

Mainland Chinese International University Students' Travel Motivations, Travel Information Sources, and General Travel Patterns within Canada: A Case Study at the University of Waterloo

by

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## **Author's Declaration**

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.

## **Abstract**

Many international students conduct tourism activities in the host country during their overseas living experience, which is significant for the country's tourism industry and overall economy. Chinese international students (CIS) increasingly dominate the international education sector, and they generate tourism in the host country. In the context of Canada, while the number of CIS is significant, there is a lack of understanding about CIS's intra-Canada travel characteristics. Regarding international student travel, while motivations have been widely studied, tourism information-search behavior is not well understood. The purpose of this study is to develop a profile of a Canadian domestic travel market segment -- CIS, by exploring their intra-Canada overnight leisure travel, regarding general travel patterns, travel motivations, travel information sources, and socio-demographic characteristics. To achieve this purpose, this study explored this population in Canada through a case study at the University of Waterloo (UW). This study developed a four-section self-administered survey based on the literature. The survey was distributed online using SurveyMonkey. Potential participants were approached through various channels: UW departments, an undergraduate class, personal resources, and UW Chinese Student and Scholar Association website. In total, 154 responses were used for data analysis.

It was found that CIS in Canada exhibited similar general travel patterns compared to CIS in other nations. Using Principal Components Analysis, four motivational dimensions of intra-Canada overnight leisure travel emerged: "Exploration and Learning", "Memorable Activities and Achievement", "Socialization and Prestige", and "Escape and Relaxation". Regarding travel information sources, the study findings generally echo findings from the very few previous studies about international students' travel information sources; however, some new and different findings emerged. Overall, online information sources are more important than offline information sources, which indicates the importance of internet. Friends and relatives' recommendations, previous visit experiences, destination marketing organizations websites, and general blogs or online travel communities are important information sources, while professional travel consultants, offline tourism specific literature, and traditional mass media are of low importance. Significant correlations were found between the four travel motivational dimensions and the two types of information sources (online and offline). The findings of this exploratory

study have practical implications for both tourism marketing and international education promotion of Canada towards CIS.

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## **Chapter 1: Introduction**

### **1.1 Study Background**

#### **1.1.1 International University Student Travel**

The number of university students taking vacations has historically grown annually (Mattila et al., 2001; Heung & Leong, 2006). Compared to full-time workers, university students have periodically longer holidays and more free time (Field, 1999; Heung & Leong, 2006).

Researchers have noticed a growing research interest in the university student market recently (Hsu & Sung, 1997; Field, 1999; Gallarza & Gil Saura, 2006). While the university student travel market is widely perceived as of low yield and low importance by the mainstream tourism sector (Shanka & Taylor, 2002), some researchers suggest that university students are a lucrative leisure travel market with great potentials (Chen & Kerstetter, 1999; Field, 1999; Mattila, Apostolopoulos, Sonmez, Yu, & Sasidharan, 2001; Shanka & Taylor, 2002; Kim, Oh, & Jogaratnam, 2007).

International university students are a sub-segment of the university student travel market. This segment has been recognized as a major driving force for the future travel industry because of the rapid growth of students seeking overseas education and the propensity for them to travel within the host country during their study (Shanka & Taylor, 2002). According the United Nations Educational Scientific and Cultural Organization (UNESCO, 2014), international students are “students who have crossed a national or territorial border for the purpose of education and are now enrolled outside their country of origin”. Literature has recognized international students’ significant and increasing contribution to the tourism sector of the host country both directly through their own travel within the host country as well as indirectly through inbound tourism generated by their VFRs (Sung & Hsu, 1996; Shanka & Taylor, 2002;

Shanka & Taylor, 2003; Taylor, Shanka, & Pope, 2004; Min-En, 2006; Liu & Ryan, 2011; Huang & Tian, 2013). For international students, study and travel are two important parts of their overseas living. For education destinations or countries, education and tourism are two mutually beneficial sectors. The tourism sector needs to cooperate more and better with the education sector to promote the host country's tourism among international students (Michael, Armstrong, & King, 2003; Shanka & Taylor, 2003; Taylor, Shanka, & Pope, 2004; Glover, 2011b).

In spite of the significant importance of this market, tourism research on international student travel during their stay in the host country is limited (Min-En, 2006; Huang, 2008a). According to the definition by the World Tourism Organization (2010), "a visitor is a traveller taking a trip to a main destination outside his/her usual environment, for less than a year, for any main purpose (business, leisure or other personal purpose) other than to be employed by a resident entity in the country or place visited... A visitor (domestic, inbound or outbound) is classified as a tourist (or overnight visitor), if his/her trip includes an overnight stay, or as a same-day visitor (or excursionist) otherwise" (p.10). Students who are seeking education in a foreign country for more than a year are not normally considered as tourists for the host country (Weaver & Lawton, 2002; Min-En, 2006). However, through an intensive literature review, it is observed that a growing number of studies have investigated the international student travel market in various countries (see Appendix A).

As shown in Appendix A, studies on international university student travel concentrated in some major international education destinations, such as the US, Australia, and New Zealand. Looking at the study population of these studies, while many of the recruited samples consist of a large proportion of Asian international students (especially students with a Chinese culture background), only a few studies specifically targeted at Chinese international students (e.g.,

Ryan & Zhang, 2007; Wang & Davidson, 2008; Liu & Ryan, 2011; Huang & Tian, 2013). It is evident that Chinese international students do travel within the host country during their study, and the number of visits made by their family, relatives or friends is significant (Ryan & Zhang, 2007; Wang & Davidson, 2008; Liu & Ryan, 2011; Huang & Tian, 2013).

In spite of the fact that Canada has a significant number of international students, relevant research is very limited in Canada. According to the 2011 Economic Impact of International Education in Canada report posted on the website of Foreign Affairs, Trade and Development Canada (Roslyn Kunin & Associates, Inc., 2012), the estimated total tourist spending by international students and their family/friends is CAD\$336,389,440 in 2010, which is equivalent to CAD\$187,680,000 in GDP, 5,550 job opportunities, and CAD\$9,739,000 in government revenues. According to the report, China is Canada's number one international student source country. In 2010, all long-term Chinese international students generated CAD\$1,836,427,000 regarding the value of international education services for Canada (Roslyn Kunin & Associates, Inc., 2012).

Noticing the importance of Chinese international students and the insufficient understanding of this potential travel market, this study will focus on Chinese international students in Canada. It is important and meaningful to research a specific cultural group of international student travelers. According to Huang and Tian (2013), culture, as a determinant of travel behavior, has been studied among student travellers since early 1990s. Both differences and similarities in travel characteristics were found among international students from different country origins (Field, 1999; Kim & Jogaratnam, 2002; Kim & Jogaratnam, 2003; Shanka & Taylor, 2003; Kim, 2007; Glover, 2011a). Furthermore, some researchers even found variations

in travel characteristics among international students from the same cultural background (Ryan & Zhang, 2007; Huang & Tian, 2013).

In terms of key study variables, travel motivations are one of the most widely studied aspects of international student travel (see Appendix A). Push and pull motivation model is the most commonly used tool in exploring international university students' travel motivations. The push and pull motivation approach has been widely accepted and adopted in tourism research (Uysal & Hagan, 1993; Kim, Noh, & Jogaratnam, 2006; Kim, 2007). Push factors are internal personal travel desires that drive the decision of "whether to go", while pull factors are destination attributes that determine "where to go" (Crompton, 1979; Josiam, Smeaton, & Clements, 1999; Klenosky, 2002; Kim & Lee, 2002). In other words, travelers are pushed by their internal desires for traveling, and pulled by destination-specific attributes to make destination choices (Crompton, 1979; Uysal & Hagan, 1993; Kim & Jogaratnam, 2002). A few researchers specifically studied Chinese international students' motivations to travel in the host country during their overseas study, and various motivation-based segments and multiple dimensions of travel motivations were revealed (Ryan & Zhang, 2007; Liu & Ryan, 2011; Huang & Tian, 2013).

While some knowledge about travel motivations of international students were generated, the understanding of travel motivations of Chinese international students, who study and travel in Canada, is extremely lacking. Also, although push and pull model is commonly used to examine travel motivations, there is no clear line between push and pull motivational factors in practice (Kim, Noh, & Jogaratnam, 2006). Therefore, instead of the push and pull model, this study will study the travel motivations as a whole considering that it is empirically hard to differentiate push and pull motivations.

### **1.1.2 Information Search for Leisure Travel**

While travel motivations are relatively popularly studied among international student travelers, a very minimal attention is placed on the information-search behavior of this population. Glover (2011b) argued that travel related information about a country or a destination not only influences travel decisions of existing international students within the host country but also the study destination choice of potential future international students.

Information search is an important aspect of consumer behavior, and it has been widely studied in both general consumer behavior literature (Beatty & Smith, 1987; Manfredo, 1989; Schmidt & Spreng, 1996) and tourism-specific literature (Fodness & Murray, 1997; Chen & Gursoy, 2000; Gursoy & McCleary, 2004). According to Manfredo (1989), information search “occurs when a person intends to purchase a product, has high involvement in the product and its purchase, but feels that they have inadequate knowledge for making a good purchase decision” (p.30). Marketers are most likely to influence consumers’ buying decisions during information acquisition (Schmidt & Spreng, 1996). Engel, Blackwell and Miniard’s (1993) characterized consumer information search along three main dimensions: degree (the total amount of search), direction (the specific content of search), and sequence (the order in which search activities occur).

Engel, Blackwell, and Miniard (1993, p.511) defined information search as “the motivated activation of knowledge stored in memory or acquisition of information from the environment”, which suggested that information search could be either internal or external. Internal search occurs when retrieving information already stored in memory, whereas external search involves collecting information from the environment; external information search is usually conducted when internal information search is inadequate (Engel, Blackwell & Miniard,

1993; Schmidt & Spreng, 1996; Gursoy & Chen, 2000). Some researchers argued that, information search for leisure travel was predominantly external (Schul & Crompton, 1983). Compared to general consumers, leisure travelers tends to spend longer time and consult more sources during information searching (Fodness & Murray, 1998), and “gathering, processing, and evaluating information is an integral part of the travel experience” for many tourists (Snepenger & Snepenger, 1993, p.830). In existing research, the construct of information search has been studied as both a descriptor of tourist behavior and a segmenting variable of different tourist markets (Fodness & Murray, 1997).

It is noticed that tourism information search has been commonly examined with trip-planning or travel decision-making in various ways (Bieger & Laesser, 2004; Hyde, 2008; Choi, Lehto, Morrison, & Jang, 2012). Snepenger and Snepenger (1993) suggested that the level and the type of information search differ across different vacation types (e.g., routine trips versus exotic vacations) as well as different travel decision-making processes (e.g., routine, limited, and extensive decision making). Hyde (2008) viewed tourist information search as one of the three unique phases of pre-vacation decision-making process (the other two phases are vacation planning and vacation bookings). Choi, Lehto, Morrison and Jang (2012) examined information use patterns within a sequential (before purchase, at the time of purchase, after purchase, and after arrival) and decision-multidimensional (e.g., departure date, travel budget, and length of trip) structure of travel planning process.

Regarding the specific studied areas of tourism information search, literature emphasized three major aspects: search motives, information sources, and determinants of search (Fodness & Murray, 1997). Regarding search motives, many researchers viewed information search as functional or directed by purchase goal — an expressed need to collect information from various

sources to make better purchase decisions (Schmidt & Spreng, 1996; Moutinho, as cited in Fodness & Murray, 1997). Expanding on this perspective, some other researchers suggested that tourism information search not only satisfied functional information needs but also non-functional needs such as innovation, hedonic, aesthetic, and sign needs (Vogt & Fesenmaier, 1998; Nishimura, Waryszak, & King, 2007; Wong & Liu, 2011).

The type of tourism information sources and the usage of various sources are another major research area in tourism information search. The most fundamental classification of information sources is external versus internal information sources (Fodness & Murray, 1997). Tourism research mostly focused on external information sources. Snepenger and Snepenger (1993) identified five types of information sources that were most commonly used by tourists for trip-planning: 1) family and friends, 2) prior visits (i.e., past experience), 3) destination specific literature (e.g., maps, and brochures), 4) media (e.g., magazines, and newspapers), and 5) travel consultants (e.g., travel agents and tour operators). Among these five categories, only prior visits refer to internal information sources, while the other four are external information sources (Gursoy & Chen, 2000). In addition to these five categories, internet is another important information source nowadays. Different combinations of information sources used by tourists are viewed as different information-search strategies (Snepenger & Snepenger, 1993). Tourists use various types and amounts of information for trip planning according to internal and external contingencies (Fodness & Murray, 1999).

Besides information-search motivations and information sources, many studies tried to identify factors or determinants that influence tourists' information-search behavior. Tourism literature suggested that both trip-specific characteristics and individual tourist characteristics influence the extent of information search and the type of information sources used (Schul &

Crompton, 1983; Snepenger & Snepenger, 1993; Fodness & Murray, 1997; Fodness & Murray, 1999; Hyde, 2008; Wong & Liu, 2011). Some studies also proposed models to describe the interplay of various determinants in influencing tourists' information-search behavior (Fodness & Murray, 1999; Gursoy & McCleary, 2004; Erawan & Krairit, 2011).

Only a few studies examined information sources and determinants of international student travelers' information search. Generally, friends or word-of-mouth is the most important information source for international student, while traditional tourism information sources (e.g., TV, newspaper, brochures destination marketing organizations, travel agencies and guidebooks) are of low importance to this population (Sung & Hsu, 1996; Frost & Shanka, 1999; Shanka, Ali-Knight, & Pope, 2002; Ryan & Zhang, 2007). Regarding information-search determinants, Sung and Hsu (1996) found that demographic factors affected tourism information source usage of international students.

## **1.2 Study Purpose, Objectives and Research Questions**

Based on a review of existing literature, two research gaps were identified. First, there is a lack of study on Chinese international students as a domestic travel market in Canada. Second, the understanding of international students' travel information search behavior is extremely insufficient. Considering these two research gaps, the researcher decided to study the intra-Canada overnight leisure travel of Mainland Chinese international students by conducting a case study at the University of Waterloo in Ontario, Canada.

The purpose of this study is to explore a Canadian domestic travel market segment – Mainland Chinese international students, by profiling their intra-Canada overnight leisure travel, regarding general travel patterns, travel motivations, travel information sources, and socio-demographic characteristics, as well as examining relationships between these variables. To

achieve the study purpose, the following objectives are developed: 1) to picture Mainland Chinese international students' general travel characteristics in Canada, such as the frequency, season, and type of travel; 2) to explore factors motivating the targeted population to conduct leisure travel activities within Canada; 3) to examine the perceived importance of various tourism information sources among this population; 4) to identify socio-demographic characteristics of the study population; 5) to explore relationships between study variables.

Based on these objectives, the following research questions were developed:

1. What are the general travel patterns of Mainland Chinese international students in Canada, in terms of travel frequency, travel season, travel party, travel type, travel intentions, and major travel constraints?
2. How important are different factors in motivating the study population to travel within Canada during their study?
3. How important are different types of information sources perceived by Mainland Chinese international students for their intra-Canada trip planning?
4. What are the relationships between travel motivations, information sources, general travel patterns and socio-demographics?

Regarding travel motivations, this study is not destination-specific, and it will focus on general motivational factors that drive the travel decision. In terms of the construct of information search, this study will examine the importance of various information sources to the participants. Considering Schul and Crompton's (1983) comment that leisure travel information search is predominantly external, this study will mainly focus on external information sources. Literature on information-search motives and determinants will also be reviewed to create a

comprehensive picture of tourist information search; however, these two aspects will not be the major focus of this research.

### **1.3 Structure of Paper**

The following sections of the paper will first review relevant literature. Following that, the research method of this study will be introduced, regarding research instrument, sampling and data collection, and data analysis. Then, the findings will be presented and discussed. The final chapter will conclude the study with a brief study summary, and a discussion of study implication, limitation, and future study directions.

The next chapter is literature review. In this section, studies on international university student travel, university student travel motivations, international student-related travel markets, and tourist information search will be reviewed. Tourism literature identified international students as a distinct travel market, and some studies focused on Chinese international students specifically. About travel motivations, studies were found either studying university students in general or international university students specifically. More relevantly, some researchers studied Chinese international students' travel motivations. In terms of international student-related travel markets, VFR visitors and revisiting university alumni have been significantly generated by international university students. Following that, tourism information search literature will be reviewed in four areas: information needs or search motives, information sources and search strategies, determinants of information search, and information search and trip planning. Lastly, a brief review of travel constraints and intentions literature will be provided. After reviewing existing studies in details, the major findings from literature will be summarized.

## **Chapter 2: Literature Review**

### **2.1 International University Student Travel**

Recent studies drew attentions to the link between overseas education and travel by examining reasons of study destination choice and travel related factors among international students.

Michael, Armstrong and King (2003) emphasized the relationship between overseas study and tourist destination choice, as well as the significant tourism contribution of international students to the local economy. Min-En (2006) found that although travel opportunities were not the main factor considered by international students when choosing the study destination, it had a strong influence on the education destination choice of some students. Huang's (2008b) study on international students' experience in the UK suggested that, besides academic purposes, travelling was an equally important social experience for international students (especially for Chinese international students). Similarly, Glover (2011b) suggested that travel-related motivations played an important role in full-degree international students' study destination choice, although to a less extent than exchange students.

Although these studies reveal the significant relationship between overseas education and tourism, cooperation between the two sectors is lacking in practice. A better inter-sector coordination is needed to fully boost the potential of the host country's tourism and education (Michael, Armstrong, & King, 2003; Shanka & Taylor, 2003; Taylor, Shanka, & Pope, 2004; Glover, 2011b).

#### **2.1.1 International Students as a Distinct Travel Market**

International university students are a distinct travel market segment. Compared to general tourists (Huang, 2008b), international students' travel experience in the host country has similarity as well as unique characteristics. Also, compared to domestic university students,

international student travelers exhibit both similarities and differences in various aspects (e.g., general travel characteristics, travel motivations, and activity preferences) (Field, 1999; Kim & Jogaratnam, 2002; Kim & Jogaratnam, 2003; Glover, 2011a). In terms of general travel characteristics, Glover (2011a) found significant differences in length of stay, timing of travel, destination choice, transportation means, accommodation, and travel party between international and domestic students in Australia. In addition, Glover (2011a) suggested that the longer stay in the host country did not result in adaptation of international students' travel behavior to that of domestic students. Kim and Jogaratnam (2002) found many similarities as well as some clear differences in travel motivations between international and domestic students in the US. Studies had different findings regarding how international students resemble and differ from their domestic peers in activity preferences. For example, while Field (1999) found significant differences of activity preferences between international students and domestic American students at Clemson University in the US, Kim and Jogaratnam (2003) argued that ethnicity was not efficient in segmenting the US university student travel market based on their activity preferences (i.e., travel activity preferences were similar between Asian international students and domestic American students).

A number of studies specifically focused on international university student travel. An early study by Sung and Hsu (1996) did an exploratory study among international students studying in a Midwestern US university regarding their travel characteristics, such as the use of travel information sources before and after destination selection, general travel patterns, the longest trip in the US, and their demographic characteristics. A relevant paper published one year later by the same authors investigated travel behaviors of international students traveling in the US, specifically, travel patterns (e.g., transportation, accommodations, and meals) and travel-

related activities (Hsu & Sung, 1997). Sung and Hsu (1996) found that the majority of respondents took one to three trips that usually lasted two to three days per year, and the average party size was three; on average, respondents started trip-planning twelve days in advance. Additionally, students who were older and stayed in the US longer tended to plan a trip further in advance, and undergraduate students tended to travel more than graduate students (Sung & Hsu). Both studies found that an automobile was the primary transportation, and hotels/motels and friends/relatives' homes were the most popular accommodations for the majority of respondents (Sung & Hsu, 1996; Hsu & Sung, 1997). Hsu and Sung (1997) found that fast-food restaurants were the most popular choice for meals. In terms of travel-related activities, using factor analysis, Hsu and Sung identified seven factors, labeled as action (e.g., going to a night club), events (e.g., attending a cultural event), touring (e.g., sightseeing), sports (e.g., golfing), recreation (e.g., hiking), leisure (e.g., visiting a state/country/city park), and zoo (e.g., visiting a zoo). Both studies revealed the inter-correlations between socio-demographic factors (e.g., level of study, and funding sources) and travel-related variables (e.g., information source usage, travel frequency, and accommodation choices) (Sung & Hsu, 1996; Hsu & Sung, 1997).

Besides the US, Australia is another popular international education destination that attracted a relatively considerable amount of research interest on international student travel. For example, Shanka, Ali-Knight and Pope (2002) conducted a research to explore the intrastate travel experiences of international students (90% of the sample were Asian international students) in Western Australia and their impressions of the destinations. It was found that for intrastate travel, rental cars, own vehicles and friends' vehicles were the most commonly used transportation, more than half of the respondents used hotel and motel for accommodation, and 73% respondents mainly engaged in sightseeing (Shanka et al., 2002). Another example of

studies done in Australia was focus group research by Min-En. Min-En (2006) looked at 23 international students from Griffith University, exploring their perceived image of Australia and travel patterns. He found that all participants had participated in some form of tourism during their stay in Australia, and the most projected image of wildlife and native animals played an instrumental role in positioning Australia as a destination among these international students (Min-En, 2006).

Studying travel characteristics (e.g., information sources, travel patterns, travel expenditures, and future travel intentions) of Asian international students from seven universities in Victoria, Australia, Michael, Armstrong and King (2003) drew attention to the significant contributions of Asian international student travel and their VFR visits to the host country's economy. Michael et al.'s research was cooperatively done between the universities and tourism DMOs (e.g., Tourism Victoria). By distributing questionnaires via the international student offices and the student union offices of targeted universities, Michael et al. found that nearly half of the respondents preferred to arrange their own trips, while 10.5% of them went on tour packages; shopping and driving were the two major activities, and accommodation and transportation were the top two expenditures; work-of-mouth was by far the most popular information source for learning about destinations, while newspapers were insignificant to this population; summer break was the best travel time, followed by the semester break in winter; more than half of the respondents had host VFRs during their study; more than half intended to revisit previous destinations in Australia, and over half of the respondents intended to travel in Australia both on completion of their studies and after returning to their home country.

### **2.1.2 Research on Chinese International Students' Travel**

Some researchers specifically focused on Chinese international students' travel in the host country (Ryan & Zhang, 2007; Wang & Davidson, 2008; Liu & Ryan, 2011; Huang & Tian, 2013). Examining holiday behaviors of Chinese international students from University of Waikato, New Zealand, Ryan and Zhang (2007) studied their travel patterns, travel motivations, activity preferences, infrastructure preferences, and information sources. In terms of their general travel patterns, Ryan and Zhang found that more than half of the respondents were financially supported by their parents; while most respondents had low expenditures on their trips, the frequency of travel was relatively high with more than half of them had at least one trip during the previous 12 months; students usually used shared cars for transportation and traveled in an average group size of four; a majority of them organized trips by themselves; more than half traveled with friends.

Liu and Ryan (2011) explored the dual role of Chinese international students as tourists and VFR hosts in New Zealand. In this study, both students who had and had not hosted VFRs during their study were researched. Liu and Ryan did an importance-satisfaction analysis of the students' holiday-taking motivations, explored the attractiveness of travel activities in New Zealand to this population, and outlined the travel behaviors and characteristics of both the students and their VFRs. It was found Chinese students did conduct travel activities in New Zealand during their study, and the number of their VFR trips was significant: on average, the respondents took 5.6 trips in New Zealand each year, three of which were overnight trips; respondents engaged in a diversity of passive, social, and hedonistic trip activities, and physical activities were only of some importance to them (Liu & Ryan).

Besides New Zealand, research on Chinese international students has been also done in other international education destinations. For example, Wang and Davidson (2008) did an exploratory research to assess Chinese international students' perceived image of Australia as a destination before and after their arrival in Australia, which identified strengths and weaknesses of Australia's perceived destination image for marketing implications. Huang and Tian (2013) did an investigation among Chinese international students in the UK regarding their travel motivations, travel patterns, overall travel satisfaction, and their importance to the VFR market in the UK. It was found that compared to Chinese leisure or business travelers to the UK, Chinese international students were more likely to recommend Britain as a tourism destination (Huang & Tian). Huang and Tian also found that Chinese international students in the UK did not differ from other markets in selecting high quality accommodation, which was contrary to traditional beliefs that students typically seek for cheap accommodation. This is consistent with the findings of Ryan and Xie (as cited in Huang & Tian) in New Zealand that Chinese international students do prefer hotels than cheap alternatives.

As shown in the above studies, international university student travelers are a unique, profitable, and growing market. While the previous studies are mostly conducted in Australia, the US, and New Zealand, this study will explore the situation in Canada, where the understanding of the market is extremely lacking.

## **2.2 Travel Motivations of University Students**

Studies on university student travel market have placed significant attention on travel motivations. According to Kim (2007), tourist motivation plays an important role in understanding and predicting travel decisions. Push and pull motivation model was mostly used in studying university students' travel motivations.

Researchers suggested that travel was the result of push and pull forces; push/pull model is the tool to examine these forces (Smith, 1983; Uysal & Hagan, 1993). Push factors included socio-economic and psychological constructs of individual tourists, which help explain the intangible desire to travel; pull factors are usually destination- or route-related attributes, either tangible resources or tourists' perceptions and expectations, responding to and reinforcing push motivational factors (Lundberg, 1980; Smith, 1983; Uysal & Hagan, 1993). In other words, push factors are personal travel desire that drive the decision of "whether to go", while pull factors are destination attributes that determine "where to go" (Crompton, 1979; Josiam, Smeaton, & Clements, 1999; Klenosky, 2002; Kim & Lee, 2002). Although these two sets of motivational factors are conceptually different, they relate and usually overlap with each other in practice (Kim, Noh, & Jogaratnam, 2006).

### **2.2.1 Travel Motivations of General University Student**

Surveying students at Michigan State University, Kim, Noh and Jogaratnam (2006) and Kim (2007) examined various push and pull factors that motivated US university students to travel. Studying domestic travel of the US university students, Kim et al. (2006) found six push motivational factors (viz., escape & relax, leisure & adventure, seeing & learning, travel bragging, visiting friends & relatives, and nature) and six pull factors (viz., accessibility, sun & beach, recreation, attractions, observing nature, and family); significant differences were found in both push and pull motivations by the top 10 US destinations. While Kim et al.'s study examined students' domestic travel within the US, Kim (2007) studied US university students' motivations for traveling both domestically and internationally. While the pull factors revealed (viz., accessibility, beach & sun, sports, attractions, natural environment, and family oriented) were very similar to Kim et al.'s (2006) findings, Kim (2007) found eight push factors (viz.,

escape, education, connection & thrill, friends, family togetherness, scenery, fun, and relax). Comparing domestic and international travel motivations, Kim revealed both similarities and differences: substantial differences were found in push motivations, while pull motivations differed to a less extent between the two travel types.

Focusing on push factors, Kim, Oh and Jogaratnam (2007) found seven dimensions of push motivations (viz., knowledge, sports, adventure, relax, lifestyle, travel bragging, and family) by studying 484 students from three public universities in the US. Kim et al.'s (2007) study was based on a push motivation model developed from the general international travel market, and the findings suggested general suitability of the model to the university student population, as well as notable differences in push motivations between the general international travel market and the university student travel market. Conducting a research among full-time students from eight universities in Hong Kong, Heung and Leong (2006) found that Hong Kong university students traveled mainly for relaxing and enriching experience rather than prestige, and significant differences were found in some motivational factors between students from different study disciplines.

Interviewing students from a Midwestern university in the US, Klenosky (2002) adopted the means-end approach to explore the relationship between destination pull attributes (the means) and personal value push factors (the ends) of a trip experience. They found that a single concrete destination pull factor (e.g., beaches, warm climate, and historic/cultural attractions) could lead to satisfaction or achievement of multiple different personal value factors, such as accomplishment, fun/enjoyment, excitement, and self-esteem (Klenosky). Klenosky also identified some factors (e.g., outdoor recreation, and new/novel experience) bridging “the means”

and “the ends”; these factors are labeled as consequence factors, which are more abstract than “the means” but more concrete than “the ends”.

### **2.2.2 International Students’ Travel Motivations**

While the above studies looked at travel motivations of university students in general, others considered students’ country of origin when examining their travel motivations. Kim and Jogaratnam (2002) found many shared similarities as well as some clear differences in travel motivations by comparing Asian international and domestic American students from three US Midwestern universities. Kim and Jogaratnam did an importance-performance analysis of motivational attributes (i.e., knowledge, sports, entertainment, relax, leisure, family, and travel bragging) among the participants, and the analysis of Asian international students showed that, motivational attributes of knowledge, entertainment, family, and leisure were rated high in both importance and satisfaction, sports as a motivational dimension was neither important or satisfying to the group, and relax and travel bragging were rated low in importance but high in satisfaction.

Focusing on a special timing—international student graduation ceremonies— Shanka and Taylor (2003) found that a significant number of international university graduates returned to Australia for leisure/holiday or VFR purposes. Shanka and Taylor also found that international students from different countries differed in their travel motivations: Singapore students revisited mainly for leisure/holiday, while students from Malaysia, Hong Kong, and Indonesia tended to be more motivated by VFR purposes.

### **2.2.3 Chinese International Students’ Travel Motivations**

Although limited, several studies were found studying Chinese international students’ travel motivation (Ryan & Zhang, 2007; Liu & Ryan, 2011; Huang & Tian, 2013). Conducting

research in New Zealand, Ryan and Zhang (2007) segmented Chinese international students into four motivation-based clusters: 1) relax and sightsee, 2) explore place and people, 3) simply relax, and 4) the career oriented. Also in New Zealand, Liu and Ryan (2011) did an importance-satisfaction analysis of Chinese international students' holiday-taking motivations, and it was found that the following motivation items were of both high importance and high satisfaction: "to relax mentally", "to relax physically", "to visit New Zealand's natural attractions", "to avoid the hustle and bustle of daily life", "to change my surroundings for the sake of change", "to be in a calm atmosphere", "to discover new places and things", "to holiday somewhere that is clean and unpolluted", "to holiday somewhere safe", "to travel with existing friends/relatives who are staying in New Zealand", and "to explore new ideas". Studying Chinese international students in the UK, Huang and Tian (2013) found four dimensions of travel motivations: relaxation, self-improvement, experiencing culture, and adventure and excitement.

As seen in the studies above, both trip characteristics (e.g., domestic vs. international travel) and students' own characteristics (e.g., country of origin, and study discipline) influence travel motivations. These studies enhanced understandings about travel motivations of general university student population, international university students, and specifically Chinese international students.

### **2.3 International Student-related Travel Markets**

Besides international university students' own travel, literature also identified two travel markets related to international students: VFRs and international university alumni. Besides the direct impact of international students' own travel on the host country/destination, international students also contribute to tourism by generating VFR visitors (Taylor, Shanka, & Pope, 2004; Min-En, 2006). Min-En (2006) stated that the number of international students in a country is

positively related to the number of VFR tourists to the country. In addition, international students also have the potential to generate future alumni revisit to the host country after they graduate (Michael, Armstrong, & King, 2003; Shanka & Taylor, 2003; Schofield & Fallon, 2012).

### **2.3.1 International Student-generated VFRs**

According to Seaton and Palmer (as cited in Min-En, 2006, p.451), “a VFR tourist is defined as someone whose primary purpose of tourism is to visit friends and relatives domestically or internationally”. Researchers found that a significant proportion of international students have host VFRs during their study, and their VFRs’ economic contribution to the host country is significant (Michael, Armstrong, & King, 2003; Shanka & Taylor, 2003; Taylor, Shanka, & Pope, 2004; Min-En, 2006). Michael, Armstrong and King (2003) stated that international students’ overall tourism contribution to Victoria, Australia, would double if their VFR expenditures were included.

A number of studies investigated international student-generated VFRs. Conducting research among university students enrolled in one of the four public universities in Western Australia, Taylor, Shanka and Pope (2004) studied international student-generated VFRs regarding visiting family members, length of stay, expenditures, and purpose of visit. It was found that parents and friends were the main visitors to the students; the main purpose of visits was to see the student, followed by leisure and business purposes, and those with a main purpose to see the student tended to stay longer (Taylor et al.). Shopping was found to be the highest expenditures by VFRs, with accommodation being the second highest and food/drinks ranked the third (Taylor et al.).

Focusing on international student graduation ceremonies, Shanka and Taylor (2003) studied VFRs to international graduates in Australia, and they had similar findings compared to

Taylor et al.'s (2004) study. On average, two to three family members or friends attended the ceremony, and most of the attendees were family members (e.g., parents or siblings); commercial accommodations (e.g., hotels) were the most popular type, followed by students' own place. Shopping accounted for the most expenditure, followed by accommodation and food/drinks (Shanka & Taylor, 2003). Conducting focus groups among international students in Australia, Min-En (2006) found that international students mainly considered the length of stay and the budget constraints in deciding whether to host VFRs, and the student hosts had a strong influence on the places visited during VFR visits.

Some researchers suggested that students with Chinese ethnicity were more likely to host VFRs, which might be explained by the interest in family reunion among Chinese students (Michael, Armstrong, & King, 2003). Exploring Chinese international students' dual roles as both tourists and VFR hosts in New Zealand, Liu and Ryan (2011) revealed hosting VFRs as well as the ability and willingness to provide advice to VFR visitors were influenced by Chinese international students' own travel experience. Liu and Ryan also noticed significant differences between "relatives" (VRs) and "friends" (VFs) regarding accommodation types, visiting purpose, and activity preferences. Huang and Tian (2013) conducted a research among Chinese international students in the UK, revealing that Chinese international students attracted a significant number of VFRs from China to the UK and were extremely likely to recommend the UK as a travel destination to their families and friends.

### **2.3.2 International Alumni Revisit**

Besides VFRs, another international student related travel market— international university alumni— has also generated some tourism research interests. In Australia, Shanka and Taylor (2003) found high propensity among international student alumni to return to visit the country,

especially for leisure/holiday and VFRs purposes. Michael, Armstrong and King (2003) also found that a significant number of international Asian students would like to revisit as well as recommend Australia as a vacation destination after graduating and even after returning to their home country. Surveying alumni of the University of Salford in the Greater Manchester area of the UK, Schofield and Fallon (2012) assessed the viability of university alumni as a repeat visitor market by examining return visit motivations and constraints, past return visit experience, satisfaction of the visit, and the intention of revisiting and recommending the place. Although Schofield and Fallon did not specifically focus on international alumni, the study population consisted of alumni living in Europe but outside of Greater Manchester.

Although this study will not examine VFRs of Chinese international students, the importance of international students as both travelers and VFR hosts triggers the research passion, which will probably lead to further research about VFRs to Chinese international students in Canada in the future. While VFR is not the focus of this study, Chinese international students' continuous tourism contribution as alumni will be examined in terms of post-graduate and revisit intentions.

#### **2.4 External Tourism Information Search**

According to Beatty and Smith (1987), external information-search effort is “the degree of attention, perception, and effort directed toward obtaining environmental data or information related to the specific purchase under consideration” (p.85). Srinivasan (1990) summarized three theoretical foundations in explaining variations in consumers' external information-search behavior: 1) the economics approach adopting the cost-benefit framework; 2) the psychological approach examining motivational factors and person/product/situation related variables; 3) the information processing approach stressing the role of memory and cognitive information

processing limitations of humans. Based on Srinivasan's idea, Schmidt and Spreng (1996) argued that the information processing approach should be included in the psychological approach. Engel, Blackwell and Miniard's (1993) characterized consumer information search along three main dimensions: degree (e.g., number of information sources consulted, and time spent on search), direction (e.g., types of information sources consulted, and attributes considered), and sequence (e.g., the order of information sources consulted, and the order of product attribute information processed).

As mentioned earlier, tourism information search literature focused on search motives/needs, information sources, and determinants of search (Fodness & Murray, 1997), and researchers usually studied information search with trip planning and decision-making (Bieger & Laesser, 2004; Hyde, 2008; Choi, Lehto, Morrison, & Jang, 2012). The following sections will first review existing research findings about the three major aspects of tourism information search (viz., information needs, information sources, and information-search determinants). Then some major studies about tourism information search and trip planning will be presented.

#### **2.4.1 Information-search Needs**

Research on information needs have been found in tourism literature. While functional needs are the major information-search motive among tourists or potential travelers, other types of information needs also exist (Vogt & Fesenmaier, 1998; Nishimura, Waryszak, & King, 2007; Osti, Turner, & King, 2009; Wong & Liu, 2011). Destination marketing practitioners should understand that different tourists have different types of information needs (Gursoy & McCleary, 2004). Vogt and Fesenmaier (1998) developed a scale to measure information-search needs in the recreation and tourism context, which expanded the traditional functional information search model by identifying four additional information need constructs (viz., innovation, hedonic,

aesthetic, and sign). The scale was tested among participants requesting vacation information about a Midwest US destination, and the findings on one hand supported the traditional view that information was mainly collected and utilized for functional reasons, and on the other hand showed evidence of non-functional information needs among tourists (Vogt & Fesenmaier).

Nishimura, Waryszak and King (2007) and Wong and Liu (2011) adopted and modified Vogt and Fesenmaier's model to study travelers' information needs in using travel guidebooks in Asian contexts. Studying Hong Kong leisure travelers, besides the five original needs in Vogt and Fesenmaier's model, Wong and Liu (2011) identified four more need constructs (viz., itinerary improvement, travel partner, quality information, personal interest, and security needs). Nishimura, Waryszak and King (2007) studied Japanese overseas tourists, and identified some different need constructs (viz., forward-looking, learning, enjoyment, guidebook enthusiast, and functional needs) compared to Vogt and Fesenmaier's model.

Nishimura et al. (2007) argued that the differences of information needs found across different studies might be attributed to the differences of the study population. Supporting this perspective, evidences have been found regarding cultural influences on information needs. For example, Osti, Turner and King (2009) conducted research in Australia and Thailand among Japanese, Korean, Chinese and North American travelers regarding their information needs of using travel guidebooks, and significant differences were found across the four different cultural groups, especially between Asian cultures and North American culture. Osti et al. measured information needs by asking participants to rate the importance of a list of concrete information items. Osti et al. found that, the information items ranked from the highest to the lowest importance by the Chinese sample were "basis" (places to stay, maps, and places to eat), "service" (embassies and consulates, post offices, and tourist information centers), "health"

(health hazards, and medical/hospital service), “local geography” (physical landscape, local arts, flora & fauna, and history), “time” (time differences, and telephone prefixes), “communication” (local customers & beliefs, avoiding arguments, and language phrases), “sites” (churches/temples, museums, and historic sites), “transport” (air routes and fares, and how to reach the destination), “local attractions” (photos of attractions, and sport activities), “local transport” (info on hitchhiking), and “cost of living” (real estate market prices, and employment availability).

#### **2.4.2 Information Sources and Search Strategies**

Vacation travel often requires a significant amount of efforts in consulting various information sources for trip planning and decision-making (Schul & Crompton, 1983). Tourism literature has identified various information sources for tourists, and also has studied the usage of these sources. Fodness and Murray (1997) identified two main conceptual approaches adopted in examining tourists’ information-search behavior: direction of search (types of information sources used), and degree of search (number of sources used and amount of time devoted). Both approaches look at information sources.

**Information sources.** Kotler and Armstrong (2011) identified some common information sources for general consumers: 1) personal sources of information from family, friends, and other formal or informal social networks; 2) commercial sources, including salespeople, advertising, dealer websites, packaging, and all other forms of marketing communications; 3) public sources, such as mass media, consumer rating organizations, and internet search; 4) experiential sources accessed by direct observation and product trial. Engel, Blackwell and Miniard’s (1993) suggested four broad categories of information sources classified by their source (personal versus impersonal) and type (commercial versus non-

commercial). According to Engel et al., commercial impersonal sources include advertising, non-commercial impersonal sources include mass media, commercial personal sources include salespeople, and non-commercial personal sources include social contacts such as friends and family.

As mentioned earlier, Snepenger and Snepenger (1993) suggested four types of external information sources (family and friends, destination specific literature, media, and travel consultants) and one type of internal information sources (prior visits) that were commonly used by tourists for trip planning. Based on Engel, Blackwell and Miniard's (1993) two-dimension information classification system (commercial versus non-commercial, and personal versus impersonal), Fodness and Murray (1997) classified eleven tourism information sources into four categories: commercial/impersonal sources (brochures, guidebooks, local tourist offices, and state travel guides), commercial/personal information sources (auto clubs and travel agents), non-commercial/impersonal sources (magazines and newspapers), and non-commercial/personal sources (friends/relatives, highway welcome centers, and personal experience).

According to the degree of formality, Raitz and Dakhil (1989) suggested that information sources could be either formal (purposefully designed to convey and consistent message) or informal (e.g., oral communication with friends). Money and Crotts (2003) categorized tourism information sources into non-marketer dominated sources and marketer-dominated mass media. In Money and Crotts' (2003) study, non-marketer dominated sources included personal (e.g., advice from friends and relatives), neutral (e.g., travel guides), and channel members (e.g., travel agencies and tour operators), while marketer-dominated mass media included newspapers/magazine ads, TV/radio ads, PC/electronic database, government tourist office, and state/city travel office.

Based on the level of information, Seabra, Abrantes and Lages (2007) categorized information sources into non-media information sources produced locally by tourism organizations (e.g., commercial brochures produced by private tourism enterprises), and mass media information sources broadcast at a national scale through television, press or radio (e.g., advertisement). Considering the use of Internet, Choi, Lehto, Morrison and Jang (2012) grouped information sources broadly into offline and online sources.

There are more ways to categorize different tourism information sources. For example, Kim, Weaver and McCleary (1996) categorized tourism information sources into official sources (e.g., chamber of commerce at destination, state tourist information office, and convention and visitor bureau at destination), media sources (e.g., newspapers, and magazines), and professional sources (e.g., travel club, and travel agents). Dey and Sarma (2010) categorized tourism information sources into informal sources (e.g., friends/relatives/colleagues), cognitive wisdom (e.g., past experience), travel consultants (e.g., travel agent/tour operator/travel guides), destination-specific sources (e.g., government tourism office, brochures/pamphlets, travel information center, and advertisements), media/general publications (e.g., newspapers/magazines/articles), and other “personal” sources (e.g., embassy/consulate).

Although limited, a few studies examined information sources used by international university students. According to Glover (2011b), various information sources influenced and shaped international students’ perception of the general as well as the combined tourism- and study-related destination image of a foreign country, and the image perception further influenced the students’ decision of study and/or travel in the country. Most of these studies examined the information source usage as part of the travel pattern and characteristics. It was found that friends or word-of-mouth were the most important information sources for international

university students to make travel decisions or plan a trip (Sung & Hsu, 1996; Frost & Shanka, 1999; Shanka, Ali-Knight, & Pope, 2002; Ryan & Zhang, 2007).

An early exploratory study done by Sung and Hsu (1996) found that international students in the US received travel information frequently from maps and family/friends and sometimes from past experience, travel clubs, pamphlets/brochures, and visitor welcome centers both in selecting a destination and after the choice being made. Frost and Shanka (1999) studied international student travel in Australia, and it suggested that information through friends and word-of-mouth played an important role for the students to learn about the destinations, while travel agents and other tourism promotion were of less importance to the population.

A study done in Australia also found that friends were the major information source for international university student travelers, while traditional information sources such as TV, newspapers, the destination marketing organization, and travel agency were less utilized (Shanka, Ali-Knight, & Pope, 2002). Surprisingly, Shanka, Ali-Knight and Pope (2002) also found that the Internet was very rarely used. One possible explanation might be that the study was done in 2000 when the Internet was not used as widely as now. Examining travel information sources used by Chinese international students in New Zealand, Ryan and Zhang (2007) found that Chinese language newspaper articles and friends were the most important and frequently used information sources; in comparison, internet, travel agencies, and one's own experience were of moderate importance. Traditional information sources like radio, English newspaper articles, TV, brochures, and guidebooks were of low importance to this market.

**Information-search strategies.** According to Snepenger and Snepenger (1993), the combination of information sources used by tourists can be seen as an information-search strategy. Fodness and Murray (1999) further elaborated on this idea, suggesting tourist

information-search strategies as a dynamic process of using various types and amounts of information, responding to internal and external contingencies in vacation planning. Relevant research on tourist information-search strategies was found in literature (Snepenger, Meged, Snelling, & Worrall, 1990; Fodness & Murray, 1998).

Fodness and Murray (1998) identified three dimensions of tourism information-search strategies: spatial or the locus of search activities (internal versus external), temporal or the timing of search (ongoing or pre-purchase), and operational or the effectiveness of search activities for problem solving and decision-making (contributory or decisive). The spatial dimension received the most attention in tourism literature (Fodness & Murray, 1998).

Regarding the spatial dimension, some researchers argued that information search for leisure travel was predominantly external and usually involved a variety of information sources (Schul & Crompton, 1983; Fodness & Murray, 1998). Furthermore, the timing of information search, regarding when information is obtained and used, has also generated research interests (Snepenger & Snepenger, 1993).

Considering the temporal dimension of information search, external information search can be conceptually separated into pre-purchase and ongoing search, but the border between the two is obscure in practice (Bloch, Sherrell, & Ridgway, 1986). Pre-purchase external information search is often driven by the desire to make a better upcoming purchase decision and facilitates the decision, whereas ongoing information search is usually on a regular basis regardless of specific purchase needs or decisions, and motivated by increasing knowledge for future decision making (Bloch, Sherrell, & Ridgway, 1986; Engel, Blackwell & Miniard, 1993). Tourism information sourcing is usually an ongoing process in the whole decision-making process (Zins, 2007), and often lasts until the end of a trip (Bieger & Laesser, 2004).

In terms of the operational dimension of information search, different information sources are utilized by tourists in various ways (Raitz & Dakhil, 1989) and contribute to travel decision and trip planning differently (Hyde, 2008). For example, Hyde (2008) found that the extent of consultancies with travel agents was positively associated with pre-vacation booking of accommodation, while the hours spent consulting travel guidebooks or friends and relatives were negatively associated with pre-vacation booking of accommodation.

### **2.4.3 Information-search Determinants**

Determinants and factors that influence or correspond to information-search behavior are another major aspect of tourist information search studies. Some researchers argued that information-search determinants could be better predictors on tourist behavior than types of information sources chosen (Fodness & Murray, 1997).

Information-search determinants and the interrelationship among different determinants have been studied extensively in consumer research (Beatty & Smith, 1987; Engel, Blackwell & Miniard, 1993; Schmidt & Spreng, 1996). Beatty and Smith (1987) identified 60 determinants of external search efforts proposed in general consumer literature, and the major constructs were market environment, situational variables, potential payoff/product importance, knowledge and experience, individual differences, conflict and conflict resolution, and cost of search. Engel, Blackwell and Miniard (1993) discussed situational determinants (e.g., information environment), product determinants (e.g., product features and price), retail determinants (e.g., similarity among retailers), and consumer determinants (e.g., knowledge, involvement, beliefs and attitudes, and demographic characteristics).

In the recreation and tourism setting, a considerable number of studies examined determinants of tourists' information-search behavior. Fodness and Murray (1999) suggested that

1) travel contingencies (decision type, purpose of trip, traveling party composition, and model of travel), 2) tourist characteristics (stage of family life cycle, and socio-demographics), and 3) search outcomes (length of stay, destinations and attractions visited, and entertainment expenditures) influenced or correlated to tourist information-search strategies. Similarly, Wong and Liu (2011) summarized three major tourism information-search determinants identified in literature: 1) internal knowledge and external information search, 2) demographics of tourists and travel-related factors, and 3) the mode of travel. Hyde (2008) also emphasized the influence of characteristics of both vacation and vacationer on information search.

Researchers found that past experience or internal knowledge has influence on information search (Manfredo, 1989; Chen & Gursoy, 2000; Gursoy & McCleary, 2004; Lehto, Kim & Morrison, 2006; Erawan & Krairit, 2011). Gursoy and McCleary (2004) suggested that previous visits, familiarity (subjective knowledge), expertise (objective knowledge) are three of the major determinants of both external and internal tourism information search. By comparing first-time and repeat travelers from Germany, France and Britain visiting the US, Chen and Gursoy (2000) found that past trip experience significantly influenced travelers' use of information sources. Studying the case of Thailand, Erawan and Krairit (2011) found that perceived experience was negatively related to the time spent to search for travel information. Lehto, Kim and Morrison (2006) summarized three different perspectives in both consumer research and tourism literature about the relationship between prior knowledge or experience and the extent of information search: positive (Johnson & Russo, 1984; Olshavsky & Granbois, 1979), negative (Kiel & Layton, 1981), and inverted-U shaped relationship (Brucks, 1985; Gursoy, 2003).

In terms of socio-demographic characteristics of travelers, various demographic factors were found correlated to tourism information-search behavior. Some researchers found age as a determinant for information search. Hyde (2008) suggested that tourists of a younger age were less likely to do detailed research because of a psychological need for novelty and surprise. Sung and Hsu (1996) found that younger international university students tended to consult more reliable information such as own travel experiences and family and friends' advice. The length of stay in the host country and the level of study were found influence international university students' search behavior. Studying international university students in the US, Sung and Hsu (1996) found that students with fewer years' living experience in the US tended to consult more their own past experiences and the advice of family and friends because of information reliability; undergraduate students were more likely to use more information sources than graduate students. Sung and Hsu (1996) also found that travel funding sources had some influences on information source usage. Sung and Hsu found that students with full financial support from family more frequently used information sources from a greater variety.

The cultural background, as another factor of tourists' demographics, also plays a significant role in explaining variations in tourists' information-search behavior (Snepenger & Snepenger, 1993; Gursoy & Chen, 2000; Chen & Gursoy, 2000; Money & Crofts, 2003; Osti, Turner, & King, 2009). For example, Money and Crofts (2003) measured the effect of uncertainty avoidance on external information search, and it was found that tourists from a higher levels of uncertainty avoidance culture (e.g., Japanese) consulted more channel member sources (e.g., travel agencies) for information, while those from a lower levels of uncertainty avoidance culture (e.g., German) used more personal (e.g., advice from friends and relatives) and destination marketing-related or mass media sources (e.g., TV/radio ads, and State/city travel

office). Osti, Turner and King (2009) found significantly different information needs across culture among Japanese, Korean, Chinese and North American travelers when using travel guidebooks.

Although limited, evidence was found regarding the influence of travel motivations on the choice of information sources. Studying the US senior travel market, Kim, Weaver and McCleary (1996) found significant relationships between travel motivation (knowledge, escape, and kinship) and the use of information sources (official source, media, and professional source) using structural equation modeling. Studying visitors to newly emerging tourist destinations of India's northeast region, Dey and Sarma (2010) investigated the most commonly used information sources (cognitive wisdom, travel consultants, destination-specific sources, media/general publications, and other personal sources) among all visitors as well as information use patterns among different motivation-based segments (nature-loving explorers, nature-loving vacationers, and change-seekers). Although these two studies were conducted during very different time as well as in very different context, both of them found that different motivation-based travel market segments exhibited different information sourcing behavior.

Some researchers developed models to describe how various determinants influence tourist information-search behaviors intertwiningly. Integrating the three main theoretical approaches of customer information-search behavior (psychological approach, economics approach, and information processing approach), Gursoy and McCleary (2004) proposed a theoretical model identifying eight interrelated determinants of both external and internal tourism information search. The eight determinants are previous visits, involvement, intentional learning, incidental learning, familiarity (subjective knowledge), expertise (objective knowledge), cost of

internal information search (cognitive effort), and cost of external information search (financial and time costs) (Gursoy & McCleary, 2004).

Erawan and Krairit (2011) proposed and tested a model of tourists' external information-search behavior in a case study of visitors to Thailand, which examined the relationships among determinants of external information-search behavior (perceived costs, perceived benefits, perceived knowledge, perceived experience, perceived involvement, ability to search, subjective norms, attitude, perceived environmental risk, perceived personal risk, and information sources usefulness & accessibility), search intentions, and search behavior (extent of search and time spent prior to the trip). The testing of the conceptual model suggested that information sources usefulness and accessibility was positively related to the extent of external search, perceived experience was negatively related to the time spent to search, and ability to search was positively related to time spent to search (Erawan & Krairit). Although not directly related to external search behavior, perceived benefit, subjective norms, and perceived norms were found significantly related to search intentions, which were directly and positively related to the extent of external search (Erawan & Krairit).

Another model proposed and tested by Fodness and Murray (1999) examined how travel contingencies (decision type, purpose of trip, traveling party composition, and model of travel), tourist characteristics (stage of family life cycle, and socio-demographics), and search outcomes (length of stay, destinations and attractions visited, and entertainment expenditures) were related to tourist information-search strategies.

As mentioned earlier, information-search determinants are an important aspect of tourist information search, which help an overall understanding of tourist information-search behavior. Although information-search determinants are not the focus of my study, it is reasonable to

predict that general travel characteristics and demographics of my study population are significant determinants of their perceived importance of different information sources. These potential relationships will be examined in future studies.

#### **2.4.4 Information Search and Trip Planning**

Researchers have commonly studied tourism external information search within the process of decision-making and trip planning (Bieger & Laesser, 2004; Hyde, 2008; Choi, Lehto, Morrison, & Jang, 2012). For example, interviewing 550 first-time vacation tourists to New Zealand, Hyde (2008) developed a structural model of pre-vacation decision-making for a touring vacation. The model identified three distinct but interrelated phases (information search, vacation plans, and vacation bookings), and examined the influence of both the vacation and the vacationer characteristics on the three decision-making phases. Some significant relationships were found among different phases. For example, it was found that the amount of pre-vacation information search conducted could predict but not fully explain the extent of vacation planning and bookings (Hyde).

Another example of studying information search within trip planning and decision-making is Bieger and Laesser's (2004) research surveying 1233 households in Switzerland regarding their information-search behavior for leisure travel. Bieger and Laesser identified various information sourcing behavior before and after the point of a trip decision being made, which formed various information sourcing paths during the decision-making and trip preparation process before trip departure. Based on the type of information sources used (direction) and the frequency of information usage (degree), clusters of information sourcing behavior were identified before a definite trip decision (informal, direct, or professional) and after a definite trip decision (no information, highly informal, or high information) (Bieger &

Laesser). While Bieger and Laesser tried to segment different information sourcing behavior based on both the direction and the degree of information search, Fodness and Murray (1997) compared these two alternative conceptualizations (viz., degree and direction) in segmenting leisure tourists' information-search behavior. The degree-based segmentation mode was found to be better than the direction-based mode in providing insights into tourist external information-search behavior for marketing strategies (Fodness & Murray, 1997).

Targeting at Chinese tourists to Macau, Choi, Lehto, Morrison and Jang (2012) studied their information source use patterns within a multidimensional, ongoing sequential and hierarchical structure of travel planning process. In Choi et al.'s study, information sources used for various travel decision components (departure date, travel budget, length of trip, travel model, accommodation, attractions, and activities) were examined at four trip phases (before purchase, at time of purchase, after purchase, and after arriving in Macau). They found that different types of information sources were consulted at different phases of a trip. Information acquisition was most extensive at the "before purchase" phase, decreased between travel purchase and trip departure, and increased again during the trip when encountering novel or unexpected situations and making decisions (Choi et al.). Choi et al. also found that information use patterns varied between first-time visitors and experienced visitors, and between visitors living a short distance away and long distance away from the destination.

## **2.5 Travel Constraints**

The concept of travel constraints comes from leisure constraints. The leisure constraints model proposed by Crawford and Godbey (1987) suggested three types of constraints: intrapersonal (e.g., lack of interest), interpersonal (e.g., lack of companion) and structural (e.g., lack of time or money). According to Jackson (2000), constraints related to time and money are the major ones

experienced by leisure participants. Identifying the research gap in applying leisure constraints theory in the field of tourism, Nyaupane and Andereck (2008) used and extended the leisure constraints model proposed by Crawford and Godbey (1987) to examine leisure travel constraints. Consistent with literature, Nyaupane and Andereck's (2008) study found that time and money were the most constraining factors for leisure travelers.

For the university student travel market, regarding time-related concerns, university students have more free time and longer holidays than full-time workers (Field, 1999; Heung & Leong, 2006), and they usually travel during term breaks (Michael, Armstrong, & King, 2003; Glover, 2011a). In terms of money-related issues, international university students usually gain their travel funds from their parents or family (Sung & Hsu, 1996; Hsu & Sung, 1997; Ryan & Zhang, 2007). While some researchers argued that university students had high money-related constraints (Shanka & Taylor, 2002), some other researchers suggested that Chinese international students have good purchase power (Huang & Tian, 2013).

## **2.6 Travel Intentions**

Behavioral intention has been studied a lot in the context of travel and tourism. Swan (1981) defined behavioral intention as the anticipated or planned future behavior of an individual. According to Hennessey, Yun, MacDonald, and MacEachern (2010), behavioral intentions are developed through a process of choices and decisions, and intentions include the individual's attitude toward the behavior and social influences. Hennessey et al. (2010) suggested that many psychology studies found high correlations between behavioral intentions and actual behavior, and behavioral intentions were a predictor or indicator of actual behavior.

According to Woodside and MacDonald (1994), travel intentions are a type of tourist belief considering the perceived likelihood of visiting a destination within a certain period of

time. Tourism literature usually examined travel intentions with trip planning behavior, and various factors (e.g., information sources) were found influencing travel intentions (Hennessey et al., 2010). Existing literature has revealed some relationships between travel intentions and travel motivations/travel information sources. Studying Taiwanese travelers to Hong Kong, Lam and Hsu (2006) found that various travel motivations related to behavioral belief, normative belief, and control belief influenced behavioral intention of choosing a travel destination. Regarding the relationship between information sources and travel intentions, Hennessey et al. (2010) found that online information sources created lower visit intentions compared to other types of information sources such as word-of-mouth. However, Kaplanidou and Vogt (2006) found that the usefulness of websites for trip planning strongly predict travel intentions.

## **2.7 Summary of Relevant Literature**

The review of literature shows that, while some researchers studied university students' travel in general (Josiam, Smeaton, & Clements, 1999; Klenosky, 2002; Bai, Hu, Elsworth, & Countryman, 2004; Heung & Leong, 2006; Kim, Noh, & Jogaratnam, 2006; Kim, 2007; Kim, Oh, & Jogaratnam, 2007), some others differentiated their study population by countries of origin. Among the later group of studies, some compared the travel between domestic and international students (Field, 1999; Kim & Jogaratnam, 2002; Kim & Jogaratnam, 2003; Glover, 2011a), while others focused specifically on international students' travel within the host country (Sung & Hsu, 1996; Hsu & Sung, 1997; Frost & Shanka, 1999; Shanka, Ali-Knight, & Pope, 2002; Min-En, 2006). A few studies specifically targeted at international students from China (Ryan & Zhang, 2007; Wang & Davidson, 2008; Liu & Ryan, 2011; Huang & Tian, 2013).

According to Kim, Oh and Jogaratnam (2007), university student travel research focused on several broad areas: 1) travel motivations and their influence on travel decisions 2)

associations between motivations and related variables; 3) travel patterns and favored activities; 4) travel satisfaction; and 5) others. As shown in the previous discussion, studies about international university student travel also concentrated around similar areas. Some other popular tourism research topics relevant to international students are travel opportunities and overseas education destination choice (Michael, Armstrong, & King, 2003; Min-En, 2006; Glover, 2011b), international student-generated VFRs (Michael, Armstrong, & King, 2003; Shanka & Taylor, 2003; Taylor, Shanka, & Pope, 2004; Min-En, 2006; Liu & Ryan, 2011; Huang & Tian, 2013), and return visits by international university alumni (Michael, Armstrong, & King, 2003; Shanka & Taylor, 2003; Schofield & Fallon, 2012).

Among studies on travel motivations of university students, push and pull model was the most widely used tool. While many of these studies used similar scales or examined similar motivational items, different university student market segments were found share similarities as well as exhibit differences in push and pull motivations. Some commonly revealed push motivations are knowledge, sports, adventure, relax, friends and family, entertainment, travel bragging, and some mostly displayed pull motivational themes are sun and beaches, attractions, nature, and accessibility (Kim, & Jogaratnam, 2002; Klenosky 2002; Kim, Noh, & Jogaratnam, 2006; Kim, 2007). Supporting Kim, Noh and Jogaratnam's (2006) opinion that push and pull motivations are practically hard to be separated, overlaps between these two sets of motivational factors were observed in literature. For example, "sports" was found as a push factor in one study, but labeled as a pull factor in another study.

Chinese international students are a distinct market segment from domestic university students and other international students. Researchers have identified various travel motivation dimensions and different motivation-based travel segments among Chinese international students

(Ryan & Zhang, 2007; Liu & Ryan, 2011; Huang & Tian, 2013). For the purpose of this study, Huang and Tian's (2013) research on Chinese international students in the UK provides the most relevant list of push motivational factors.

Based on existing research on university students, international students, and Chinese international students in different countries, this study will explore the travel motivations and general travel patterns of Chinese international university students in the Canadian context. It will be interesting to compare the findings in Canada with existing studies in other countries. In tourism literature, information-search behavior of international university student travelers is not well understood; however, relevant research on other populations provides useful insights about tourist information search, which forms theoretic foundation and provides implications for studying Chinese international university students' information search.

Information search can be conceptually studied regarding the direction, the degree, and the sequence of search (Engel, Blackwell & Miniard, 1993; Fodness & Murray, 1997), and tourist information search was usually studied with trip-planning and travel decision-making (Snepenger & Snepenger, 1993; Bieger & Laesser, 2004; Hyde, 2008; Choi, Lehto, Morrison, & Jang, 2012). In tourism literature, information needs, information sources, and information-search determinants are three major study areas of information search (Fodness & Murray, 1997).

Information search is conducted to meet functional needs, as well as other non-functional needs such as innovation, hedonic, aesthetic, and sign needs (Vogt & Fesenmaier, 1998; Nishimura, Waryszak, & King, 2007; Wong & Liu, 2011). Various tourism information sources are available to and used by tourists. Based on what and how information sources are used, information search can be external or internal, ongoing or pre-purchase, and contributory or

decisive (Fodness & Murray, 1998). Tourism information search is mostly external and ongoing through the whole trip (Schul & Crompton, 1983; Bieger & Laesser, 2004; Zins, 2007).

Furthermore, information search is influenced by various information-search determinants, such as trip specific characteristics (e.g., travel motivations, traveling party composition, and model of travel) and travelers' characteristics (e.g., past experience, and socio-demographic factors) (Snepenger & Snepenger, 1993; Sung & Hsu, 1996; Fodness & Murray, 1999; Gursoy & Chen, 2000; Chen & Gursoy, 2000; Money & Crofts, 2003; Hyde, 2008; Osti, Turner, & King, 2009).

As shown in literature, information search is a broad area that can be studied from various aspects. This study will focus on information sources. Specifically, this research will explore the importance of different information sources to Chinese international university students traveling in Canada. Although not studied in this research, other aspects of information search help the researcher to gain a comprehensive understanding of this area.

## **Chapter 3: Methods**

### **3.1 Research Instrument**

Based on an extensive review of literature, a structured self-administered survey was designed to collect information about travel patterns, travel motivations, information search, and socio-demographic information (see Appendix B). The questionnaire was designed with the consultancy to the University of Waterloo (UW) Registrar's Office, International Student Office of UW, and reviewed by the academic committee.

The survey was designed in English with a few Chinese translations of some key concepts or complex English words/phrases to facilitate understanding. Two reasons were considered when deciding not to completely translate the whole questionnaire into Chinese. First, the study population is students at a university that requires a certain level of English skills, so it is assumed that potential participants have sufficient English skills to interpret the questionnaire. Second, translation between English and Chinese has the potential of causing misinterpretations and loss of meanings; however, using minimal but necessary amount of Chinese translations could help the understanding considering that English is not the first language for the target population. In terms of the contents, the questionnaire has a screener-question section and four main sections, consisting of mostly close-ended questions. In the following sections, details about the questionnaire design will be discussed.

#### **3.1.1 Screener Questions**

Screener questions were asked at the beginning of the survey to screen participants. The first screener question asked participants to identify their place of origin, which allowed them to self-identify their cultural background (e.g., Mainland China, Hong Kong, Macau, and Other). The reason for offering these four options is that there are subcultural groups under the big umbrella

of “Chinese” origin, and different subgroups might differ from each other in travel characteristics. While Hong Kong and Macau are politically parts of China, their colonialism history makes people from these two places culturally different from Mainland Chinese people. Considering this, this study tries to focus on only Mainland Chinese international students.

The other screener question asked participants about their residency status in Canada. The answer options are student on a study permit, permanent resident, Canadian citizen with dual citizenship, Canadian citizen, and other. Through this question, international students (i.e., students reside in Canada on a study permit) could be differentiated from other non-international students (e.g., permanent Canadian residents).

Besides these two screener questions, participants were also asked about their registration status at UW and the year come to Canada in order to have a better understanding of some basic information about the participants. For the registration status question, the answer options (e.g., studying to complete/obtain a UW degree, studying/working temporarily in UW - not to complete/obtain a UW degree, UW alumni, and other) were developed in consultancy with the university’s Registrar’s Office. Also, participants were asked to indicate the year when they first come or move to Canada, which aimed at calculating the length of their stay in Canada.

### **3.1.2 General Travel Patterns**

In the main part of the questionnaire, Section One was about the general travel characteristics of participants’ overnight leisure trips in Canada, including travel frequency, travel season, travel party, type of travel, travel intentions, and major travel constraints. The list of travel constraints was developed based on a study by Nyaupane and Andereck (2008). “Overnight leisure trips” was defined and explained in Chinese in the survey. Translating the Chinese explanation into English is overnight leisure trips are trips that are mainly for leisure or VFR purposes and need

overnight staying in an accommodation. The reason for defining this in Chinese is to help a better understanding without any confusion because of language.

This section aimed at providing some general ideas about participants' general travel experience and their travel propensity in Canada. Also, this section helped set the tone of the survey for the participants. Through thinking about the past travel experiences or future possible travel in Canada, participants were expected to better answer questions in the later sections about their travel motivations and travel information sources.

### **3.1.3 Travel Motivations**

The second section of the survey explored participants' motivations of taking overnight leisure trips in Canada. A list of motivational factors was provided to participants, and the participants were asked to rate their perceived importance of each factor. To measure the importance of each motivation item, a 4-point monotonic scale was used, with 1 representing "Not important at all" and 4 indicating "Very important".

The list was developed based on Liu and Ryan (2011) study on Chinese international students in New Zealand. Liu and Ryan's original scale had 25 motivation items. For the purpose of this research, some changes were made to Liu and Ryan's scale, and the final list contained 17 motivational factors. The changes being made were as follows:

1. The items "To relax mentally" and "To relax physically" were combined into one item "To rest/relax". These two items measures the motivation of resting and relaxing in general, either mentally or physically. Many other studies, which investigated international students' travel motivations, typically did not separate mental and physical relaxation, and "To rest/relax" was normally adopted to measure these two aspects in general. It was believed that mental and physical relaxation closely inter-

related to each other in motivating travel. Also, considering the length of the survey, combining these two items into one helped shorten the list.

2. The items “To avoid the hustle and bustle of daily life” and “To change my surroundings for the sake of change” were combined into one item “To escape from daily life”. The considerations of this change were similar to the change in the first point. Basically, these two items measured the motivation of escaping from daily life. The way of avoiding daily life hustle and bustle is to escape from the daily surrounding or environment for a change, and the reason of seeking for a change is to escape from daily routine. In existing literature, many studies used the idea “to escape” to capture these motivations. Combining these two items helped shorten the list.
3. The word “New Zealand” was replaced with “Canada”. This change was made because of the study behavior was intra-Canada leisure travel.
4. Eight items (“To holiday somewhere safe”, “To holiday somewhere that is clean and unpolluted”, “To explore new ideas”, “To look at career opportunities”, “To look at other universities and courses”, “To visit Maori attractions”, “To take some exercises (e.g., go caving)” and “To challenge my abilities”) were removed. The reason for removing the item “To holiday somewhere safe” was that, safety was believed to be more a travel constraint than travel motivation. Therefore, it was decided that the travel constraint section would examine the safety concern, and it was duplicate to include the item “To holiday somewhere safe” in motivations. “To holiday somewhere that is clean and unpolluted” was a very vague item, and from the researcher’s perspective, it was not a driving force for travel in Canada because of Canada’s overall unpolluted environment. The item “To explore new ideas” was

thought duplicate to the item “To discover new places and things”. Both items measured the motivation of seeking for novelty, and the later one was more concrete and captured the motivation “novelty” better. The reason for removing “To look at career opportunities” and “To look at other universities and courses” was that this research focused on travel for leisure or VFR purposes; looking for career opportunities and looking at universities and courses were not considered as relevant travel motivations in this study context. In terms of the items “To visit Maori attractions”, “To take some exercises (e.g., go caving)” and “To challenge my abilities”, one of the reason to remove them was that Liu and Ryan’s (2011) research found significantly low importance and low satisfaction of these motivations.

Additionally, for the item “To visit Maori attractions”, in the Canadian context, “To visit aboriginal attractions” would be suitable; however, this was considered too attraction-specific. This study intended to study general internal travel forces that drive travel intentions and behavior, rather than specific destination associated travel attractions. Regarding the item “To take some exercises (e.g., go caving)”, it was removed considering that most existing literature suggested that physical exercises were unimportant to Chinese international students. “To challenge my abilities” was a very vague item that did not provide too much information about travel motivation.

5. Finally, two extra items (“To take lots of photographs”, and “To improve my English level”) were added. The former one was taken from Ryan and Zhang’s (2007) study on Chinese international students in New Zealand; the latter one was taken from Huang and Tian’s (2013) study on Chinese international students in the UK. These two items were added specifically for the Chinese international student population.

Taking photographs was found moderately important for Chinese international students in New Zealand (Ryan & Zhang, 2007). Also, based on the researcher's own experience and hypothesis, taking photos would be an important travel motivation for many Chinese international students, especially females. "To improve my English level" was another motivation that was assumed important for Chinese students in Canada, because that learning English was one big reason for taking overseas education.

### **3.1.4 Information Sources**

In the third section, information-search behavior was examined through the perceived importance of different information sources. A list of information sources was provided to participants. Participants were asked to rate the importance of each information source on a 4-point monotonic scale, from 1 being "Not important at all" to 4 being "Very important". The list was developed based on Choi, Lehto, Morrison, and Jang's (2012) study on Chinese tourists visiting Macau, and modifications were made to fit the purpose and condition of this study.

In Choi et al.'s list, information sources were separated into two categories: offline and online sources. Regarding offline information sources, several changes were made to Choi et al.'s list. First, "Consumer magazines and newspapers" was reworded to "Other magazines or newspapers". The reason for this change was to contrast to another item "Travel magazines". Additionally, three items of Choi et al.'s original list were removed ("Travel show", "Local tourist information centers", and "Tour guides"). "Travel show" was removed considering the assumed low possibility that Chinese students would gain information from it. "Local tourist information centers" and "Tour guides" were removed because they were mostly likely to be used after trip departure or after arriving to the destination. This study aimed at focusing on pre-

trip information search behavior, which was mainly for trip planning purposes. Finally, Choi et al.'s item "Other offline information sources" was modified to an open-ended option with a comment box to give participants a chance to clarify their responses.

In terms changes to online information sources, "Consumer magazines and news websites" was reworded to "Other magazines or newspapers websites". Similar to the change made in offline sources, the reason was to contrast to another item "Travel magazines websites". "Travelogues or online travel communities" was reworded as "Blogs or online travel communities" because it was considered that participants might have difficulty understanding the word "Travelogue". Two extra items were added – "TripAdvisor" and "Chinese websites (e.g., Qiongyou)": the former one was added because of its popularity in North America among travelers; the later item was added considering that the study population is Chinese students, using Qiongyou, the most popular Chinese travel online community, as an example. Finally, Choi et al.'s original item option "Other online information sources" was left open with a comment box for further comments.

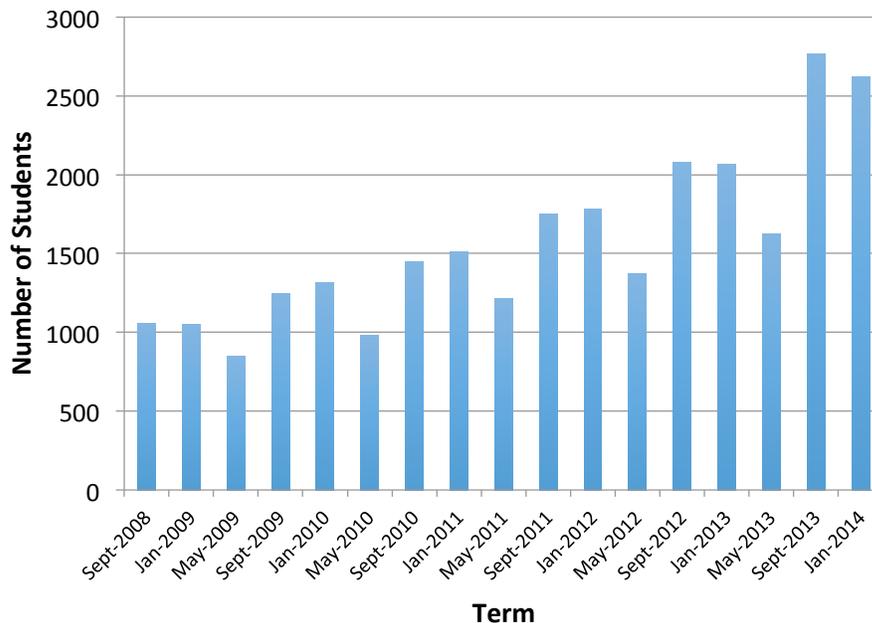
The last section asked for socio-demographic information, including gender, age, level of study, total anticipated length of stay in Canada, and travel funding sources.

### **3.2 Sampling and Data Collection**

The targeted population of this study was University of Waterloo students who have a Mainland Chinese citizenship and need a study permit to attend universities in Canada — Mainland Chinese international students. As mentioned earlier, country of origin, and residency status were asked at the beginning of the survey to screen participants. Students, who were either not from Mainland China or not residing in Canada on a study permit, were not considered as the target

population. However, when recruiting participants, the general term “Chinese students” were used to satisfy the curiosity about participants’ self-identification.

Data was collected among Chinese students at the University of Waterloo (UW) in March, 2014. The main campus of UW locates in the city of Waterloo in southern Ontario of Canada. The university has a large population of Chinese international students. Data retrieved from University of Waterloo (2014) shows that the university has been experiencing a steady annual growth in the number of Chinese international students in the past five years (see *Figure 1*). As shown in *Figure 1*, within each fiscal year, the Fall (September - December) and the Winter (January - April) terms normally have higher registration than the Spring term (May - August). Considering this fact as well as the research progress, data was collected during March 2014 (Winter 2014).



*Figure 1.* Full-time Chinese international student registration by student count for academic terms from September, 2008 to January, 2014. *Note:* From University of Waterloo.

Questionnaires were distributed online through the web survey tool SurveyMonkey. Both UW sources and non-UW sources were used to recruit participants. Specifically, participants were reached through the Graduate Studies Office, the Faculty of Science, the Faculty of Environment, an undergraduate class, UW Chinese Students and Scholar Association (UWCSSA) and the researcher's personal resources. In total, 278 responses were collected, with 231 usable questionnaires. The unusable questionnaires were either incomplete or had an excessive amount of missing data. Among the usable responses, 154 were from Mainland Chinese international students; therefore, only these 154 responses were analyzed for this study.

### **3.3 Data Analysis**

The data collected in this study were mostly quantitative. Data were analyzed using the Statistical Package for the Social Sciences (SPSS). Very few participants provided comments to the open-ended questions, and the very few qualitative data were read through. The qualitative information was not rich enough to be included in the results, considering the amount and usefulness of the information. The data analysis techniques used were frequency analysis, descriptive analysis (mean scores and standard deviation), Principle Components Analysis (PCA), correlation analysis, one-way ANOVA, and independent sample *t*-test.

Questions in Section One (general travel patterns) and Section Four (socio-demographics) have both single-choice and multiple-choice answers. Frequency analysis was used to describe participants' general travel patterns and socio-demographic characteristics. For scale-type questions in Section One (travel intentions and travel constraints), Section Two (travel motivations) and Section Three (importance of information sources), mean scores and standard deviation were calculated. Additionally, in order to understand the relative importance of each

item within each scale, the mean scores were ranked for each scale. Furthermore, to investigate the internal consistency of the scales in the questionnaire, reliability tests (Cronbach's Alpha) were conducted for travel constraints, travel motivations, and information sources scales. For travel motivations, exploratory PCA was conducted to reveal the internal structure of motivation variables. The aim of PCA in this study was to discover the dimensions of Chinese international students' travel motivations in Canada. To examine correlations between variables, Pearson Correlations were calculated for travel motivational dimensions (factors from PCA), two categories of information sources (online and offline), and travel intentions. Finally, group differences of travel motivations and information sources were analyzed using one-way ANOVA and independent sample *t*-test.

## Chapter 4: Discussion of Results

### 4.1 “Chinese International Students”

The purpose of this study is to have an understanding of Chinese international student’ intra-Canada travel characteristics. In this study, the term “Chinese international students” was carefully defined. In Canada, Chinese students include many subgroups. Chinese students can refer to the place of origin (e.g., Mainland China, Hong Kong, and Macau), ethnicity (e.g., Chinese Indonesia), and citizenship (i.e., Chinese). In other words, “Chinese” can refer to geography, culture, politics or all of these together. Usually, these subgroups are hard to be differentiated and culturally they resemble to each other to different levels. While researchers studied Chinese international students, very few of them operationally defined “Chinese international students”. To screen participants, this study operationally defined “Chinese international students” specifically as students 1) with a Chinese citizenship (Mainland China), and 2) residing in Canada on a study permit. In order to get a large sample and also satisfy the researcher’s curiosity about how potential participants would identify themselves, the term “Chinese students” was used to recruit participants. In total, 278 respondents self-identified themselves as “Chinese students” and participated in the study, and 231 responses were usable.

Table 1 shows the results of the screener questions about place of origin and residency status in Canada. Among the 231 usable responses, 202 (87.4%) participants reported their place origin as “Mainland China”, 24 (10.4%) as “Hong Kong”, 1 (0.4%) as “Macau”, 4 (1.7%) as “other”. In terms of the residency status in Canada, 157 (68.0%) participants were in Canada on a study permit, and these students were considered as international students. Others were not residing in Canada as an international student: 15 (6.5%) permanent residents, 11 (4.8%) Canadian citizens with dual citizenship, and 40 (17.3%) Canadian citizens. Among all responses,

154 were from Mainland Chinese students who resided in Canada on a study permit; therefore, these were the target population of this study. In later discussions, only these 154 responses will be analyzed, and they will be referred to as Chinese international students.

**Table 1**  
*Origin & Residency Status in Canada*

Variables	Frequency	Percent
Place of Origin		
Mainland China	202	87.4%
Hong Kong	24	10.4%
Macau	1	0.4%
Other	4	1.7%
<i>Total</i>	<i>231</i>	<i>100.0%</i>
Residency Status		
Student on a study permit	157	70.4%
Permanent resident	15	6.7%
Canadian citizen with dual citizenship	11	4.9%
Canadian citizen	40	17.9%
<i>Total</i>	<i>223</i>	<i>100.0%</i>

## 4.2 Respondent Profiles

The basic information about the study sample is summarized in Table 2. As shown in Table 2, more females than males participated in this study: 59 (42.4%) participants are male, and 80 (57.6%) are female. Most of participants (66.2%) are between 22 and 25 years old. No respondent is under 18; 25 (18.0%) are between 18 and 21 years old; 20 (14.4%) are between 26 and 29. Only 2 (1.4%) participants reported their age “30 or above”. Regarding level of study, graduate students dominate the sample, especially Master’s students. Being more specific, 47 (33.8%) respondents are undergraduate students; 67 (48.2%) are master’s students; 24 (17.3%) are doctoral students. Additionally, most participants anticipated their length of stay in Canada somewhere between 1 and 4 years, and many of them will stay for more than 4 years. 22 (15.8%) respondents anticipate they will stay in Canada for less than a year; 43 (30.9%) anticipated a

length of 1 to 2 years; 32 (23.0%) reported 3 to 4 years; 32 (23.0%) reported more than 4 years; 10 (7.2%) participants were not sure about their length of stay.

**Table 2**  
*Profiles of Mainland Chinese International Students*

Variables	Frequency	Percent
<b>Gender</b>		
Male	59	42.4%
Female	80	57.6%
<i>Total</i>	<i>139</i>	<i>100.0%</i>
<b>Age</b>		
Under 18	0	0.0%
18 to 21	25	18.0%
22 to 25	92	66.2%
26 to 29	20	14.4%
30 or above	2	1.4%
<i>Total</i>	<i>139</i>	<i>100.0%</i>
<b>Level of Study</b>		
Undergraduate	47	33.8%
Master's	67	48.2%
Doctoral	24	17.3%
Other	1	0.7%
<i>Total</i>	<i>139</i>	<i>100.0%</i>
<b>Anticipated Length of Stay in Canada</b>		
Less than 1 year	22	15.8%
1-2 years	43	30.9%
3-4 years	32	23.0%
More than 4 years	32	23.0%
Not sure	10	7.2%
<i>Total</i>	<i>139</i>	<i>100.0%</i>
<b>Major Travel Funding Sources</b>		
Self	78	50.6%
Parents or other relatives	99	64.3%
Friends	13	8.4%
Other	6	3.9%

Regarding financial support, students themselves and their parents or relatives are the major financial sources of intra-Canada leisure travel. 78 (50.6%) participants reported themselves as the major funding source, and 99 (64.3%) suggested gaining financial support from parents or other relatives. Only 13 (8.4%) participants suggested friends supported their travel financially, and only 6 (3.9%) students reported other funding sources. Some researchers found that back in the 1990s, international students in the US gained their travel funding mainly from assistantship/scholarship and parents/family for travel funding (Sung & Hsu, 1996; Hsu &

Sung, 1997). A more recent study by Ryan and Zhang (2007) found that Chinese international students in New Zealand were financially supported by their parents for traveling.

### **4.3 General Travel Patterns and Characteristics**

This section will report and discuss the findings about the general patterns of Chinese international students' intra-Canada overnight leisure travel, including travel frequency, travel timing, travel party, travel type preference, and travel related intentions. This study found that Chinese international students in the context of Canada exhibited similar travel patterns and characteristics compared to international students in other countries as suggested in literature. This indicates that Chinese international students in Canada have some similarities to their international student peers elsewhere.

The results of travel frequency are shown in *Figure 2* and *Figure 3*. Being asked how often they take overnight leisure trips in Canada, most students traveled at least once a year. 85 (55%) reported a travel frequency "2-3 times a year"; 15 (10%) respondents traveled 4 to 5 times a year; 9 (6%) indicated they traveled 6 times or more a year. This result of travel frequency is consistent with Sung and Hsu's (1996) study among international students in the US, Min-En's (2006) study on international students in Australia, and Ryan and Zhang's (2007) and Liu and Ryan's (2011) findings on Chinese international students in New Zealand. It further proves that Chinese international students in Canada also travel as often as general international students or their Chinese international counterparts in other international education countries. This is important for Canadian industry to know, because it shows that Chinese international students in Canada do take overnight leisure trips within the country during their study. While most students travel frequently in Canada during their study, it is also noticed that quite a few participants have

low travel frequency. 18 (12%) participants reported they did not travel at all in Canada; 27 (17%) reported traveling once a year or less.

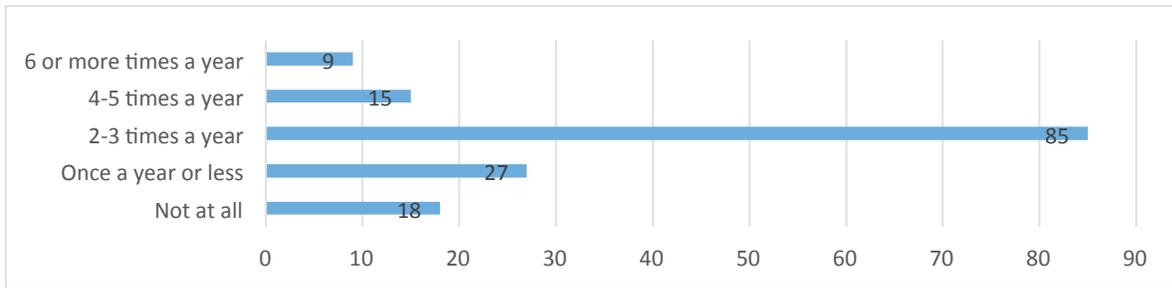


Figure 2. Results of travel frequency of Chinese international students (frequency).

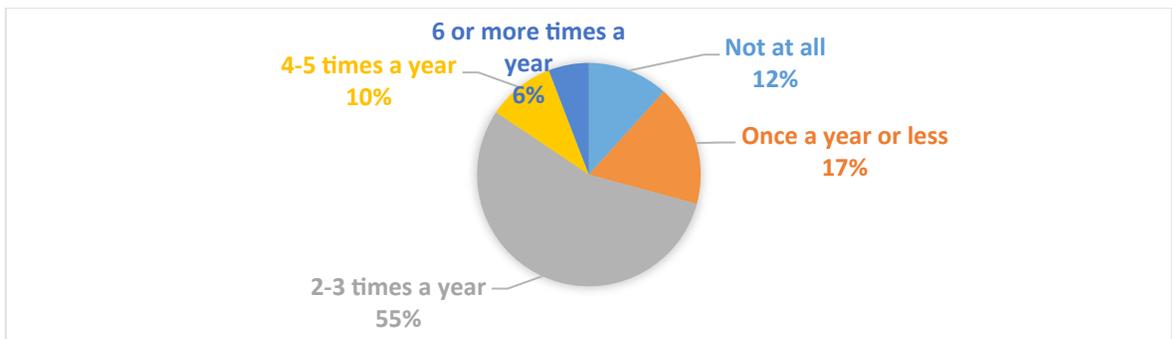


Figure 3. Results of travel frequency of Chinese international students (percent).

In terms of travel timing, the results are not very surprising. For this question, participants can choose multiple options. The results are summarized in *Figure 4*. The majority who travel do so either during long weekends of a term or during breaks between two terms. 112 suggested they traveled during holidays (not including regular weekends) during a term, and 97 respondents traveled during breaks between two terms. This is reasonable and predictable because of the time constraints associated with university teaching time. Previous research also suggested that term breaks were the best timing for travel (Michael, Armstrong, & King, 2003; Glover, 2011a). Glover (2011a) suggested that international students were likely to travel back to their home country during term breaks, which would prevent traveling in the study country.

Glover’s suggestion might be a good explanation for the finding that slightly more participants usually took intra-Canada trips during holidays in a term than term breaks. Besides, some less popular travel timings are regular weekends and weekdays during a term. 11 participants reported traveling during weekdays of a term; 39 usually travel during weekends (not including holidays) of a term. Glover (2011a) also found that although much less popular, international students do take trips during a term.

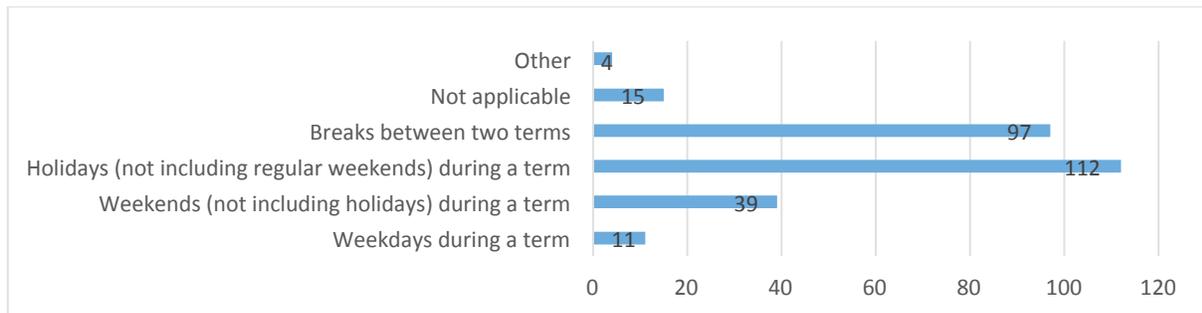


Figure 4. Results of travel timing of Chinese international students (frequency).

Regarding the question about travel party, participants can also choose multiple options. Some researchers found that Chinese international students liked to travel with their friends, without identifying different categories of friends (Ryan & Zhang, 2007). Gardiner, King and Wilkins (2013) provided more detailed categories of travel companion, and they found that international students were most likely to travel with other international students from their own country. To better understand the “friends” group, this study used and modified Gardiner et al.’s categories. The results of travel party are shown in *Figure 5*. This study found that many Chinese international students usually traveled with friends who were also Chinese international students, which is consistent with Gardiner et al.’s finding. As shown in *Figure 5*, 120 participants suggested that they usually traveled with international students from China. Few participants traveled with international students from other countries, Canadian students, or other non-student

friends. 17 reported traveling with international students from other countries; 21 traveled with Canadian students; 24 traveled with other friends who were not students. The explanation for these results might be that it is relatively easy for Chinese international students to make friends within the Chinese social circle, and it is usually harder for them to get out of the circle to meet other non-Chinese student friends.

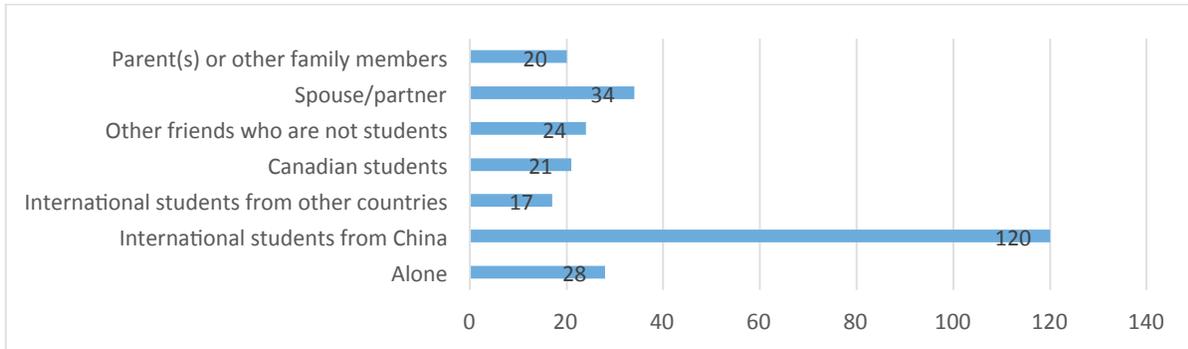


Figure 5. Results of travel party of Chinese international students (frequency).

Another finding about travel party is that only 28 participants indicated they usually traveled alone, which suggests that most Chinese international students prefer to travel in groups. Again, this finding is consistent with Gardiner, King, and Wilkins' (2013). This was also indirectly reflected in some other studies. According to Huang (2008b), travel is an important social experience for international students. Liu and Ryan (2011) found that for Chinese international students, they engaged in a diversity of social activities during their trips in New Zealand.

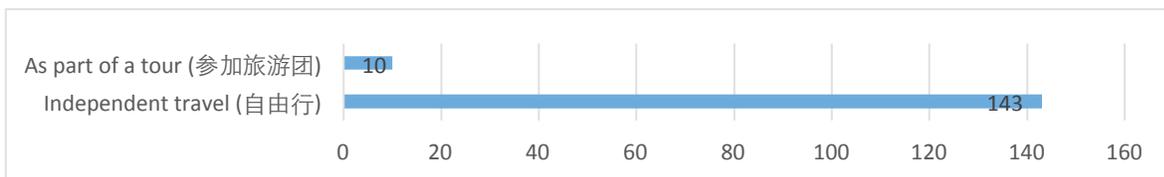


Figure 6. Results of travel type preference of Chinese international students (frequency).

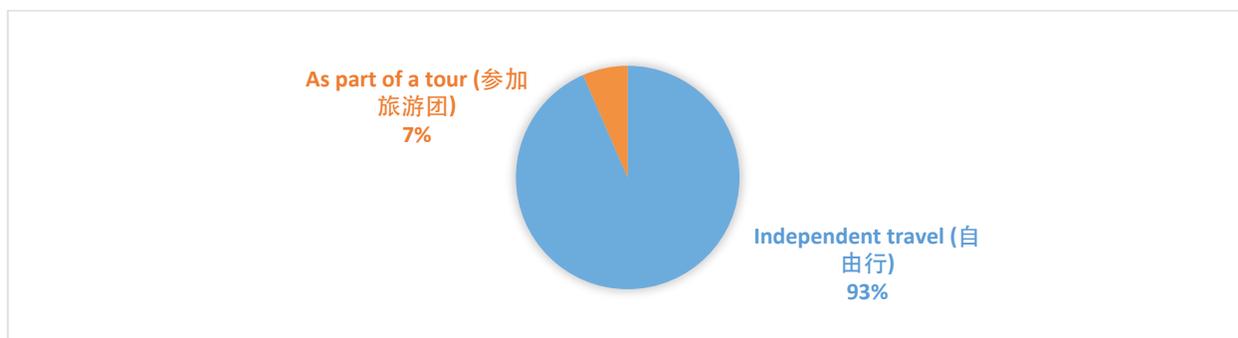


Figure 7. Results of travel type preference of Chinese international students (percent).

Regarding the preferred travel type, the finding is not very surprising considering the study population is students - independent travel was much more preferred than being part of a tour. As shown in *Figure 6* and *Figure 7*, 143 (93%) participants indicated that they preferred independent travel, while only 10 (7%) preferred travel as part of a tour. This finding is consistent with previous studies on international students. Michael, Armstrong and King (2003) found that Asian international students in Australia generally preferred to arrange their own trips. Specifically, Ryan and Zhang (2007) found that self-organized trips were preferred by Chinese international students in New Zealand.

The results of travel-related intentions are presented in Table 3. The intentions are measured on a 6-point scale, with 1 “Strongly disagree” to 6 “Strongly agree”. Generally, participants had high-level intentions of traveling, recommending, and revisiting Canada.

**Table 3**  
*Travel/Recommend/Revisit Intentions - Mainland Chinese International Students*

Intention Statements	N	Mean	Std. Deviation
After finishing my study, I intend to travel in Canada.	153	4.56	1.650
During my study, I intend to travel in Canada.	153	4.40	1.741
I intend to recommend Canada as a travel destination to my friends or family.	153	4.20	1.506
After finishing my degree and returning to China, I intend to revisit Canada.	152	4.05	1.506

As shown in Table 3, students indicated high-level intentions of traveling in Canada either after finishing their study or during their study. The mean score of the post-study travel intention measured by the statement “After finishing my study, I intend to travel in Canada.” is the highest (4.56), and the standard deviation is 1.650. The statement “During my study, I intend to travel in Canada.” measures during-study travel intention, and it has the second highest mean score (4.40) with a 1.741 standard deviation. Additionally, participants also showed a high intention of recommending Canada. This is reflected by the statement “I intend to recommend Canada as a travel destination to my friends or family.” It has a mean score 4.20, with a 1.506 standard deviation. In terms of revisiting Canada after returning to China, the intention is relatively lower than other intentions, but still high. Revisiting intention is measured by the statement “After finishing my degree and returning to China, I intend to revisit Canada.” It has the lowest mean score (4.05), with a 1.506 standard deviation.

These findings are similar to findings in other nations. Michael, Armstrong and King’s (2003) found that most Asian international students in Australia have intentions to travel in Australia on completion of their studies and revisit Australia after returning to their home countries. Huang and Tian (2013) found that Chinese international students have a higher intention level of recommending the UK as a destination than other Chinese travelers to the UK. These high-level travel-related intentions indicate that Chinese international students are interested in traveling in Canada, which suggests that they are a high potential travel market for Canadian tourism industry.

Table 4 shows the results of travel constraints of Mainland Chinese international students. The scale of travel constraints in the questionnaire was labeled as 1 “Not at all”, 2 “A little”, 3 “Somewhat”, and 4 “A lot”. The Cronbach’s Alpha of the travel constraint scale is 0.761, which indicates good internal consistency. According to Gardiner, King and Wilkins (2013), very few researchers studied travel constraints of international students. Gardiner et al. found that financial (i.e., money) and temporal (e.g., time constraints and study commitments) concerns and travel mechanisms (e.g., student-specific discounts or packages) are the major constraints for international students’ travel in Australia. This study had similar findings.

**Table 4**  
***Travel Constraints - Mainland Chinese International Students***

<b>Constraints Statements</b>	<b>N</b>	<b>Mean</b>	<b>Rank</b>	<b>Std. Deviation</b>
I don't have time to take a leisure trip in Canada.	146	2.95	1	.893
I don't have enough money to take a leisure trip in Canada.	145	2.86	2	.895
The weather isn't favorable.	146	2.80	3	1.015
Areas I want to visit in Canada are too far away.	146	2.60	4	.899
There are no student discounts.	146	2.45	5	.887
There are no student-specific travel packages.	146	2.35	6	.914
Transportation	146	2.32	7	.923
Accommodation	146	2.16	8	.952
I concern about my safety.	145	2.06	9	.963
I don't have information about places to visit and activities to participate in Canada.	146	2.04	10	.931
I don't have anyone to travel with.	146	1.94	11	.991
Food/diet	146	1.55	12	.797
There are no areas in Canada I want to visit.	146	1.49	13	.816
A lack of Chinese language services.	145	1.48	14	.809
My health doesn't allow me to travel.	146	1.25	15	.630

The participants generally indicated that a lack of time and a lack of money were their main constraints. As shown in Table 4, the statements “I don't have time to take a leisure trip in Canada” and “I don't have enough money to take a leisure trip in Canada” have high mean score

with low standard deviation. These findings are consistent with existing literature on leisure constraints or specifically leisure travel constraints (Jackson, 2000; Nyaupane & Andereck, 2008). Bad weather is another problem that acts as an impediment, but varies greatly from participant to participant, which is reflected by the high mean score and the high standard deviation of the statement “The weather isn't favorable”. Besides, distance to destinations (i.e., “Areas I want to visit in Canada are too far away”), a lack of student discounts (i.e., “There are no student discounts”) or student-specific travel packages (i.e., “There are no student-specific travel packages”), and transportation also somewhat constrain for participants’ intra-Canada leisure travel, but to a less level than time, money and weather. Participants only concerned safety a little bit as an issue (i.e., “I concern about my safety”), which suggests that Chinese international students generally consider Canada relatively safe to travel. Also, a lack of information about destinations or activities in Canada (i.e., “I don’t have information about places to visit and activities to participate in Canada”) is only a little bit constraining for participants, which indicates that the accessibility of travel information about Canada is relatively high and students can easily find information for their travel.

Some aspects were not considered constraining by participants, reflected by low mean scores between 1 “Not at all” and 2 “A little”. It is interesting that, although very few participants indicated they preferred to travel alone when answering the travel party question, a lack of company was not a big travel constraint for them (i.e., “I don't have anyone to travel with”). One possible explanation might be that Chinese international students prefer to travel with others, and they usually find travel party easily. Additionally, food/diet, a lack of interesting destinations, a lack of Chinese language services, and health concerns are not constraining factors for the participants at all.

#### 4.4 Travel Motivations

Travel motivations were measured on a 4-point scale (1 “Not important at all”, 2 “Somewhat important”, 3 “Important”, 4 “Very important”). For the motivation scale, the Cronbach’s Alpha is 0.840, which indicates good internal consistency. The mean score and standard deviation of each individual travel motivation item was calculated. Additionally, Principle Components Analysis (PCA) was conducted to examine the hidden internal structure among motivation items in order to reveal major dimensions of travel motivations.

#### 4.5.1 Means and Standard Deviation

**Table 5**  
*Travel Motivations (Means & Std. Deviation)*

Motivation Variables	N	Mean	Ranking	Std. Deviation
To rest/relax	141	3.26	1	.743
To discover new places and things	141	3.23	2	.759
To visit Canada's natural attractions	141	3.14	3	.752
To escape from daily life	142	2.82	4	.970
To satisfy a sense of adventure	141	2.81	5	.902
To visit Canada's historical and cultural attractions	141	2.79	6	.844
To travel with existing friends/relatives who are staying in Canada	141	2.74	7	.873
To visit somewhere I had read about	141	2.74	8	.892
To be in a calm atmosphere	142	2.73	9	.900
To experience Western lifestyle	142	2.66	10	.914
To travel with friends/relatives who visit me from China	141	2.65	11	.994
To understand myself better	141	2.52	12	.975
To take lots of photographs	142	2.51	13	.973
To be with others and make new friends	141	2.45	14	.857
To visit friend(s) and relative(s) in Canada	142	2.24	15	.914
To visit somewhere my friends have not been	142	2.20	16	.957
To improve my English level	142	2.16	17	.958

The mean score and standard deviation of each motivation variable are showed in Table 5. In the table, variables are listed by the ranking of their mean scores from the highest to the

lowest. As shown in Table 5, the mean scores range from 2.16 to 3.26. Three motivation items are important: “To rest/relax”, “To discover new places and things”, and “To visit Canada’s natural attractions”. For these three items, they have the three highest mean scores (greater than 3.00). Also, these three items have the three lowest standard deviations, which indicates low variation of importance among different students. Besides these three, all other items have mean scores falling between 2 “Somewhat important” and 3 “Important” (ranging from 2.16 to 2.82), and the standard deviations range from 0.844 to 0.994. Some relatively unimportant motivation items are “To visit friend(s) and relative(s) in Canada”, “To visit somewhere my friends have not been”, and “To improve my English level”. These three items have the lowest three mean scores.

#### 4.5.2 Principal Components Analysis (PCA)

**Table 6**  
*Principal Components Analysis for Travel Motivations*

Components Motivation Variables	Factor Loading	Communality Score	Rotated Eigenvalue	Explained Variance
<b><i>Factor 1: Exploration and Learning</i></b>			2.662	19.01%
To understand myself better	0.733	0.618		
To visit Canada's natural attractions	0.678	0.532		
To experience Western lifestyle	0.670	0.601		
To visit Canada's historical and cultural attractions	0.652	0.530		
To discover new places and things	0.641	0.614		
<b><i>Factor 2: Memorable Activities and Achievement</i></b>			2.187	15.62%
To take lots of photographs	0.781	0.626		
To satisfy a sense of adventure	0.662	0.591		
To improve my English level	0.629	0.622		
To be with others and make new friends	0.574	0.555		
<b><i>Factor 3: Socialization and Prestige</i></b>			1.925	13.75%
To visit friend(s) and relative(s) in Canada	0.752	0.580		
To visit somewhere my friends have not been	0.639	0.592		
To travel with friends/relatives who visit me from China	0.636	0.468		
<b><i>Factor 4: Escape and Relaxation</i></b>			1.514	10.81%
To escape from daily life	0.805	0.695		
To rest/relax	0.753	0.663		
<b><i>Total variance explained</i></b>				<b>59.19%</b>

To identify potential motivational dimensions, Principal Components Analysis (PCA) was conducted for motivation variables, using the varimax rotation method. Missing values were replaced with means. It was found that Chinese international students exhibited four major motivational dimensions of conducting intra-Canada leisure travel. The four dimensions are 1) “Exploration and Learning”, 2) “Memorable Activities and Achievement”, 3) “Socialization and Prestige”, and 4) “Escape and Relaxation”.

The PCA results are shown in Table 6. It is a four-factor solution. The Kaiser-Meyer-Olkin (KMO) value is 0.791, which indicates that the sample is adequate for PCA. Also, the Bartlett’s Test of Sphericity is significant with a p-value less than 0.000, which indicates that these data are suitable for the PCA.

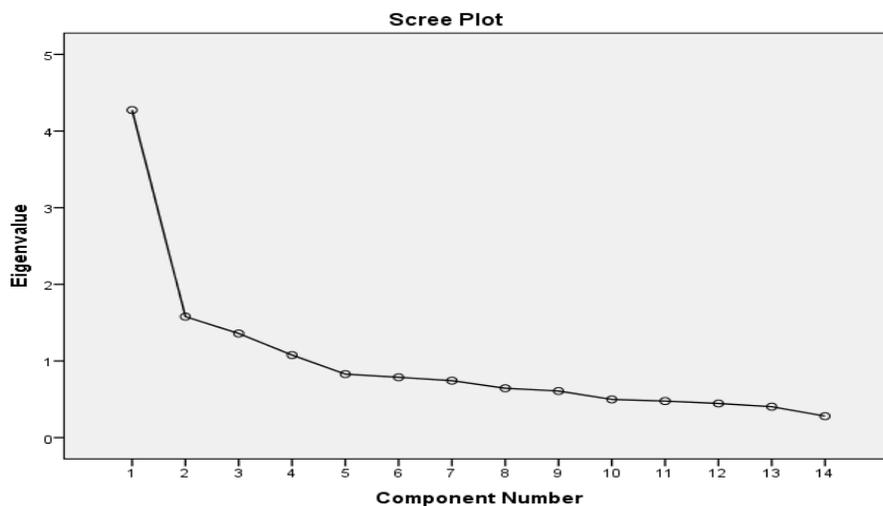


Figure 8. Scree plot of Principle components analysis.

The initial motivation scale had 17 variables (see Table 5 for the list of motivation variables). Considering variables’ communalities and factor loadings, and conceptual meanings of the overall structure, only 14 variables were kept in the final PCA results. The three variables dropped from the analysis are “To travel with existing friends/relatives who are staying in

Canada”, “To be in a calm atmosphere”, and “To visit somewhere I had read about”. Running PCA for all 17 variables, the communalities of “To travel with existing friends/relatives who are staying in Canada” (0.328) and “To be in a calm atmosphere” (0.378) were below 0.40; therefore, these two items were dropped. After dropping these two variables, the PCA was run again for the rest 15 variables. For this round of analysis, the variable “To visit somewhere I had read about” had a low factor loading (0.585) below 0.600, and its communality score (0.453) was also relatively low; however, the performance of this variable was not too poor. Considering these, another PCA was run with 14 variables removing “To visit somewhere I had read about”. The 14-variable and 15-variable results were compared regarding total explained variance, and the changes in factor loadings and communalities. From the comparison, it was decided that the 14-variable solution was better.

This four-factor solution is statistically and conceptually reasonable. When making factor retention decisions, several criteria were considered. First, according Kaiser’s (1960) rule of retaining factors with eigenvalues greater than 1 (K1 rule), only factors with an eigenvalue greater than 1 were extracted. Second, the cumulative percentage of variance of each solution was evaluated. According to Pett, Lackey, and Sullivan (as cited in Williams, Brown, & Onsmann, 2012), 50-60% total explained variance is common in humanities research. Because this study aimed at identifying the dimensions of travel motivations, it was determined that a percentage greater than 55% was acceptable. The cumulative percentage of variance explained by these four factors is 59.19%. The third criterion is Cattell’s (1966) scree test of retaining factors before the “scree” or the obvious break point. During the PCA, the scree plot of each situation was carefully examined to find any breaks or discontinuities. The scree plot (*Figure 8*) of this PCA solution clearly shows a break point at the fifth factor, which suggests that the four

factors before the break point should be extracted. Referring back to literature, most of the existing studies about student travel motivations reported retaining factors based on the K1 rule (e.g., Kim & Jogaratnam, 2002; Kim, 2007; Huang & Tian, 2013) and the cumulative percentage of variance (e.g., Kim & Jogaratnam, 2002; Kim, 2007).

Factor loadings of the variables range from 0.574 to 0.805. Only “To be with others and make new friends” (0.574) has a factor loading lower than 0.600. The communalities are also generally high (ranging from 0.468 to 0.695). Only “To travel with friends/relatives who visit me from China” (0.468) has a communality score lower than 0.500. Considering that this item has a moderate factor loading 0.636, it was retained.

Factor 1 was labeled as “Exploration and Learning”. This factor has an eigenvalue 2.662 and explains 19.01% of the variance. This factor consists of five variables: “To understand myself better”, “To visit Canada’s natural attractions”, “To experience Western lifestyle”, “To visit Canada’s historical and cultural attractions”, and “To discover new places and things”. Interpreting this travel motivation dimension, through intra-Canada leisure travel, Chinese international students want to have a better understanding about themselves, which indicates a motivation of self-reflection and self-learning. Besides learning about the self, participants are also motivated to explore and learn about the larger world through visiting Canada’s natural and historical/cultural attractions, experiencing Western lifestyle, and exploring new places and new things. These findings are also reflected in existing studies on Chinese international students, which used similar terms to describe Chinese students’ travel motivations, such as exploring new things, place and people, visiting attractions, experience cultures, and self-improvement (Ryan & Zhang, 2007; Liu & Ryan, 2011; Huang & Tian, 2013).

Factor 2 was labeled as “Memorable Activities and Achievement”, which has an eigenvalue 2.187 and explains 15.62% of the variance. Four motivation variables contribute to this factor highly: “To take lots of photographs”, “To satisfy a sense of adventure”, “To improve my English level”, and “To be with others and make new friends”. To interpret this dimension, Chinese international students are motivated by the opportunity to take lots of photographs, which helps document memorable activities (e.g., “to be with others and make new friends”) during the trip and mental feeling of achievement (e.g., “to satisfy a sense of adventure”, and “to improve their English level”) through the travel experience.

Factor 3 was named as “Socialization and Prestige”, which has an eigenvalue 1.925 and explains 13.75% of the variance. Under this factor, there are three motivation variables: “To visit friend(s) and relative(s) in Canada”, “To visit somewhere my friends have not been”, and “To travel with friends/relatives who visit me from China”. Chinese international students are motivated to travel in Canada as both visitors to friend(s)/relative(s) in Canada and the host for their friend(s)/relative(s) from China. This indicates the social needs of Chinese international students in the form of VFR tourism (as either the visitor or the host). This contains two aspects: VFRs and socialization. In terms of VFRs, as mentioned earlier, international students generate a significant number of VFRs to the study country (Michael, Armstrong, & King, 2003; Shanka & Taylor, 2003; Taylor, Shanka, & Pope, 2004; Min-En, 2006; Huang, & Tian, 2013), and Chinese students especially are more likely to host VFRs because of the cultural tradition of family reunion (Michael, Armstrong, & King, 2003). During the visit of family or friends, international students conduct tourism activities with them. While previous studies did not explicitly suggest that VFR was a main reason of Chinese international students’ travel, studies on Asian international students found that family or VFR purposes were important travel motivations for

students to take trips in the education service providing country (Kim & Jogaratnam, 2002; Shanka & Taylor, 2003). This study further reveals that hosting and visiting family and friends are important motivations for Chinese international students' intra-Canada leisure travel. Because Chinese international students do host VFRs during their studies and their VFRs contribute to local economy significantly (Liu & Ryan, 2011; Huang & Tian, 2013), the finding that hosting and visiting friend(s)/relative(s) as an important travel motivation has useful practical implication.

In terms of the other aspect of this travel motivation dimension – socialization, as discussed before about travel party, the participants usually preferred traveling with someone instead of traveling alone. Travel is an important social experience for international students (Huang, 2008b), and evidence has been found that Chinese international students engaged in a diversity of social activities during their trips in the study country (Liu & Ryan, 2011). Traveling with family or friend visitors, the social needs can be satisfied. Related to the needs of socialization, Chinese international students also travel for prestige, reflected by the motivation of visiting somewhere their friends have not been. While Chinese international students travel with their friends most of the time, sometimes they also want to feel the sense of prestige through traveling to different places that have not been visited by their friends. In other words, both the sense of social belonging through traveling with friends and the sense of prestige through being different from friends are important motivational factors for Chinese international students to travel in Canada.

Lastly, Factor 4 is “Escape and Relaxation”, which has an eigenvalue 1.514 and explains 10.81% of the variance. Two motivation variables fall under this factor: “To escape from daily life” and “To rest/relax”. Chinese international students take intra-Canada overnight leisure trips

for the purpose of escaping from daily life, or just simply for resting and relaxing. This motivation dimension is debatable in existing literature. While many researchers found that relaxation and escape were important motivations for Chinese international students to travel within the study host countries such as the UK and New Zealand (Ryan & Zhang, 2007; Liu & Ryan, 2011; Huang & Tian, 2013), some other researchers suggested the opposite. For example, Kim and Jogaratnam (2002) found that relaxation was not an important motivation for general Asian international students in the US. However, this difference might be explained by various reasons, such as study location (i.e., different study countries) and study sample (e.g., Chinese international students vs. general Asian international students). The findings of this study suggest that Chinese international students in Canada do travel for relaxation and escape.

#### **4.5.3 Travel Dimensions and Importance**

In Table 7, mean scores and PCA results are combined together. This table presents the composite means of the newly generated four motivation dimensions from PCA and the mean of each individual motivation item. The four dimensions are listed based on composite means from the highest to the lowest. Also, the individual variables under each dimension are listed based on mean scores descendingly.

As shown in Table 7, motivational dimension “Escape and Relaxation” has the highest composite mean score (3.04), which indicates that it is the most important one for the participants. This well reflects Crompton’s (1979) finding that pleasure vacation was essentially for a break from routine. According to Crompton, relaxation and escape were two important motives associated with pleasure vacationer’s socio-psychological status. Another motivational dimension “Exploration and Learning” is also perceived important with a composite mean 2.87. Again, this reflects Crompton’s (1979) suggestion that novelty and education as two important

aspects of cultural motives that were associated with destination rather than the socio-psychological status of the individual. These findings are also quite consistent with existing literature specifically on Chinese international students. Huang and Tian’s (2013) study among Chinese international students in the UK found that relaxation was the most important motivational dimension. Ryan and Zhang (2007) also found that many Chinese international students in New Zealand fell under the motivational clusters related to relaxation or exploration.

**Table 7**  
***Motivation Dimensions and Means***

Dimensions	Motivation Variables	Composite Means	Variable Means
<b><i>Escape and Relaxation</i></b>		3.04	
	To rest/relax		3.26
	To escape from daily life		2.82
<b><i>Exploration and Learning</i></b>		2.87	
	To discover new places and things		3.23
	To visit Canada's natural attractions		3.14
	To visit Canada's historical and cultural attractions		2.79
	To experience Western lifestyle		2.66
	To understand myself better		2.52
<b><i>Memorable Activities and Achievement</i></b>		2.48	
	To satisfy a sense of adventure		2.81
	To take lots of photographs		2.51
	To be with others and make new friends		2.45
	To improve my English level		2.16
<b><i>Socialization and Prestige</i></b>		2.36	
	To travel with friends/relatives who visit me from China		2.65
	To visit friend(s) and relative(s) in Canada		2.24
	To visit somewhere my friends have not been		2.20

Examining the individual motivational variables, among the top three ranking most important travel motivations as shown in Table 5 (“To rest/relax”, “To discover new places and things”, and “To visit Canada’s natural attractions”), two are under the motivation dimension “Exploration and Learning”, and one is under “Escape and Relaxation”. Comparatively, the other

two dimensions “Memorable Activities and Achievement” (2.48) and “Socialization and Prestige” (2.36) have relatively lower importance measured by the composite mean.

#### 4.6 Travel Information Sources

The results of measuring travel information sources on a 4-point scale (1 “Not important at all”, 2 “Somewhat important”, 3 “Important”, 4 “Very important”) are showed in Table 8 and Table 9.

In terms of reliability of the information source scales, the Cronbach’s Alpha of all offline and online information sources is 0.838. For only offline information sources, the Cronbach’s Alpha of the scale is 0.792. The Cronbach’s Alpha of the online information source scale is 0.733.

**Table 8**  
*Travel Information Sources – Online and Offline*

Information sources	N	Composite Mean	Mean	Ranking	Std. Deviation
<b>Offline</b>		2.38			
Recommendations from friends and relatives	139		3.09	1	.721
Previous visit experiences	139		2.87	2	.815
Travel guidebooks	139		2.54	3	.870
Printed travel brochures	139		2.27	4	.921
Travel magazines	139		2.16	5	.919
TV/Radio commercials	139		2.14	6	.853
Other magazines or newspapers	139		2.00	7	.860
Travel agents and tour operators	139		1.94	8	.853
<b>Online</b>		2.69			
Map or weather sites	139		3.09	1	.928
Online travel guides	139		3.07	2	.786
Official destination websites	139		3.05	3	.845
Blogs or online travel communities	139		3.00	4	.843
Hotel or other accommodation websites	139		2.81	5	.924
TripAdvisor	139		2.66	6	.975
Airline or other transportation websites	139		2.60	7	.922
Chinese websites (e.g., Qiongyou (穷游网))	139		2.53	8	1.058
Travel agency and tour operator websites	139		2.35	9	.859
Travel magazine websites	139		2.30	10	.865
Other magazines or news websites	139		2.13	11	.858

Table 8 shows offline sources and online sources separately. Sources under each category were ranked by the mean score from the highest to the lowest. Reflected by the composite mean score of each category, online sources (2.69) were perceived more important than offline information sources (2.38). This reflects the importance of internet. While this study found that internet was very important for Chinese international students to get travel information, some previous studies being done on international students suggested less importance of internet (Shanka, Ali-Knight, & Pope, 2002; Ryan & Zhang, 2007). This difference can be explained by the increasing popularity of internet during the past decade.

Regarding offline sources, “Recommendations from friends and relatives” (3.09) has the highest mean score. Six offline information sources’ mean scores are between 2 “Somewhat important” and 3 “Important”: “Previous visit experiences” (2.87), “Travel guidebooks” (2.54), “Printed travel brochures” (2.27), “Travel magazines” (2.16), “TV/Radio commercials” (2.14), and “Other magazines or newspapers” (2.00). “Travel agents and tour operators” (1.94) has the lowest mean score among offline information sources. The standard deviations of the offline sources range from 0.721 to 0.921.

In terms of online information sources, four sources’ mean scores are between 3 “Important” and 4 “Very important”: “Map or weather sites” (3.09), “Online travel guides” (3.07), “Official destination websites” (3.05), and “Blogs or online travel communities” (3.00). All other online sources have mean scores between 2 “Somewhat important” and 3 “Important”: “Hotel or other accommodation websites” (2.81), “TripAdvisor” (2.66), “Airline or other transportation websites” (2.60), “Chinese websites (e.g., Qiongyou (穷游网))” (2.53), “Travel agency and tour operator websites” (2.35), “Travel magazine websites” (2.30), and “Other magazines or news websites” (2.13). The standard deviations of the online sources range from

0.786 to 1.058. It was noticed that “Chinese websites (e.g., Qiongyou (穷游网))” has a relatively high standard deviation (1.058).

**Table 9**  
*Travel Information Sources – All Sources*

Information Sources	N		Mean	Ranking	Std. Deviation
	Valid	Missing			
Recommendations from friends and relatives	139	15	3.09	1	.721
<i>Map or weather sites</i>	<u>139</u>	<u>15</u>	<u>3.09</u>	<u>2</u>	<u>.928</u>
<i>Online travel guides</i>	<u>139</u>	<u>15</u>	<u>3.07</u>	<u>3</u>	<u>.786</u>
<i>Official destination websites</i>	<u>139</u>	<u>15</u>	<u>3.05</u>	<u>4</u>	<u>.845</u>
<i>Blogs or online travel communities</i>	<u>139</u>	<u>15</u>	<u>3.00</u>	<u>5</u>	<u>.843</u>
Previous visit experiences	139	15	2.87	6	.815
<i>Hotel or other accommodation websites</i>	<u>139</u>	<u>15</u>	<u>2.81</u>	<u>7</u>	<u>.924</u>
<i>TripAdvisor</i>	<u>139</u>	<u>15</u>	<u>2.66</u>	<u>8</u>	<u>.975</u>
<i>Airline or other transportation websites</i>	<u>139</u>	<u>15</u>	<u>2.60</u>	<u>9</u>	<u>.922</u>
Travel guidebooks	139	15	2.54	10	.870
<i>Chinese websites (e.g., Qiongyou(穷游网))</i>	<u>139</u>	<u>15</u>	<u>2.53</u>	<u>11</u>	<u>1.058</u>
<i>Travel agency and tour operator websites</i>	<u>139</u>	<u>15</u>	<u>2.35</u>	<u>12</u>	<u>.859</u>
<i>Travel magazine websites</i>	<u>139</u>	<u>15</u>	<u>2.30</u>	<u>13</u>	<u>.865</u>
Printed travel brochures	139	15	2.27	14	.921
Travel magazines	139	15	2.16	15	.919
TV/Radio commercials	139	15	2.14	16	.853
<i>Other magazines or news websites</i>	<u>139</u>	<u>15</u>	<u>2.13</u>	<u>17</u>	<u>.858</u>
Other magazines or newspapers	139	15	2.00	18	.860
Travel agents and tour operators	139	15	1.94	19	.853

Notes: Rank first by mean (descending), then by Std. Deviation (ascending)

Table 9 presents offline and online information sources together by the mean score (descending) and the standard deviation (ascending). Online sources were italicized and underlined in the table to be differentiated from offline sources.

Ranking all information sources by the mean score, four of the top five information sources (mean scores are greater than 3.00) are online sources (i.e., “Map or weather sites”, “Online travel guides”, “Official destination websites”, and “Blogs or online travel communities”), and one is offline source (i.e., “Recommendations from friends and relatives”).

The rest 14 information sources fall into one of the three categories: 1) relatively high mean score with high standard deviation; 2) relatively low mean score with also low standard deviation; 3) relatively mediate mean score with high standard deviation. None of the three situations indicate good results of perceived importance.

Consistent with the findings from previous studies on international students in various education destinations (Sung & Hsu, 1996; Frost & Shanka, 1999; Shanka, Ali-Knight, & Pope, 2002; Michael, Armstrong & King, 2003; Ryan & Zhang, 2007), friends and relatives' recommendations were the most important information source. Among all information sources, "Recommendations from friends and relatives" ranked the first. It has the highest mean score, which shows the highest importance measured by the average rating across all participants. Also, its standard deviation score is the lowest among all sources, which indicates the lowest variation from the average across all participants.

Additionally, participants rated three online information sources highly regarding the perceived importance: "Online travel guides", "Official destination websites" and "Blogs or online travel communities". The finding about "Official destination websites" is different from existing literature. Shanka, Ali-Knight and Pope (2002) suggested that destination marketing organizations (DMOs) were less utilized by international students in Australia. This difference might be due to the fact that Canada is making significant marketing efforts through DMOs. Also, another explanation might be that internet makes information more accessible, and it is easier for international students to find information through DMOs than early 2000s when Shanka et al.'s study was conducted.

It is interesting to see that while the general item "Blogs or online travel communities" was perceived very important, two other specific information sources of blogs or online travel

communities were rated moderately important - “Chinese websites (e.g., Qiongyou (穷游网))” and “TripAdvisor”. These two information sources represents online social communities where people provide reviews about tourism businesses or share travel experience or tips. The information source “Chinese websites (e.g., Qiongyou (穷游网))”, which refers to some popular travel websites in China, is specially added to the list considering that the study population is Chinese international students. “TripAdvisor” is popular in North America, and this item is examined because the studied context is Canada. It is also noticed that these two items’ standard deviations are the highest among all online and offline information sources, which suggests that their importance varies greatly from student to student. These results are interesting because it was previously assumed that Chinese international students in Canada would perceive Qiongyou and TripAdvisor important considering the popularity of these two websites; however, the results suggested only moderate importance with high variation. The interpretation of the higher importance of general “Blogs or online travel communities” and lower importance of specific websites might be because Chinese international students use diverse websites of blogs or travel communities besides these two.

It was also noticed that the information source “Previous visit experiences” was relatively important to Chinese international students. It has the second highest mean score of importance among offline information sources with low variation among participants. This item is the only internal information source on the list, and all other items are external sources. Schul and Crompton (1983) suggested that information search for leisure travel was predominantly external. Therefore, like previous tourism studies, this study mainly focused on external information sources. The limited previous research did not find previous visit experiences as important as what this study found among Chinese international students in Canada. For example,

an early study by Sung and Hsu (1996) found that international students in the US got travel information from past travel experience only sometimes. Ryan and Zhang (2007) found that for Chinese international students in New Zealand, previous experience was only of moderate importance. The gradually increasing importance of previous experiences since 1990s might be because students are becoming more and more experienced tourists. A final comment about the item “Previous visit experiences” is that it is important not only as an information source, literature suggested that the past experience or internal knowledge was also an information-search determinant influencing the use of information sources and the extent of information search (Manfredo, 1989; Chen & Gursoy, 2000; Gursoy & McCleary, 2004; Lehto, Kim & Morrison, 2006; Erawan & Krairit, 2011).

The item “Map or weather sites” is a little bit interesting. While this source has the same high mean score as “Recommendations from friends and relatives”, its standard deviation is relatively high, which suggests that the perceived importance of this source varies greatly among participants. Very limited evidence was found in existing literature regarding international students’ use of map for information. Sung and Hsu (1996) found that maps were frequently consulted for travel information among international students in the US, which is somewhat consistent with the discovered high perceived importance of map in this study. The finding is empirically reasonable, because maps helps better navigate around the destination during travel, and weather conditions influence travel experience significantly as well. Also, this finding could be related to the findings about travel constraints. As discussed in previous sections, it was found that weather was a high-level constraining factor, and transportation was also somewhat constraining. Relating these findings, travel constraints might be related to information search

behavior. Additionally, weather as a constraint varies for different students. This might be a reason why the importance of “Map or weather sites” varies highly.

In terms of tourism specific literature, while the item “Online travel guides” was perceived very important by participants, the importance of some other tourism dedicated information sources ranges from moderate to low. For example, “Travel guidebooks” was rated moderately important, and “Printed travel brochures” was perceived relatively unimportant. The standard deviation of “Printed travel brochures” is high, which suggests that the perceived importance of this information sources varies among different participants. These findings are consistent with the very limited existing literature about international students’ information source choices. Ryan and Zhang (2007) found that brochures and guidebooks were of low importance to Chinese international students in New Zealand. Based on these findings, the implication is that traditional tourism information literature like travel brochures or guidebooks might not be efficient in promoting tourism to Chinese international students in Canada.

Regarding professional travel consultants, participants perceived “Travel agents and tour operators” as the least important source. This is consistent with other researchers’ findings that travel agents were both of less importance to international students and less utilized by them (Frost & Shanka, 1999; Shanka, Ali-Knight & Pope, 2002). In comparison, the websites of travel agents and tour operators (“Travel agency and tour operator websites”) has a relatively moderate importance with moderate variation. These results again show the importance of internet. For Chinese international students in Canada, rather than going to the physical location of travel consultants, they somehow prefer to use the websites of travel consultants for travel information. Some researchers suggested that travel agencies should proactively and properly market their products to students (Field, 1999; Shanka & Taylor, 2002). Based on the research findings of this

study, it seems debatable whether this kind of marketing promotion by travel agencies would be efficient.

The low importance of travel consultants is also reflected by the highly rated importance of tourism service suppliers as direct information sources. “Hotel or other accommodation websites” and “Airline or other transportation websites” were rated relatively important. These suggest that Chinese international students are capable and experienced to use various tourism service providers directly for information rather than consulting tourism agencies in between. In the information era, the increasing use of direct tourism service supplier gradually replaces the function of tourism agencies in the middle, especially for young, educated, or experienced tourists. On the other hand, the standard deviations of “Hotel or other accommodation websites” and “Airline or other transportation websites” are high, which suggests that while some Chinese students use accommodation or transportation providers directly for information, some other students still do not.

When looking at traditional mass media, “TV/Radio commercials” was perceived relatively unimportant by participants. Also, “Other magazines or newspapers” and “Other magazines or newspapers websites” ranked low among all information sources in terms of the perceived importance. These findings are consistent with what was found by other researchers. Shanka, Ali-Knight and Pope (2002) found that in Australia TV and newspapers were less utilized by international students for travel information. Focusing on Asian international students in Australia, Michael, Armstrong and King’s (2003) study also suggested that newspapers were not important to this population. Specifically focusing on Chinese international students in New Zealand, Ryan and Zhang’s (2007) research found that TV and English newspapers were of low importance. However, Ryan and Zhang found that Chinese language newspapers were one of the

most important and frequently used information sources. This suggests that the language of the information source influences Chinese international students' information search.

While non-travel mass media (i.e., “TV/Radio commercials”, “Other magazines or newspapers” and “Other magazines or newspapers websites”) were perceived relatively unimportant, Chinese international students in Canada rated travel-specific mass media (i.e., “Travel magazine websites” and “Travel magazines”) more importantly. This suggests that Chinese international students prefer to consult travel-specific information sources when planning trips rather than getting information from general mass media. Also, the websites of traditional printed media (i.e., “Travel magazine websites” and “Other magazines or newspapers websites”) were perceived more important than printed media (i.e., “Travel magazines” and “Other magazines or newspapers”). Again, this shows the importance of internet.

#### **4.7 Correlations between Variables**

In this section, correlations between travel motivations, information sources, and travel intentions will be presented and discussed. Pearson Correlation was calculated using the composite mean scores of the four motivational dimensions and the two categories of information sources as well as the original mean scores of the four travel intentions.

Table 10 presents the results of the correlation analysis between travel motivations and information sources. As shown in Table 10, the correlations between all motivational dimensions and information sources are significant ( $p < 0.001$ ). The correlation coefficients are all positive ranging from 0.256 to 0.450, which suggests that the importance of the four motivational dimensions positively correspond to the perceived importance of offline and online information sources: an increase (or a decrease) in the importance of motivations correspond to an increase (or a decrease) in the importance of both online and offline information sources. As mentioned

earlier in the literature review, limited evidence was found regarding the influence of travel motivations on the choice of information sources. Studying the US senior travel market using structural equation modeling, Kim, Weaver and McCleary (1996) found that different motivational market segments (knowledge, escape, and kinship) exhibited different preferences of information source types (official source, media, and professional source). Similarly, Dey and Sarma (2010) investigated information use patterns among different motivation-based segments (nature-loving explorers, nature-loving vacationers, and change-seekers) by studying visitors to newly emerging tourist destinations of India’s northeast region. Studying Chinese international students in Canada, although this study did not examine the causal relationships between motivations and information sources, the significant correlations found between travel motivations and information sources further proved that these two aspects were significantly related in a different travel market.

**Table 10**  
*Correlations between Travel Motivations and Information Sources*

Motivational Dimensions	Offline Information Sources		Online Information Sources	
	<i>Pearson Correlation</i>	<i>Sig. (2-tailed)</i>	<i>Pearson Correlation</i>	<i>Sig. (2-tailed)</i>
Exploration and Learning	0.365**	.000	0.395**	.000
Memorable Activities and Achievement	0.449**	.000	0.450**	.000
Socialization and Prestige	0.306**	.000	0.256**	.000
Escape and Relaxation	0.273**	.000	0.307**	.000

Looking at the correlation coefficients, it was noticed that besides the motivational dimension “Socialization and Prestige”, all other three motivational dimensions had higher correlation coefficients with online information sources than offline sources. The interpretation for this is that students who were highly motivated by socialization and prestige needs also

tended to have higher perceived importance of socially related offline information sources such as friends and relatives' recommendation.

**Table 11**  
*Correlations between Travel Motivations and Travel Intentions*

<b>Motivational Dimensions</b>		<b>Travel Intentions</b>			
		<i>During my study, I intend to travel in Canada.</i>	<i>After finishing my study, I intend to travel in Canada.</i>	<i>After finishing my degree and returning to China, I intend to revisit Canada.</i>	<i>I intend to recommend Canada as a travel destination to my friends or family.</i>
Exploration and Learning	<i>Pearson Correlation</i>	0.139	0.197*	0.259**	0.283**
	<i>Sig. (2-tailed)</i>	.100	.019	.002	.001
Memorable Activities and Achievement	<i>Pearson Correlation</i>	0.113	0.139	0.194*	0.098
	<i>Sig. (2-tailed)</i>	.183	.099	.022	.246
Socialization and Prestige	<i>Pearson Correlation</i>	0.124	0.199*	0.126	0.129
	<i>Sig. (2-tailed)</i>	.142	.018	.138	.126
Escape and Relaxation	<i>Pearson Correlation</i>	0.134	0.123	0.018	0.146
	<i>Sig. (2-tailed)</i>	.113	.145	.829	.083

Table 11 shows the results of the correlation analysis between travel motivational dimensions and travel intentions. The motivational dimension “Exploration and Learning” has some significant correlations with post-graduate travel intention (i.e., “After finishing my study, I intend to travel in Canada.”), revisit intention (i.e., “After finishing my degree and returning to China, I intend to revisit Canada.”), and recommend intention (i.e., “I intend to recommend Canada as a travel destination to my friends or family.”). This indicates that highly exploration and learning motivated students correspondingly have higher travel intentions. For the motivational dimension “Memorable Activities and Achievement”, its correlation with revisit intention (i.e., “After finishing my degree and returning to China, I intend to revisit Canada.”) is

significant. The interpretation is that students who are motivated by memorable activities might tend to revisit Canada in the future to pick up their memory. This possible causal relationship needs to be further tested in future study. Another observed significant correlation is between “Socialization and Prestige” motivations and post-graduate travel intention (i.e., “After finishing my study, I intend to travel in Canada.”). One possible explanation for this is that students are busy during their study, and those who are highly motivated by the socialization and prestige might correspondingly have higher post-graduate travel intentions because they have more free time to socialize after finish their study.

**Table 12**  
*Correlations between Travel Intentions and Information Sources*

<b>Travel Intentions</b>	<b>Offline Information Sources</b>		<b>Online Information Sources</b>	
	<i>Pearson Correlation</i>	<i>Sig. (2-tailed)</i>	<i>Pearson Correlation</i>	<i>Sig. (2-tailed)</i>
During my study, I intend to travel in Canada.	0.073	.396	0.035	.685
After finishing my study, I intend to travel in Canada.	0.251**	.003	0.301**	.000
After finishing my degree and returning to China, I intend to revisit Canada.	0.178*	.037	0.084	.329
I intend to recommend Canada as a travel destination to my friends or family.	0.180*	.035	0.082	.341

Table 12 shows the results of correlation analysis between travel intentions and information sources. Post-graduate travel intention (i.e., “After finishing my study, I intend to travel in Canada.”) has significant positive correlation with both offline and online information sources. In other words, students who had high post-graduate travel intentions correspondingly perceived both offline and online information sources importantly. Also, both revisit intention (i.e., “After finishing my degree and returning to China, I intend to revisit Canada.”) and

recommend intention (i.e., “I intend to recommend Canada as a travel destination to my friends or family.”) are significantly correlated to offline information sources. Considering word-of-mouth or experience related sources (“Recommendations from friends and relatives” and “Previous visit experiences”) are the most dominant offline information sources, the significant positive correlations between revisit and recommend intentions and offline sources makes empirical sense.

#### **4.8 Group Comparisons of Motivations and Information Sources**

This section will discuss the findings about the group differences in motivations and information sources. Grouping variables examined were travel frequency, source of travel funds, and types of travel party. One-way ANOVA and independent sample *t*-test were used.

Examining the group differences between different travel frequency categories, some original frequency categories were combined to avoid small group sizes. “Not at all” and “Once a year or less” were combined into one category “One time a year or less”, and “4-5 times a year” and “6 or more times a year” were combined into another new category “4 or more times a year”. The original category “2-3 times a year” was kept. Table 13 and Table 14 show the results of one-way ANOVA analysis between travel frequency and travel motivations, and between travel frequency and information sources. As shown in the two tables, the mean score differences between travel frequency groups are very small, and F values are low as well. The *p* values of all comparisons are much greater than 0.05, which suggests that there are no significant differences between different travel frequency categories regarding their perceived importance of travel motivations and information sources. In other words, students who have higher or lower travel frequency in Canada do not have significantly different travel motivations or information source choices.

**Table 13**  
*ANOVA Analysis of Group Differences of Motivations by Travel Frequency*

<b>Motivational Dimensions</b>	<b>Groups</b>	<b>Mean</b>	<b>F</b>	<b>Sig. (p value)</b>
Exploration and Learning	One time a year or less	2.85	0.045	0.956
	2-3 times a year	2.86		
	4 or more times a year	2.90		
Memorable Activities and Achievement	One time a year or less	2.52	0.717	0.490
	2-3 times a year	2.43		
	4 or more times a year	2.61		
Socialization and Prestige	One time a year or less	2.42	0.764	0.468
	2-3 times a year	2.30		
	4 or more times a year	2.48		
Escape and Relaxation	One time a year or less	3.03	0.070	0.932
	2-3 times a year	3.03		
	4 or more times a year	3.09		

**Table 14**  
*ANOVA Analysis of Group Differences of Information Sources by Travel Frequency*

<b>Types of Information Sources</b>	<b>Groups</b>	<b>Mean</b>	<b>F</b>	<b>Sig. (p value)</b>
Offline Information Sources	One time a year or less	2.39	0.369	0.692
	2-3 times a year	2.34		
	4 or more times a year	2.45		
Online Information Sources	One time a year or less	2.76	0.565	0.570
	2-3 times a year	2.67		
	4 or more times a year	2.64		

The influences of travel funding sources on travel motivations and information sources were also examined. Table 15 is the results of comparing self-funded and non-self-funded

students' travel motivations. As shown in Table 15, only “Socialization and Prestige” has a  $p$  value slightly lower than 0.05 and the  $t$  score is relatively high (-1.985), which suggests that there is significant difference between self-funded and non-self-funded students. The two groups of participants do not differ significantly in all other three motivational dimensions. These results suggest that students who self-support their travel financially differ in the travel motivations related to socialization and prestige.

**Table 15**  
*Independent Sample T-test of Travel Funding Source Group Differences of Motivations (Self-funded or Not)*

Motivational Dimensions	Groups	Mean	t	Sig. (p value)
Exploration and Learning	Yes	2.79	-1.500	0.136
	No	2.95		
Memorable Activities and Achievement	Yes	2.41	-1.200	0.232
	No	2.55		
Socialization and Prestige	Yes	2.25	-1.985	0.049
	No	2.49		
Escape and Relaxation	Yes	3.03	-0.127	0.899
	No	3.04		

Table 16 shows the results of comparing self-funded and non-self-funded students' travel information sources. As shown in Table 16, the comparisons for both offline and online information sources have a  $p$  value greater than 0.05 and the group difference in mean score is very small, which suggests that there is no significant difference between self-funded and non-self-funded students regarding their perceived importance of information sources. This implies that whether students support their travel funds by themselves or not do not make a difference in their use of travel information sources.

**Table 16**  
*Independent Sample T-test of Travel Funding Source Group Differences of Information Sources (Self-funded or Not)*

<b>Types of Information Sources</b>	<b>Groups</b>	<b>Mean</b>	<b>t</b>	<b>Sig. (p value)</b>
Offline Information Sources	Yes	2.33	-1.059	0.291
	No	2.43		
Online Information Sources	Yes	2.66	-0.893	0.374
	No	2.73		

**Table 17**  
*Independent Sample T-test of Travel Funding Source Group Differences of Motivations (Parents/Relatives Funded or Not)*

<b>Motivational Dimensions</b>	<b>Groups</b>	<b>Mean</b>	<b>t</b>	<b>Sig. (p value)</b>
Exploration and Learning	Yes	2.96	3.038	0.003
	No	2.62		
Memorable Activities and Achievement	Yes	2.52	1.329	0.186
	No	2.35		
Socialization and Prestige	Yes	2.44	2.127	0.035
	No	2.15		
Escape and Relaxation	Yes	3.05	0.344	0.731
	No	3.00		

Table 17 presents the results of comparing travel motivations between parents/relatives funded students and others who do not gain parents/relatives' travel support. As shown in Table 17, the comparisons for "Exploration and Learning" and "Socialization and Prestige" have a *p* value lower than 0.05 and the *t* scores of those two dimensions are relatively high, which suggests that there is significant difference between these two groups of students in these two motivational dimensions. In other words, students who gain travel funding from parents or

relatives differ from other students in the travel motivations related to exploration/learning and socialization/prestige.

Table 18 is the results of comparing travel information sources between parents/relatives funded students and others who do not gain parents/relatives' travel support. As shown in Table 18, the comparisons for both online and offline information sources have a *p* value lower than 0.05 and the *t* scores are moderately high, which suggests that there is significant difference between these two groups of students in their perceived importance of travel information sources. In other words, students who gain travel funding from parents or relatives differ from other students in information search regarding both offline and online information sources.

**Table 18**  
*Independent Sample T-test of Travel Funding Source Group Differences of Information Sources (Parents/Relatives Funded or Not)*

Types of Information Sources	Groups	Mean	t	Sig. (p value)
Offline Information Sources	Yes	2.43	2.043	0.043
	No	2.23		
Online Information Sources	Yes	2.74	2.152	0.033
	No	2.56		

Table 19 shows the results of comparing travel motivations between students who commonly travel with other Chinese international students and others who do not. As shown in Table 19, the comparisons for all motivational dimensions have *p* value greater than 0.05 and the mean differences are small, which suggests that there is no significant difference between these two groups of students in travel motivations. In other words, students who usually travel with other Chinese international students do not differ from other students in travel motivations.

**Table 19**  
*Independent Sample T-test of Travel Party Group Differences of Motivations (with Other Chinese International Students or Not)*

Motivational Dimensions	Groups	Mean	t	Sig. (p value)
Exploration and Learning	Yes	2.90	1.119	0.265
	No	2.76		
Memorable Activities and Achievement	Yes	2.53	1.621	0.107
	No	2.31		
Socialization and Prestige	Yes	2.41	1.276	0.204
	No	2.22		
Escape and Relaxation	Yes	3.05	0.202	0.840
	No	3.02		

**Table 20**  
*Independent Sample T-test of Travel Party Group Differences of Information Sources (with Other Chinese International Students or Not)*

Types of Information Sources	Groups	Mean	t	Sig. (p value)
Offline Information Sources	Yes	2.41	1.274	0.205
	No	2.27		
Online Information Sources	Yes	2.71	0.828	0.409
	No	2.63		

Table 20 presents the results of comparing travel information sources between students who commonly travel with other Chinese international students and others who do not. As shown in Table 20, the comparisons for offline and online information sources have a *p* value greater than 0.05 and the mean differences are small, which suggests that there is no significant difference between these two groups of students in the perceived importance of offline and online information sources. In other words, students who usually travel with other Chinese

international students do not differ from other students in information search regarding the perceived importance of information sources.

Table 21 is the results of comparing travel motivations between undergraduate and graduate (including both Master’s and Doctoral students) students. As shown in Table 21, the comparisons for “Socialization and Prestige” have a *p* value lower than 0.05 and the *t* value is high, which suggests that there is significant difference between undergraduate and graduate students in this motivational dimension. In other words, students at different study level differ in the travel motivations related to socialization/prestige.

**Table 21**  
*Independent Sample T-test of Study Level Group Differences of Motivations (Undergraduate and Graduate)*

Motivational Dimensions	Groups	Mean	t	Sig. (p value)
Exploration and Learning	Undergraduate Students	2.95	1.290	0.199
	Graduate Students	2.81		
Memorable Activities and Achievement	Undergraduate Students	2.55	0.856	0.393
	Graduate Students	2.44		
Socialization and Prestige	Undergraduate Students	2.55	2.177	0.031
	Graduate Students	2.27		
Escape and Relaxation	Undergraduate Students	3.04	-0.011	0.991
	Graduate Students	3.04		

Table 22 presents the results of comparing travel information sources between undergraduate and graduate (including both Master’s and Doctoral students) students. As shown in Table 22, the comparisons for offline and online information sources have a *p* value greater than 0.05, which suggests that there is no significant mean difference between undergraduate and graduate students in the perceived importance of offline and online information sources.

**Table 22**  
*Independent Sample T-test of Study Level Group Differences of Information Sources (Undergraduate and Graduate)*

Types of Information Sources	Groups	Mean	t	Sig. (p value)
Offline Information Sources	Yes	2.48	1.504	0.135
	No	2.33		
Online Information Sources	Yes	2.76	1.229	0.221
	No	2.66		

To summarize the findings from one-way ANOVA and independent sample *t*-test, some significant differences were found between different groups in their perceived importance of motivations and information sources. Specifically, students with travel funding from parents/relatives differ from other students in motivational dimensions “Explorations and Learning” and “Socialization and Prestige” and both online and offline information sources. Additionally, students with travel funding from themselves or pursuing a graduate degree differ from others in “Socialization and Prestige”. While these differences were found, travel frequency seemed not to be a factor that differentiated travel motivations and information search. These findings suggested that certain general travel patterns or demographics (e.g., travel funding sources, and study level) might be factors that influenced some aspects of travel motivations and information sources.

#### **4.9 Summary of Research Findings**

It was found that Chinese international students in Canada exhibited similar general travel patterns compared to their counterparts in other nations. A significant percentage of Chinese international students took overnight leisure trips within Canada during their study quite often, and they usually took trips during long holidays or term breaks. Also, it was found that they had high intentions of traveling in Canada both during and after finishing their study, recommending

Canada as a tourism destination, and revisiting Canada after returning to China. These findings suggested the high potential of Chinese international students as a domestic travel market for Canada. Chinese international students did not prefer travel alone by themselves, and socialization was an important aspect of their travel. Compared to previous studies' finding of Chinese international students traveling with friends, this study specifically found that they traveled with friends who were also Chinese international students. Furthermore, like general young travelers, Chinese international students in Canada preferred independent travel far more than tour packages. The most constraining factors for Chinese international students' intra-Canada leisure travel were time and money. Related to money, student discounts and student travel packages were considered when making travel decisions. Canada's two most important characteristics - cold weather and the vast landscape - also imposed some constraints for students. A lack of information was not a concern, which indicated easy accessibility of Canadian travel information. Also, students were not constrained by food, lack of interesting destinations, and language barriers.

Examining travel motivations, four motivation dimensions were revealed: "Exploration and Learning", "Memorable Activities and Achievement", "Socialization and Prestige", and "Escape and Relaxation". Some important individual motivation items were "To rest/relax", "To discover new places and things", and "To visit Canada's natural attractions". Some relatively unimportant motivations were "To visit friend(s) and relative(s) in Canada", "To visit somewhere my friends have not been", and "To improve my English level". Suggested by both mean ranking and motivation dimensions, "Exploration and Learning" and "Escape and Relaxation" were two important travel motivation dimensions for Chinese international students in Canada. Previous studies also found that Chinese international students in other countries were

strongly motivated by exploring/learning and relaxation/escape purposes (Ryan & Zhang, 2007; Liu & Ryan, 2011; Huang & Tian, 2013).

Regarding travel information sources, generally the study findings echo findings from the very few previous studies about international students' travel information sources; however, new and different findings emerged. One of the similar findings to existing literature was that friends and relatives' recommendations were the most important information source for Chinese international students' intra-Canada leisure travel. Consistent with previous studies, professional travel consultants and offline tourism specific literature were of low importance to the students. The low importance of travel agencies was also indirectly reflected through students' preference of using accommodation and transportation service providers directly for information rather than using travel agencies in the middle. Also consistent with existing literature, traditional mass media such as TV, magazines and newspapers, were unimportant information sources for Chinese international students in Canada; however, the online versions of traditional mass media and travel-specific mass media were slightly more important information sources.

Some findings in this study provided different and new insights about information sources. One of the most obvious new finding was the growing importance of internet. Overall, online information sources were rated more important than offline sources. This is different from previous studies' suggestion of the low importance of internet, which might be explained by the increasing popularity of internet in recent years. Another new finding was that destination marketing organizations (DMOs) as an information source was found more important in this study than previous research finding in Australia suggested by Shanka, Ali-Knight, and Pope (2002). This might suggest that Canada is doing a relatively good job in promoting tourism through DMOs. The only internal information source examined in this study "Previous visit

experiences” was found very important for Chinese international students, while earlier studies in other nations found it of less importance. This somehow might be explained by students’ increasing travel experiences nowadays. Another new insight generated from this study was possible relationships between travel constraints and information sources. For example, it was observed that weather and transportation related constraints and the perceived importance of “Map or weather sites” might have some associated relationships, which could be a hint for future study exploring constraints and information sources relations. Also, it was found that general blogs or online travel communities were important travel information sources for Chinese international students; however, the importance of the major Chinese or North American travel community websites varied among students.

To conclude this paper, the final chapter will briefly summarize the study project by reviewing the study purposes, research methods, and research findings. Additionally, study implications, research limitations, and future research directions will be discussed.

## **Chapter 5: Conclusion**

### **5.1 Study Summary**

Identifying the research gap in international student travel in Canada and the information search behavior of the general international student population, this study conducted a case study among Mainland Chinese international students at the University of Waterloo, Canada. The purpose of this study was to develop a profile of a Canadian domestic travel market segment -- Chinese international students, by exploring their intra-Canada general travel patterns, travel motivations, travel information sources, and socio-demographic characteristics. Also, this study explicitly focused only on overnight intra-Canada leisure travel. In other words, same-day visit, outside of Canada travel, or business trips were not the studied behavior. The reason for this was to narrow and specify the study scope.

The research instrument used was a self-developed quantitative questionnaire with consultancy to existing literature, research committee, and university officials. Surveys were distributed online through SurveyMonkey. In total, 278 responses were returned, and 154 responses from Mainland Chinese international students were analyzed.

Examining travel motivations, information sources, and general travel patterns, it was found that Chinese international students in Canada generally exhibited some very similar travel characteristics compared to international students in other nations; however, this study also found some differences. In terms travel motivations, this study identified four motivation dimensions: 1) “Exploration and Learning”, 2) “Memorable Activities and Achievement”, 3) “Socialization and Prestige”, and 4) “Escape and Relaxation”. Previous studies also found similar results about Chinese international students in other nations. Additionally, this study found correlations between motivational dimensions and travel intentions; especially, highly

exploration and learning motivated students correspondingly have higher post-graduate travel, revisit, and recommend intentions.

While this study supported the limited research findings about international students' travel information search behavior, it also provided new and enriched understandings of this important tourist behavior. For example, the finding about internet as an important source of information was contradictory to previous research. While the importance of internet in students' information search was presumably apparent, there was no research evidence suggesting that. This study definitely filled in this gap. Also, the two types of information sources were found significantly and positively correlated to all four motivational dimensions. While limited studies have found relationships between travel motivations and information sources in other travel markets, this study not only provided further evidence showing the relationships but also revealed these relationships in a completely different travel market – Mainland Chinese international students in Canada. Another new finding is that information sources were found positively correlated to various travel intentions, and these correlations varied between online and offline sources. Finally, some factors related to demographics and general travel patterns seemed to be influential in information search. Specifically, significant differences were found in the perceived importance of both online and offline information sources between students who gain travel funds from parents/relatives and who do not gain support from this source. Also, students who identified parents or other family members as a common travel party type perceived offline information sources differently.

Regarding general travel patterns, most Chinese international students in Canada travel domestically at least once a year, and they usually took independent trips during long holidays or term breaks with other Chinese international students. Generally, they indicated high intentions

to travel in Canada as well as recommend and revisit the country; however, money and time were the two most constraining factors for their intra-Canada leisure travel.

## **5.2 Study Implications**

This study was initially driven by practical intentions. For the travel industry, university market could be profitable if the marketing is done properly, and the destinations with major sightseeing, shopping and cultural attractions should particularly market to international students (Field, 1999). As mentioned in the introduction section, in 2010, the estimated direct economic impact of tourism activities associated with all international students and their family/friends in Canada was CAD\$336,389,440, which is substantial; China was Canada's No.1 source of international students (Roslyn Kunin & Associates, Inc., 2012). As an exploratory study, this research found evidence of the great potential of Mainland Chinese international students as a profitable domestic travel market for Canadian tourism indicated by their high travel frequency and high travel/recommending/revisit intentions.

Also, this study provided some basic knowledge about this potential market. To attract this market, the findings about why they travel (motivations), what information sources they use, and what their general travel patterns (e.g., timing) are will be informative and helpful. For example, regarding why traveling, Chinese international students were strongly driven by the motivations related to "Exploration and Learning" and "Escape and Relaxation". Some very important specific motivations are to rest and relax, to discover new places and things, and to visit Canada's natural attractions. Based on these findings, Canadian tourism marketer can put more efforts and attention to promote relaxation, novelty, and natural beauty to Chinese international student market. In terms of travel information sources, since online sources were perceived as more important than offline sources, more marketing efforts should be made

through online promotion channels. However, the importance of word-of-mouth type sources such as friends and relatives' recommendation and previous visit experiences suggests that some important sources of information are also out of marketers' control. Furthermore, the significant positive correlations found between travel motivations and information sources also have important marketing implications. Although the causality of the relationships is not clear yet, it is understood that travel motivations and information search correspond to each other positively.

This study also has practical implications for the education sector. Researchers found relationships between overseas education and tourism: education-seekers not only generate tourism revenues during their study in the country, travel related motivations are also important factors influencing potential international students' overseas education destination choices (Michael, Armstrong, & King, 2003; Min-En, 2006; Glover, 2011b). While there is an understanding that a better coordination between tourism and educational institutions can help fully boost the host country's tourism and education potential, the involvement of the tourism sector in promoting a destination country to both existing and potential international students is low (Michael, Armstrong, & King, 2003; Shanka & Taylor, 2003; Taylor, Shanka, & Pope, 2004; Glover, 2011b). Like previous studies on international student travel in other nations, this study believes that a better promotion of Canada as a tourism destination will help promote the country as a study destination to Chinese international students. Based on this belief, this study hopes to provide marketing knowledge about the Chinese international student travel in Canada, which will be beneficial for international education promotion in the long run.

### **5.3 Study Limitations and Future Studies**

This study has some limitations which should be better addressed in future studies. While this study used place of origin and residency status as screening criteria to effectively identify

Mainland Chinese international students, it was understood that practically some other subgroups of Chinese students might also exhibit very similar travel characteristics compared to the international students identified by these two criteria. For example, Chinese students, who have just got their permanent residence status in Canada after years as international students, might be one subgroup similar to Chinese international students. In this sense, it was believed that some other factors (e.g., cultural influence) might be also very influential besides “study permit” or “citizenship”. Culturally, it is hard to draw a clear line between Chinese international students and other Chinese student subgroups. Cultural connection or closeness might be a more important factor than residency status, which is beyond the scope of this study. For future study, cultural connection can be a variable included, and it will be interesting to examine its influence on Chinese background students’ travel behavior.

Another study limitation is that graduate students dominate the study sample. The ratio of undergraduate students and graduate students at the University of Waterloo (study population) is much higher than the study sample. In other words, undergraduate students are under-represented in this study. Graduate students are generally more mature, and their work or study schedule is usually more flexible than undergraduate students. Therefore, their travel characteristics might be very different from undergraduate students. To better reflect and represent the study population, the future study needs to recruit the sample based on the study population ratio.

This is an exploratory study about Chinese international students in Canada, and the purpose was to develop a descriptive profile of their travel motivations, information sources, and general travel patterns, as well as to examine correlations between variables and group differences. This study found significant correlations between travel motivations and information sources, and future research can further examine causal relationships between these two aspects.

Also, this study is the first step in understanding Chinese international students' information search behavior through their perceived importance of various information sources. To study information sources, the actual choice of information sources during different stages of a trip is also important to be explored in future studies. As mentioned in literature review, besides information sources, information search needs and search determinants are two other major study areas of information search behavior. It will be interesting to further explore Chinese international students' information search behavior by studying the needs and determining factors of information search behavior. Finally, another direction for future study is to model the relationships among travel motivations, travel intentions and information sources. As shown in this study, some significant correlations were found among these variables, and it would be interesting to further examine the relationships.

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Appendix A  
Literature on International University Student Travel

Key Variables	Authors & Title Location & Sample Characteristics	Travel Motivations	Information Sources
<b>Sung &amp; Hsu (1996): International students' travel characteristics: an exploratory study</b>			
Information sources usage before & after destination selection; general and longest trip travel patterns; demographics & its relationship to other variables	A Midwestern university, US International students	✗	✓
<b>Hsu &amp; Sung (1997): Travel behaviors of international students at a Midwestern university</b>			
Demographics; travel patterns; travel activities	A Midwestern university, US International students	✗	✗
<b>Frost &amp; Shanka (1999): Asian Australian student travel preferences: an empirical study</b>			
Destination choice & visit purpose; details of stay; tour funding; influencing factors of destination choice	A university in Perth, Australia 62.7% Asian international students, 34.9% domestic Australian students	✓	✓
<b>Field (1999): The college student market segment: a comparative study of travel behaviors of international and domestic students at a Southeastern university</b>			
The propensity of college student travel; differences & similarities between domestic and international students, and among each group; travel patterns; likelihood of travel; revisit intention; use of travel agent; activities; demographics & its relationship to other variables	Clemson University, US 1501 domestic, 509 international	✗	✗
<b>Kim &amp; Jogaratnam (2002): Travel motivations: a comparative study of Asian international and domestic American college students</b>			
Importance & performance of travel motivations; nationality	Three Midwestern universities, US 63.7% Asian international students; 36.3% domestic American students	✓	✗
<b>Kim &amp; Jogaratnam (2003): Activity preferences of Asian international and domestic American university students: an alternate basis for segmentation</b>			
Travel activity preferences; preferences of transportation, accommodation & meal	Three universities, US 187 domestic American students; 328 Asian international students	✗	✗
<b>Michael et al. (2003): The travel behavior of international students: the relationship between studying abroad and their choice of tourist destinations</b>			
Reasons of study destination choice; travel patterns; travel expenditure; VFRs; future travel intentions	Several universities in Victoria, Australia Asian international students (30.1% Mandarin and Cantonese speakers)	✗	✓
<b>Shanka et al. (2002): Intrastate travel experiences of international students and their perceptions of Western Australia as a tourist destination</b>			
Travel experience & patterns (intrastate); impression of the destinations; funding sources	A university in Western Australia International students (90% Asian)	✗	✓

<b>Shanka &amp; Taylor (2003): International student graduation ceremonies: an opportunity for local tourism services providers</b>			
Characteristics of VFR tourism generated by graduation ceremonies; alumni revisit	A university in Western Australia International students (mostly Asian)	✓	✗
<b>Taylor et.al (2004): Investigating the significance of VFR visits to international students</b>			
Travel patterns & expenditures of VFR to international students; purpose of visit	Four universities in Western Australia International students (mostly Asian)	✗	✗
<b>Min-En (2006): Travel stimulated by international students in Australia</b>			
Destination image; study destination choice; travel experience; planning & characteristics of VFR	Griffith University, Australia International students (focus group)	✗	✓
<b>Ryan &amp; Zhang (2007): Chinese students: holiday behaviors in New Zealand</b>			
Travel patterns; travel motivations; activities; infrastructure preferences; information sources	University of Waikato, New Zealand Chinese international students	✓	✓
<b>Wang &amp; Davidson (2008): Chinese student travel market to Australia: an exploratory assessment of destination perceptions</b>			
Pre- and post- arrival perceptions of destination attributes of Australia	Australia Chinese international students	✗	✗
<b>Glover (2011a): A comparison between domestic and international students' trip characteristics: evidence from an Australian university</b>			
Travel patterns & trip characteristics; differences between domestic and international students	University of Queensland, Australia 74.8% domestic students; 25.2% international students (79.8% Asian)	✗	✗
<b>Glover (2011b): International students: linking education and travel</b>			
Destination image; study destination choice; travel intention & actual travel; study & travel	University of Queensland, Australia International students (79.8% Asian)	✓	✓
<b>Liu &amp; Ryan (2011): The role of Chinese students as tourists and hosts for overseas travel</b>			
Travel motivations; the attractiveness of travel activities; travel behavior of respondents and their VFR	Four universities, New Zealand Chinese international students	✓	✗
<b>Huang &amp; Tian (2013): An investigation of travel behavior of Chinese international students in the UK</b>			
Travel motivations; travel behavior patterns of past trips; the importance of Chinese international students to the VFR in the UK; overall satisfaction with travel experience	RenRen (Chinese social media website) Chinese international students in UK	✓	✗

## Appendix B Research Instrument

### Intra-Canada Leisure Travel of UW Students

#### Information Letter and Participant Consent

Title of Project: Chinese University Students' Travel Motivations, Travel Information Sources, and General Travel Patterns within Canada: A Case Study of Students at the University of Waterloo

You are invited to participate in a research study conducted by Ji Qiu, under the supervision of Professor Stephen L. J. Smith, the Department of Recreation and Leisure Studies of the University of Waterloo, Canada. The objectives of the research study are 1) to picture Chinese students' general travel characteristics in Canada, such as the frequency, season, and type of travel; 2) to explore factors motivating the targeted population to conduct leisure travel activities within Canada; 3) to examine the choice and perceived importance of various tourism information sources among this population; 4) to identify socio-demographic characteristics of the study population; 5) to explore possible correlations among study variables. The study is for a M.A. thesis.

If you decide to volunteer, you will be asked to complete a less than 10-minute online survey that is completed anonymously. Survey questions focus on travel-related aspects of your Canadian experience with mostly close-ended questions. Participation in this study is voluntary. You may decline to answer any questions that you do not wish to answer and you can withdraw your participation at any time by not submitting your responses. There are no known or anticipated risks from participating in this study.

In appreciation of your time, you will be eligible to win one of 30 prizes of \$5 in cash. Your odds of winning one of the prizes is based on the number of individuals participating in the study. We expect that approximately 200 individuals will take part in the study. Information collected to distribute the prizes will not be linked to the study data in any way, and this identifying information will be securely stored and later destroyed after the prizes being provided. The amount received is taxable. It is your responsibility to report this amount for income tax purposes.

It is important for you to know that any information that you provide will be confidential. All of the data will be summarized and no individual could be identified from these summarized results. Furthermore, the web site is programmed to collect responses alone and will not collect any information that could potentially identify you (such as machine identifiers).

This survey uses Survey Monkey™ which is a United States of America company. Consequently, USA authorities under provisions of the Patriot Act may access this survey data. If you prefer not to submit your data through Survey Monkey™, please contact the researcher at [uwstudentstravel@gmail.com](mailto:uwstudentstravel@gmail.com), and the researcher will email you a fillable PDF copy of the survey. The alternate method may decrease anonymity but confidentiality will be maintained.

The data, with no personal identifiers, collected from this study will be maintained on a password-protected computer database in a restricted access area of the university. As well, the data will be electronically archived after completion of the study and maintained for five years and then erased.

Should you have any questions about the study, please contact the investigator, at [uwstudentstravel@gmail.com](mailto:uwstudentstravel@gmail.com). Further, if you would like to receive a copy of the results of this study, please contact the investigator at [uwstudentstravel@gmail.com](mailto:uwstudentstravel@gmail.com).

I would like to assure you that this study has been reviewed and received ethics clearance through a University of Waterloo Research Ethics Committee. However, the final decision about participation is yours. If you have any comments or concerns resulting from your participation in this study, please feel free to contact Dr. Maureen Nummelin in the Office of Research Ethics at 1-519-888-4567, Ext. 36005 or [maureen.nummelin@uwaterloo.ca](mailto:maureen.nummelin@uwaterloo.ca).

Thank you for considering participation in this study.

#### **1. Consent of Participant:**

**With full knowledge of all foregoing, I agree, of my own free will, to participate in this study.**

- I agree to participate (please click "Next" at the bottom of this page to continue the survey).
- I do not wish to participate (please close your web browser now).

## Intra-Canada Leisure Travel of UW Students

### 1. What is your place of origin?

- Mainland China
- Hong Kong
- Macau
- Other (please specify)

### 2. What is your current registration status at UW?

- Studying to complete/obtain a UW degree
- Studying/working temporarily in UW - not to complete/obtain a UW degree (e.g., Exchange students)
- UW alumni (already graduated from UW)
- Other

### 3. What is your residency status in Canada?

- Student on a study permit
- Permanent resident
- Canadian citizen with dual citizenship
- Canadian citizen
- Other (please specify)

**1. In which year did you come to Canada to study?**

I came to Canada to study  
in the year:

## Intra-Canada Leisure Travel of UW Students

### 1. In which year did you first move to Canada?

I first moved to Canada in  
the year:

## Intra-Canada Leisure Travel of UW Students

### Section One: General Travel Characteristics in Canada (在加旅游特征)

In this section, I would like to ask about the general characteristics of your overnight leisure trips (过夜的休闲或探亲访友旅游) in Canada.

**1. In Canada, how often do you take overnight leisure trips? (overnight leisure trips: 以休闲娱乐或探亲访友为主要目的、且需要过夜的旅游)**

- Not at all
- Once a year or less
- 2-3 times a year
- 4-5 times a year
- 6 or more times a year

**2. (可多选) In Canada, when do you usually take overnight leisure trips? (overnight leisure trips: 以休闲娱乐或探亲访友为主要目的、且需要过夜的旅游)**

- Weekdays during a term
- Weekends (not including holidays) during a term
- Holidays (not including regular weekends) during a term
- Breaks between two terms
- Not applicable
- Other (if any, please specify)

**3. (可多选) In Canada, who do you usually take overnight leisure trips with?**

- Alone
- International students from China
- International students from other countries
- Canadian students
- Other friends who are not students
- Spouse/partner
- Parent(s) or other family members
- Not applicable
- Other (if any, please specify)

## Intra-Canada Leisure Travel of UW Students

### 4. In Canada, which type of overnight leisure trips do you prefer?

- Independent travel (自由行)
- As part of a tour (参加旅游团)

### 5. For the following statements, please rate your agreement level from 1 to 6, with 1 being "Strongly Disagree" and 6 being "Strongly Agree":

	1 (Strongly Disagree)	2	3	4	5	6 (Strongly Agree)
During my study, I intend to travel in Canada.	<input type="radio"/>					
After finishing my study, I intend to travel in Canada.	<input type="radio"/>					
After finishing my degree and returning to China, I intend to revisit Canada.	<input type="radio"/>					
I intend to recommend Canada as a travel destination to my friends or family.	<input type="radio"/>					

## Intra-Canada Leisure Travel of UW Students

### Travel Constraints (旅游阻碍)

**\* 1. Many people have concerns or barriers to take overnight leisure trips in Canada. To what extent are the following travel constraints (旅游阻碍) influence your travel decisions?**  
 旅行过程中，阻碍时有发生。下列旅游阻碍在多大程度上影响你在加拿大旅游的计划及活动？

	1 (Not at all)	2 (A little)	3 (Somewhat)	4 (A lot)
I don't have time to take a leisure trip in Canada.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I don't have enough money to take a leisure trip in Canada.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I don't have information about places to visit and activities to participate in Canada.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There are no areas in Canada I want to visit.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Areas I want to visit in Canada are too far away.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The weather isn't favorable.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There are no student discounts.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There are no student-specific travel packages.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I concern about my safety.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My health doesn't allow me to travel.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I don't have anyone to travel with.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A lack of Chinese language services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Accommodation (住宿)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Transportation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Food/diet (饮食)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Intra-Canada Leisure Travel of UW Students

### Section Two: Travel Motivations (旅游动机)

**\* 1. People take overnight leisure trips in Canada for different motivations. How important are each of the following motivations for you?**

人们出于各种动机进行过夜的休闲探亲访友旅行（**overnight leisure trips**）。下列各项旅游动机（**travel motivations**）对你在加拿大的旅游计划及活动有多重要？

	1 (Not important at all)	2 (Somewhat important)	3 (Important)	4 (Very important)
To rest/relax	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To escape from daily life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To visit Canada's natural attractions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To discover new places and things	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To be in a calm atmosphere	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To travel with friends/relatives who visit me from China	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To travel with existing friends/relatives who are staying in Canada	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To experience Western lifestyle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To understand myself better	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To visit Canada's historical and cultural attractions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To visit somewhere I had read about	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To visit friend(s) and relative(s) in Canada	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To visit somewhere my friends have not been	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To be with others and make new friends	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To satisfy a sense of adventure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To take lots of photographs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To improve my English level	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Intra-Canada Leisure Travel of UW Students

### Section Three: Information Sources for Leisure Trips (旅游信息来源)

**\* 1. People use various information sources to plan overnight leisure trips in Canada.**

**How important are the following offline information sources to you?**

人们使用各种信息来源 (**information sources**) 计划旅行。下列各项线下信息来源 (**offline information sources**) 对您在加拿大的旅游计划及活动有多重要?

	1 (Not important at all)	2 (Somewhat important)	3 (Important)	4 (Very important)
Recommendations from friends and relatives	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Previous visit experiences	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
TV/radio commercials	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Travel agents and tour operators	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Travel magazines	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other magazines or newspapers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Travel guidebooks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Printed travel brochures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other offline information sources (if any, please specify)

## Intra-Canada Leisure Travel of UW Students

### \*2. How important are the following online information sources to you for your trip planning in Canada?

下列各项线上信息来源（**online information sources**）对你在加拿大的旅游计划及活动有多重要？

	1 (Not important at all)	2 (Somewhat important)	3 (Important)	4 (Very important)
Official destination websites	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Travel agency and tour operator websites	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hotel or other accommodation websites	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Online travel guides	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Travel magazine websites	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other magazine or news websites	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Airline or other transportation websites	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Map or weather sites	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
TripAdvisor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Blogs or online travel communities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chinese websites (e.g., Qiongyou (穷游网))	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other online information sources (if any, please specify)

# Intra-Canada Leisure Travel of UW Students

## Section Four: Socio-demographics

Finally, I'd like to get a bit of information about who you are-to better understand how different people make travel plans. Your information will be kept confidentially and securely.

### 1. Gender

- Male
- Female

### 2. Age

- Under 18
- 18 to 21
- 22 to 25
- 26 to 29
- 30 or above

### 3. What is your current level of study at the University of Waterloo?

- Undergraduate
- Master's
- Doctoral
- Other

### 4. Your anticipated length of stay in Canada (in total):

- Less than 1 year
- 1-2 years
- 3-4 years
- More than 4 years
- Not sure

## Intra-Canada Leisure Travel of UW Students

5. (可多选)What are the major funding sources for your leisure trips in Canada:

- Self
- Parents or other relatives
- Friends
- Other
- Other (if any, please specify)

## Intra-Canada Leisure Travel of UW Students

### The END - Thank you for your participation!

Thank you for participating in the project "Chinese University Students' Travel Motivations, Travel Information Sources, and General Travel Patterns within Canada: A Case Study of Students at the University of Waterloo". Your feedback is extremely valuable.

In appreciation of your time, you will be eligible to win one of 30 prizes of \$5 in cash. If you would like to be put in a draw for a prize, please email the investigator at [uwstudentstravel@gmail.com](mailto:uwstudentstravel@gmail.com). The investigator will provide you with detailed information regarding the draw. Information collected to distribute the prizes will not be linked to the study data in any way, and this identifying information will be securely stored and later destroyed after the prizes being provided.

If you have any general comments or questions related to this study, please contact the investigator at [uwstudentstravel@gmail.com](mailto:uwstudentstravel@gmail.com). Also, if you would like a copy of the study results, please contact the investigator. The study results will be available by October 2014.

I would like to assure you that this study has been reviewed by, and received ethics clearance through a University of Waterloo Research Ethics Committee. If you have any concerns regarding your participation in this study, please contact Dr. Maureen Nummelin, the Director, Office of Research Ethics, at 1-519-888-4567, Ext. 36005 or [maureen.nummelin@uwaterloo.ca](mailto:maureen.nummelin@uwaterloo.ca).