘generic tourism industry sites’ than those who spent less than 1 month to plan their trip. This is understandable, as respondents who spent more than 1 month searching for information and vacation planning are more likely to be extensive searchers, who tend to consult a wide range of sources and websites. In addition, these students may plan for trips that require a higher level of planning (e.g. longer visits), therefore they would not only use booking sites and UGC travel sites but also search for information on generic industry sites.

Results also show that respondents who spent less than AU$500 on the trip were more likely to use their personal experience than respondents who spent AU$500–1000. This suggests that respondents who had a lower expenditure (< $500) were more likely to visit a close-to-home destination that involved less cost on transportation and accommodation. Therefore, respondents tended to conduct limited external information search for the trip, as the perceived risks associated with the trip were relatively low. In such circumstances, respondents tended to rely on their internal information (personal experience) to make trip decisions.

5.10 Conclusion

This chapter has presented the results of the stage one quantitative study of this research. The primary objective was to answer the first three research questions that seek to gain a comprehensive understanding of student travellers’ information search behaviour. Specifically, results show that most respondents used limited information sources and time to plan their most recent overnight trip in Australia. Online information and friends’ recommendations are the most important information sources for decision-making.
Results also confirm the ongoing nature of a traveller’s travel information search strategy, in that respondents conduct information search prior to and during their trips. Based on respondents’ information search strategies, three tourist segments are identified: focused, passive and extensive searchers. Finally, multiple regression analyses show that the variation of respondents’ use of information sources and travel websites is only explained a small percentage by the demographic and trip-specific variables. In addition, only a few descriptive variables are shown to be statistically significant in terms of predicting respondents’ use of information sources. Finally, the chapter provided a discussion regarding the main findings regarding the quantitative results, drawing on relevant literature. The next chapter presents the findings of stage two, which was a qualitative research study designed to answer research question 4: ‘Why do students use specific information sources and conduct information search the way they do?’
Chapter 6  Qualitative results and discussion

6.1 Introduction

This chapter presents and discusses the results of the stage two qualitative data collection. The qualitative stage was designed to answer research question four: ‘why do Chinese students use specific information sources and conduct information search the way they do?’ The primary objective was to extract the students’ own accounts of why they had used or had not used various sources for travel information and thus elicit the choice factors associated with this decision. This stage also elicited details about what purposes were served by the information search, when specific information sources were used, and in what situations the sources were, or may be, used.

This chapter starts with a brief description of sample characteristics for the qualitative stage (section 6.2). The transcribed and summarised interview responses by individual information source are subsequently presented in concept maps (section 6.3). After summarising the main points and forming concept maps for each information source, the next step of the analysis was to identify commonalities and themes that describe the essence of the choice criteria elicited by the interviews (section 6.4). In this section, a conceptual model is built based on all the themes found. The model illustrates various factors that may influence why student travellers employ the information search strategies that they do. Finally, the results are discussed in relation to the literature (section 6.5).
6.2 Sample characteristics of the qualitative stage

Different from quantitative research, which uses numeric representations for results, qualitative research relies mostly on a textual narrative representation of the data rather than a tabular and statistical representation, including the respondent profile (Marshall & Rossman 1995). Interviewees include both male and female, mainly over 25 years of age and studying at the postgraduate level at regional universities.

6.3 Interview respondents’ travel information search strategies

Interview questions were asked in forms such as: ‘You have indicated that you made use of [information source] when planning your trip. What are some of the reasons why you used that particular information source?’; ‘What are the reasons why you did not use [information source]’; and ‘Can you think of some situations or contexts in which you would be more likely to use it?’

Interviewees’ answers in terms of why they did and did not use specific information sources are summarised in concept maps (see, for example, Figure 6.1). Each idea stated by interview respondents is presented in a branch. These represent, as far as possible, the interviewees’ own words with only a minimal amount of analytical restructuring and rephrasing used. This procedure is part of the data analysis, and maps presented in this section are mainly for summary rather than analytical purposes. When an idea or factor has been mentioned by more than one interview respondent, a number is given indicating the number of interviewees who reported the same experience. The main branches of the maps reflect the most common ways interviewees initiated an answer to an interview question. For instance, most interview respondents initiated their answers in ways such as: ‘I used xx source to …’, ‘Because it is…’, ‘I did not use it, because….’ Although not all of them used these exact words, the answers seemed sufficiently similar in meaning to be displayed within this pattern. Some discussion is included to assist the reader to better understand the results.
Figure 6.1 Reasons for use of online information

- **Online information**
  - I used it primarily (14), because it is convenient
  - it is fast and efficient
  - there are wide range of information
  - there are large amount of information (2)
  - there are different types of information
  - I can get latest news (2)
  - it saves time and efficient (2)
  - traditional offline information sources are outdated
  - it is accessible, whenever you need, it is there
  - a lot information are from real travelers, more reliable
  - I can compare different information
  - I can find cheap price online
  - I use internet every day (5)
  - I can see other people’s comments

- **Official tourism websites** (6)
  - To search information about:
    - latest tourism information
    - price
    - local special events
    - local attractions
    - special discount
  - Because:
    - information is accurate and reliable
    - I can find all the information I need
    - things/attractions recommended by official website should be well-established
    - website usually is well made

- **TripAdvisor** (4)
  - To search information about:
    - top destinations/attractions
    - people’s comments about hotel
    - good restaurant
  - Because:
    - I can see negative comments as well
    - comments are from travellers from all over the world, therefore is comprehensive

- **Chinese travel websites** (e.g. qyer, qunar, mafengwo) (10)
  - To:
    - read other travellers’ travel experience/diary/guide/tips
    - know about destinations/attractions/activities
    - see people’s recommendation
  - Because:
    - it is easy to read and understand
    - it has personal experience
    - it has many detailed information
    - it is helpful for vacation planning
    - Chinese usually share similar interest and experience
    - information is reliable
    - I can find all kinds of information
    - website is well-made/designated
6.3.1 Online information

Figure 6.1 shows that there are many reasons stated by interview respondents for using online information as a primary information source for their vacation planning. These reasons or statements discussed by interview respondents can be captured as four groups. Specifically, ‘it is convenient’, ‘it is fast and efficient’, ‘it saves time and is efficient’ and ‘I use the internet everyday’ mainly describe the easy access, ease of use and flexibility of online information. Statements such as ‘wide range of’, ‘large amount of’, and ‘different types of’ information refer to the quantity and variety of information content that respondents can find using online information sources. Statements such as ‘I can get the latest news’ describe the speed of information update or timeliness of information. Finally, ‘information is from real travellers’ and ‘I can see other people’s comments’ mainly relate to personal experience characteristics of the information content. To summarise, there are four reasons given by respondents for using online information: it is highly accessible and flexible, the quantity and variety of information available, it provides up-to-date information, and previous personal experience.

When talking about specific types of websites used, interview respondents mainly mentioned three types of travel websites: official tourism destination websites, TripAdvisor, and Chinese travel websites. In terms of official destination websites, interview respondents mainly like to use this type of website to get localised information, such as the latest tourism information, local special events, local attractions and prices. The main reasons for them to use this type of website are that such websites are established by official tourism organisations and are usually well-designed. More importantly, information provided on such websites are trustworthy and reliable. TripAdvisor was another website mentioned by many interview respondents. Respondents mostly use it to get personalised information, such as opinions, comments and experiences of other customers for a hotel or restaurant, so that they can consider the pros and cons of a travel decision using real personal advice.
Ten out of fifteen interviewees stated they have used Chinese travel websites for their vacation planning in Australia or for overseas trips. The most frequently mentioned Chinese travel websites include: Qyer.com, Qunar.com and Mafengwo.com. These are popular travel websites used among Chinese travellers, especially independent travellers. People use these websites to book flights and hotels, book tours, get information about what to see and, most importantly, read other travellers’ gonglue.

Travel gonglue can be translated as ‘strategy of travel’. The format of gonglue usually imitates that of popular guidebooks for backpackers, such as Lonely Planet (Zhang 1999). The author usually writes some facts about the best season to visit, describes their own itinerary including detailed information on how to find cheap accommodation, where to eat authentic food, and what souvenirs to buy. The author also adds personal recommendations and criticisms regarding various aspects of the trip. These personal observations and opinions are very important for a good gonglue as they are from real travel experiences of the traveller rather than from tourist agency promotions, which are often considered unreliable and suspect due to their commercial nature. This information is particularly useful for interviewees who do not have much overseas travel experience, yet want to conduct independent travel.

Interview respondents reported using these Chinese travel websites mainly for two reasons: a) information is easy to read and understand; and b) experiences and recommendations provided on the websites are useful. Many interviewees indicated that, because of their similar background, Chinese people usually have similar interests in terms of what to see and do at a destination and what to avoid during travel. This information is very helpful for their vacation planning. The reasons for choosing certain websites can be collapsed into several aspects: information credibility, personal previous experience, easy to read and understand, and common interest. It should be noted that all 15 respondents indicated using of online information for vacation planning, therefore reasons for ‘why not’ were not collected for online information sources.
6.3.2 Travel agency

Figure 6.2 shows the reasons why interview respondents use or do not use travel agencies for information. Eight interviewees stated they have used travel agencies for information while they travelled in Australia. The main purpose for using travel agencies is to book transportation tickets or other tickets, either for convenience or for cheap prices. Four of them said they booked day tours with a travel agency and three used a destination travel agency for this service. In addition, six of the interviewees indicated they preferred to use a Chinese travel agency, as it was easy to communicate and the information provided by a Chinese agency is more likely to suit their interest and budget.

Seven interview respondents indicated they did not use travel agencies for information while travelling in Australia. One important reason was that they can, or like to, search for information themselves online, and there is no need for them to go to a travel agency. Another reason brought up frequently was they were concerned that a travel agency is a commercial organisation, and will make a profit out of their customers. Therefore, they do not trust the information from travel agencies, especially as most students are budget travellers and looking for cheap prices. In terms of when or in what situations they may use this travel information source, four interviewees indicated they may use a travel agency to: book tours for their parents when they come to visit, or when they go to an unfamiliar destination such as an overseas destination. To summarise, the main factors influencing respondent use or non-use of travel agencies include: easy to understand and communicate, common interest, price, commercial source, travel party, and trip destinations.
Figure 6.2 Reasons for using information from a travel agency

6.3.3 Travel brochures

Most interview respondents indicated they used travel brochures for information when they travelled in Australia (see Figure 6.3). One important reason was that the information source was highly accessible. Interviewees could look at free travel brochures at many places, such as while walking on the street, at a travel agency, at hotel or motels they stayed in, and at information centres, and they mostly would take one to browse through. However, in many situations interviewees did not take them for planning purposes, and therefore the influence of this information source on their decisions was low. This means that they were less likely to make travel decisions based on the travel brochure. Some interviewees thought that travel brochures were helpful for their vacation planning in terms of providing information on what to see and where to go at the destination, and booking day tours. In addition, four interviewees indicated that, in particular, they used travel brochures at destinations as a complementary information source because they did not do a lot of searching before their trip.
Only two interviewees said they never used any travel brochures for their trips in Australia. The main reason can be described as the Internet effect, which means that they could get all the information they need online and, therefore, they did not seek information from other sources. However, they may use travel brochures if they cannot get enough information about the destination on the Internet. In conclusion, the main reasons stated by respondents for using or not using travel brochures are accessibility and the Internet effect.

Figure 6.3 Reasons for using travel brochures
6.3.4 Travel guidebooks

Four interviewees used travel books or magazines, although sometimes not for planning purposes, and eleven did not use them (see Figure 6.4). The main reason for using this information source was personal interest in terms of reading travel books and magazines. Interviewees stated that they liked the fact that travel books and magazines have *in-depth information* about travelling or destinations, which is very different from other information sources. They also said they gain both knowledge and pleasure from reading travel books or magazines. All of them had used Lonely Planet before. However, one important issue interviewees pointed out in terms of using these print media for travel information was that the speed of *information updates* was slow, which made information provided in books or magazines sometimes inaccurate.

Eleven interviewees indicated that they have never used any travel guidebooks for information while they travelled in Australia. One important reason was the *Internet effect*. Another reason interviewees discussed was that they did not need much in-depth information from books or magazines as they mainly travelled for fun and pleasure. Therefore, the most important underlying factors influencing respondents’ use or non-use of travel books/magazines are *the depth* of information, the *Internet effect*, and *timeliness* of information.
Figure 6.4 Reasons for using travel guidebooks

When

I conducted in-depth travel

to a destination

Travel guidebook

When I travel overseas (3)

I go to an unfamiliar place or countries

speak different language

I want to know more about

culture or background of a
destination

Internet effects/online information is convenient (4)

I do not like to read books/magazines

I do not like to spent too much energy to search information

I travel overseas (3)

I go to an unfamiliar place or countries

speak different language

I want to know more about

culture or background of a
destination

May use, if

Because

I did not use (11)

I used (4)

To:

know about a country

know about a destination

Because:

friend recommended a book

information is comprehensive

I like reading books/magazines

it provides in-depth information in terms of culture and customs

information is attractive

However

information update is slow

information is not very accurate

it only says good sides about a destination/attraction

I did not use

I used

Because

I do not like to read books/magazines

I do not like to spent too much energy to search information

internet effects/online information is convenient (4)

Because

I travel overseas (3)

I go to an unfamiliar place or countries

speak different language

I want to know more about
culture or background of a
destination

May use, if
6.3.5 Friends’ recommendations

Most interview respondents indicated they asked friends for travel information when they travelled in Australia (see Figure 6.5). The most important reason was that friends have destination experience and their recommendations are reliable. In addition, interviewees were more likely to get information about what to see and do at the destination from their friends. In terms of the extent of influence on travel decisions, interviewees were more likely to make decisions based on information from friends who live at the destination than those who have been to the destination. It was believed that information from friends who live at the destination is more authentic than that of friends who have been to the place. In addition, two interviewees stated that they did not search for any information for the trip as friends who live at the destination made all the arrangements for them.

Three interviewees said they felt it was unnecessary to get information from friends when travelling within Australia. This was either due to the fact that they can find enough information from other sources or they felt they have more travel experience than their friends. To summarise, the main reasons stated by respondents in terms of use or non-use of recommendations from friends are: personal experience, credibility and authentic information.
6.3.6 Tourist information centres

About half of those interviewed used tourist information centres at the destination for travel information (see Figure 6.6). The reasons for using this information source were to get transportation or direction information (e.g., how to get to the place, how to take public transportation) and attraction or activity information (e.g. what to do, where to see). While the other half of the interviewees did not use this information source. Low accessibility was the most important reason stated by them for not using this source. It was indicated by interviewees that tourist information centres were not always there when they need them, and they have to find the place first to get the information. Therefore, if they can get information from other sources they would not bother spending the time and effort to find the place. Interviewees also stated that they were
more likely to obtain information from destination tourist information centres when they travelled to a close-to-home destination. Respondents were less likely to conduct extended search activities for such trips, sometimes even without having performed an information search at the pre-trip stage. Therefore, they would use a tourist information centre to get some information when they arrived at the destination. To conclude, the main reasons for respondents using or not using tourist information centres are accessibility of the source and type of destination or trip conducted.

Figure 6.6 Reasons for using tourist information centres
6.4 Factors influencing students’ information search strategies

6.4.1 Summary of themes and concepts

The concept maps discussed above formed the basis for analysing commonalities and identifying themes that describe the essence of the choice criteria discussed in the interviews. Based on Figures 6.1 to 6.6, respondents’ answers in terms of why they do or do not use each information source can be collapsed into several themes that describe the commonalities of a group of answers, as summarised at the end of each section. Some of the factors describe the characteristics of information sources, therefore are concluded as being source attribute variables. Some factors directly relate to the type of trip that interviewees went on or destination visited, and are therefore labelled as trip-specific variables. The rest of the themes closely link to interview respondents’ personal characteristics and are therefore summarised as personal variables (Table 6.1). Table 6.1 shows a summary of themes or concepts generated from respondents’ answers under each general category. Information sources related to the concepts are also listed in the table.
Table 6.1 Summary of reasons for respondents’ information search strategies

<table>
<thead>
<tr>
<th>Theme</th>
<th>Key words from interviewees</th>
<th>Related sources</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Source attribute variables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accessibility &amp; flexibility</td>
<td>• easy and convenient • accessible • everyday • handy</td>
<td>Online information Travel agency Travel brochures Information centre</td>
</tr>
<tr>
<td>Speed</td>
<td>• fast and efficient • saves time</td>
<td>Online information</td>
</tr>
<tr>
<td>Timeliness</td>
<td>• up-to-date information • the latest</td>
<td>Online information Travel agency Travel brochures Travel centre</td>
</tr>
<tr>
<td>Quantity &amp; variety</td>
<td>• wide range • large amount • make comparisons • all kinds • comprehensive</td>
<td>Online information</td>
</tr>
<tr>
<td>Detail</td>
<td>• detail • depth</td>
<td>Online information Travel guidebook</td>
</tr>
<tr>
<td>Credibility</td>
<td>• real travel experience • other people’s comments • accurate and reliable • trust • commercial</td>
<td>Online information Travel agency Friends’ recommendations Information centre</td>
</tr>
<tr>
<td>Destination experience</td>
<td>• personal experience • been there before</td>
<td>Online information Friends’ recommendations</td>
</tr>
<tr>
<td>Price</td>
<td>• cheap • special discount</td>
<td>Online information Travel agency</td>
</tr>
<tr>
<td>Authenticity</td>
<td>• local • live there</td>
<td>Friends’ recommendations</td>
</tr>
<tr>
<td>Commonality</td>
<td>• similar interests and experience • know about Chinese • know my needs</td>
<td>Online information Travel agency Friends’ recommendations</td>
</tr>
<tr>
<td><strong>Trip-specific variables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type of trip</td>
<td>• remote area • longer trip • overseas • unfamiliar place or country • uncommon destinations</td>
<td>Travel agency Travel guidebook Information centre</td>
</tr>
<tr>
<td>Travel party composition</td>
<td>• parents came over • taking family to travel</td>
<td>Travel agency Information centre</td>
</tr>
<tr>
<td><strong>Personal variables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language barrier</td>
<td>• easy to read and understand • easy to communicate • language barrier</td>
<td>Online information Travel agency Information centre</td>
</tr>
<tr>
<td>Travel experience</td>
<td>• I am experienced</td>
<td>Travel agency Friends’ recommendations</td>
</tr>
</tbody>
</table>
6.4.2 Source attribute variables that influence interviewees’ information search strategies

Ten perceived characteristics of the information sources were identified as influencing why interviewees used or did not use particular information sources (see Table 6.2). Sections 6.4.2–6.4.4 discuss the meaning of each theme. The discussion of each characteristic also includes direct quotes from interviewees that seem most representative of the theme, using interviewees’ pseudonyms, gender and age.

6.4.2.1 Accessibility and flexibility

Accessibility and flexibility was a major factor determining interview respondents’ choice of information sources. Frequently stated by interviewees as a reason for using online information, they referred to the extent to which information is available and accessible in a format that the consumer can use (Bettman 1979). Specifically, accessibility describes the ease with which users can obtain the information, while flexibility refers to the availability of the information in relation to when and where it is required. The statements respondents used to describe this characteristic include ‘it was convenient’, ‘it was easy for me’, ‘it was handy’ and ‘whenever I need it, it is there’.

Interviewees commented on this attribute of online information:

Online information is available to me whenever I need it, it is there, and it is very convenient. It is not like other information [sources] such as travel brochures, you have to go out to get it. (Kunlun, female, 24)

I use Internet on my mobile phone every day, so I can search information whenever I need it”. (Ling, female, 23)

Some interviewees also mentioned this characteristic when talking about reasons for using travel brochures. Although travel brochures are not as accessible as online information, people can find them at many places. For instance, interviewees commented: ‘every hotel I stayed at had some travel brochures. Normally I take some that I was interested to have a look at’ (Yichen, male, 28); ‘sometimes I can see some travel brochures when I am walking on the street, and I like to take some to browse the information’ (Huiming, male, 26).
6.4.2.2 Speed

Speed is another important factor influencing interview respondents’ choice of information sources. Speed here refers to both the time it takes to reach an information source as well as the speed with which information could be obtained from an information source. Fast and quick are the words used most often by respondents to describe this characteristic. Online information was frequently mentioned as a fast information source. This attribute reduces the time required for information searching and thereby increases the efficiency of respondents’ search activities. An interviewee commented on online information: ‘I can obtain a large amount of information in a short time’ (Jinheng, male, 37).

6.4.2.3 Quantity and variety

Another major source attribute that influences interview respondents’ information search strategies is the quantity and variety of information that can be obtained from the information source. Quantity and variety indicate both amount as well as range of information that people can obtain from the information source. Online information was regarded as the most comprehensive source, providing a lot of information. Some interviewees also mentioned travel guidebooks when considering the amount of information. However, online information was the only source identified as providing different types of information. One interviewee commented: ‘there are large amounts of information online, and I can make comparisons’ (Huiming, male, 26). Another interviewee commented:

You can find all forms of information online, not just limited to pictures. Pictures sometimes can be deceptive. For online information, you can read words, watch videos, and see people’s comments, and the type of information is much wider. (Yicheng, male, 28)

However, too much information sometimes can be an issue for some interviewees. Information overload was considered by a few interviewees as a disadvantage of online information. This is especially a consideration for inexperienced, independent travellers as they lack the experience and skills to distinguish which websites and information are
Chapter 6 Qualitative results and discussion

reliable. For instance, one interviewee stated: ‘there is too much information online, sometimes it makes me feel anxious as I cannot decide which one to choose’ (Han, male, 26). However, in general, the quantity of information was seen as a positive feature of information sources, as most interview respondents indicated that they have the time and experience to find the information they need on the Internet.

6.4.2.4 Timeliness

It is not only the quantity and variety of information that matters to interview respondents when searching for travel information. Timeliness is an important aspect that interview respondents look for when searching travel information. Phrases they used to describe this characteristic include ‘updated’, ‘most recent’, ‘new’, ‘out dated’, ‘up to date’ and ‘old’. Interview respondents stated that they are always trying to get the latest information from the information source. Information is frequently updated on the Internet, which makes online information the timeliest information source. Getting the newest or most recent information can be important in the tourism and hospitality industry, as the price and availability change frequently due to reasons such as seasonality, holidays, government policies, etc. An interview respondent stated: ‘the speed of information updates is very fast online, so I can always get the latest news. Other information sources such as print media are relatively slow on information updates’ (Jinheng, male, 37). Another interviewee commented on the Lonely Planet travel books:

I feel the information updates are a bit slow, therefore sometimes information in the book is not very accurate. For instance, some information about time, price or some events may be for last month or last season. (Li, female, 27)
6.4.2.5 Detail

To what extent the information source provides detailed information about various aspects of a trip is another factor that influences interview respondents’ choice of information sources. This attribute is especially important for interviewees who have less travel experience and are going to an unfamiliar destination or on an overseas trip. Due to the lack of experience or familiarity with the destination, these interviewees were more likely to feel insecure and perceive higher risks associated with the trips. Therefore, they are more likely to conduct extensive search activities and get more detailed information about the destination and other trip-related information to avoid uncertainties and risks.

Detailed information about the trip, such as maps of the destination, ticket prices of attractions, what to see in the surrounding areas, places to dine, etc., are all indicated as useful information by interview respondents. Two types of information are more likely to provide detailed information: travel guidebooks, and online travel gonglue or blogs. One interviewee commented on the Lonely Planet travel book:

    I am not an experienced traveller, and I like the fact that it is easy to read. It has detailed information such as maps, the ticket price of each tourist attraction, what you can eat at surrounding areas, what you can see at the attraction, which season is best to visit, and it is very comprehensive. (Li, female, 27)

Another interviewee commented on using online travel gonglue on Chinese travel websites:

    When we went to New Zealand, we only used three travel gonglue to plan our trip. These gonglue have very detailed information, for instance, which hotel to stay at, which restaurant is recommended, what attractions we can see. It was quite helpful. The information looks reliable too. (Ling, female, 23)
6.4.2.6 Credibility

Credibility in this context refers to the extent to which interview respondents trust the information from the sources and make decisions based on the information sources. ‘It is reliable’ was the most frequently used statement by interviewees to describe this concept. Generally, interviewees were more likely to trust two types of information sources: government sources and personal sources. On the one hand, many interviewees think that information provided by official destination tourism websites (e.g. Tourism Australia) and official destination tourist information centres are reliable, as they are government organisations and are therefore trustworthy. On the other hand, interviewees were also more likely to use information from individual travellers (mostly their friends) who had been to the destination before.

When assessing credibility of an information source, interviewees were likely to consider the motives of the information provider for giving the particular information. Government sources and personal sources were not considered as being profit-oriented in terms of providing the information. Therefore, interviewees tended to trust the information from these sources. From this stance, commercial information sources were considered less credible. For instance, a travel agency is considered less credible as it is a commercial organisation, which is one of the reasons that some interviewees did not use travel agencies for information. When talking about travel agencies, most interviewees directly related them to tour operators, and thought that the primary service of a travel agency is to sell travel packages or tours to customers, although they know that a travel agency can book transportation and accommodation on behalf of the customers. One interviewee noted:

I feel a travel agency is a place that always tries to put you on a tour or package travel. I like independent travel; therefore, it is unnecessary to go there. (Yichen, male, 28)
Another student commented on the issue of credibility of travel agencies:

As a student traveller, my first consideration was budget. As a travel agency is a commercial organisation, its primary purpose is to make a profit. I think they would sell expensive packages or tours to me, therefore I do not trust their recommendations. (Yifan, female, 28)

6.4.2.7 Destination experience

Destination experience in this context means that the individual who conveys the travel information has been to the destination before, and has first-hand experience in terms of what to see and do at the destination. Interview respondents mainly indicated three types of sources that have destination experience: friends who have been to the destination, other individuals who have travelled to the destination, and the interviewees’ own experience with the destination.

As discussed above, information from individuals with destination experience was considered reliable, as the information is based on the individual’s real experiences, and mostly were shared for non-profit purposes. This is viewed as particularly useful for recommendations about what to see and do at the destination and potential problems or risks during travel. Some interviewees also stated they particularly like to read other people’s experience and comments when booking a hotel, and negative comments have more influence on their decisions as negative comments are usually more ‘real’. One interviewee said:

When booking a hotel I am mainly concerned about cleanliness and convenience of transportation. Many people would post negative comments on websites if the hotel was dirty. (Li, female, 27)

Interviewees’ own destination experiences mainly influence their information search strategy when conducting repeat visits to the destination. Experience and knowledge gained through previous visits usually transfer into internal information that is stored in the interviewees’ long-term memory. Therefore, when interviewees went on a repeat
visit to a destination most of them indicated no information search or limited information search activity.

6.4.2.8 Price

Price here refers to which information source conveys lower prices or the best deals for travel services. Price is an important consideration for student travellers, as most students are budget travellers and are highly price conscious. One important reason indicated by interview respondents for using online information is that they can compare prices of different service providers, and find the cheapest one or best deal. A few interview respondents also mentioned this attribute when talking about reasons for choosing Chinese travel agencies over Australian ones. One interviewee commented on local Australian travel agencies:

I think Australian travel agencies are targeting local tourists. The price of travel packages or tours suits local spending power; however, is a bit high for students. I went to an Australian travel agency once to ask about a trip to Cairns. They straight recommended a $600 three-day package to me, which is out of my budget. However, I did not want to tell them that I could not afford it. I just did not take their advice. (Han, male, 26)

Interviewees who had not used a travel agency before indicated that they might go to a travel agency if there are cheap tickets or tours at the agency and it is cheaper than the price they can find themselves.

6.4.2.9 Authenticity

Authenticity refers to individuals based at the destination. Interview respondents expressed their preference for recommendations from friends who are based at the destination over those who have been to the destination before. Information from local friends is perceived to be more authentic than visitors’ perspectives. In addition, friends based at the destination can provide more targeted and unique information in terms of local specialties. A few interview respondents also indicated their willingness to experience local culture and lifestyle. An interviewee pointed out:
Friends who have been to the destination are still tourists. Therefore, the way they talk about the place is from a tourist perspective. I think a local’s recommendation is more authentic regarding local specialties, which is different from a tourist’s perspective. I am curious about local entertainment and local culture, as my reason to travel is not only to relax but also to learn and experience a different lifestyle or culture. Local culture and special events are very attractive to me, and I would like to know about them. (Yichen, male, 28)

Rompf (2001) notes that recommendations from locals are considered genuine in nature, therefore travellers are more likely to seek information from a local expert.

6.4.2.10 Commonality

Commonality in this context means that interview respondents are looking for information sources who have common interests, experience or similar backgrounds to them. This attribute is particularly evident in information provided by Chinese sources (e.g. interviewees’ Chinese friends, Chinese travel agencies, and other Chinese tourists).

Having a similar background is important for interviewees in terms of choosing what to do and see at the destination. In addition, interviewees like to get information from these sources about potential risks and problems they may encounter during the trip. One interviewee talked about the reasons for using Chinese information sources rather than English ones:

Language is not a major concern for me. However, Chinese and westerners have different interests in terms of travel activities. What local people recommend may not be of interest to Chinese people. For instance, they like adventurous activities such as camping; however, Chinese usually do not like these. What Chinese people recommend are more likely to suit our interests. (Mei, female, 28)
6.4.3 Trip characteristics that influence interviewees’ information search strategies

In addition to characteristics of the information sources, two key themes associated with trip variables appear to influence the extent or degree of interview respondents’ information search behaviour: the type of trip and the travel party composition (see Table 6.2). Again, quotes from interviewees (using pseudonyms) are used in the following to illustrate each theme.

6.4.3.1 Type of trip

Type of trip in this context refers to both the length of trip interviewees conducted and the type of destination interviewees visited. While online information is still the primary information source for their vacation planning, interviewees were also likely to use other offline information sources to get a wide range of information if they conducted a longer trip or went to a destination that is unfamiliar to them. In addition, the longer period interviewees travelled, the more likely they were to use various offline information sources. The more unfamiliar interviewees were with the destination, the more likely they were to use formal professional information sources (e.g. travel agency, travel guidebooks).

When describing the type of destinations, interviewees tended to categorise the places they went into, identifying three types: popular tourist destinations in Australia such as Sydney, Melbourne, Cairns, etc.; places in Australia that are not as popular with general international tourists, especially rural or remote areas (e.g. Darwin); and overseas destinations such as the US, European countries, Southeast Asian countries, etc.

Visiting popular tourist destinations usually involves use of fewer information sources, as interviewees could get enough information from one or two information sources, mostly through online information and recommendations from friends. In addition, interviewees usually have some basic knowledge about the popular destinations in terms of what to see and do. For instance, when thinking about Sydney, people can immediately come up with some must-see iconic buildings and sites, such as the Sydney
Opera House, Harbour Bridge and Darling Harbour, even if they have never been to Sydney before. However, when going to a smaller or less-popular destination, sometimes there is limited information interviewees can find online or from friends, therefore they need to consider using other information sources such as a travel agency or destination information centre. One interviewee noted:

If I go to a place like Darwin, I may use travel brochures or a travel agency. If it is not a mainstream tourism destination, there is probably limited information I can find online. In addition, I am also concerned about safety, and may ask a travel agent to book my hotel, flight ticket, and pick-up services for me. (Mei, female, 28)

In terms of overseas travel, some interviewees indicated that they tend to visit several popular tourist destinations at an overseas destination within a relative short period. For instance, an interviewee who travelled to the US spent 18 days visiting eight major cities and several small towns from the east coast to the west coast; another interviewee used two weeks to visit seven major cities in four countries in Europe. Because of the intensity of these trips there are various elements that interviewees need to consider, and a wide range of information is needed to make an efficient and affordable travel plan. Therefore, interviewees may use some additional information sources to assist with the plan (e.g. travel agency). There were also a few interviewees who mentioned that the reason they may use travel guidebooks or magazines when going overseas is that travel guidebooks/magazines usually have in-depth information about a country, especially the country’s culture and customs, and it would be interesting to know these while travelling. Howard and Seth (1969) note that consumers’ uncertainty in terms of a service or product acts on risk arousal, which stimulates them to search for information. Previous experience suggest that a higher perceived risk increases travellers’ information searching, as one way to reduce risk is to obtain more information (Bieger & Laesser 2004; Schmidt & Sprang 1996).
However, it should be noted that these answers were mainly based on interviewees’ assumptions when answering questions about ‘in what situations, would you use this information source (e.g. travel agency, travel guidebook, tourist information centre)?’. The extent to which they actually use these information sources is still unclear. In fact, of the four interviewees who had overseas travel experience while studying in Australia, only one said she used a travel agency to help with booking flight tickets and hotels, which is different from her domestic travel in Australia. The other three still used the information sources they normally use (e.g. mainly online information) for domestic travel.

There were also interview respondents who indicated that the type of trip did not influence the type of information sources they used; however, it influenced the quantity of information they searched for from the sources and the time they spent on search activities. For instance, interviewees who mainly used online information for vacation planning, instead of browsing one or two websites for domestic travel in Australia, visited more websites and read more information online for overseas travel. One important reason that interviewees conducted a limited information search while travelling in Australia was that their trips were normally short and focused on one destination per trip. Interviewees also mentioned that because they have stayed in Australia for a while and have some knowledge about the country they therefore feel more confident about travelling in Australia than to other foreign countries.

### 6.4.3.2 Travel party composition

Interviewees indicated that they mainly travelled with two types of people: friends who are also international students, and VFRs from their home country. When travelling with other Chinese students, interviewees generally felt casual and relaxed in terms of vacation planning. Therefore, most did not need to conduct extended information search, especially for short trips within Australia. If their family (mostly their parents) came to visit, students were more likely to feel they have responsibilities to plan a nice trip for their visitors, and therefore may use some additional information sources. Four
Interviewees said they might go to a Chinese travel agency if their parents came over. They may book a Chinese tour or travel package for their parents, which is easier for them. Again, these answers were mainly based on their assumptions for future trips. The extent to which they actually use the information sources is unclear.

Six interviewees indicated that travel party composition would not influence their choice of information sources; however, it may influence the effort and time spent on search activities. As noted above, interviewees were more likely to conduct extended information search if they had parents or other family come to visit. There are more elements they need to consider when making travel plans for their families, such as their interests, their health conditions, type of cuisine they like, etc., therefore they may spend a longer time searching for information.

6.4.4 Personal characteristics that influence interviewees’ information search strategies

Finally, the use of information sources is influenced by interviewees’ personal characteristics, in particular their self-perceptions of their English language limitations and their general travel experience.

6.4.4.1 Language barrier

Eleven interview respondents indicated that language barriers influence their information search strategy to some extent. While some of them did not directly use the word ‘language barrier’, they did imply this was an issue in other ways, such as ‘it is easy to read and understand’, ‘I could not understand them’, ‘I could not fully express myself’, etc. Four interviewees said that the language barrier was not an issue for their information search, but indicated that they did read a lot of Chinese information online when planning trips.

Chinese students usually need to reach a certain level of English to be able to study in Australia. Therefore, it is surprising to find out that language was a concern for them when searching for travel information. Interviewees indicated that, compared to English
information, they were more likely to read Chinese information when searching information online, even though they can understand the English information. Chinese information is easy to read and understand, therefore it is much faster and more efficient for them to search and read information in Chinese than in English. An interviewee commented on this issue:

it is faster for me to read Chinese information online. In addition, I do not know which English website is good and reliable, and it takes time to find out. Therefore, I prefer to use Chinese travel websites. (Huiming, male, 26)

Two interviewees indicated that they are more likely to read English information now than a few years ago, as their English has improved a lot. Three interviewees stated they preferred Chinese travel agencies than Australian ones due to language barriers. One of them pointed out:

when I go to a local Australian travel agency, I may be able to understand 80% of what the agent said. The 20% of information I missed may be very important, which may cause serious problems if I missed it. (Han, male, 26)

Another interviewee commented on using Australian travel agencies: ‘I could understand what they say. However, I could not fully express myself in terms of what I really wanted’ (Yu, Male, 28).

6.4.4.2 Travel experience

Travel experience here is different from ‘destination experience’ discussed above. Travel experience in this context mainly refers to interviewees’ general travel experience with respect to independent travel. Experienced independent travellers are more likely to rely on their internal information and personal experiences, and less likely to get information from consulting information sources such as travel agents and friends or relatives. One interviewee commented on travel agencies:

I have more than 10 years travel experience, and I think I am more experienced than they are. So I do not think their information would provide much help to me. (Jinheng, male, 37)
Another interviewee commented on the influence of travel experience on her information search behaviour:

compared to years ago when I was not an experienced traveller, now I spend less time on information search as I am more purposeful in terms of what information I need and where to find the information I need. In addition, I am less likely to read much detailed information. Sometimes just booking a flight and a hotel is enough. (Tian, female, 31)

6.5 Summary of qualitative results and discussion

6.5.1 Summary of qualitative results

This study’s qualitative stage was designed mainly to answer research question 4: ‘Why do student travellers use specific information sources and conduct information search the way they do?’ The most important findings can be presented in a summary conceptual model that describes the relationships between the variables and respondents’ information search strategies (Figure 6.7). According to interview respondents, factors that influence their information search behaviour (A) can be generally categorised into three groups: source attribute (B), trip-specific (C), and personal variables (D). Specifically, source attribute variables are mentioned most frequently by interview respondents when describing reasons for choosing certain information sources (E). In terms of trip-specific variables, the extent to which the type of trip and travel party composition actually influence interview respondents’ choices of information sources is still unclear, therefore the relationship is presented using a dotted line (F). Two trip-specific variables are found to influence respondents’ levels of information search (e.g. time and effort spent on search activities) (G). Finally, two personal variables (language barrier and personal travel experience) are found to influence both interview respondents’ choices of information sources (H) and level of information search (e.g. time and effort spent on search activities) (I).

Figure 6.7 Relationships between three types of factors and respondents’ information
search behaviour (Qualitative results)

6.5.2 Discussion of qualitative results

An important contribution of the qualitative stage is that it identifies a series of source attribute variables that seem to be influential in respondents’ use of travel information sources. Most previous research has focused on various situational (trip-specific) variables and/or demographic variables in terms of their influence on tourists’ information search strategies. However, results of this research indicate that these variables are less-frequently mentioned when interviewees are asked about their information search strategy. This suggests that, in future research, attention should be given to the characteristics associated with the distribution of sources (e.g. availability and flexibility) and the information or content provided in the sources (e.g. credible information).

The source attribute variables mainly describe two aspects of information sources: the distribution of the information source and information or content provided in the information source. In terms of distribution, respondents are more likely to use information sources that are accessible, flexible and fast in terms of accessing travel information. The relationship between these source characteristics and the information search strategy used can be explained by the ‘economics of information’ theory. The
theory implies that tourists are likely to search until they believe the benefit of obtaining information is equal to or outweighs the cost of the search activities (Srinivasan 1990). Consumers face various information sources, and only a limited subset is ultimately used for decision-making. The selection is driven by consumers weighing the costs and benefits of information sources (Fodness & Murray 1998).

Previous studies have found that there is a negative relationship between the cost of searching and the extent of travellers’ information searching (Gursoy & Chi 2008; Gursoy & McCleary 2004; Vogt, Stewart & Fesenmaier 1998). Information sources that are easy to access, flexible and fast reduce the perceived cost of search activities, such as monetary expenditure (e.g. transportation), time sacrifice and physical effort (e.g. finding a store), which in turn increase people’s tendency to use the information source. This suggests that information source designers or destination marketing organisations need to take steps to increase the accessibility and flexibility of information sources for potential travellers. It is also important to increase consumers’ awareness of the availability of information and make it easy to understand by potential travellers (Schmidt & Sprang 1996).

According to the results of both the quantitative and qualitative stages, most of the offline industry sources are relatively less-used by respondents, and one important reason is they are less accessible and flexible than online information. The Internet and mobile technology eliminate the temporal and spatial limits of information search activities (Hyde 2009; Tjøstheim 2002). This means that travellers have more freedom to choose when to search, where to search and how long to search. Internet technology has made online information the most accessible and flexible information source for consumers—especially for younger consumers who are noted as being technology savvy or the ‘net-generation’. For university students, the Internet is part of their everyday lives. They use the Internet to search for information, study, socialise with friends, shop, etc.
From this perspective, increasing the accessibility and availability may increase students’ use of the offline industry sources. For instance, some universities have set up small tourist information centres that display various travel brochures, pamphlets and even a self-service machine for information searching and ticket booking in student lounge areas. This service has made information centres much more accessible to university students, and may increase their use of this information source. However, it is also important for universities to increase students’ awareness of this service (e.g. inform students about this service at orientation week).

Apart from distribution, the quantity and content of information provided by the source is another important consideration for respondents. The quantity of information mainly indicates the amount and variety of information respondents can find from the information source. The content of information mainly refers to the characteristics of information updates, credibility, authenticity, details, price and commonality.

There is limited research examining source characteristics in terms of their influence on travellers’ information search behaviour. One notable study is by Kersetter and Cho (2004), who found that credibility is a strong predictor of travellers’ source selection. This result is confirmed by the current study, in that respondents are more likely to use information sources that are perceived to be credible or reliable. Nolan (1976) found that individuals perceive official government sources and guidebooks as the most credible. This is also supported by the current study in that respondents are more likely to trust government sources, such as tourist information centres and a destination’s official tourism website. In addition, results confirmed previous findings that consumers of tourism and hospitality industry perceive UGC and SNSs to be useful and trustworthy, and are likely to make travel decisions based this type of online information (Law, Buhalis & Cobanoglu 2014; Fotis, Buhalis & Rossides 2012; Sparks et al. 2013).

Many interview respondents indicated that they like to read travel blogs or gonglue of other travellers and plan their own trips based on the information. Gotlieb, Schlacter and Louis (1992) note that credibility plays a central role when consumers make
decisions about a product provider; it affects consumers’ attitudes and behavioural intentions (Manfredo & Bright 1991).

A few other studies have also examined the influence of source attributes on travellers’ information search strategies; however, these focused on the choice of travel agents. These studies found that reputation, past experience with an agent, travel knowledge, lowest fares, courteous/friendly and personal service influence travellers’ choice of and preference for travel agents (Heung & Chu 2000; LeBlanc 1992; Persia & Gitelson 1993; Ryan & Cliff 1997; Wolfe, Hsu & Kang 2004). Specifically, three studies found competitive or lower fares significantly influenced travellers’ selection of travel agents (LeBlanc 1992; Persia & Gitelson 1993; Wolfe, Hsu & Kang 2004). The current study also found that price is an important factor that determines respondents’ use of information sources. It seems that information sources that can provide lower fares or better deals are more likely to attract Chinese international students, who are mostly budget travellers.

One interesting finding of these source attributes is the commonality that respondents are looking for when choosing information sources. Interview respondents indicated that they are more likely to use information provided by other Chinese travellers (e.g. their Chinese friends, Chinese travel agents in Australia, Chinese travel websites). They stated that they find information provided by Chinese tourists is more relevant to them and closer to their interest. This finding is consistent with Ayeh, Au and Law (2013) who found that people often regard others who are similar to them as credible source. The authors also noted that the similarity not only describes demographic characteristics and lifestyles, but also refers to shared interest and shared mind-set. From this perspective, it is not surprising that respondents are more likely to get information from other Chinese as they share similar demographic background and national culture, therefore are more likely to have similar interest for tourism products and activities.
Another explanation for this finding is the culture dimension of *collectivism*. According to Hofstede (2001), China is a highly collectivist society that stresses strong relationships with family and other group members. This culture influence is reflected in some of their travel behaviours. For instance, Davidson et al. (2013) found that Chinese international students are much more likely to travel with students from their own country than other international students in Australia. Sparks and Pan (2009) found reference groups are influential in travel intentions for the Chinese, and Chinese are more likely to visit the target destination when their social networks consider it is a positive thing to do. In addition, Chinese culture is high in *uncertainty avoidance*. As stated by interview respondents, they are less likely to visit destinations or take activities that are perceived as high-risk. Previous research has also found that Chinese travellers in general are less likely to experience adventurous activities than westerners. From this perspective, it is understandable that Chinese tourists are more likely to seek advice from other Chinese tourists rather than from local Australian people.

The finding that *commonality* influences a respondent’s information search strategy to a certain extent confirms Carr and Axelsen (2009), who found *national culture* influences leisure behaviour even when people are away from their home country. Carr (2002) notes that people take their place-specific culture with them as baggage when they travel outside of their place of origin. This suggests that marketing to Chinese international students should take into consideration their cultural background (e.g. collectivist, uncertainty avoidance). Gursoy and Chi (2008) note that tourism companies need to modify their communication strategies and tools to fit the culture of the target market; that is, strategies that work in one culture may not work in others.

In terms of *price*, the finding of the current study that youth, especially student travellers, are more price conscious and seek discounted prices supports previous literature. In particular, Bai et al. (2004) found that easiness of meeting the vacation budget positively influences students’ satisfaction with online vacation planning.
Another important reason that respondents seek Chinese information sources is the *language barrier*, as discussed in section 6.4.4.1. This result confirmed Hughes, Wang and Shu (2015) who found that language barrier is an important factor that constrain students travelling extensively in Australia. The study found that Chinese students had difficulty understanding tourist information and signage. Students studying in Australia mostly have reached a certain level of English skills. However, interview respondents stated that using their native language to search for information is easier and faster than using English. This suggests that destination tourism organisations targeting Chinese students may consider adding Chinese language services to their business. In addition, it is recommended that more signs be written in Chinese in tourist destinations, which may help students building up confidence to travel extensively in Australia. For instance, travel agencies can use Chinese staff to serve Chinese customers. Tourism organisations can add Chinese language to their websites. These strategies may help to increase the use of these information sources by Chinese international students and other Chinese tourists.

Other source attributes, such as the *quantity* of information and *information updates*, have been rarely discussed and examined in previous tourism studies. However, it should be noted that many of these source attributes identified mostly relate to online information, and are the result of the popularity of Internet technology. For instance, Internet technology eliminates the temporal and spatial limits of the information search, which has made online information the most accessible, flexible and fastest source compared with traditional offline information sources (Hyde 2009; Tjøstheim 2002). The Internet also encompasses an enormous amount of information and covers various aspects of information needed by travellers (Hyde 2009). In addition, it enables tourists to find up-to-date information on inventories and prices, as well as to make comparisons, which is convenient for travellers’ decision-making.

There is debate in the tourism literature about whether the use of online information will replace traditional offline information sources. Some believe that online
information may replace the use of traditional offline information sources, as it is becoming easier for tourists to gather travel-related information from the Internet (Luo, Feng & Cai 2004; Oorni 2004). Others think that online information cannot fully replace traditional offline information sources, and tourists who make use of the Internet to search for travel information also make use of many other offline sources (Hyde 2007; Oorni 2004). Findings from the current study seem more likely to support the former proposition, especially when the current young travellers become the mainstream tourist market. Respondents in both the quantitative and qualitative stage indicated that online information is the most important information source for their vacation planning. In fact, their wide use of online information has significantly decreased the importance of traditional offline information sources. It is suggested that the Internet is driving development in tourism information and communication technology, and the Internet is becoming an important platform for marketing communication in tourism. However, the results also support Xiang et al. (2015) who noted that while the Internet has become the leading information source of travel, traditional sources remain relevant. It is indicated by interview respondents of the current study that traditional sources are complementary to online information in different ways, and some respondents are consciously seeking a variety of information to have a comprehensive understanding to the tourist destinations or travel products.

This trend suggests that information source organisations or tourism marketing companies may consider putting more effort into developing online distributions of their products, and communicating with potential customers through the Internet. For instance, instead of solely focusing on offline services, travel agencies can put more effort into building and managing online customer services. Some big travel agency companies have already set up online, real-time consulting services for customers who wish to communicate and consult travel information via online chatting. To develop new products or effective marketing campaigns companies also need to conduct research and make predictions for future trends in terms of the needs and preferences
of major tourist markets.

With the exception of the above, another important contribution of the qualitative results is that it shows how trip-specific and personal variables not only influence tourists’ choice of information sources (direction of search) but also the *time and effort* spent on search activities (degree of search activity). Previous studies examining various situational and personal variables in terms of their influence on travel information search behaviour mainly focus on travellers’ choices of information sources (direction of search). However, results of the qualitative stage of this study show that variables such as type of trip, travel party, language barriers and personal travel experience also influence the time and effort spent on searching (degree of search). For instance, interview respondents indicated that if they go to an uncommon or unfamiliar destination (especially for overseas trips), or host family or friends from overseas, they are more likely to conduct an extended information search and spend longer on vacation planning. This was mainly due to the uncertainty and relatively higher perceived risk associated with the trip. As mentioned, previous literature suggests that higher perceived risk increases travellers’ information search activities, as one way of reducing this risk is to obtain more information (Bieger & Laesser 2004; Schmidt & Sprang 1996). On the contrary, respondents’ travel experiences tend to have a negative effect on the degree of their information search. This was indicated by a few interview respondents who consider themselves as experienced independent travellers. It seems that experienced travellers are more likely to focus on certain sources or travel websites, or just rely on their personal experience; they are less likely to spend much time and effort on searching for information or read detailed information such as travel *gonglue*. 
6.6 Conclusion

This chapter has presented the results of the qualitative interviews conducted for stage two of this study. The study found that source attribute variables (e.g. accessibility and flexibility, quantity and variety, credibility, etc.) are particularly important in terms of determining respondents’ choices of travel information sources. While trip-specific variables (e.g. type of trip, travel party composition) are more likely to influence respondents’ degree of search (e.g. time and effort spent on search activity), rather than direction of search (choice of information sources). Two variables particularly relate to the Chinese international student market—commonality and language barrier—which suggests that special attention should be given to these attributes when examining the Chinese international student traveller market.

The next chapter summarises and discusses the main findings of this study into Chinese international student travellers’ information search behaviour, drawing on both the quantitative and qualitative results.
Chapter 7  Discussion and conclusion

7.1  Introduction

The aim of this research was to discover and explore Chinese international student travellers’ information search behaviour when they travelled in Australia. Specifically, it aimed to produce a comprehensive understanding of their search behaviour. It was also the purpose of the research to identify the underlying factors influencing student travellers’ choices of information sources. Chapter 4 described how this has been achieved through a mixed-method approach, combining both quantitative and qualitative techniques. Stage one data collection took a quantitative perspective to generally examine Chinese international student travellers’ information search behaviour in terms of three underlying dimensions of the search strategy, tourist segmentation based on their search strategy, and what trip-specific and personal variables influence their information search strategy. Qualitative interviews following the stage one data collection were undertaken in stage two to provide a detailed explanation of the specific findings of stage one. The results from the two stages and relevant discussions were presented in Chapters 5 and 6.

This chapter provides discussions that integrate both quantitative and qualitative results by firstly reviewing and discussing when, how, and to what degree respondents use each type of information source (quantitative findings) followed by why they use or not use the source in certain ways (qualitative findings). The chapter first summarises Chinese student travellers’ use of and perceptions toward each of the information sources examined, drawing on both the quantitative and qualitative findings (section 7.2). Section 7.3 presents a conceptual model based on both the quantitative and qualitative results. The model illustrates the relationships between the three main areas examined in this study. The characteristics of the three tourist segments and their associated travel information search behaviours are summarised in Table 7.1, followed by a discussion
of the implications of the key results.

Contributions to the tourism literature are provided in section 7.4, followed by the implications and applications for the tourism industry in section 7.5. Finally, the limitations of this research are considered, and avenues for future research are suggested (section 7.6). A final summary is provided in section 7.7.

### 7.2 Chinese student travellers’ use and perception of each travel information source

#### 7.2.1 Online information

Online information is indicated as the most important information source by Chinese student travellers for both pre-trip and during-trip stages. It is also the most used primary information source for all the major travel services (accommodation, transportation, recreation and entertainment activities). In addition, it tends to be used as a decisive source for decision-making. This finding empirically confirms the proposition that online information is the most important information source for younger travellers, especially university students (Michael, Armstrong & King 2004; Richards & Wilson 2003; Ryan & Xie 2003; Xu, Morgan & Song 2009). In contrast, studies examining general inbound and/or outbound tourists have found that tourists are more likely to use certain offline industry information sources such as travel agencies (Chen & Gursoy 2000; Connolly & Olsen 2001; Gitelson & Crompton 1983; Murray 1991; Snehenger 1987; Snehenger et al. 1990; Wynne et al. 2001), travel brochures (Fodness & Murray 1999; Getz & Sailor 1994; Gursoy & Umbreit 2004; Raitz & Dakhil 1989; Snehenger et al. 1990; Wick & Schuett 1991, 1993), tourist information centres (Fesenmaier, Vogt & Stewart 1993) and travel guidebooks (Nishimura, Waryszak & King 2006a, 2006b).

The differences can be explained by generational differences and the ‘Internet effect’. It seems that this population, who are younger travellers, prefer online information more than tourists older in age. Chinese student travellers examined in this study are mostly
university students who are younger in age and undertaking higher education degrees. These consumers are noted as the ‘net generation’, who are familiar and skilled with Internet technology. Therefore, it is not surprising that online information has become the most important information source for these consumers, and the importance of traditional offline information sources such as travel agents has decreased. This suggests that future studies examining travellers’ information search behaviour need to understand the generational background of the tourist market.

Most previous studies examining general inbound and outbound tourists were conducted relatively earlier, when online information was not a mainstream information source. The popularity of the Internet has had a strong impact on tourists’ information search behaviour, changing the way travellers search for travel information (Hyde 2007; Lo, Cheung & Law 2004; Tjøstheim 2002). Online information is becoming an important information source for travellers nowadays and has significantly changed travellers’ information search activities.

According to the stage two qualitative interviews, respondents indicated several main reasons for using online information as a primary information source. First, different from traditional offline information sources, online information eliminates the temporal and spatial limits of information search activities, and greatly reduces the total search time and other associated costs (Hyde 2009; Tjøstheim 2002). This means travellers have greater control over various aspects of the information acquisition process, and can decide which website to visit, when to visit and how long to stay on the website.

Second, there is an enormous amount of up-to-date travel information available online, which covers various aspects of information needed by travellers. In addition, travellers can make comparisons between different suppliers online and make the most suitable decision. Third, the Internet makes it possible for travellers to get information from a wider range of word-of-mouth sources (e.g. social networks, UGC travel sites), which are considered useful and reliable for decision-making. Interview respondents
specifically indicated their intention to use UGC travel sites to search for travel information. The personal experiences and opinions provided by other travellers are considered useful and reliable, especially for destination-naive travellers.

The importance of online information suggests that future research and practitioners need to pay more attention to tourists’ online information search behaviour, and design effective online communication strategies to reach and communicate to potential tourists. In addition, more attention should be given to UGC travel websites as they have a significant influence on travellers’ decision-making.

7.2.2 Friends’ recommendations

A recommendation from a friend is the second most important source perceived by respondents. It is also more likely to be used as a decisive source for vacation planning. This finding is consistent with previous studies that a recommendation from a friend and family member is one of the most effective communication tools affecting consumers’ purchase decisions (Bansal & Voyer 2000; Wang, Severt & Rompf 2006). Tourists have greater confidence in personal recommendations (Mitra, Reiss & Capella 1999), especially for tourist products that are usually associated with higher perceived risk. It is believed that informal personal sources ‘are often credited with greater reliability and authenticity than more formal sources’ (Laing 1987, p. 275), therefore consumers place a greater level of trust on information obtained from their family and friends (Carr 2003). Stage two qualitative results of this study also confirm the previous finding that the greater the perceived risk of a purchase decision, the greater the importance of personal information sources (Murray 1991). Interview respondents stated that if they go to an unfamiliar destination or on an overseas trip that is perceived to have higher risks and uncertainty then they are more likely to trust personalised information, such as recommendations from friends.

With respect to the temporal dimension, friends’ recommendations are significantly more important at the pre-trip stage than during the trip. This may be because Chinese
student travellers tend to make major travel decisions before the trip starts, and recommendations from friends are an important source of information for their decision-making. It seems that friends’ recommendations have a significant influence on Chinese international students’ travel decisions, especially at the early stage of their vacation planning.

As a result of the one-child policy the current young Chinese are the first generation to grow up without siblings, and friends and peers have a significant place in their lives (Luo & Lagerdahl 2011). In addition, the Chinese highly collectivist culture stresses strong relationships with family and other inner-group members. As such, recommendations from friends are weighted as highly important for travellers’ decision-making.

This suggests that tourism companies and destinations need to provide quality services to their customers, and make sure that existing customers are satisfied with the services they receive so that they will spread positive word-of-mouth for the company and destination, and make recommendations to other potential customers. Bearden and Teel (1983) note that satisfied consumers are more likely to provide positive word-of-mouth recommendations to their family and friends.

7.2.3 Tourist information centres

Tourist information centres were the fourth most important information source following online information, friends’ recommendations and personal experience, and the most important information source among all the offline industry sources (e.g. travel agencies, guidebooks/magazines, and brochures). Results show that they are particularly important for transportation services and recreational activities. This finding is also supported by results of the stage two interviews, which found that the main reasons for using tourist information centres are to get transportation or directional information (e.g., how to get to the place, how to take public transportation) and attraction or activity information (e.g. what to do, where to see).
A few interview respondents indicated that they are more likely to use a tourist information centre when they are on a close-to-home leisure trip, which is consistent with previous findings (Fesenmaier, Vogt & Stewart 1993). These trips tend to be short, and Chinese student travellers usually do not conduct extensive searches. Therefore, information provided at the destination is an important source for them.

Credibility is an important reason indicated by interview respondents for using tourist information centres. Interviewees noted that it is a government organisation and therefore the information provided is seen as reliable. However, their relatively low accessibility is the main reason stated by interview respondents for not using this information source. Tourist information centres are an important information source used by state to encourage visitors to stay and sightsee within the destination (Fesenmaier, Vogt & Stewart 1993). In fact, many local tourism business especially the smaller ones, are highly dependent on the information centre to generate local awareness (Pearce & Tan 2004). To increase travellers’ use of this information source destination tourism organisations need to think of strategies to increase the accessibility of information centres, for instance locating them at more popular places or gateways of a destination (e.g. airports, train stations) to gain tourists’ awareness and attention. In this way, tourists can easily notice and find the place when they arrive at the destination, which may increase their use of this information source.

7.2.4 Travel guidebooks

This information source is the second least used information source by Chinese student travellers among the seven information sources. Previous studies have found that travel guidebooks are particularly popular among experienced travellers and backpackers. These travellers tend to be planning longer trips to more ‘difficult destinations’, which require higher levels of planning (Richards & Wilson 2003). Chinese student travellers examined in this study are relatively less experienced in terms of general travel experience. In addition, according to their trip characteristics, most Chinese student
travellers conduct short, close-to-home trips in Australia. Such trips do not usually require high levels of planning and in-depth information. This may partially explain why travel guidebooks are relatively unpopular within the Chinese student market. Other reasons indicated by interview respondents include: Internet effects, relative higher monetary and time cost, and slow information updates.

Travel guidebooks add value to the decision-making of potential travellers by offering ‘insights into prospective experiences and can provide comprehensive information and imagery about all travel components and destinations, including the likely atmosphere to be encountered’ (Nishimura, Waryszak & King 2006a, p. 25). Therefore, this information source can be useful for individuals who seek in-depth experiences in the destination. It is expected that Chinese students will be more likely to use this information source as their travel experience increases. This proposition is supported by a few interview respondents who consider themselves experienced travellers. They expressed their preference for using travel guidebooks to get in-depth information about the destination and local culture.

To increase the general use of this information source, guidebook companies may need to consider increasing the accessibility and decreasing the cost associated with using this information source, for instance by developing and marketing digital travel guidebooks. It would be cheaper for consumers to purchase a digital book online and would be more accessible for Internet users who mostly search for and obtain information online. It is also important that guidebook companies constantly update information on their official websites, and make sure book users can easily link to the updated information when they read the book on the Internet.
7.2.5 Travel brochures

Travel brochures in general were used relatively less by Chinese international student travellers. Results show that travel brochures are more likely to be used as a source for recreational activities, and are significantly more important during the trip than prior to the trip. This is consistent with previous findings that tourists are more likely to use travel brochures for activities, attractions and events during the trip to ‘allow for flexibility in travel plans and to avoid the risk of having purchased tickets that may not be used’ (Jun, Vogt & MacKay 2007, p. 273).

Travel brochures were a key information source for tourists to choose hotels, destinations and various activities (Gursoy & Umbreit 2004; Raitz & Dakhil 1989; Snepenger et al. 1990). However, the current research found that Chinese student travellers are more likely to use travel brochures to broaden their knowledge or stimulate awareness or interest and that, rather than being used for decision-making, they served to complement other sources. One implication from this finding is that researchers and practitioners may need to consider how to increase the credibility of travel brochures so that they can be more influential on tourists’ decision-making. Tourism companies that only use travel brochures to promote their services and products may need to consider using other sources to communicate to potential tourists.

7.2.6 Travel agency

Stage one quantitative results show that travel agencies received the lowest use by Chinese student travellers at both the pre-trip and during-trip stages. This result confirmed Ryan and Xie (2003) finding that travel agencies are used less among independent travellers. In addition, according to Gronflaten (2009), travellers who prefer travel agents are likely to be older (older than 59), on an organised tour or business travellers. Hence, it is understandable that travel agencies are not a popular information source among Chinese student travellers in the current study. Viewed temporally, travel agencies were more likely to be used during the trip. The reason
indicated by interview respondents is that they are more likely to use a travel agency to book activity services or day tours when they arrive at the destination.

Many previous studies have found that travel agencies are an important information source for travellers. Traditionally, travel agencies specialised in terms of being geographically close to tourists and provided value to consumers by doing much of the searching on their behalf, catering to tourists’ individual requirements (Seabra, Abrantes & Lages 2007). However, these benefits are no longer attractive to many tourists, especially among younger tourists who are familiar with using the Internet to search for information. By typing in few key words on the computer, travellers can easily get all the relevant information they need without the use of a travel agent.

However, researchers have noted that many tourists still prefer to book services through travel agents because they appreciate human interaction and personal advice (Morrison & King 2002). This suggests that travel agencies that provide online consultation services are more likely to reach potential travellers who are Internet users and also prefer human interactions and personalised services. A few interview respondents indicated the issue of information overload when they search for information on the Internet. The online travel consultant service can be a useful service for this group of tourists, as travel agents conduct much of the searching on their behalf, which saves customers time and effort when vacation planning.

Interview respondents also indicated that one important reason that they do not use travel agencies is that they perceive the price of travel services or packages provided by travel agencies to be usually higher than they can find themselves from other websites. Students are mostly budget travellers, trying to find the lowest price and best deal for travel services. Thus, by using their connections with service providers to get special prices or package deals, and designing budget travel packages, travel agencies may be able to target student travellers. Those who can provide lower prices or special deals are more likely to attract the student market.
7.2.7 Travel websites

The current study indicates that airline or other transportation websites and hotel or other accommodation websites were the most frequently used travel websites of Chinese student travellers. Transportation and accommodation services are necessary components of most leisure trips. Therefore, travellers are likely to acquire a seat or vehicle and book a room in advance, ensuring that the service is available on arrival (Pearce & Schott 2005). As such, it is understandable that these types of websites are the most popular websites for Chinese student travellers.

For destination activities, Chinese student travellers mostly use online travel guide websites and travelogues or online travel communities’ websites. Specifically, interview respondents mentioned TripAdvisor.com and some Chinese tourism websites such as Qunar.Com, Qyer.com and Mafengwo.com. These websites are particularly popular among independent travellers for both searching and sharing personal travel experiences, comments and opinions. These websites that allow consumers to share their experiences in ways such as posting their stories, comments, pictures and movie clips are known as SNSs or UGC websites. Many interview respondents indicated that they particularly like to use these Chinese tourism websites to read other travellers’ travel gonglue. The format of travel gonglue is like a travel guide, where the author describes their own itinerary and provides recommendations on various trip-related aspects, such as the transportation method, how to book accommodation, which restaurant is recommended, etc. The author often adds personal recommendations and criticisms regarding various aspects of the trip. These personal observations and opinions are very important for Chinese student travellers to plan their trips and make decisions regarding travel services, as the information is based on real travel experiences of individuals and is considered reliable due to its personal and non-commercial nature.

The popularity of such information among Chinese student travellers on the one hand
indicates that most Chinese international students are relatively inexperienced in terms of independent travel and therefore need such detailed guides to plan their own trips. On the other hand, the study supported the proposition that UGC travel websites and SNSs are increasingly becoming a major source of travel information that have profoundly transformed consumer behaviour. Credibility and commonality are the two critical elements that influence consumers’ use and trust of UGC websites. Chinese students indicated that the eWOM provided by other Chinese tourists as more trustworthy as they share similar background and interest. This further emphasises the importance of personal recommendations in terms of their influence on Chinese student travellers’ information search behaviour and decision-making. For tourism practitioners, this raises the issue of how tourism businesses can use social media as a platform for their online marketing strategies.

Other than SNSs or UGC travel sites, Chinese student travellers are also likely to get activity information from official tourism destination websites. Interview respondents indicated that they are more likely to get information about destination special events or activities from these sites. These websites are considered reliable due to being government-owned and non-commercial in nature. This finding indicates that official tourism websites are an effective channel for local government to promote local tourism. Government organisations need to continue working on improving the quality of official local tourism websites, especially putting more effort into introducing local specialties, special events and uniqueness.

7.3 Conceptual model for results and discussions

A conceptual model has been developed based on the quantitative and qualitative results. It illustrates the relationships between tourist segments, three types of input variables and Chinese student travellers’ information search behaviour (Figure 7.1). The right-hand side of the model shows the relationships between various input variables and Chinese student travellers’ information search behaviour. In general, three types of
variables are identified as influencing Chinese international students’ information search behaviour: trip-specific, personal and source-attribute variables. Solid lines indicate findings based on quantitative results, while dotted lines indicate findings based on qualitative results. Detailed discussions in terms of each identified relationship are provided in section 5.9.4 and section 6.5.

Figure 7.1 Conceptual model of research findings (combining quantitative and qualitative results)

The left-hand side of the model shows the relationships between the input variables and the three tourist segments. The chi-square statistics show that the distribution of each segment in terms of personal and trip-specific variables in general are not statistically
significant (section 5.6.2). However, it is clear that respondents with certain personal and/or trip-specific characteristics tend to fall into one of these tourist segments. Table 7.1 summarises the characteristics and search behaviour of each tourist segment, drawing on both quantitative and qualitative results, and is followed by a more detailed discussion.

Table 7.1 Travel behaviour and characteristics of the three tourist segments

<table>
<thead>
<tr>
<th>Tourist segment</th>
<th>Search strategy</th>
<th>Personal &amp; trip characteristics</th>
<th>Type of trip</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Focused searcher</strong></td>
<td>Online information, Friends’ recommendations, Personal experience</td>
<td>• Travelled with other Chinese students &lt;br&gt; • Stayed 1–3 nights &lt;br&gt; • Spent less than AU$500 &lt;br&gt; • Repeat visit &lt;br&gt; • Less than 1-month planning</td>
<td>• Popular destination &lt;br&gt; • Close-to-home destination &lt;br&gt; • Short visit</td>
</tr>
<tr>
<td><strong>Passive searcher</strong></td>
<td>Friends’ recommendations</td>
<td>• Travelled with VFRs &lt;br&gt; • Stayed over 7 nights &lt;br&gt; • Spent more than AU$1000 &lt;br&gt; • Went to multiple destinations &lt;br&gt; • Male &lt;br&gt; • Undertaking undergraduate degree</td>
<td>• Visiting friends</td>
</tr>
<tr>
<td><strong>Extensive searcher</strong></td>
<td>Online information &amp; Various offline information sources, including personal experience, friends’ recommendations, industry sources (e.g. travel brochures, guidebooks, travel agency, tourist information centres)</td>
<td>• Travelled by themselves &lt;br&gt; • Travelled 4–6 nights &lt;br&gt; • Spent AU$500–1000 &lt;br&gt; • First-time visit &lt;br&gt; • Older than 25 years old &lt;br&gt; • Female &lt;br&gt; • More than 1 month planning &lt;br&gt; • Undertaking VET &amp; ELICOS or Postgraduates</td>
<td>• Unfamiliar destination &lt;br&gt; • Overseas destination &lt;br&gt; • Longer visit</td>
</tr>
</tbody>
</table>

First, the quantitative results indicate that most respondents are focused searchers who conducted basic information search activities and mainly used decisive sources (online information and friends’ recommendations) and personal experience for their most recent overnight trip in Australia. The time spent on searching for travel information is relatively short. It is suggested that, due to time and financial constraints, their trips tend to be short and are more likely be close-to-home destinations. In addition, Chinese
students may still be at an early stage of their travel career, and are more likely to go to traditional iconic attractions and sites to tick off the ‘must see’ places. In addition, their high uncertainty avoidance culture background suggests Chinese students tend not to visit unusual or ‘difficult’ destinations that are perceived to be risky. As such, their trips generally do not require high levels of planning with detailed information, and general information is considered enough.

Respondents’ demographic and trip characterises show that focused searchers are more likely to travel with other Chinese students, stay 1–3 nights at the destination, spend less than AU$500, and be on repeat visit. It is clear that these characteristics show a low perceived risk associated with the trip. For instance, when conducting a short and/or repeat visit to a destination, students may have some basic knowledge or previous experience about the destination. The literature notes that previous experience with the destination provides a consumer with a wealth of information that is not available to first-time visitors (Crotts 1999). As such, when students perceive less risk for the trip they may incorporate less effort and time, and only conduct basic search activities for trip planning.

Second, interview respondents indicated that when they travel to an unfamiliar destination, overseas destination or a longer visit they are more likely to conduct extensive search activities. The extensive searchers not only use decisive sources but also use a wide range of offline industry sources (e.g. travel agencies, guidebooks, travel brochures, tourist information centres) to search for travel information. According to interview respondents, such trips may involve higher financial, social and/or psychological risks and therefore they tend to seek more external information to decrease the perceived risks. In the same vein, when students make a first-time visit to a destination, or travel by themselves, they are more likely to feel increased uncertainty about the trip. The literature notes that first-time visitors to a destination are noted as destination-naive as they lack experience or prior knowledge about the destination; therefore they are more likely to be involved in extensive information search to
minimise the risk involved in visiting an unknown destination (van Raaij 1986). They are also more likely to rely on promotional materials provided by marketing channels (Bitner & Booms 1982; Van Raaij 1986) and professional sources than experienced tourists (Woodside & Ronkainen 1980; Snepenger et al. 1990).

Interview respondents also noted that when their travel experience increases they are also more likely to conduct *extensive searches* and use offline information sources such as guidebooks. This may be explained by Gursoy and McCleary’s (2004) U-shaped relationship between travellers’ prior experience and external search behaviour. The authors note that in the early stage of information gathering, when individuals are ‘low familiar’ with a destination or activities, they are more likely to use external information sources. Concurrently, when a traveller becomes more familiar with, and has high levels of expertise about, the destination or leisure activities external search behaviour once again becomes important to the final vacation decision (Gursy & McClaery 2004). However, the two groups differ in that destination-naïve travellers who are not familiar with the destination tend to use external information sources to gather ‘simple, understandable, and overall information about a destination’, while experienced travellers who are high in expertise are likely to gather ‘specific and detailed information about the destination and its attributes’ (Gursoy & Chi 2008, p. 283). In addition, it seems that experienced travellers are more likely to be planning longer visits to more ‘difficult’ destinations, which require higher levels of planning (Richards & Wilson 2003).

The demographic characteristics show that extensive searchers are more likely to be over 25 years and undertaking postgraduate degrees. It suggests that Chinese student travellers older in age (over 25 years) or having a higher level of education may have more travel experience, and plan for more ‘difficult’ trips, and therefore are more likely to be extensive searchers when planning a vacation trip.

Third, in terms of *passive searchers*, the results of the quantitative and qualitative stages
are contradictory. The quantitative results show that passive searchers are more likely to travel with their visiting family or friends, stay over 7 nights, spend more than AU$1000 and go to multiple destinations. They had the lowest usage for almost all information sources and particularly use friends’ recommendations for information. However, according to interview respondents, these characteristics or conditions, such as hosting family/friends from overseas, conducting long overnight trips and trips involving multiple destinations, are mostly associated with higher levels of planning, and are more likely to result in extensive information search and the use of a wide range of information sources (e.g. travel agency).

In fact, Chinese international student travellers indicated they are more likely to become passive searchers when they visit family or friends who live or are based at the destination. It is noted that trips to visit friends or relatives tend to involve minimal information search as family and friends at the destination are the predominant source of information for these travellers (Gitelson & Crompton 1983). It suggests that future research can further explore this issue to provide explanations for such contradictory findings.

From a marketing point of view, it seems that passive searchers are of limited value for destination marketers who try to use various information sources to target the Chinese student market. Results of the current study show that passive searchers tend to have minimal use of most information sources and solely rely on family’s or friends’ recommendations. On the contrary, marketing campaigns distributed through various information sources, especially offline industry sources (e.g. guidebooks, travel brochures), are more likely to influence extensive searchers who use a wide range of information sources for vacation planning. In addition, first-time visitors who lack travel experience are more likely to rely on promotional materials provided by marketing channels (Bitner & Booms 1982; Van Raaij 1986) and professional sources (Woodside & Ronkainen 1980; Snejberger et al. 1990).
7.4 Contributions to the literature

First, this study contributes to the body of literature on youth and student travel, especially university or college student travel, by expanding on previous studies. Previous research examining youth travel behaviour mainly focuses on ‘backpackers’, who are perceived as a large and lucrative market. There is especially a lack of research on international students on the basis of nationality. In addition, most studies examining college or university students’ travel focus on the basic aspects of their travel behaviour, such as travel motivations, destination image, choice of destination, travel product and activity preference. These studies indicate that college or university students, who are mostly independent travellers, prefer organising their trips by themselves. However, there is a limited understanding of how students search for travel information and plan their trips. As such, the current study is valuable in terms of providing a comprehensive understanding of university students’ information search behaviour and more insights into youth and students’ travel, particularly, Chinese international students. For the tourism industry, Chinese students constitute the largest international student market for Australia and many other destination countries (e.g. the US and UK) (UNESCO 2009).

Second, the current study also contributes to the tourism literature on methodological grounds. In general, there is a lack of qualitative research in tourism information search literature. The current study examines Chinese international student travellers’ information search behaviour from three perspectives (information search strategy, tourist segments and factors influencing their search strategy), incorporating both quantitative and qualitative methods, and provides a comprehensive description of how and when they search for travel information, what information sources they use for decision-making, the underlying factors influencing their information search strategy and how they can be segmented on the basis of their information search behaviour. Previous travel information search studies mostly focus on one or two aspects of
travellers’ search behaviour; there is a lack of systematic and comprehensive research on this topic.

Third, this study contributes to the literature by using three individual methods to measure three dimensions of travel information search strategy, and the results support the existence of three dimensions and the use of these three dimensions to describe Chinese international student travellers’ information search strategies. Further, the results confirm the ongoing nature of international student travellers’ information search behaviour and multiple information-sourcing tendencies.

Fourth, this study confirms using both the direction and degree of search to segment the international student travel market, and identifies three types of information searchers that may also exist in other tourist markets. Specifically, focused searchers represent those who mainly focus on using certain types of information sources, and their total searching time is relatively short. Passive searchers are those characterised as using minimal information sources for vacation planning, relying on friends’ recommendations. Extensive searchers are those who consult a wide range of information sources and spend a longer time on information searching and vacation planning. Each segment is associated with certain search patterns and behaviours. By understanding the information search patterns and characteristics of each segment, academics and practitioners can have an in-depth understanding of travellers’ information search behaviour.

Fifth, the current study contributes to the literature by directing future researchers’ attention to a series of source-attribute variables (e.g. accessibility and flexibility, timeliness) that have rarely been discussed and examined in previous studies. By using qualitative interviews the current study found a range of variables that are highly influential on Chinese student travellers’ information search behaviour based on their own self-reporting.
Furthermore, the current study indicates that some trip-specific variables may not only influence Chinese international student travellers’ information search behaviour in terms of the direction of search (specific source consulted) but also the degree of search (time and effort spent on information search activities). Most previous studies examining relationships between various situational and personal variables and tourists’ information search behaviour have focused on the direction of search activities, and rarely discuss their effects on the time and effort spent by travellers.

One of the most important theoretical contributions of the thesis is combining these in a single model. A conceptual model that integrates the main findings of the quantitative and qualitative research was built and can be used as a theoretical structure for future research.

Finally, findings of the current study can be used as a prototype to understand the behaviour of the emerging independent Chinese outbound travellers and as a signal for future market development. Existing evidence suggests that independent travel will become more commonplace in China’s future outbound travel, and Chinese international students who conduct travel activities during their education in a foreign country are acknowledged as an early wave of Chinese independent outbound travellers.

### 7.5 Implications and applications of findings for the tourism industry

Findings of the current study provide important insights for the tourism industry regarding a better understanding of the Chinese international student market. The results presented in this research may provide marketers with insights into which communication strategies may be suitable for the Chinese student market. Results also show which sources are used with respect to each travel service (e.g. accommodation, transportation, recreational and entertainment activities) and when these sources are used, which can facilitate tourism companies to effectively distribute marketing campaign by using right channel at the right time.
The current study found that online information and friends’ recommendations are the two most important information sources that are frequently used by Chinese international student travellers for travel information. On the one hand, the wide use of online information, specifically the popularity of UGC travel sites and SNSs suggests that tourism companies and businesses need to ‘develop new types of information-oriented platforms and new kinds of customisable application environments, and is forcing businesses to think about massive information distribution in a novel and customised manner’ (Gursoy & Chi 2008b, p.287). On the other hand, the importance of friends’ recommendations suggests tourism companies need to provide quality services to international student travellers and make sure that existing customers are satisfied with the services they receive so that they will spread positive word-of-mouth for the company and destination, and make recommendations to other potential customers. Bearden and Teel (1983) note that consumer satisfaction significantly relates to positive word-of-mouth. Research has found that satisfied tourists are more likely to provide positive recommendations to friends and relatives (Yoon & Uysal 2005).

The current study also identified a series of source-attribute variables that are highly influential on Chinese international students’ choice of information sources. The literature notes that knowledge about which attributes or characteristics consumers look for when choosing and using travel information is essential to understanding how to improve the distribution and design of information sources. This knowledge is particularly important for developing new information and communication technology. Understanding travellers information search behaviour is essential to the design of Internet-based technology (Pan & Fesenmaier 2003).

Specifically, accessibility and flexibility are important factors that influence Chinese student travellers’ choice of information sources. Therefore, when choosing information distribution channels it is essential for tourism companies to consider whether the source they plan to employ is easy for consumers to access and use, and whether the travel website is easy to find on the Internet. Destination organisations and
tourism information companies also need to think of strategies to increase the accessibility of information sources. For instance, local tourism councils can locate destination information centres at gateways of destinations (e.g. airports, train stations) to gain travellers’ awareness and attention, which in turn may increase their use of the information source.

*Credibility* of the information source is another important factor that Chinese international students expressed concern about when making travel decisions. Therefore, it is essential for information providers to establish and maintain credibility, including by providing honest and sincere information, rather than stretching the truth to make a quick sale. In addition, government organisations need to continue to work on improving the quality of official local tourism websites, especially putting more effort into introducing local specialties, special events and uniqueness.

It is also suggested that tourism companies constantly update their information and provide up-to-date information on inventories and prices for potential Chinese international student travellers. In the tourism and hospitality industry *timeliness* of information is important for travellers, as outdated information can be inaccurate and misleading, which may result in dissatisfaction. Additionally, Chinese international students are highly *price conscious*, and are trying to find information on the lowest price and the best deal for travel services. This suggests that travel agencies can use their connections with service providers to get special prices or package deals and design budget travel packages for the student market. Those who can provide lower prices are more likely to get the student market.

In addition to the above findings, the current study indicates that female Chinese international students are more likely to be *extensive searchers*, spending a longer time on information searching and using various offline industry sources. This result confirms previous literature that states women are ‘comprehensive processors’ who attempt to assimilate all available information before decision-making, which is
different from males who are mostly ‘selective processors’ and who do not engage in comprehensive processing of all available information before judgment. This suggests that offline industry sources and websites such as UGC travel sites and service-specific sites are more likely to influence female travellers. This is useful information for tourism organisations who seek to cater to female travellers’ preferences when designing travel information.

For destination marketers, communication strategies and information distribution channel used should adapt to the culture of the target market, as a strategy that works in one culture may not work in others (Gursoy & Chi 2008b). For instance, the current study indicates that Chinese student travellers are more likely to choose information sources provided by Chinese companies or individuals and are highly reliant on recommendations from their friends, which may be due to the high collectivist cultural background. Such findings suggest that tourism companies, such as local travel agencies, can add Chinese-speaking services for Chinese international students, which may increase the opportunity of potential Chinese travellers using this information source.

Finally, destination management organisations could build connections with universities to target international students and the associated VFR tourist markets. For instance, they could send out state information kits to international students at orientation week. This could enhance students’ motivation to travel around the state and to specific destinations within Australia (Michael, Armstrong & King 2004).

7.6 Limitations of the study and avenues for future research

There are some limitations associated with the research methodology and findings. First, the study used convenience sampling, therefore how generalisable the findings are is unknown. Ideally, respondents would have been accessed randomly from different universities and states to get a better cross-section of the population of interest. However, this could not be achieved given the limited time, university restrictions and
financial constraints. Post-stratification weighting was conducted where the sample over- or under-represented the broad population of Chinese students studying in Australia, which makes the results less biased. Furthermore, it might have been better to interview a certain number of respondents who participated in the first stage of data collection. However, due to the anonymous nature of the survey it was not possible to access respondents who participated in the quantitative survey. The use of different individuals for quantitative and qualitative data collection may have introduced personal characteristics that confounded the merging of the two datasets (Creswell & Clark 2007).

Second, the sample size collected is small considering the overall size of the studied population. Quantitative studies usually require large sample sizes to enable more accurate results and generalise the findings to the large population being studied. However, to improve the representativeness of the findings to the wider population data were weighted according to the general population of Chinese international students in Australia.

Third, the findings reported in this study are applicable only to Chinese students who are currently studying in Australia. The results and implications may not be applicable to other groups of students or Chinese students studying in other countries. It is suggested that the study should be replicated in other settings, for instance research drawing on students from other nationalities.

Fourth, there are some research design and measurement limitations. For example, all the trip-specific and personal variables are measured as categorical data, and variables were dummy coded to conduct multiple regression analyses. More accurate results may have been forthcoming if interval-level data had been collected. Future research could cross-tabulate two dimensions: pre- versus during-trip; travel decisions (destination, transportation, accommodation, recreation and entertainment activity) and query the information sources used in each cell. The current study only measures ‘the extent of
information search conducted by respondents’ rather than ‘the extent of use of each information source (e.g. number of hours of use for each source)’. Future research may consider examining ‘the extent of use of individual source’ by travellers to provide a deeper understanding of the degree to which travellers rely on each information source. In addition, the study assesses only six types of information sources and seven types of travel websites that are most likely used by current travellers. Respondents may make use of other information sources (e.g. radio or TV advertising) or travel websites not included in the questionnaire. Other information sources and other types of websites (e.g. news media website, maps or weather websites) should be examined in future studies. Future research should also examine what mobile apps are used by student travellers when planning their vacation trips. Finally, the current study only examines respondents’ information search strategy for accommodation, transportation, and tourism activities. Future research can extend the current study by examining what information search strategy tourists use for choice of destination. In addition, future research could consider examining the relative role of each key travel decisions tasks (i.e., choices in destination, transportation, accommodation, activities, and entertainment) in overall information search strategies.

Ideally, data on pre-trip information search could have been gathered either immediately prior to, or soon after, departure for the vacation. Data on during-trip information search could have been gathered either during the vacation, or soon after, completion of the vacation. However, due to constraints of accessing potential respondents, limited time for data collection, and limited budget for extended travelling, all the data were collected after respondents finished their most recent trip.

Moreover, the current study examined four trip-specific variables and three personal variables in terms of their influence on Chinese student travellers’ information search behaviour. There may be additional variables (e.g. travel mode) that influence their search behaviour. Again, future researchers can include and test these other variables in their analysis.
It is clear that the Chinese international student market is not sufficiently understood, and the tourism industry has yet to maximise its full market potential. In addition to the above recommendations for future research, there are other potential avenues that future research can focus on to better understand the market. For instance, results of the current study confirm the ongoing nature of Chinese international student travellers’ information search strategies, which suggests future studies need to examine tourists’ information search behaviour from a multi-stage perspective, rather than focus exclusively on pre-trip search activities. Understanding when the sources are used by tourists is critical to effectively and efficiently promoting a travel product, and adjusting promotion strategies to the time that consumers have a need for and are receptive to the information are more like to succeed (Choi, Lehto & Morrison 2008; Crotts 1999).

The predominant use of online information sources by Chinese student travellers suggests future research needs to pay more attention to the online information search behaviour of younger travellers, especially college or university student travellers. This includes how they search for information on the Internet, what types of websites they are more likely to use, and how they use and perceive different travel websites in terms of trip planning. In addition, SNSs or UGC travel sites (such as travel gonglue) have been utilised particularly by Chinese student travellers as an important information source. This suggests further research can focus on student travellers’ use of SNSs or UGC sites for travel information.

The current study mainly focuses on what information sources Chinese students use. However, with the popularity of mobile devices (e.g. smartphones) it is also important to understand the way tourists obtained the information (e.g. using smartphones or computer, and through which apps). It is suggested that future research can extend this issue by including ‘through which channel’ (e.g. smartphone) travellers obtained the information.
In addition, the current study only examines the ‘information sources’ that respondents use for vacation planning and neglects the specific type of information (e.g. videos, photos, words) that Chinese students are seeking from each type of information source. It is suggested that future research can examine both the ‘source’ and the ‘type’ of information when examining travellers’ information search behaviour, which may provide a better understanding of the issue.

Furthermore, it seems that their national cultural background influences Chinese international students’ travel and information search behaviour. For instance, the high collectivist culture suggests that Chinese international students particularly prefer information provided by other Chinese travellers or tourism organisations (e.g travel agencies). In addition, Chinese international students are less likely to travel to ‘difficult’ destinations that require a higher level of planning, and therefore the information search conducted by Chinese international student travellers are relatively basic, involving less information sources and planning time. This suggests that future research examining travel behaviour of student travellers needs to take into consideration national cultural background, and more nationality-based studies are needed.

Finally, the conceptual model (Figure 7.1) developed based on the quantitative and qualitative results provides a diagrammatic illustration of travellers’ information search behaviour from three aspects (tourist segmentation, travel information search strategy and travellers’ input variables). The model may be used as a tool for future research that intends to gain a comprehensive understanding of travellers’ information search behaviour. Additionally, future research can extend the current investigation by testing the relationships illustrated in the model in different tourist markets.

7.7 Summary

Theoretically, the current study fills a gap in the youth and student travel literature by providing a comprehensive analysis of the information search strategies of Chinese international students. The current study empirically confirmed there are at least three
types of information seekers: focused, extensive, and passive searchers. Each tourist group reveals a specific information search pattern and is associated with certain personal and/or trip-specific characteristics. This finding suggests that Chinese international students are not homogeneous in terms of information search behaviour, and provides a basis upon which to market to Chinese international student travellers. Indeed, the importance and rapid expansion of the international student market, especially Chinese international students, suggests that the current research has considerable applied relevance. For instance, the findings indicate that Chinese international students are independent travellers who organise trips themselves, and that online information and friends’ recommendations are the most important sources for their travel decision-making. This differs from mainstream Chinese outbound tourists who are mainly group visitors and rely on Chinese travel agencies and tour operators. The results also suggest that the information search behaviour of Chinese international students is different from other inbound and outbound tourists who use a wide range of information sources and spend a relatively longer time on information search. Chinese international students tend to use limited time (less than one month) and fewer information sources when planning their trips in Australia. Furthermore, Chinese international students prefer to get information from other Chinese individuals and/or tourism companies, and are highly reliant on friends’ recommendation. These differences may be explained by the social and cultural background of Chinese international students, such as the high collectivist and uncertainty avoidance national culture, the one-child policy, and the language barrier.

For destination marketers, the findings of the current study suggest that communication strategies and communication tools need to be modified to suit the culture of the target market. Practically, the findings of the current study may provide tourism marketers with insights into which communication strategies may be effective in targeting the Chinese international student market. In addition, findings based on current Chinese international student tourists may be used to understand and predict the behaviour of
the emerging and future Chinese independent outbound tourists. Existing evidence suggests that independent travel will become more commonplace in China’s future outbound travel. However, there is limited understanding of how these independent travellers plan their trips and what information sources they use.

Finally, there are some potential avenues on which future research can focus. For example, research examining information search behaviour of tourist markets needs to take into consideration the social and cultural background of the tourists. In addition, more focus should be given to nationality-based research. Future research can replicate and test the conceptual model of the current study in other settings (e.g. international students from other nationalities). Future research may also usefully extend the current study by using a larger sample size and a random sampling approach. Finally, the current study identified a series of source-attribute variables that are more likely to influence Chinese international students’ choice of information sources than travellers’ personal and trip specific variables. This directs future researchers’ attention to the variables that are associated with the characteristics and distribution of information sources – ‘accessibility and flexibility’, ‘speed’, ‘timeliness’, ‘quantity and variety’, ‘detail’, ‘credibility’, ‘destination experience’, ‘price’, ‘authentic’ and ‘commonality’ – that have rarely been discussed in previous research.
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Appendices

Appendix A — Survey of Chinese International Students’ Travel Information Search Behaviour in Australia

Part 1 Travel information search behaviour

Please answer the following questions relating to your most recent self-planned/organised overnight trip in Australia.

Q1. On your most recent overnight trip in Australia, who did you mainly travel with?

Tick one box only

- International students from my nationality
- International students from other nationalities
- Other friends or relatives who are not students
- Australian students
- By myself
- Other ____

Q2. The primary city/region in Australia you visited on this most recent trip, is it your first time visit to the city/region?

Tick one box only

- Yes
- No
- I went to several cities/regions, cannot pick a primary city/region
Q3. Before this most recent trip started, which of the following sources did you use in planning the trip?

Tick one or more circles

○ Internet/Online information
○ Travel agency (Store)
○ Travel guidebooks (Printed)
○ Travel brochures (Printed)
○ Local tourist information centres
○ Friends’ recommendations
○ My personal experience
○ Other ___(please specify)

Q4. How long before your most recent trip in Australia did you begin making your travel plans?

Tick 1 box only

☐ Less than 1 month
☐ 1 month or more
**Q5.** Before this most recent trip started, how important was each information source for the planning of this trip?

(Note: important=used/relied upon, for information you never used, please choose ‘1 Not at all important’)

Tick one circle for each information source (i.e. one circle in each row of the table)

1=Not at all important, 2=Somewhat important, 3=Quite important, 4=Very important, 5=Extremely important

<table>
<thead>
<tr>
<th>Information sources</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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</thead>
<tbody>
<tr>
<td>Internet/Online information</td>
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<td>o</td>
</tr>
<tr>
<td>Travel agency (store)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Travel guidebooks (printed)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Travel brochures (printed)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
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<tr>
<td>Destination information centres</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Friends’ recommendations</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>My personal experience</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
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<tr>
<td>Other offline information_________</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
</tbody>
</table>

(please specify)
Q6. During this most recent trip, how important was each information source for the planning of this trip?

(Note: important=used/relied upon, for information you never used, please choose ‘1 Not at all important’)

Tick one circle for each information source (i.e. one circle in each row of the table)
1=Not at all important, 2=Somewhat important, 3=Quite important, 4=Very important, 5=Extremely important

<table>
<thead>
<tr>
<th>Information sources</th>
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<tr>
<td>Internet/Online information</td>
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<tr>
<td>Travel agency (store)</td>
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<tr>
<td>Travel guidebooks (printed)</td>
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<tr>
<td>Travel brochures (printed)</td>
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<tr>
<td>Destination information centres</td>
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<tr>
<td>Friends’ recommendations</td>
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<tr>
<td>My personal experience</td>
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<tr>
<td>Other offline information_________</td>
<td>o</td>
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</table>

(please specify)
**Now please think only about the websites you used**

**Q7.** How important was each **website** for the planning of the **whole trip**?

(Note: important=used/relied upon, for information you never used, please choose ‘1 Not at all important’)

Tick one circle for each information source (i.e. one circle in each row of the table)
1=Not at all important, 2=Somewhat important, 3=Quite important, 4=Very important, 5=Extremely important

<table>
<thead>
<tr>
<th>Information sources</th>
<th>1</th>
<th>2</th>
<th>3</th>
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<th>5</th>
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</thead>
<tbody>
<tr>
<td>Travel agency websites</td>
<td>o</td>
<td>o</td>
<td>o</td>
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<td>o</td>
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<tr>
<td>Official destination websites</td>
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<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Airline or other transportation websites</td>
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<tr>
<td>Hotel or other accommodation websites</td>
<td>o</td>
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</tr>
<tr>
<td>Travel magazine websites</td>
<td>o</td>
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<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Online travel guides</td>
<td>o</td>
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<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Travelogues or online travel communities</td>
<td>o</td>
<td>o</td>
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<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Other online information_________(please specify)</td>
<td>o</td>
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<td>o</td>
</tr>
</tbody>
</table>
Q8. When choosing travel accommodation, what was the primary information source you used?
Tick one circle
- Internet/Online information
- Travel agency
- Travel guidebooks (printed)
- Travel brochures (printed)
- Local tourist information centres
- Friends’ recommendations
- My personal experience
- Other ____

If “Internet/Online information” is selected, then skip to ‘Q9’

Q9. Which one of the following websites was your primary choice of information source about accommodation?
Tick one circle
- Travel agency websites
- Official destination websites
- Airline or other transportation websites
- Hotel or other accommodation websites
- Travel magazine websites
- Online travel guides
- Travelogues or online travel communities,
- Other online information ____ (please specify)
Q10. When choosing travel transportation, what was the primary information source you used?

Tick one circle

- Internet/Online information
- Travel agency
- Travel guidebooks (printed)
- Travel brochures (printed)
- Local tourist information centres
- Friends’ recommendations
- My personal experience
- Other ____

If “Internet/Online information” is selected, then skip to ‘Q11’

Q11. Which one of the following websites was your primary choice of information source about transportation?

Tick one circle

- Travel agency websites
- Official destination websites
- Airline or other transportation websites
- Hotel or other accommodation websites
- Travel magazine websites
- Online travel guides
- Travelogues or online travel communities,
- Other online information ____ (please specify)
Q12. When choosing travel recreation activities such as sightseeing, visit place of interest, what was the primary information source you used?

Tick one circle

☐ Internet/Online information
☐ Travel agency
☐ Travel guidebooks (printed)
☐ Travel brochures (printed)
☐ Local tourist information centres
☐ Friends’ recommendations
☐ My personal experience
☐ Other ____

If “Internet/Online information’ is selected, then skip to ‘Q13’

Q13. Which one of the following websites was your primary choice of information source about recreation activities such as sightseeing, visit place of interest?

Tick one circle

☐ Travel agency websites
☐ Official destination websites
☐ Airline or other transportation websites
☐ Hotel or other accommodation websites
☐ Travel magazine websites
☐ Online travel guides
☐ Travelogues or online travel communities,
☐ Other online information ____ (please specify)
Q14. When choosing travel **entertainment activities such as places of dining, nightclub, shopping places, etc.**, what was the **primary** information source you used?

Tick one circle

- Internet/Online information
- Travel agency
- Travel guidebooks (printed)
- Travel brochures (printed)
- Local tourist information centres
- Friends’ recommendations
- My personal experience
- Other ____

If “Internet/Online information’ is selected, then skip to ‘Q15’

Q15. Which one of the following **websites** was your **primary** choice of information source about **entertainment activities such as places of dining, nightclub, shopping places, etc.**?

Tick one circle

- Travel agency websites
- Official destination websites
- Airline or other transportation websites
- Hotel or other accommodation websites
- Travel Magazine websites
- Online travel guides
- Travelogues or online travel communities,
- Other online information ____ (please specify)
Part 2 Trip profile & Demographic questions

16. How many nights did this most recent trip include?

- 1-3 nights
- 4-6 nights
- 1-2 weeks
- More than 2 weeks

17. What was the expenditure of the most recent overnight trip in Australia?

- Less than 100 AUD
- 100-300 AUD
- 301-500 AUD
- 501-1000 AUD
- 1001-2000 AUD
- More than 2000 AUD

18. Are you...

- Male
- Female

19. What education level are you currently studying?

- English Language
- Certificate
- Diploma
- Associate degree
- Under-graduate degree
- Post-graduate degree
- Research Higher Degree (RHD) or PhD
- Other (please specify) _____________________
20. Your age

- 18-21 years
- 22-25 years
- 26-29 years
- Over 30 years

Thank you for your participation in this survey!
Appendix B — Translation of Questionnaire

亲爱的学生，

在澳洲留学期间，您曾经有过在澳大利亚过夜旅游的经历吗？如果有，我想邀请您参与这个关于‘在澳中国留学生的旅游信息使用情况的研究’的问卷调查。您的回答将帮助我们更好的了解中国留学生对于澳大利亚旅游信息资源的看法，以便于旅游服务公司为您的出行提供更好的服务。

非常感谢您能参与并认真完成这份问卷！完成问卷将会占用您 10-15 分钟。此问卷不涉及任何能够辨别个人信息的信息，所以您不用担心个人信息被泄露，此次调查是完全匿名的。如果对此次调查有任何疑问请发邮件联系我 m.zhu.15@student.scu.edu.au.

本研究经南十字星大学人类研究伦理委员会批准（编号 ECN-13-254），如果您对此有任何问题，请联系相关人员，电子邮箱: ethics.lismore@scu.edu.au

第一部分 旅游信息资源搜索调查

请回想你最近一次在澳大利亚的过夜旅行，然后回答下面的问题

Q1. 你最近一次在澳大利亚的过夜旅行，主要是和谁一起？（请选择一项）
   - 和其他中国留学生
   - 和来自其他国家的留学生
   - 和朋友或家人（非留学生）
   - 和澳大利亚本地的学生
   - 我自己
   - 其他（请说明） ____

Q2. 这次旅行你去的主要城市/地区，是你第一次访问这个城市/地区吗？（请选择一项）
   - 是
   - 不是
   - 我去了很多城市/地区，没办法选出一个主要的城市/地区

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Q3. 最近这次旅行出发前，你都用了哪些旅游信息资源来计划你的行程？【选择一项或多项】
- 网络信息
- 旅行社提供的信息（如旅行社）
- 旅行指南书
- 旅游小册子/宣传册
- 旅游地的信息服务中心
- 朋友的建议
- 我的个人经验
- 其他非网络的信息资源（请说明）

Q4. 请回想一下你最近一次的澳大利亚旅行，旅行出发前大概用了多长时间来搜索信息规划这次行程？【选择一项】
- 少于一个月
- 一个月或更长

Q5. 请回想你最近的一次澳大利亚旅行，在旅行出发前，以下信息资源对你计划这次旅行的重
要程度？

(注：这里的‘重要程度’指你在多大程度上使用或依赖于该信息资源。那些你没有用过的信息资
源，请选择‘完全不重要’。)

<table>
<thead>
<tr>
<th>信息资源</th>
<th>1=完全不重要</th>
<th>2=有一点重要</th>
<th>3=相当重要</th>
<th>4=很重要</th>
<th>5=非常重要</th>
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<tbody>
<tr>
<td>网络信息</td>
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<tr>
<td>旅行社提供的信息</td>
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<td>朋友的建议</td>
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<td>我的个人经验</td>
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<td>其他非网络信息资源（请说明）</td>
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</table>

268
Q6. 请回想你最近的一次澳大利亚旅行，在旅行的途中，以下信息资源对你计划这次旅行的______程度？
（注：这里的‘重要程度’指你在多大程度上用了或依赖于该信息资源。那些你没有用过的信息资源，请选择‘完全不重要’。）

<table>
<thead>
<tr>
<th>信息资源</th>
<th>1 完全不重要</th>
<th>2 有一点重要</th>
<th>3 相当重要</th>
<th>4 很重要</th>
<th>5 非常重要</th>
</tr>
</thead>
<tbody>
<tr>
<td>网络信息</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☝</td>
</tr>
<tr>
<td>旅行社提供的信息</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☝</td>
</tr>
<tr>
<td>旅行指南书</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☝</td>
</tr>
<tr>
<td>旅游小册子/宣传册</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☝</td>
</tr>
<tr>
<td>旅游地的信息服务中心</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☝</td>
</tr>
<tr>
<td>朋友的建议</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☝</td>
</tr>
<tr>
<td>我的个人经验</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☝</td>
</tr>
<tr>
<td>其他非网络信息资源（请说明）</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☝</td>
</tr>
</tbody>
</table>

Q7. 在你最近一次的澳大利亚旅行中，以下网站对你计划整个旅行的______程度？
（注：这里的‘重要程度’指你在多大程度上用了或依赖于该信息资源。那些你没有用过的信息资源，请选择‘完全不重要’。）

<table>
<thead>
<tr>
<th>旅游信息资源</th>
<th>1 完全不重要</th>
<th>2 有一点重要</th>
<th>3 相当重要</th>
<th>4 很重要</th>
<th>5 非常重要</th>
</tr>
</thead>
<tbody>
<tr>
<td>旅行社的网站</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☝</td>
</tr>
<tr>
<td>旅游地的官方旅行网站</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☝</td>
</tr>
<tr>
<td>飞机票订票网站或其他交通信息网站</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☝</td>
</tr>
<tr>
<td>酒店预定或其他住宿预定网站</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☝</td>
</tr>
<tr>
<td>旅游杂志网站</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☝</td>
</tr>
<tr>
<td>网络旅游指南</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☝</td>
</tr>
<tr>
<td>旅游博客或旅游论坛等网站</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☝</td>
</tr>
<tr>
<td>其他网络信息（请说明）</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☝</td>
</tr>
</tbody>
</table>
Q8. 在最近这次旅行中，你选择旅游住宿时用的**最主要**的信息资源是什么？（请选择一项）
- A 网络信息
- B 旅行社提供的信息（非网络）
- C 旅行指南书（非网络）
- D 旅游小册子/宣传册（非网络）
- E 旅游地的信息服务中心
- F 朋友的建议
- G 我的个人经验
- H 其他非网络信息（请说明）____

如果您选择了“A 网络信息”，请继续 Q9 题，如果您选择了 B-H 中的任何一个选项，请跳到 Q10 题

Q9. 以下这些网站中，哪一个是你选择旅游住宿时**最主要**用到的网站？（请选择一项）
- 旅行社网站
- 旅游地的官方旅行网站
- 飞机票订票网站或其他提供交通信息的网站
- 酒店或其他住宿预定的网站
- 网络旅游杂志
- 网络旅行指南
- 旅游博客或旅游论坛的网站
- 其他网站（请说明）____

Q10. 在最近这次旅行中，你选择旅行交通时用的**最主要**的信息资源是什么？（请选择一项）
- A 网络信息
- B 旅行社提供的信息（非网络）
- C 旅行指南书（非网络）
- D 旅游小册子/宣传册（非网络）
- E 旅游地的信息服务中心
- F 朋友的建议
- G 我的个人经验
- H 其他非网络信息（请说明）____

如果您选择了“A 网络信息”，请继续 Q11 题，如果您选择了 B-H 中的任何一个选项，请跳到 Q12 题
Q11 以下这些网站中，哪一个是你选择旅游交通时最主要用到的网站？(请选择一项)

- 旅行社网站
- 旅游地的官方旅行网站
- 飞机票订票网站或其他提供交通信息的网站
- 酒店或其他住宿预定的网站
- 网络旅游杂志
- 网络旅行指南
- 旅游博客或旅游论坛的网站
- 其他网站 (请说明) ___

Q12. 在最近这次旅行中，你选择旅游景点等参观游览活动时用的最主要的信息资源是什么？(请选择一项)

- A 网络信息
- B 旅行社提供的信息（非网络）
- C 旅行指南书（非网络）
- D 旅游小册子/宣传册（非网络）
- E 旅游地信息服务中心
- F 朋友的建议
- G 我的个人经验
- H 其他非网络信息（请说明） ___

如果您选择了“A 网络信息”，请继续 Q13 题。如果您选择了 B-H 中的任何一个选项，请跳到 Q14 题。

Q13 以下这些网站中，哪一个是你选择旅游景点等参观游览活动时最主要用到的网站？(请选择一项)

- 旅行社网站
- 旅游地的官方旅行网站
- 飞机票订票网站或其他提供交通信息的网站
- 酒店或其他住宿预定的网站
- 网络旅游杂志
- 网络旅行指南
- 旅游博客或旅游论坛的网站
- 其他网站（请说明） ___
Q14. 在最近这次旅行中，你选择旅游休闲娱乐项目（如餐饮，酒吧，购物场所等）时用的最主要的信息资源是什么？(请选择一项)
   - A 网络信息
   - B 旅行社提供的信息（非网络）
   - C 旅行指南书（非网络）
   - D 旅游小册子/宣传册（非网络）
   - E 旅游地信息服务中心
   - F 朋友的建议
   - G 我的个人经验
   - H 其他非网络信息（请说明）____

如果您选择了“A 网络信息”，请继续 Q15 题。如果您选择了 B-H 中的任何一个选项，请跳到 Q16 题

Q15. 以下这些网站中，哪一个是你选择旅游休闲娱乐项目（如餐饮，酒吧，购物场所等）时最主要用到的网站？(请选择一项)
   - 旅行社网站
   - 旅游地的官方旅行网站
   - 飞机票订票网站或其他提供交通信息的网站
   - 酒店或其他住宿预定的网站
   - 网络旅游杂志
   - 网络旅行指南
   - 旅游博客或旅游论坛的网站
   - 其他网站（请说明）____
第二部分 旅行概况和人口信息

16. 你最近一次澳洲旅行包含了几晚上？
   - 1-3 晚
   - 4-6 晚
   - 1-2 周
   - 两周以上

17. 你最近一次澳洲旅行的花费是多少？
   - 低于 100 澳元
   - 100-300 澳元
   - 301-500 澳元
   - 501-1000 澳元
   - 1001-2000 澳元
   - More than 2000 澳元

18. 你的性别
   - 男
   - 女

19. 你现在就读（或取得）的学位是？
   - English Language （英语语言课程）
   - Certificate （证书课程）
   - Diploma （技术专科课程或预科课程）
   - Associate degree （副学士学位）
   - Under-graduate degree （本科课程/学士学位）
   - Post-graduate degree （研究生课程/硕士学位）
   - Research Higher Degree (RHD) or PhD （博士或高级研究课程）
   - 其他（请说明）____________________

20. 你的年龄是？
   - 18-21 岁
   - 22-25 岁
   - 26-29 岁
   - 30 岁以上

感谢您的参与！
Dear sir or madam,

My name is Professor Betty Weiler and, as part of Ms Manli Zhu’s PhD studies in the School of Tourism and Hospitality Management at Southern Cross University (SCU), we seek your assistance with a once-only access via email to your international students from China. Manli’s project – “Chinese International students travel information search behavior” – is aimed at better understanding how international students search for travel information when planning a holiday within Australia. The results are expected to help university student travel offices and other travel companies to better service Chinese students in the future, which can help to improve their businesses and the students’ holiday experiences. For you as an educational institution, such information may help provide some useful insights on Chinese students from both an educational and tourism perspective, and may help you better understand and work more effectively and efficiently with these students.

We would be most grateful if you would copy the attached letter of invitation into an email and send it to your list of students who are from China and are currently studying at your institution. Alternatively, if it is more convenient you can send the email to all your international students, as the first question in the survey will filter out those who are not from China. The invitation contains a link to an on-line survey that can be completed only once by each respondent.

Please note that, while demographic questions such as gender, age, and education level are asked, no identifying information will be collected from respondents. All participants will remain anonymous and their responses strictly confidential and only de-identified group data will be reported. Analysed group data will be used in publications and in Manli’s final thesis. Each student’s participation is completely voluntary, and they are free to withdraw at any time they wish.
The survey is being sent to the International Student Offices of all 39 Australian universities, so we are confident that the results will be of interest and use. Please send us a brief email reply to confirm that you have sent the email to your student list or alerting us as to when you plan to do so. Of course, if you have any questions or concerns about the survey or project, you can contact Manli Zhu, by email m.zhu.15@student.scu.edu.au or me (Professor Betty Weiler) at betty.weiler@scu.edu.au or by telephone 07 5589 3178.

If you wish to receive the findings of this research, please email one of us and leave your contact details. If you want to make a complaint about the ethical aspects of this survey, you can contact Sue Kelly, The Ethics Complaints Officer, Southern Cross University, PO Box 157, Lismore, NSW, 2480, or Email: ethics.lismore@scu.edu.au.

Thank you very much for your time and support – it is greatly appreciated.

-our signatures-

Professor Betty Weiler, Research Professor
School of Tourism and Hospitality Management
Southern Cross University (Gold Coast Campus)

Ms Manli Zhu
PhD Candidate, School of Tourism and Hospitality Management, SCU
Appendix D — Email Invitation to Chinese International Students

Dear Chinese student,

During your time so far as an international student, have you taken a holiday in Australia of at least one night away from where you live? If yes, we invite you to participate in a survey of “Chinese International students travel information search”. Your answers and opinions will help travel organisations and companies to provide a better service for you and others when planning future holidays.

I am a PhD student at Southern Cross University (School of Tourism and Hospitality Management), and this survey is the main part of my studies. Thank you in anticipation that you will complete the survey by 30 November 2014 and help me with my studies – I really appreciate it! It takes about 15 minutes to complete the survey. Please click on this hyperlink to complete the survey:

https://scuau.qualtrics.com/SE/?SID=SV_42Qg8fphzdIP5aZ&Q_lang=ZH

You will see that some demographics questions such as gender, age, and year of study are included. However, you will not be identified in the results; all participants will remain anonymous. I will report differences such as between males and females and between students at different ages and studying different courses.

Please note that by answering this questionnaire, you have given your consent to participate in this research. If you want to make a complaint about the ethical aspects of this survey, you can contact Sue Kelly, The Ethics Complaints Officer, Southern Cross University, PO Box 157, Lismore, NSW, 2480, or Email: ethics.lismore@scu.edu.au. Approval number ECN-13-254.

If you have any question about the survey or project, you can contact me by email m.zhu.15@student.scu.edu.au or my supervisor Professor Betty Weiler at betty.weiler@scu.edu.au. If you wish to receive a summary of the findings of this
research, please email me and leave your contact details with me.

Thanks again.
Kind regards.

Manli Zhu
Appendix E — Information Sheet and Informed Consent Form for Interview Respondents

Dear student,

You are invited to participate in a study of “Chinese International students travel information search behaviour”. I am a PhD student from Southern Cross University, School of Tourism and Hospitality Management, and this interview is part of my study.

The purpose of this interview is to better understand your information search strategy for vacation planning within Australia, for example, why you use information source and conduct information search strategy in a certain way. Your opinion may help travel organisations and companies to provide better service for you and other Chinese students in the future, which can help to improve your holiday experience.

The following interview will take approximately 20 to 40 minutes. It will be conducted at a time and place to suit you. With your permission, the interview will be recorded on a recorder. Only first name rather than full names will be recorded as identification and full transcripts of interviews and recording will be kept confidential in my personal computer. Direct quotes may be extracted from the responses you provide, however they will in no way be able to trace back to you.

Once all the interviews are completed, a brief summary of the findings will be available to participants. It would be appreciated if you would review the summary and then provide a short feedback of any comments or further thoughts you may have on the issue examined.

Participation in this study is voluntary and you may withdraw at any time without giving a reason. If you decide to participate, please sign an Informed Consent Form before interview.
If you have any question about the interview or project, you can contact me by email m.zhu.15@student.scu.edu.au or my principle supervisor professor Betty Weiler betty.weiler@scu.edu.au. If you want to make a complaint about the ethical aspects of this interview, you can contact Sue Kelly, The Ethics Complaints Officer, Southern Cross University, PO Box 157, Lismore, NSW, 2480, or Email: ethics.lismore@scu.edu.au.

I have read the above information for this research and agree to participate in this interview.

I am over the age of 18 years.

Name of Participants: .............................................

Signature of Participants: .........................Date: .................
Appendix F — Interview Guideline

Respondents’ information

<table>
<thead>
<tr>
<th>Code:</th>
<th>Gender:</th>
<th>Education level:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travel party:</td>
<td>Nights travelled:</td>
<td>Planning period:</td>
</tr>
</tbody>
</table>

Questions:

1. When planning a trip in Australia, most Chinese students mentioned they used online information primarily. Is this the case for you? If yes, why do you think online information is important for your vacation planning? In what ways has it helped you?

2. When using online information, what kind of websites did you use for information? Why did you use this website? What did you use this website for? In what way did these websites help you?

3. What other information sources have you used mostly for your most recent overnight trip planning?

4. You mentioned you have used ______ (above mentioned source) for information. Why did you use this information source? Or what did you use this information source for? Or What quality of the source is important to you?

5. You did not use ____ (did not mention above); why did you not use it?

6. In what situations might you use this information source?
   - For instance: when travelling with a different travel party, would your information search strategy be different? If yes, why?
   - When going to different destinations, would your information search strategy be different? If yes, why?