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Soo Hyun Jun

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INTERNET USES FOR TRAVEL INFORMATION SEARCH AND TRAVEL PRODUCT PURCHASE IN PRETRIP CONTEXTS

By

Soo Hyun Jun

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ABSTRACT

INTERNET USES FOR TRAVEL INFORMATION SEARCH AND TRAVEL PRODUCT PURCHASE IN PRETRIP CONTEXTS

By

Soo Hyun Jun

Internet has replaced or decreased the role of many traditional travel planning tools, information or marketing communications, and purchase channels. Despite the fast growth in Internet use for travel information search, the population who purchases travel products online is only half of the online information searchers. In other words, consumers use the Internet differently as a functional information source and shopping outlet.

This research sought to identify differences and interrelationships between travel information search and product purchase behaviors. The problem statement of this research was to understand online travel planning strategies during the pretrip stage for a general population sample of Internet users, and to examine which factors significantly encourage or discourage online travel information search and product purchase during pretrip planning.

This study had five distinct findings: (1) travel information search and purchase behaviors during pretrip are different; (2) travel information search and purchase behaviors are different by country of residence; (3) people use various channels, such as online, offline and both on/offline, for travel information search and purchase; (4) travel information search and purchase behaviors were more likely to relate to a specific purpose of Internet use; and (5) patterns of travel information search and purchase vary by travel product categories.

Dedicated to my parents, who have offered me unconditional love and support throughout the course of this thesis.

ACKNOWLEDGEMENTS

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CHAPTER 1

INTRODUCTION

As the cost of computers has fallen, software improved, and the speed of telecommunications accelerated, the number of Internet users has progressively grown (Morrison et al., 2001). The Travel Industry Association of America (TIA) estimated that 54 percent of the 209.4 million American adults (113 million adults) used the Internet in 2002 (TIA, 2002). In 2002, an estimated 62 percent of the nearly 12.2 million Canadian households (7.5 million households) had at least one member who used the Internet regularly (Statistics Canada, 2003). Online shopping also has been a growing phenomenon all over the world, especially among countries with well-developed infrastructure for marketing activities over the Internet (Kau, Tang, & Ghose, 2003). According to a study from International Data Corp, more than 600 million people worldwide will have access to the Internet by the end of 2002 and have spent more than US$1 trillion buying goods and service online (Straits Time, 2002).

The Internet has replaced or decreased the role of many traditional travel planning tools, information or marketing communications, and purchase channels. All the leading hotel chains, car rental and airline companies currently have their own websites (Morrison et al., 2001) and these companies encourage customers to reserve products through these websites. All states in the U.S. have at least one Convention and Visitor Bureau (CVB) which hosts a website according to the *Directory of Members* of the International Association of Convention and Visitor Bureaus (IACVB, 2003). CVBs focus on Internet

marketing more than other marketing tools since the Internet offers distinct advantages in cost reduction, revenue growth, marketing research, and database development and customer retention that other marketing information systems have not achieved (Morrison et al., 1999).

A TIA study (2001) on Americans reported that Internet usage is higher among travelers than the general adult population. Thirty-one percent of American adults used the Internet for online travel planning in 2002 (TIA, 2002). Thirty percent of Canadian households used the Internet for travel information and arrangements in 2002 (Statistics Canada, 2003). However, despite the fast growth in Internet use for information search, the population who purchases travel products online is only half of the online information searchers. While 65 million Americans planned travel through the Internet, only 31 million purchased travel products such as hotel rooms or airline tickets through the Internet in 2001 (TIA, 2002). This trend suggests that many Internet users search for information at a variety of web-based sites, and then only buy at one site; or, that after online information search, consumers buy offline.

Three dynamics provide possible explanations for this trend of web information search for exceeding web purchasing. First, the gap between information search and purchase behaviors is a reflection of general Internet use. According to Intermarket Group (1999), 64 percent of Internet users have used the web to do "consumer research online" but only 32 percent have made at least one purchase online. Second, travelers' Internet use behaviors (i.e. searching for information rater than purchasing online) could be an extension of traditional

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travel planning and purchasing behaviors. Travel is primarily an intangible product and travelers associate many risks with purchasing travel products (Roehl & Fesenmaier, 1992). Therefore, travel planning can be information intensive and result in greater amounts of information searching and processing than the purchasing of other goods or services. Since the Internet has intensified the ease of collecting information, travelers may overplan or change their plans more often (Stewart & Vogt, 1999). Third, travel information seekers may not be acquiring information to solve a vacation problem, but instead using the Internet as a form of entertainment or social exchanges (Vogt & Fesenmaier, 1998). These cases suggest that the Internet has been used differently for information search and purchasing.

Research on general Internet usage, however, has neglected the study of different usages of information search and purchase. General Internet use studies have focused more on estimating the customer base and developing customer profiles (Card, Chen, & Cole, 2003). Travel-related studies on online behaviors have followed research approaches from general Internet use studies; accordingly, travel-related studies also focused mostly on studying travel information search and purchase behaviors using consumers' demographics as the primary explanatory variables (Davis, Bagozzi, & Warshaw 1989; Igbaria 1994; Hwang, Gretzel, & Fesenmaier 2002). Research has shown that age, education, gender, income and occupation influence travel-related Internet use (Bonn, Furr, & Susskind 1999; Card, Chen, & Cole 2003; Morrison et al. 2001; So & Morrison 2003; Weber & Roehl 1999). However, these studies of online

travelers' demographics have not explained the different uses of the Internet for travel information search and purchase behaviors.

Travel studies have expanded on those variables that may significantly influence online travel information search and purchase behaviors, such as travel characteristics and online behavioral characteristics. For example, Bonn and colleagues (1999) and Xu (1999) found that those using the Internet to search for travel information were more likely to stay in commercial lodging establishments and spend more money on travel. Weber and Roehl (1999) found travelers who purchased online were more likely to have used the Internet for at least four years. Few studies to date have separated online information search behaviors from online purchase behaviors and examined how independent variables affect online information search and online purchase. A possible reason that travel studies have neglected understanding different uses of the Internet for information search and purchase is that these studies have not specifically examined the Internet as "a functional information source" and "shopping outlet." With the ever expanding Internet, a study on Internet usage for travel information search in combination with travel product purchase is timely.

Statement of the Problem

The problem statement of this research was to understand online travel planning strategies during the pretrip stage for a general population sample of Internet users, and to examine which factors significantly encourage or discourage online travel information search and product purchase during pretrip

planning. Specifically, the study sought to answer the following research questions:

1. What factors significantly affect online travel information search during pretrip?

2. What factors significantly affect online travel product purchase during pretrip?

3. How do online travel information search and online travel product purchase interrelate with each other?

The conceptual model of travel planning and travel behaviors for this research (Figure 1-1) was modified from *a conceptual model of case-based vacation planning* by Stewart and Vogt *(1999)*. *Travel planning and travel behaviors* are separated into three stages, pretrip, trip and post-trip. *Travel information search* occurs during all three stages as an ongoing process. *Travel product purchase* occurs from pretrip to the end of a trip, also as an ongoing process. *Trip specific behaviors* occur during a trip. These variables of *travel planning and travel behaviors* are shown to be interrelated, and they are affected by travelers' *general background* including tourists' *demographics, travel experience and general Internet use*. This research focused on pretrip behaviors because travel information search and product purchase during pretrip are often an important part of vacationing (Stewart & Vogt, 1999). *General background* and *trip specific behavior during trip* were examined as elements which influence travel information search during pretrip (Figure 1-2). These same elements were also

Figure 1-1
Conceptual Model of Travel Planning and Travel Behaviors
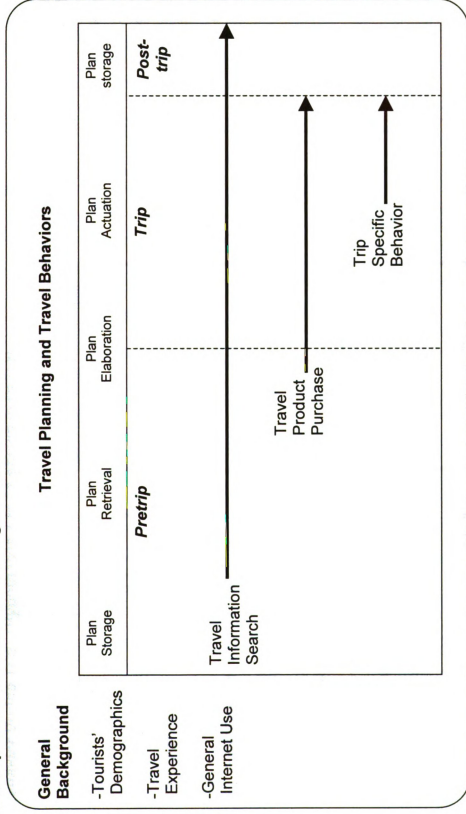
Travel Planning and Travel Behaviors

General Background	Plan Storage	Plan Retrieval	Plan Elaboration	Plan Actuation	Plan storage
-Tourists' Demographics		*Pretrip*		*Trip*	*Post-trip*
-Travel Experience					
-General Internet Use	Travel Information Search				
		Travel Product Purchase			
				Trip Specific Behavior	

Modified from a conceptual model of case-based vacation planning by Stewart and Vogt (1999).

Figure 1-2
Relationships between *General Background, Travel Planning Behavior During Pretrip* and *Trip Specific Behavior During Trip* (*Hypotheses 1 to 11 shown in italics*)

General Background

Tourists' Demographics:
a. Country of residence
b. Gender
c. Age
d. Education

Travel Experience:
a. Number of vacation trips in recent 12 months

General Internet Use:
a. Years of Internet use
b. Time spent online per week
c. Speed of Internet connection
d. Credit card use for online purchase

Travel Planning Behavior During Pretrip

Travel Information Search

Online   **6 travel products for the latest trip**
Offline   -accommodations
           -activities
On/offline -attractions
           -car rentals
None   -events
           -flights

Travel Product Purchase

Online   **6 travel products for the latest trip**
Offline   -accommodations
           -activities
On/offline -attractions
           -car rentals
None   -events
           -flights

Internet Use for the Latest Trip:
a. Planning horizon for Internet use for the latest trip

Internet Use for the Latest Trip:
b. Time spent online for the latest trip

Trip Specific Behavior During Trip

Latest Trip Behavior:
a. Length of stay of the latest trip
b. Destination of the latest trip
c. Season of the latest trip

H 1, 2 and 3
H 4, 5 and 6
H 7
H 8
H 9
H 10
H 11

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examined for travel product purchasing. The results were compared to understand different uses of the Internet for travel information search and travel product purchase during pretrip. The interrelationship between travel information search and travel product purchase during pretrip were also examined to understand the different roles of travel behaviors.

Purpose of the Study

The purpose of this analysis was to clarify similarities and differences in trip planning and travel behaviors between online and offline information searchers and purchasers. This study will help tourism marketers develop better strategies for providing information desired by potential travelers and direct travelers to the most efficient information search and purchase channels. This is important because many tourism-related organizations are severely reducing staff and offices that assist consumers in planning or purchasing offline because of budget cuts and a shift in investing in technology. This is causing firms to instead drive consumers to use the Internet for information searching and purchasing. In short, this research on information search and purchase behaviors can help government agencies who traditionally provide the most comprehensive travel information, as well as companies in the travel industry, better understand the growing role of the Internet in vacation decision making.

Significance of the Study

Travel planning research has studied decision behaviors by different stages. Fesenmaier and Jeng (2000) showed three different decision stages that consist of core, secondary and *en route* sub-decisions: core and secondary decisions are considered in advance of the actual trip and *en route* sub-decisions are considered during the trip. Stewart and Vogt (1999) showed travelers' different planning behaviors by three stages, during pretrip, during trip and during post-trip (Figure 1-1). Research has suggested that planning during pretrip is an important part of vacationing (Stewart & Vogt, 1999). Travel is inherently intangible and experiential; therefore, consumers depend heavily on learning about products during pretrip mainly to evaluate the nature of the consumption experience that the product can offer and how well the information and the product obtained during the pretrip can meet the expectations of the anticipated experience (Hoc & Deighton 1989; Hwang, Gretzel, & Fesenmaier 2002). The Internet can make travel easier by collecting information and purchasing travel products prior to a trip. Currently, the Internet is available during a trip in a very limited way (e.g., some hotels provide access); therefore, consumers collect travel information through the Internet mostly before leaving. Few studies have examined travel behaviors across three stages (during pretrip, trip and post-trip). This research focused on travel information search and travel product purchase behaviors during pretrip.

Published research (Bonn, Furr, & Susskind 1999; Card, Chen, & Cole 2003; Joines, Scherer, & Scheufele 2003; Korgaonkar & Wolin 1999; Morrison et al.

2001; So & Morrison 2003; Weber & Roehl 1999) has focused primarily on identifying and studying elements which affect travel information search or travel product purchase with only a few studies investigating the interrelationship between travel information search and product purchase behaviors.   Stewart and Vogt (1999) showed that people often cope with uncertainty by preparing plans for more than one set of expected conditions, knowing that they will not actuate all of their trips. Stewart and Vogt (1999) found travelers tend to over-plan and consider a more diverse set of travel companions, transportation, accommodations, and activities than they actually act on. An Internet study showed a gap between the number of online travel information searchers and online travel product purchasers suggesting that over-planning may occur with web users (e.g. 64 million Americans searched for information online for travel planning, and 42 million Americans purchased travel products online in 2003) (Greenspan, 2004). This study will provide a clearer understanding of the interrelationship of information search and purchasing as it compares and examines correlations between information search and purchase behaviors.

Several studies have shown that the most popular travel product purchased online has been airline tickets, followed by accommodations and car rentals, with package tours purchased the least (Card, Chen, & Cole 2003; Mast, Shim, & Morgan 1991; Morrison et al. 2001). Stewart and Vogt (1999) found that consistency of travel planning and actuating behaviors is different by travel products (e.g., activities were shown to be the most changeable plan elements of a vacation, as they tended to be dropped from plans with relatively few

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additions). This suggests that traveler's information search and purchase behaviors are different by travel products. In this study, travel information search and travel product purchase behaviors are detailed by six travel products, accommodations, activities, attractions, car rentals, events and flights.

Delimitations

The study was delimited to the following:

1. A secondary dataset funded by Canadian Tourism Commission (CTC). This dataset was analyzed with the assistance of Scott Meis and SECOR, a consulting firm.

2. Those US and Canada residents who have web access and were willing to complete the online survey instrument. This involved, first, using the Internet for travel or vacations (i.e., planning, researching, reserving, or paying credit card for travel product), and second, taking a vacation in 12 months between November 2000 and October 2001. The sample was further qualified by those residents who completed the survey instrument.

3. Travel information search and product purchase behaviors were delimitated to the latest trip in the past 12 months. The behaviors studied occurred during the pretrip stage of a latest trip per the respondent, but the survey was conducted after this latest trip.

4. Only three *general background* topics were selected from the literature to examine their influences on travel information search and product purchase: (1) tourists' demographics, (2) travel experience, and (3) General Internet use

(Figure 1-2). There are many more background variables to study such as values, geography, or interests.

5. Four channels to search for travel information and purchase travel products were: (1) online, (2) offline, (3) both online and offline (on/offline), and (4) not applicable (none) (Figure 1-2).

6. Six travel products for the latest trip were selected to examine different travel information search and product purchase behaviors: (1) accommodations, (2) activities, (3) attractions, (4) car rentals, (5) events, and (6) flights (Figure 1-2). Other products might have been included, such as cruises and tours, clothes and other articles for the trip, or restaurants.

7. Statistical inferences were delimited to descriptive statistics (cross-tabulation), comparisons of differences in travel information search and travel product purchase (Chi-square tests) and measures of association between travel information search and travel product purchase (Contingency Coefficient tests).

Limitations

The study was limited by the following factors:

1. The sample of residents was limited to those who have Internet access, used the Internet for travel or vacation purposes, and traveled or had vacation experience(s). Therefore, this sample may not be representative of all US and Canada residents. This was minimized by matching the respondent dataset to national demographic profiles of Americans and Canadians. Canadian data were

weighted by the primary data collectors on education and marital status to better represent the national demographic profile.

2. Travel information search and travel product purchase behaviors happened during pretrip contexts, but the survey was conducted after the trip. In addition, those information search and purchase behaviors were defined for the latest trip in the past 12 months. Accordingly, respondents may have used a variety of benchmarks to recall these experiences and may have misrepresented behaviors (Vogt, 1993).

3. Data were collected in 2001; therefore, the study may not represent Internet use levels in 2004. However, according to a trend study by TIA (2004), the number of American online travelers from 2001 to 2003 is quite similar (Figure 1-3). The growth of the Internet use in Canada has slowed down from 2001 to 2002 (Statistics Canada, 2003) (Figure 1-4). Therefore, it may be assumed that the time gap in data collection between year 2001 and 2004 may not be critically different.

4. As this study uses secondary data, the original physical survey questionnaire and coding book were provided in a report format. Since the secondary data analysts were not involved in collecting the data, the data analysis may be less than perfect in fully understanding the meaning and accuracy of the data and the meaning (or definition) of words used for data collection (Trochim, 2001). To minimize the potential error or bias from original data analysis, the primary researcher, Mr. Scott Meis, was consulted in this research analysis.

Figure 1-3
Number of Online Travelers in the U.S.

Millions of U.S. online travelers
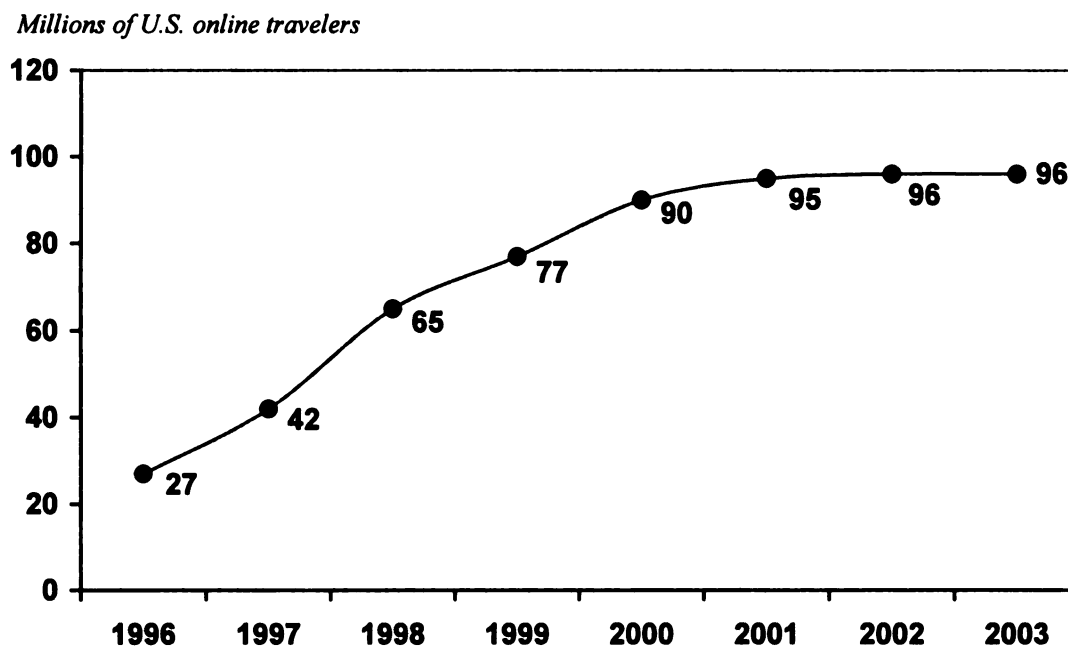
Figure 1-4
Percent of Canadian Households with Internet Use

Percent of Canadian households with at least one regular Internet user
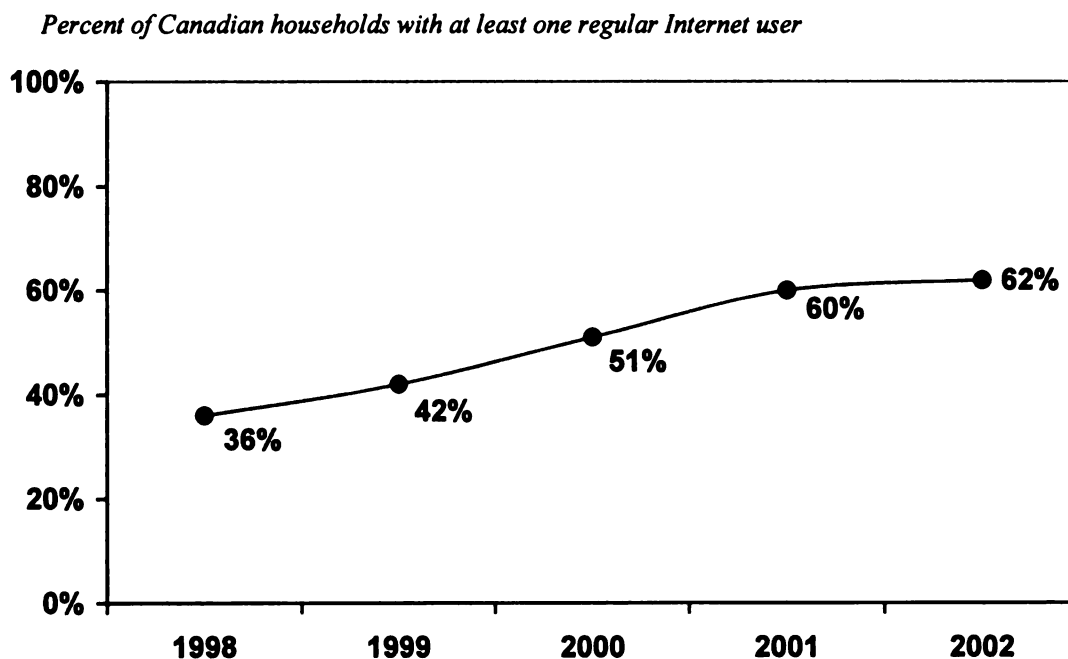
Hypotheses

The study was designed to test the following hypotheses (Figure 1-2):

Past research suggests that travel information search behaviors in a pretrip context differ by tourists' demographics, travel experience and general Internet use. This study will test for these types of significant predictions.

1. *Tourists' demographics* significantly differ in regard to travel information search behaviors during pretrip.

    1a. *Country of residence* differs on information search behaviors.

    1b. *Gender* differs on information search behaviors.

    1c. *Age* differs on information search behaviors.

    1d. *Education* differs on information search behaviors.

2. *Travel experience* significantly differs in regard to travel information search behaviors during pretrip.

    2a. *Number of vacation trips in recent 12 months* differs on information search behaviors.

3. *General Internet use* behaviors significantly differ in regard to travel information search behaviors during pretrip.

    3a. *Years of Internet use* differs on information search behaviors.

    3b. *Time spent online per week* differs on information search behaviors.

    3c. *Speed of Internet connection* differs on information search behaviors.

3d. *Credit card use for online purchase* differs on information search behaviors.

Past research suggests that travel product purchase behaviors in a pretrip context differ by tourists' demographics, travel experience and general Internet use. This study will test for these types of significant predictions.

4. *Tourists' demographics* significantly differ in regard to travel product purchase behaviors during pretrip.

4a. *Country of residence* differs on product purchase behaviors.

4b. *Gender* differs on product purchase behaviors.

4c. *Age* differs on product purchase behaviors.

4d. *Education* differs on product purchase behaviors.

5. *Travel experience* significantly differs in regard to travel product purchase behaviors during pretrip.

5a. *Number of vacation trips in recent 12 months* differs on product purchase behaviors.

6. *General Internet use* behaviors significantly differ in regard to travel product purchase behaviors during pretrip.

6a. *Years of Internet use* differs on product purchase behaviors.

6b. *Time spent online per week* differs on product purchase behaviors.

6c. *Speed of Internet connection* differs on product purchase behaviors.

6d. *Credit card use for online purchase* differs on product purchase behaviors.

Travel information search and/or travel product purchase behaviors in a pretrip context may differ by Internet use for the latest trip during pretrip. This study will also test for these types of significant predictions.

7. *Internet use for the latest trip* planning significantly differs in regard to travel information search behaviors during pretrip.

7a. *Planning horizon for Internet use for the latest trip* differs on information search behaviors.

7b. *Time spent online for the latest trip* differs on information search behaviors.

8. *Internet use for the latest trip* planning significantly differs in regard to travel product purchase behaviors during pretrip.

8a. *Planning horizon for Internet use for the latest trip* differs on product purchase behaviors.

8b. *Time spent online for the latest trip* differs on product purchase behaviors.

Past research suggests that trip specific behaviors during trip is influenced or strongly related to pretrip travel information search and/or travel product

purchase behaviors (Stewart & Vogt, 1999). This study will test for these types of significant predictions.

9. *Latest trip behavior* significantly differs in regard to travel information search behaviors during pretrip.

    9a. *Length of stay of the latest trip* differs on information search behaviors.

    9b. *Destination of the latest trip* differs on information search behaviors.

    9c. *Season of the latest trip* differs on information search behaviors.

10. *Latest trip behavior* significantly differs in regard to travel product purchase behaviors during pretrip.

    10a. *Length of stay of the latest trip* differs on product purchase behaviors.

    10b. *Destination of the latest trip* differs on product purchase behaviors.

    10c. *Season of the latest trip* differs on product purchase behaviors.

The final hypothesis tests the interrelationship between travel information search and travel product purchase behaviors across travel products.

11. *Travel information search* behaviors and *travel product purchase* behaviors during pretrip are associated, however, not perfectly.

Definition of Terms

The following terms are defined to clarify their use in the study:

Travel information search: "...the motivated activation of knowledge stored in memory or acquisition of information from the environment...a search can be either internal or external. Internal search is based on the retrieval of knowledge from memory, while the other consists of collection of information from the marketplace" (Engel et al., 1995).

Travel product purchase: Dictionary.com defines "purchase" as "to obtain in exchange for money or its equivalent; and to acquire by effort." Since travel products are intangible and experiential, purchasing travel products does not mean to own goods as a result of exchanging with money. In tourism, making a reservation for travel products is considered as a purchase.

Travel planning: "...the use of information, the formation and change of preferences, and the process of judging of alternatives..." (Stewart & Vogt, 1999, p. 80). "...an individual's reasoned attempt to recognize and define goals, consider alternative actions that might achieve the goals, judge which actions are most likely to succeed, and act on the basis of those decisions" (Hoc, 1988). Travel planning during pretrip includes travel information search and travel product purchase.

Online: The Office of Information Technology of Ohio State defines "online" as "a term that has commonly come to mean "connected to the Internet." It also is used to refer to materials stored on a computer (e.g., an online newsletter) or to a device like a printer that is ready to accept commands from a computer."

Organization of the Thesis

Beyond the introduction chapter of this thesis, four additional chapters will examine travel information search and product purchase behaviors during pretrip across six travel products. Chapter 2 contains the literature review. The literature review describes travel characteristics, travel information search behaviors and travel product purchase behaviors, specifically, in the Internet environment. The theory of case-based vacation planning will be examined to understand how case-based vacation planning can be applied to online travel behaviors. Variables influencing travel information search and product purchase will be examined. A methodology section, Chapter 3, will discuss advantages and disadvantages of the use of secondary data. It will also describe the procedures of original data collection and management. It will then explain how the original data were modified for this analysis and test hypotheses. Chapter 4 will describe the results. Finally, in Chapter 5, the findings and implications of the study will be discussed, and recommendations will be made for future research in this area.

CHAPTER 2

REVIEW OF THE RELATED LITERATURE

The literature related to travel information search, decision making and product purchase on the Internet has evolved over the past five years. Past research has focused on developing elements that influence online information search and purchase. Few studies have specifically examined the growing Internet use as a functional information source and a shopping tool. In this chapter, literature related to travel information search and product purchase behaviors and elements that affect online travel information search and product purchase behaviors was reviewed. The review of literature is organized into the following topics: (1) travel information search and travel product purchase, (2) the Internet and travel, (3) the theory of case-based vacation planning, (4) variables influencing online travel information search and product purchase, and (5) a summary.

Travel Information Search and Product Purchase

When travelers realize they need to make a decision (i.e., purchase travel products), internal information search begins, such as considering previous experiences and knowledge (Chen & Gursoy 2000; Fodness & Murray 1997; Vogt & Fesenmaier 1998), as well as active external information search, such as looking for travel guide books, brochures, websites and so on (Beatty & Smith 1987; Gursoy & McCleary 2004). Understanding when and how travelers search for information is important for marketing management decisions, design of

effective communication campaigns, and service delivery (Srinivasan 1990; Wilkie & Dickson 1985). During travelers' information acquisition, marketers can influence travelers' buying decisions (Schmidt & Spreng, 1996). Therefore, information search has been one of the most examined subjects in consumer tourism studies (Schmidt & Spreng, 1996).

Travel information search and product purchase behaviors have been examined differently from other goods' information search and purchase behaviors because of travel characteristics. Travel planning can be information intensive, and result in greater amounts of information search and processing, than the purchasing of other goods or services as travel is inherently experiential (Hwang, Gretzel, & Fesenmaier, 2002). While consumer goods typically comprise of a well-defined range of tangible/searchable attributes and, to a lesser extent, of intangible/experiential aspects, travel is a complex bundle of experiences with only a small set of tangible components (Hwang, Gretzel, & Fesenmaier, 2002). Travel products cannot be experienced even when an individual purchases the products, until they actually take the trip. Hence, travelers often feel anxiety and uncertainty about the travel product/service outcomes and feel they have no or little control on purchasing travel products/services (Weiermair, 2000). To reduce uncertainties, many travelers value information acquired during vacation planning (McCleary & Whiteny, 1994).

Purchasing travel products involves a relatively high level of perceived risk since possibilities for prepurchase evaluation are limited because of travel product characteristics such as intangibility and perishability (Nysveen, 2003).

For example, when a traveler purchases a travel product (travel experience), the person may receive a picture or brochure and a few pieces of paper with confirmation numbers, but the actual experience will not happen until his/her trip begins. In addition, travel products cannot be owned; therefore, there is nothing left except memories after using (experiencing) the product.

The Internet and Travel

The Internet represents a recent technological innovation that has had a profound impact on all facets of people's lives (Weber & Roehl, 1999). A study conducted by CyberAtlas reported that Personal Computer (PC) use in American homes had surpassed the 50 percent mark, and that 90 percent of PC users were online, in 2000 (Pastore, 2000a). TIA (2004) reported that more than 64 million Americans (67 percent of American Internet users who travel) used the Internet in 2003 to acquire information on destinations or to check prices or schedules. Thus, nearly two-thirds of the 95.8 million American Internet users who travel consulted online resources for trip planning. As the Internet is becoming a mainstream technology, the Internet is considered as an important medium for business (Joines, Scherer, & Scheufele, 2003). Tourism is among the most prospering industries in the electronic marketplace (Nault & Dexter, 1995). From the perspective of travel product suppliers, the Internet can eliminate the obstacles created by geography, time zones, and locations because it enables the suppliers to communicate directly with customers (Connolly, Olsen, & Moore 1995; Morrison et al. 2001). In addition, Internet

marketing can significantly reduce distribution and reservation costs through lower agent commissions and savings on reservation staff time and costs (Morrison et al., 2001).

Consumers find the Internet is convenient, and it is easy to find competitive pricing. According to a consumer shopping study, about 67 percent of the online shoppers agreed that convenience was the main reason they bought via the Internet, and 41 percent mentioned price as the second most important reason (Chiger, 2001). The Internet has made it easier for travelers to store, collect and exchange information. As travel planning is information intensive and results in greater amounts of information search and processing, more and more travelers are utilizing the Internet and online resources for their information needs (Gursoy & McCleary, 2004). Moreover, it is likely that because of low cost and ease of retrieving the information from online sources, more and more consumers will expand information search efforts through the Internet than to try to remember past experiences even for people who are highly familiar with the destination (Gursoy & McCleary 2004; Stigler 1961).

Some consumers may not purchase online due to the risks associated with Internet shopping, such as a possibility of credit card fraud, the inability to touch or feel something before buying it, and the problems with returning products that fail to meet expectations (Bhatnagar, Misra, & Rao 2000; Wee & Ramachandra 2000). Despite the fast growth of Internet use in travel information search, information searchers do not always purchase travel products online. According to a TIA study, while 65 million Americans planned travel through the Internet,

only 31 million Americans purchased travel products from the Internet in 2001(Greenspan, 2004). Morrison and colleagues (2001) found reasons for not buying on the Internet included perceptions of the ambiguity of reservation procedures, uncertainty of reservations and cancellations, doubts about online security, and difficulty of making reservations online. However, once people become comfortable with purchasing online, they are more receptive to buying other travel products online (Morrison et al., 2001). Moreover, various and almost limitless information through texts, images and Video on Demand (VOD) on the Internet can reduce the uncertainty about travel products and their purchases.

In summary, the Internet has intensified travel information search behaviors because of the conveniences offered. However, there are barriers to Internet purchasing such as consumers' perceived disadvantages in the purchasing process. Therefore, a gap between online travel information search and online travel product purchase is expected. Three possible explanations were provided. First, many Internet users search for more travel information than they need for purchasing a travel product as an extension of travel planning and purchasing behaviors. Stewart and Vogt (1999) found that, during pretrip, travelers tended to overplan and actuated fewer elements than they planned. Second, after online travel information search, consumers buy travel products offline as a reflection of general Internet use. Intermarket Group (1999) found that 64 percent of Internet users have used websites for information search, but only 32 percent have actually made at least one purchase through the Internet. Third,

people buy during trip (e.g., en-route or upon arrival). Through these three

explanations, it can be assumed that individuals used the Internet differently for

travel information search and travel product purchase.

Theory of Case-based Vacation Planning

The theory of case-based vacation planning was developed by Stewart and

Vogt (1999) from *the theory of case-based planning* by Hammond (1989).

Stewart and Vogt (1999) studied the extent to which the case-based planning

model captures the mechanisms of travel planning and, if so, what it reveals or

explains about travel planning behavior. The Internet has changed travel

planning and decision behaviors. This research studied how the Internet

changes travel information search and travel product purchase behaviors during

pretrip. *The theory of case-based vacation planning* is applied to examine

differences of travel information search and travel product purchase in the

Internet environment (Figure 1-1).

This section includes: (1) case-based vacation planning and the Internet, (2)

three stages of travel, and (3) travel products.

Case-based Vacation Planning and the Internet

The theory of case-based planning is the idea of planning as remembering

and learning (Hammond, 1989). Individuals practice case-based planning as

storing cases in memory, which then serve as the initial knowledge base for

tackling a new planning situation (Stewart & Vogt, 1999). In the planning

process, the constant problems arising from goal interaction, sequencing, and environmental change, lead to the development of the theory of case-based planning (Hammond, 1989). Case-based planners predict problems based on their own experiences so that they can match plans that avoid previous problems (Hammond, 1989). Thus, individuals learn specific repairs or solutions to planning problems that can be applied again when similar problems arise (Hammond, 1989).

Case-based planners retain many of the assumptions underlying earlier models, that is, that the planner has a store of knowledge together with a means of accessing it and uses rules for applying knowledge (Stewart & Vogt, 1999). But case-based planning specifies a different and more efficient means of plan production than the create-and-debug method (Stewart & Vogt, 1999). Rather than constructing a new plan from basic rules each time one is needed, case-based planners retrieve and then elaborate on previous plans (Hammond, 1989). The Internet has enhanced sharing individuals' travel experiences. Hence, individuals are able to store various cases for predicting problems that possibly occur during their trip, and they prepare solutions through the Internet. Before the Internet appeared, individuals learned primarily from their own past travel experiences or stories from their friends or relatives, or those in their "physical" social network.

One characteristic of plan formation derived from case-based planning is the expectation that people anticipate and prepare for contingencies, rather than assuming that everything will go as planned (Berger & Dibattista 1992; Stewart &

Vogt 1999). Traditional planning acknowledges that people often cope with uncertainty by preparing plans for more than one set of expected conditions, knowing that they will not actuate all of their plans (Stewart & Vogt, 1999). Stewart and Vogt (1999) found three unique characteristics of planning from case-based planning: the plans developed by all planners will be subject to change as they are actuated; people plan more than they will actuate, as they compensate for congestion and uncertainty by overplanning; and experience teaches people how to plan.

These three scenarios that Stewart and Vogt (1999) reported using case-based vacation planning supports online travel planning behaviors. The Internet has made it easier for individuals to collect travel information before leaving home. Hence, travelers can easily overplan and choose one option in their final decision. As huge amounts of information have become available through the Internet, information searchers are required to develop their own planning strategies to be able to access and use their information to solve their problem and reach their goal. The more that people use the Internet for travel and other purchases, the more they will learn how to plan travel effectively.

Three Stages of Travel

Steward and Vogt (1999) found case-based planning specifies a sequence of activities that the planner undertakes. Stewart and Vogt (1999) developed a conceptual model of case-based vacation planning with three sequential stages in relation to vacation planning, from pretrip through post-trip (Figure 1-1). Travel

is comprised of opportunities to make many choices. Travelers can choose a destination, travel companions, lodging, restaurants, activities, modes of transportation, and so on (Stewart & Vogt, 1999). Because of complex decisions of these choices, the travel decision process can be described as having a "net structure" (Fesenmaier & Jeng, 2000). A net structure means that every aspect of each decision affects and is being affected by other decisions (Fesenmaier & Jeng 2000; Mountinho 1987). Fesenmaier and Jeng (2000) showed three different, but sequential, decision stages, that are similar to the three sequential stages from case-based vacation planning. The decision stages by Fesenmaier and Jeng (2000) consist of core, secondary and *en route* sub-decisions: core decisions are usually planned ahead of time, in detail, and include sub-decisions of primary destination, date/length of trip, travel party, accommodation, route, and budget; and secondary sub-decisions are tentative decisions and include secondary destination(s) choice, selections of activities, and choosing attractions to visit. Even though secondary sub-decisions may be considered in advance of the actual trip, they are moderately flexible in order to accommodate possible changes in an itinerary (Fesenmaier & Jeng, 2000). *En route* sub-decisions are choices that are considered during the trip. Woodside and King (2001) separated vacations into three stages including "before trip," "during trip" and "after trip." These researchers have coined this sequencing as a purchase consumption system, which is a sequence of purchases the consumer undertakes where the purchase of one travel product may lead to the purchase of others. In conclusion, travel behaviors are separated into three stages, and they are

sequent and interrelated. Travel information search, decision making and product purchase behaviors may need to be studied separately in three stages of travel (i.e., during the pretrip, trip and post-trip).

Information search and purchase during pretrip are often an important part of vacationing (Stewart & Vogt, 1999). Travelers' aversion to risk, desire to save money, or the need to satisfy the preferences of a diverse group of travel companions leads them to engage in deliberate considerations and detailed advance arrangements, thus, planning takes on great importance (Fesenmaier & Lieber 1988; Roehl & Fesenmaier 1992; Stewart & Vogt 1999). The Internet has intensified pretrip information searching and purchasing. Various and almost limitless information through texts, images and VOD on the Internet has encouraged travelers to plan and purchase prior to a trip. For example, currently, people can check images of a hotel room and read other customers' experience in the hotel through the Internet. This information makes people comfortable to purchase (make a reservation) the hotel room prior to a trip.

Travel Products

According to the case-based vacation planning, trip plans are subject to change when they are actuated, and people plan more than they will actuate (Stewart & Vogt, 1999). Stewart and Vogt (1999) found that the amount of information searched for and purchasing patterns differed by travel products. Travelers tended to overplan and consider a more diverse set of travel companions, transportation, accommodations, and activities than they actually

act on (Stewart & Vogt, 1999). Specifically, activities were shown to be the most changeable plan elements of a vacation, as they tended to be dropped from plans with relatively few additions (Stewart & Vogt, 1999). Other research supports this finding. Fodness and Murray (1999) suggest features of each product clearly affect information search. Woodside and MacDonald (1993) presented a general system framework for understanding different tourists' choice by travel products, such as choice of destinations, accommodations, transportation, subdestinations, attractions, and activities. Woodside and McDonald (1993) concluded that these travel product decisions could be different but interdependent with each other. As shown through research studies, travelers are likely to have different planning and purchasing strategies by travel products.

Researchers have studied which travel products were purchased online, and found online travelers tended to purchase airline tickets first, followed by accommodation and car rentals, with package tours being purchased the least (Card, Chen, & Cole 2003; Morrison et al. 2001). Card, Chen, and Cole (2003) explained that airline ticket services are transactional services involving a purchase rather than an exchange of information, whereas package tours involve more information seeking and are generally more expensive than airline tickets. Morrison and colleagues (2001) categorized flights, lodging and car rentals as low-risk travel products for online purchasing, and travel packages as a high-risk product. Consumers feel more comfortable purchasing low-risk travel products online and online sites concentrate on these items (Card, Chen, & Cole, 2003).

For example, travel-related web sties such as Priceline.com and Travelocity concentrate on selling airline tickets, lodgings, and car rentals and turned a profit mostly from these products and not high-risk travel packages (Forrester Research, 2001). While examining popular travel products for online purchasing, researchers uncovered a sequential pattern. Morrison and colleagues (2001) found there was an online purchasing sequence for most information searchers: airline tickets or hotel rooms first, followed by other travel products. Those who have purchased airline tickets or hotel rooms online represent a lucrative potential customer group for purchasing other travel products online (Morrison et al., 2001). The literature suggests future study topics including which travel products are searched or purchased online during the three different stages (pretrip, during trip and after trip); how online information search and purchase behaviors are different by travel products; and which elements affect online information search and purchase behaviors across different travel products.

This section explained case-based vacation planning. In addition, it discussed how the Internet has enhanced case-based vacation planning. Stewart and Vogt (1999) found other characteristics of travel behavior through case-based vacation planning: travel behaviors occur in three sequential stages; and travel behaviors differed by travel products.

Variables Influencing Online Travel Information Search and Online Travel

Product Purchase

Researchers, to date, have focused on the study of elements that significantly influence online travel information search or/and purchase. Consumers' demographic profiles have been considered as the primary explanatory variables (Davis, Bagozzi, & Warshar 1989; Hwang, Gretzel, & Fesenmaier 2002; Igbaria 1994). Travel characteristics and general Internet use behaviors have also been studied as explanatory variables. This research reviews these variables and their influence on online travel information search and travel product purchase. Other variables, that have been studied on travel planning and decision making behaviors before the Internet, are also reviewed and added as explanatory variables.

This section includes: (1) tourists' demographics, (2) travel experience and latest trip behavior, and (3) general Internet use and Internet use for the latest trip.

Tourists' Demographics

In tourism research, demographics have been considered as important variables for explaining travel behaviors such as destination choice and information search (Hwang & Fesenmaier, 2004). Research has shown that age, household income, occupation and education significantly influence travel-related Internet use (Bonn, Furr, & Susskind 1999; Card, Chen, & Cole 2003; Morrison et al. 2001; So & Morrison 2003; Weber & Roehl 1999) (Table 2-1). Bonn, Furr,

and Susskind (1999) concluded that Internet users (vs. non Internet users) who searched for travel-related information were more likely to be younger than 45 years of age and college-educated owners of computers. Weber and Roehl (1999) segmented online information search and online purchase behaviors in their study. Respondents who searched for information online (vs. offline) were likely to be 26-35 years old. Online purchasers were likely to be 26-35 years old, as well as slightly older (36-55 years old). In both information search and purchase, online users were likely to be more educated (4-year college degrees or more), had higher income ($50,000 or more), and held management/ professional/ computer related occupations.

When the Internet was introduced, Internet users were dominated by males, whites, more highly educated and higher income individuals, and those who held professional/ computer-related jobs (Table 2-1). Demographic profiling of Internet users and nonusers was very important to understand the use of this new innovation. Since its introduction, there have been changes in the demographics of Internet users. Early studies found gender and race were important influencing elements in Internet use (Mirror 1995; Pitkow & Kehoe 1996; Yankelovich Partners 1995). A few years later, Korgaonkar and Wolin (1999) found gender not to be significantly correlated with online information search, but still significantly related to online purchase. Other recent research also suggests that gender and race did not significantly influence between online travel information search and nonsearch and/or between online travel purchase and nonpurchase (Bonn, Furr, & Susskind 1999; Morrison et al. 2001;

Table 2-1
Variables Significantly Influencing Online Travel Information Search or Travel Product Purchase

Author	Focus on...	Compare between...	Age	Education	Gender	Household Income	Occupation	Race	Internet users/online users/electronic shoppers/DMO web users are likely to be...
Mirror (1995) Yankelovich Partners (1995) Pitkow and Kehoe (1996)	Internet use	Internet users	N/S[a]	Yes	Yes	Yes	Yes	Yes	Male, higher socio-economic status, and white
Bonn, Furr and Susskind (1999) (survey conducted in 1996)	Information search	Internet user vs. nonuser	Yes	Yes	N/S[a]	Yes	N/S[a]	N/S[a]	Less than 45 years of age, college educated owners of computers, and $40,000 or more household income
Weber and Roehl (1999) (survey conducted in 1997)	Information search	Online vs. offline	Yes	Yes	No	Yes	Yes	No	26 to 35 years of age, 4 year college degree or more, higher incomes ($50,00 or more), and management, professional or computer related occupations
	Purchase	Online vs. offline	Yes	Yes	No	Yes	Yes	No	26 to 55 years of age, 4 year college degree or more, higher incomes ($50,00 or more), and management, professional or computer related occupations

a. N/S means variables were not studied.
b. N/A means variables were asked on the survey, but, there was no result in the article.
c. N/A means there were only descriptive results between shoppers and nonshoppers, no significance test occurred.

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Table 2-1
Variables Significantly Influencing Online Travel Information Search or Travel Product Purchase (continued)

Author	Focus on...	Compare between...	Age	Education	Gender	Household income	Occupation	Race	Internet users/online users /electronic shoppers/DMO web users are likely to be...
Morrison et al. (2001)	Information search/ purchase	Online vs. offline	N/A[b]	Yes	N/A[b]	N/A[b]	N/S[a]	N/S[a]	A Master's degree holder (vs. a Bachelor's degree)
Card, Chen and Cole (2003) (survey conducted in 2001)	Purchase	Electronic shoppers vs. nonshoppers	N/A[c]	N/A[c]	N/A[c]	N/A[c]	N/A[c]	N/S[a]	40 to 49 years of age, undergraduate degree or more, male, $70,000 or more household income, and educator or consultant
So and Morrison (2003) (secondary data analysis)	Information search	DMO web users vs. nonusers	Yes	Yes	No	Yes	N/S[a]	N/S[a]	In the age groups under 50, higher levels of education (college degree), and $50,000 or more household income

a. N/S means variables were not studied.
b. N/A means variables were asked on the survey, but, there was no result in the article.
c. N/A means there were only descriptive results between shoppers and nonshoppers, no significance test occurred.

So & Morrison 2003; Weber & Roehl 1999). Recently, research has shown that profiles of the average adult American Internet user are becoming similar to the profiles of the average American (Pastore, 2001a). Internet users are becoming more mainstream, since more people with older age, moderate incomes and moderate educational backgrounds use the Internet (Pastore, 1999). Joines, Scherer, and Scheufele (2003) concluded that online information searchers' demographics continue to move toward the general population, and online purchasers' demographics are becoming more similar to online information searchers.

Even though Internet users' demographic profiles have been studied, relatively little academic research has studied how national culture affects the way people plan vacations and purchase travel products (Money & Crotts, 2003). One possible reason is that researchers who studied online travel behaviors may think national citizenship has provided little value in explaining tourist behavior and attitudes (Crotts & Litvin, 2003). The role of national cultural characteristics in affecting tourist behavior has been investigated in cultural behavior, consumer satisfaction, and international marketing studies. In these studies, researchers have tried to empirically discover what, if any, differences actually exist in the behavior of tourists of various nationalities (Pizam & Sussmann, 1995). Researchers found an individual's cultural belonging and heritage affect the way in which people experience and interpret tourism goods and services, but it is also likely to influence decisions regarding choices of vacations and destinations (Weiermair, 2000). Crotts and Erdmann (2000) and Crotts and Litvin (2003)

found national cultural differences are one of many factors influencing consumer decision making. Assigning participants' national culture measure, based on their country of residence, provides a more robust means to account for cultural differences than does either country of birth or country of citizenship (Crotts & Erdmann 2000; Crotts & Litvin 2003).

For national destination marketing organizations, understanding travelers' different behaviors by national culture is significant for international marketing. Traditional research and marketing have treated American and Canadian travelers as being similar. They live in the same continent (North America), have similar immigration histories, and use the same language, English. Cultural difference studies on travel behaviors have generally been conducted between Americans, Asians, and Europeans. A few studies were found that examined differences in travel behaviors between American and Canadian travelers. Woodside and Jacobs (1985) found that travel behavior, socio-economics, and benefits-realized between American and Canadian visitors to Hawaii differed substantially. Canadian visitors most often reported rest and relaxation as the major benefit realized on their Hawaii visits, while mainland American visitors reported cultural experiences as major benefits realized (Woodside & Jacobs, 1985). Canadian outbound travel accounts for about 20 percent of total national person-trips (Statistics Canada, 2001), while in the U.S., outbound tourism accounts for only five percent of total national person-trips (U.S. Department of Commerce, 2001). Even before September 11, Canadian destination marketing organizations were aware that American travelers have relatively low levels of

interest in traveling internationally (Smith & Xie, 2003). Studies on Internet use

have shown differences between US and Canada residents. Canada residents

spend more time surfing on the web than US residents (Pastore, 2000b).

Canadian web surfers spent nearly 30 minutes per month more online than

American web surfers (Table 2-2) (Pastore, 2000b). Canada had the second

highest share of global e-commerce revenues after the U.S. in 1998, but,

currently, per capita Internet retail spending in Canada is CA $23, approximately

half the U.S. rate of US $41 (Jones, 2003). The body of this research suggests

country of residence is an important demographic variable for studying online

travel behaviors.

Table 2-2
Average Internet Usage in the U.S. and Canada during May 2000

	US	Canada
Number of unique sites visited	10	18
Page views per month	662	726
Time spent per month[a]	9:05:24	9:34:60
Duration of a page viewed[a]	0:00:50	0:00:47

Source: Nielsen//Net Ratings
Retrieved from
http://www.clickz.com/stats/big_picture/geographics/article.php/403541
a. hour(s):minute(s):second(s)

Travel Experience and Latest Trip Behavior

Few studies have been published on travel-related behaviors of online

travelers (Morrison et al., 2001). Bonn and colleagues (1999) concluded that

Internet users who search for travel information were more likely to stay in

commercial lodging establishments and spend more money each day while

traveling. Xu (1999) found a significant difference in travel expenditures, with

online purchasers tending to spend more on travel than offline purchasers.

Morrison and colleagues (2001) found that people who traveled to other countries in the past 12 months were more likely to be online purchasers than those who did not travel abroad.

Thirty or more years of travel information search studies has shown there are many other variables (e.g., travel experience and latest trip behavior such as length of stay of the latest trip and destination of the latest trip) to examine to understand significant relationships between travel information search (or purchase behaviors) and travel-related behaviors. Travelers who seek the greater volume of information stay longer in a destination (Fodness & Murray, 1999), visit more attractions (MacKay, 2001/02), travel longer distances, take longer vacations, or visit new and unfamiliar destinations (Etzel & Wahlers 1985; Gitelson & Crompton 1983). Most of these studies have examined correlations between variables, not causal relationship. A traveler might be staying longer because information search revealed more things to do, or it is equally likely that the anticipation of a longer trip stimulated more information search (Fodness & Murray, 1999). Thus far research hasn't shown which situation is more common or likely.

Seasons of travel, such as spring, summer, fall and winter, may also affect travel information search and purchase behaviors because different temperatures, weather, events and so on cause different needs or risks. For example, Christmas (winter) and Thanksgiving (fall) could contain more family-oriented events compared to spring break (spring). Visiting family or relatives may require less travel information search than visiting the Caribbean beach.

General Internet Use and Internet Use for the Latest trip

A growing literature on general online behavioral characteristics shows the

dynamic nature of information search and product purchase. Weber and Roehl

(1999) found travelers who purchased online have more years of Internet use

experience (one year or more) and more browser use per week (4 hours or

more) than travelers who did not purchase online. Bonn, Furr, and Susskind

(1999) found people who used the Internet to seek travel information were likely

to be computer users, purchase travel products online, and search information

for their destination. Other studies have also shown online purchasers spend

more time online per week than those purchasing offline (Morrison et al. 2001;

Xu 1999). Weber and Roehl (1999) found that online credit card use and

possession of a credit card significantly affect online purchase. Speed of Internet

connection has influenced Internet use. High-speed Internet users tended to

spend more time online than their dial-up counterparts (Pastore, 2001b). Pastore

(2001b) found Internet users who switched from modem (dial-up) to high-speed

(Broadband) increased their number of web pages viewed, number of pages per

person, and time spent online (Table 2-3).

Table 2-3
The Influence of Broadband (High-speed) Internet Usage in the U.S.

	Before Broadband (January 2001)	After Broadband (July 2001)
Page views	2.4 billion	5.5 billion
Pages per person	757	1,170
Time spent online per person during a month[a]	12:21:50	15:14:00

Source: Nielsen//Net Ratings
Retrieved from
http://www.clickz.com/stats/markets/broadband/article.php/10099_870841
a. hour(s):minute(s):second(s)

Few researchers have studied online information search and purchase on an actual trip (e.g., planning horizon for Internet use for an actual trip and time spent online for an actual trip planning) as an element that significantly influences travel information search and travel product purchase behaviors. As Internet users engage in every online activities, such as searching for information and purchasing goods, booking airline tickets, checking local entertainment information, communicating with business associates, trading stock and banking online, Internet users have developed their own online strategy for each purpose (Pastore, 1999). Hence, online information search and online purchase behaviors are different by Internet users' different purpose(s). For example, websites offering books and magazines, apparel and jewelry, and computer software and music were more often visited for online purchasing; however, travel websites and automotive commodity websites were more often visited for online information search (Ellison, Earl, & Ogg, 2001). Thus, goal-oriented Internet use (e.g., Internet use for a specific trip) would be likely to affect travel information search and purchase behaviors differently.

Summary

This review of literature was organized into five sections, including this summary. The first and second sections suggested that travelers have used the Internet differently for travel information search and product purchase. The theory of case-based vacation planning, discussed in the third section, was applied to online travel environments. This theory suggests that travel behaviors differ by the three stages of travel (pretrip, trip and post-trip) and by travel products. The last section reviewed elements that affect online travel information search and online travel product purchase behaviors.

CHAPTER 3

METHODOLOGY

The problem statement of this research was to understand online travel planning strategies during the pretrip stage for a general population sample of Internet users, and to examine which factors significantly encourage or discourage online travel information search and travel product purchase during pretrip planning. The conduct of the study included the following organizational steps: (1) secondary data analysis, (2) procedures for targeting and gathering data, (3) instrumentation, (4) model evaluation, and (5) a summary.

Secondary Data Analysis

This study was based on secondary data analysis using existing data collected by the Canadian Tourism Commission (CTC) and SECOR, a Canadian consulting firm. Trochim (2001) defines secondary data analysis as "making use of an already existing data source." Secondary data analysis typically refers to the re-analysis of quantitative data rather than text, which means the secondary data analysis is used for a new research question or an alternative perspective on the original question (Hinds, Vogel, & Clarke-Steffen 1997; Szabo & Strang 1997; Trochim 2001). The direction of this research was different from the CTC's original study. This thesis focused on studying online travel planning behaviors, especially during the pretrip, while CTC reported results on consumers' website usage for travel from pretrip to post-trip.

There are some advantages to secondary data analysis. Secondary data are less expensive for the researcher than conducting a new study and are faster as the data are already collected and keyed (Trochim, 2001). The most important merits of secondary data analysis are efficiency as the existing data is recycled and there can be replication of the prior research findings (Trochim, 2001). In most research studies, data that might have taken months or years to collect are only examined once in a relatively brief way and from one analyst's perspective (Trochim, 2001). Thus, there is a potential for error by the original analyst(s) who tend to approach the analysis from their own perspective using the analytic tools with which they are familiar (Trochim, 2001). Through different data analyses, this study replicated some parts of the original study and also showed new research findings.

This research has some potential errors or limitations in using secondary data. The data were conducted in 2001, and accordingly, it may not represent current travel planning trends. The original physical survey questionnaire and coding book were not available, instead just a report review. There may be misunderstanding on interpreting the survey questions or the data analysis. The secondary data analysts were not involved in data collection and data management, therefore, judgment on sampling procedures, reliability and validity of the data gathering instruments and procedures, and treatments and methods of the collection of data cannot be made in this research. To overcome these problems, original research reports were reviewed, and the primary researcher, Mr. Scott Meis, was consulted.

Procedures of Original Data Collection and Management

The original research used a three-phase data collection effort. The first stage, not of central interest in this research, was focus groups conducted with Canadian citizens in Toronto on July 26th 2001. The second stage used a telephone survey instrument to contact 1,600 North American travelers (800 from each country) with Internet access between November 1st and November 10th, 2001. For the third stage, a total of 21,600 invitations were e-mailed to North American Internet users (Table 3-1). Between November 8th and December 18th, 2001, 5,665 surveys were started and 2,470 surveys were completed online. The overall response rate was 11.3 percent. The Internet survey results are reliable within 3.1 percent at 95 percent confidence level. The general population of American adults (18 years old or more) is 8.7 times greater than Canadian adults (Table 3-1). However, the number of respondents who completed the survey was evenly distributed.

Table 3-1: Population and Number of Survey Respondents

	USA	Canada
Population[a]	204.9 million[b]	23.7 million[c]
Sample population	21,600	
Number of respondents who completed the survey	1,337 (54%)	1,133 (46%)

a. Population of those whose age is 18 years old or more
b. U.S. Census Bureau (2001 Supplementary Survey Summary Tables)
c. Statistics Canada (Population as of July 24, 2001)

The survey respondents represent US residents (54 percent of responses) and Canada residents (46 percent), whose age is 18 years old or more. They had web access, were willing to complete the online instrument, reported web usage for travel or vacations (e.g., planning, researching, reserving, or paying by

credit card for travel products), and took at least one vacation in the past 12 months between November 2000 and October 2001. The primary data collection instrument for the Internet survey was a self-administered online questionnaire with 95 questions. Twelve demographic questions were included at the beginning of the web-survey. Many questions were focused on the most recent trip of one or more nights at least 50 miles (80 km) away from home. The purpose of trips taken included vacation, leisure or get-away trips, and excluded business or commuting to and from school or work or trips to a cottage or vacation home that respondents regularly use. For some questions, particularly behavioral ones, respondents were offered "not applicable" as an answer and other questions offered "don't recall." Thus, the number of "valid" respondents for each question varies. The original researchers adjusted denominators to include only those respondents who were in the market to search for information or purchase a travel product. Canadian data were weighted by the primary data researchers on education and marital status to better represent the national demographic profile.

Instrumentation

As a result of the literature review, explanatory variables were added to understand those elements that encourage or discourage online travel information search and online travel product purchase behaviors. As shown in Table 3-2, there are three measurement dimensions: *general background, travel planning behavior during pretrip*, and *trip specific behavior during trip*. *General*

Table 3-2
Constructs and Associated Dimensions Included in the Analysis

Constructs and Associated Dimensions	Number of Items and Contents	Measurement
General Background:		
Tourists' Demographics	**4 items**	
	Country of residence/ Gender/ Age/ Education	Nominal/ Ordinal
Travel Experience	**1 item**	
	Number of vacation trips in recent 12 months	Ordinal
General Internet Use	**4 items**	
	Years of Internet use/ Time spent online per week/ Speed of Internet connection/ Credit card use for online purchase	Nominal/ Ordinal
Travel Planning Behavior During Pretrip:		
Internet Use for the Latest Trip	**2 items**	
	Planning horizon for Internet use for the latest trip/ Time spent online for the latest trip	Ordinal
Travel Information Search for the Latest Trip	**6 items**	
	Accommodations/ Activities/ Attractions/ Car rentals/ Events/ Flights	Nominal
Travel Product Purchase for the Latest Trip	**6 items**	
	Accommodations/ Activities/ Attractions/ Car rentals/ Events/ Flights	Nominal
Trip Specific Behavior During Trip:		
Latest Trip Behavior	**3 items**	
	Length of stay of the latest trip/ Destination of the latest trip/ Season of the latest trip	Nominal/ Ordinal

background has three types of variables: tourists' demographics including country of residence, gender, age and education; travel experience including number of vacation trips in recent 12 months; and general Internet use including years of Internet use, time spent online per week, speed of Internet connection and credit card use for online purchase. *Travel planning behavior during pretrip* has three types of variables: Internet use for the latest trip including planning horizon for Internet use for the latest trip and time spent online for the latest trip; travel information search behaviors on six travel products, accommodations, activities, attractions, car rentals, events and flights; and travel product purchase behaviors on six travel products, accommodations, activities, attractions, car rentals, events and flights. *Trip specific behavior during trip* is represented by the latest trip behavior including length of stay of the latest trip, destination of the latest trip and the season that the latest trip.

The original data selected for this research have ordinal or nominal measurement scales (Table 3-1 and Appendix 1). Some variables were modified from their original data form. Travel information search variables and travel product purchase variables are nominal scales with four category responses including "online," "offline," "both online and offline" and "not applicable" (N/A). Survey respondents' choice of N/A may be interpreted in several ways. For example, in searching for information on accommodations during the pretrip, respondents may choose N/A because: they did not search for information on accommodations but searched for another product(s) during pretrip; they did not search for information at all but purchased at least one travel product during

pretrip; they did not search for information on accommodations during pretrip but searched for information on accommodations during trip or after trip; they did not search for information on accommodations during pretrip but purchased accommodations during trip; they did not remember if they searched for information on accommodations during pretrip; or they did not understand what the survey question meant. In this research, N/A is interpreted that respondents did not search for information on a specific travel product during pretrip. However, respondents reported some other information search or product purchasing before departing. For data analysis, the name "both online and offline" was changed to "on/offline" and "N/A" to "none."

Model Evaluation

The purpose of model evaluation was to test the significance of relationships between variables in three dimensions such as *general background*, *travel planning behavior during pretrip*, and *trip specific behavior during trip*. The first step of model evaluation was to compare the data using descriptive statistics, specifically cross-tabulation. The second step was to evaluate the model outlined in Figure 1-2 using tests of significance (Chi-square) and measures of association (Contingency Coefficient). To provide details of association in variables, cross-tabulation was also used.

For testing hypotheses, the data were initially examined by country of residence (US and Canada), and the statistical results were compared. As reviewed in Chapter 2, country of residence has been shown to be a significant

independent variable in travel information search and travel product purchase behaviors. From the viewpoint of national destination marketing organizations, understanding travelers' different information search and purchase behaviors by national culture (specifically country of residence) is important in their target marketing. Prior to hypothesis testing, different travel information search and travel product purchase behaviors across six travel products were examined and compared through cross-tabulation and Chi-square tests.

Descriptive statistics is a method for presenting quantitative descriptions in a manageable form (Babbie, 1998). It is convenient to describe single variables or the association between variables. Developing tables of cross-tabulation, specifically with percentages, is the most commonly used technique to summarize the data in hypothesis tests. However, the results in a table are not always clearly understood and sometimes seem inconsistent (Sirkin, 1999). Moreover, except for the extremes of perfect relationship and no relationship, it is not possible to see the exact amount of relationship that exists between the variables (Sirkin, 1999).

To test Hypotheses one to ten (Figure 1-4), Chi-square (χ^2) was used for examining statistical significance of difference of relationship between variables. Chi-square test can be used in most levels of measurement - nominal, ordinal, or interval (Sirkin, 1999). Since the measurement scale of these data is nominal or ordinal (Table 3-1 and Appendix 1), Chi-square was a good technique to test the hypotheses. According to Babbie (1998),

> Chi-square is based on the null hypothesis test: the assumption that there is no relationship between the two variables in the total population. Given the

observed distribution of values on the two separate variables, the conjoint distribution is computed to examine if there were no relationship between the two variables. The result of this operation is a set of expected frequencies for all the cells in the contingency table. As comparing this expected distribution with the distribution of cased actually found in the sample data, the probability that the discovered discrepancy could have resulted from sampling error alone (p.427).

Rejecting a null hypothesis means that the Chi-square value obtained was not the result of sampling error, but instead reflected that the variables in the population are indeed related (Sirkin, 1999). For the decision on whether or not to reject the null hypothesis, the obtained Chi-square is compared to the critical value of Chi-square (p value) at the .05 level (Sirkin, 1999). Chi-square has the following limitations. First, the Chi-square test may cause a sampling error or an inverse function of sample size (Babbie, 1998). In larger samples, there is less chance that the correlation could be simply the product of sampling error (Babbie, 1998). Second, the Chi-square test does not show how each variable is significantly different from each other, although it tests significance of difference between variables. To resolve this problem, cross-tabulation was concurrently tested to provide detail patterns through the frequency and percentage.

Contingency Coefficient analysis was used to test Hypothesis 11 (Figure 1-2) to compare the magnitude of association between travel information search and travel product purchase across six travel products. This estimation is appropriate for nominal data with more than two groups or categories of responses, particularly when symmetry between the variables is present (Sirkin, 1999). While Chi-square analysis shows the significance of association, the actual value of the Chi-square statistic and its associated observed significance level provides

little information about the strength and type of association between two variables (Norusis, 2002). In addition, Chi-square results are highly dependent on the sample size, the number of rows and columns in the table, and the extent of the departure from independence (Norusis, 2002). Contingency Coefficient estimation modifies the Chi-square statistic so that it is not influenced by sample size. A Contingency Coefficient estimate ranges from zero (0) to one (1), with zero (0) corresponding to no association and one (1) to perfect association: however, the coefficient does not go as high as one (1), even for a table showing what seems to be a perfect relationship. The largest value it can have depends on the number of rows and columns in the table: therefore, it can never be used to compare tables of different sizes (Norusis, 2002). However, the Contingency Coefficient measure is difficult to interpret. Although it can be used to compare the strength of association in different tables, the strength of association being compared is not easily related to an intuitive concept of association (Norusis, 2002).

Summary

Secondary data analysis discussed the advantages and disadvantages of this research methodology. Procedures of the original data collection and management were explained. The instrumentation section explained the constructs, and associated dimensions included in this analysis. This section also explained which survey questions were chosen from the original data and how new scales were developed from the original data. Model evaluation described the strategies used for testing the hypotheses. Descriptive statistics, Chi-square tests and Contingency Coefficient analysis were discussed for hypothesis testing.

CHAPTER 4

RESULTS

The problem statement of this research was to understand online travel planning strategies during the pretrip stage for a general population sample of Internet users, and to examine which factors significantly encourage or discourage online travel information search and travel product purchase during pretrip planning. The analyses of the data are presented in this chapter according to the following topics: (1) description of the respondent demographic profile and (2) results of hypothesis testing. Results of hypotheses testing were separated into two parts, hypotheses 1 to 10 and hypothesis 11. Each part includes a summary.

Description of the Respondent Demographic Profile

Prior to hypothesis tests, which were aimed at understanding which elements are significantly related to travel information search and product purchase behaviors, a study of demographic profiles of US and Canada respondents was necessary to determine differences from the general population.

US Respondents

A demographic profile of US respondents is presented in Table 4-1 with US population data from the 2001 Census. Females were more likely to respond than males, commonly found in survey research, and they were

Table 4-1
US Respondent Demographic Profiles

Profiles	Survey Sample		Population[a]	
	n	%	*n*	%
Gender				
Male	546	40.9	98.3[b]	48.0
Female	788	59.1	106.6[b]	52.0
Age				
18 to 24	41	3.1	24.9	12.2
25 to 29	104	7.8	18.3	8.9
30 to 34	148	11.1	20.2	9.8
35 to 39	158	11.8	21.9	10.7
40 to 44	193	14.5	22.6	11.0
45 to 49	188	14.1	20.5	10.0
50 to 54	198	14.8	18.2	8.9
55 to 59	137	10.3	13.9	6.8
60 to 64	92	6.9	11.1	5.4
65 to 70	53	4.0	9.4[c]	4.6
71 or older	22	1.6	23.9[d]	11.6
Education				
Less than high school	6	0.5	N/A[e]	N/A[e]
Some high school	23	1.7		
Graduated high school	149	11.2		
Some university/college/ technical college	395	29.6		
Graduated university/college /technical school	440	33.0		
Post graduate	320	24.0		
Annual Household Income[f]				
Less than $15,000	52	4.0	16.7	15.6
$15,000 to 24,999	88	6.8	13.7	12.9
$ 25,000 to 39,999	204	15.8	19.6	18.4
$ 40,000 to 59,999	278	21.5	20.7	19.5
$ 60,000 to 99,999	378	29.3	22.2	20.9
$ 100,000 to 149,999	172	13.3	8.7	8.2
$ 150,000 to 199,999	69	5.3	2.5	2.3
$ 200,000 or more	53	4.1	2.3	2.2

a. U.S. Census Bureau: 2001 Supplementary Survey Summary Tables (unit: millions of people)
b. Population of those whose age is 18 years old or more
c. Data were available in 65 to 69 year segment
d. Data were available in 70 years or older segment
e. N/A: not available
f. US dollar

overrepresented in the sample when compared to US population of female adults (18 years old or more). Over half of the respondents (55 percent) were between 35 and 54 years old. Twenty-two percent were young adults of 34 years or younger, and 23 percent were 55 years and older. Thirty to 64 year olds were overrepresented, and 18 to 24 year olds and 71 or older were underrepresented in the sample compared to the US population of adults. Six out of ten respondents (57 percent) held college or graduate degrees. Only a few respondents did not have high school degrees. About a half of the respondents (51 percent) had an annual household income of US $40,000 to $99,999. Respondents who had an annual household income of US $40,000 or more were overrepresented, and respondents with less than US $40,000 were underrepresented in the sample compared to the US population of annual household income.

Canada Respondents

A demographic profile of Canada respondents is presented in Table 4-2 with Canadian population data from the 2001 Statistics Canada. Females were more likely to respond than males, and they were overrepresented in the sample when compared to the Canadian population of female adults (18 years old or more). But the gap of overrepresented rate is smaller than US residents (Table 4-1 and 4-2). Over half of the Canada respondents (54 percent) were between 35 and 54 years old. Twenty-six percent were young adults of 34 years or younger, and 20 percent were 55 years and older. Twenty-five to 64 year olds were

Table 4-2
Canada Respondent Demographic Profiles

Profiles	Survey		Population[a]	
	n	%	n	%
Gender				
Male	489	43.3	11.6[b]	48.9
Female	641	56.7	12.1[b]	51.1
Age				
18 to 24	35	3.1	2.2	9.2
25 to 29	133	11.8	2.1	8.9
30 to 34	125	11.1	2.2	9.4
35 to 39	139	12.3	2.5	10.5
40 to 44	168	14.9	2.7	11.5
45 to 49	156	13.8	2.5	10.6
50 to 54	142	12.6	2.2	9.2
55 to 59	122	10.8	1.8	7.8
60 to 64	69	6.1	1.4	5.9
65 to 70	29	2.5	1.1[c]	4.8
71 or older	11	1.0	2.9[d]	12.3
Education				
Less than high school	5	0.4	N/A[e]	N/A[e]
Some high school	40	3.5		
Graduated high school	162	14.4		
Some university/college/ Technical college	198	17.6		
Graduated university/college/ Technical school	613	54.3		
Post graduate	111	9.8		
Annual Household Income[f]				
Less than $15,000	41	3.7	N/A[e]	N/A[e]
$15,000 to 24,999	81	7.3		
$ 25,000 to 39,999	155	14.1		
$ 40,000 to 59,999	244	22.1		
$ 60,000 to 99,999	358	32.6		
$ 100,000 to 149,999	139	12.6		
$ 150,000 to 199,999	52	4.7		
$ 200,000 or more	31	2.8		

a. Statistics Canada: Population as of July 24, 2001 (unit: millions of people)
b. Population of those whose age is 18 years old or more
c. Data were available in 65 to 69 year segment
d. Data were available in 70 years or older segment
e. N/A: not available
f. Canadian dollar

overrepresented, and less than 24 year olds and 65 to older were underrepresented in the sample compared to the Canadian population of adults. Six out of ten respondents (64 percent) held college or graduate degrees. Over half of the respondents (54 percent) held university/college/ technical school degrees. Only a few respondents did not have high school degrees. Canada respondents were likely to have higher education compared to US respondents. About half of the respondents (55 percent) had an annual household income of CA $40,000 to $99,999.

Results of Hypothesis Testing

This section is separated into three parts (Figure 4-1). The first part includes testing of Hypothesis 1a (country of residence differs on information search behaviors) and Hypothesis 4a (country of residence differs on product purchase behaviors). Hypotheses were separately tested with US and Canada data. Prior to other hypothesis tests, it was necessary to study whether country of residence significantly affects other independent variables, travel information search and travel product purchase. The second part presents the statistical results for Hypotheses 1b to 10c, except 4a, which examined variables that significantly differ in regard to travel information search and product purchase across six travel products during pretrip planning. The third part presents the statistical results for Hypothesis 11 (travel information search behaviors and travel product purchase behaviors during pretrip are associated, however, not perfectly).

To test Hypotheses 1 to 10, cross-tabulation and Chi-square tests were used to examine statistical significant differences on relationships between variables. To test Hypothesis 11, cross-tabulation and Contingency Coefficient analysis were used to compare the magnitude of association between travel information search and product purchase across six travel products.

Figure 4-1
Guide Map of Result Tables of Hypothesis Tests
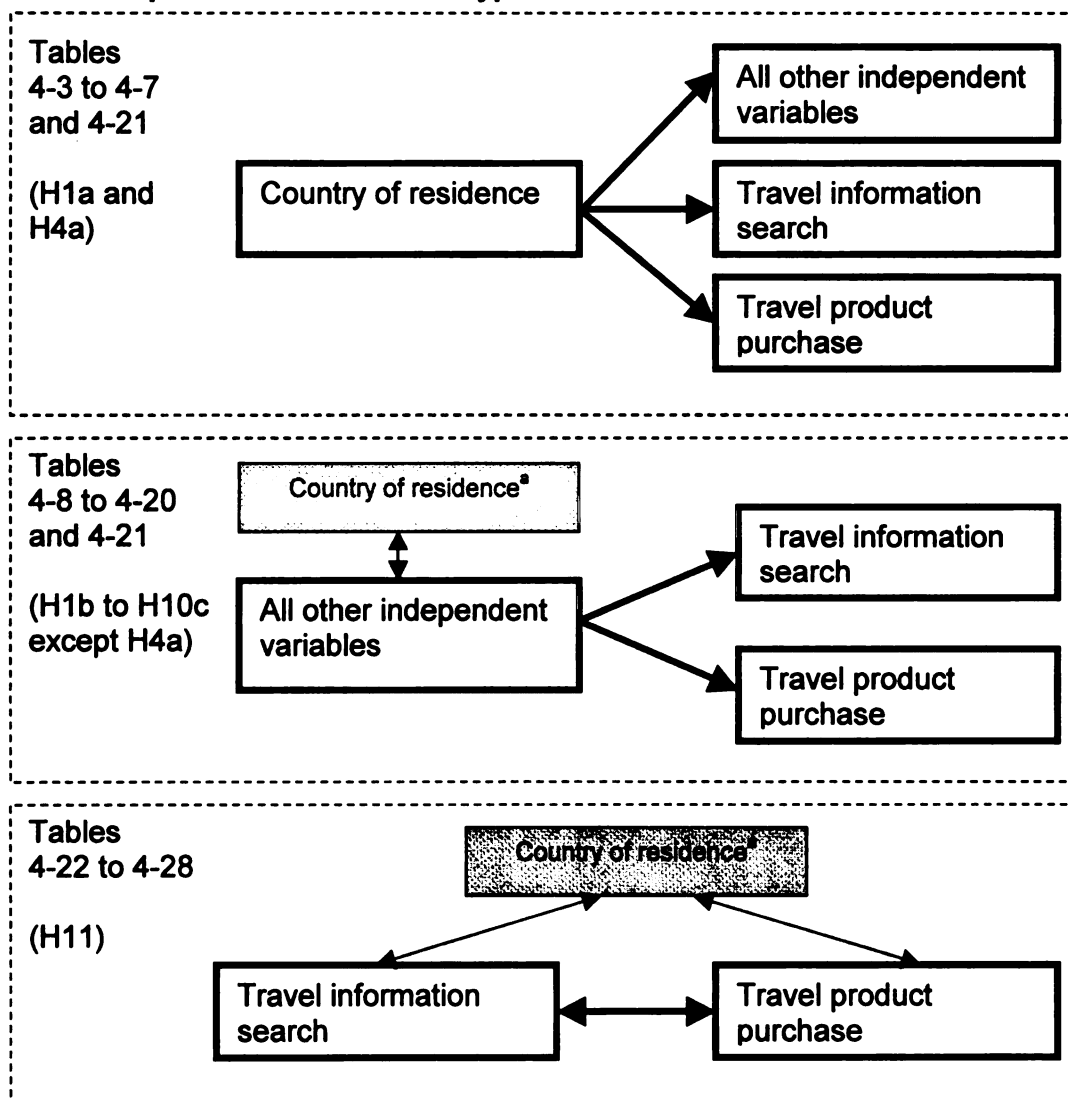
a. Shading denotes controlling for country of residence variable.

Comparisons of US and Canada Samples

Comparisons of US and Canada Samples on General Background

General Background included tourists' demographics, travel experience and general Internet use (Table 4-3). Tourists' demographics included gender, age and education. Gender did not differ significantly between US and Canada respondents. Both US and Canada females were more likely to respond than males. Age also did not differ significantly. Over half of US and Canada respondents were aged 35 to 54 years old. Education differed significantly. Canada respondents were likely to have higher education background compared to US respondents.

In terms of travel experience, the number of vacation trips in recent 12 months was significantly different between US and Canada respondents. US respondents were more likely to take vacations than Canada respondents.

General Internet use included years of Internet use, time spent online per week, speed of Internet connection and credit card use for online purchase. Years of Internet use was not significantly different between US and Canada respondents. Time spent online per week, speed of Internet connection and credit card use for online purchase were significantly different. US respondents were likely to spend more time online per week. More than half of the Canada respondents (53 percent) had a high speed Internet connection at home, compared to 40 percent of US respondents. US respondents were more likely to purchase online with credit cards than Canada respondents.

Table 4-3

Comparison of US and Canada Samples on General Background

	US		Canada		Significant difference by country of residence	
	n	%	n	%	χ^2	P-level
Tourists' Demographics						
Gender					1.4	.240
Male	546	40.9	489	43.3		
Female	788	59.1	641	56.7		
Age					7.8	.101
18-24	41	3.1	35	3.1		
25-34	252	18.9	258	22.9		
35-44	351	26.3	307	27.2		
45-54	386	28.9	298	26.4		
55 or older	304	22.8	231	20.4		
Education					12.7	.000***
Less than a college degree	573	43.0	406	35.9		
College degree or more	760	57.0	724	64.1		
Travel Experience						
Number of vacation trips in recent 12 months					22.3	.000***
1	185	13.9	193	17.1		
2	340	25.5	342	30.3		
3	286	21.4	229	20.3		
4	194	14.5	163	14.4		
5 or more	329	24.7	203	18.0		
General Internet Use						
Years of Internet use					3.6	.314
Less than 2 years	221	16.6	197	17.4		
2-4 years	413	31.1	381	33.8		
4-6 years	385	29.0	316	28.0		
More than 6 years	309	23.3	234	20.8		
Time spent online per week					19.2	.000***
4 hours or less	312	23.5	344	30.5		
5-10 hours	358	27.0	309	27.4		
11-20 hours	321	24.2	241	21.3		
21 hours or more	337	25.4	233	20.7		
Speed of Internet connection					44.7	.000***
High speed (T1, Cable, ISDN, ADSL)	530	39.8	601	53.2		
Regular speed (28-56K)	803	60.2	528	46.8		
Credit card use for online purchase					117.2	.000***
Yes	1,186	88.9	810	71.7		
No	148	11.1	319	28.3		

* $p < .05$; ** $p < .01$; and *** $p < .001$

Comparisons of US and Canada Samples on Travel Planning Behavior during Pretrip

Travel planning behavior during pretrip included Internet use for the latest trip, travel information search and travel product purchase. Travel information search and travel product purchase were tested across six travel products with four category responses, online, offline, on/offline and none. "On/offline" means respondents searched for information or purchased travel products both online and offline during pretrip. "None" means respondents did not search or purchase during pretrip.

Internet use for the latest trip included planning horizon for Internet use for the latest trip and time spent online for the latest trip (Table 4-4). Both elements were not significantly different between US and Canada respondents.

Table 4-4
Comparison of US and Canada Samples on Internet Use During Pretrip for the Latest Trip

	US		Canada		Significant difference by country of residence	
	n	*%*	*N*	*%*	χ^2	*P-level*
Internet Use During Pretrip for the Latest Trip						
Planning horizon for Internet use for the latest trip					5.0	*.288*
Less than 2 weeks	175	13.3	168	15.0		
2 to 4 weeks	255	19.3	227	20.2		
1 to 2 months	282	21.4	237	21.2		
2 to 4 months	302	22.9	219	19.5		
More than 4 months	305	23.1	270	24.1		
Time spent online for the latest trip					1.1	*.582*
2 hours or less	495	37.6	433	38.7		
3 to 5 hours	420	31.9	335	29.9		
6 hour or more	403	30.6	352	31.5		

* *p* < .05; ** *p* < .01; and *** *p* < .001

As shown in Table 4-5, US respondents' most popular product for

Information search (including online, offline and on/offline) for the latest trip

during pretrip was accommodations (86 percent of US respondents), followed by

attractions (74 percent). US respondents' least popular product for information

search was car rentals (39 percent of US respondents), followed by activities (52

percent). Canada respondents' most popular product for information search

(including online, offline, and on/offline) was also accommodations (88 percent of

Canada respondents), followed by attractions (78 percent). Canada

respondents' least popular product for information search was car rentals (30

percent of Canada respondents), followed by flights (56 percent).

US and Canada respondents searched for travel information for the latest trip

during pretrip online more than offline. US respondents searched for information

online on accommodations the most (52 percent of US respondents), followed by

flights (44 percent) and attractions (32 percent). US respondents searched for

information offline on attractions the most (10 percent of US respondents),

followed by activities (8 percent) and events (7 percent). Canada respondents

searched for information online on accommodations the most (50 percent of

Canada respondents), followed by attractions (34 percent) and flights (29

percent). Canada respondents searched for information offline on attractions the

most (10 percent of Canada respondents), followed by activities (9 percent) and

events (9 percent).

Respondents' information search for car rentals and flights was significantly

different between US and Canada respondents. US respondents were more

Table 4-5

Comparison of US and Canada Samples on Travel Information Search Behavior During Pretrip

	US								Canada							
	Online		Offline		On/offline		None		Online		Offline		On/offline		None	
	n	%	n	%	n	%	n	%	N	%	n	%	n	%	n	%
Travel Information Search Behavior																
Accommodations	683	51.7	77	5.8	374	28.3	187	14.2	563	50.1	89	7.9	339	30.2	132	11.8
χ^2=7.6, p=.054																
Activities	314	23.8	104	7.9	273	20.7	630	47.7	285	25.3	106	9.4	246	21.9	487	43.3
χ^2=5.3, p=.151																
Attractions	419	31.7	129	9.8	433	32.8	340	25.7	381	33.9	113	10.1	384	34.2	245	21.8
χ^2=5.2, p=.156																
Car Rentals	338	25.6	67	5.1	114	8.6	802	60.7	177	15.8	81	7.2	77	6.9	788	70.1
χ^2=43.2, p=.000***																
Events	364	27.6	86	6.5	275	20.8	596	45.1	314	27.9	101	9.0	228	20.3	481	42.9
χ^2=5.7, p=.126																
Flights	581	44.0	63	4.8	181	13.7	496	37.5	328	29.2	99	8.8	205	18.3	491	43.7
χ^2=64.3, p=.000***																

* $p < .05$; ** $p < .01$; and *** $p < .001$

likely to search for information online on car rentals and flights than Canada respondents.

As shown in Table 4-6, US respondents' most popular product **purchased** (including online, offline and on/offline) during pretrip for the latest trip was accommodations (72 percent of US respondents), followed by flights (54 percent). US respondents' least popular product purchased was events (24 percent of US respondents), followed by activities (26 percent). Canada respondents' most popular product purchased was also accommodations (71 percent of Canada respondents), followed by flights (47 percent). Canada respondents' least popular products purchased were activities (24 percent of Canada respondents) and events (24 percent).

US respondents purchased accommodations the most online for the latest trip during pretrip (34 percent of US respondents), followed by flights (33 percent) and car rentals (19 percent). US respondents also purchased accommodations the most offline (29 percent of US respondents), followed by attractions (20 percent) and activities (17 percent). Canada respondents purchased accommodations the most online (22 percent of Canada respondents), followed by flights (15 percent) and car rentals (10 percent). Canada respondents also purchased accommodations the most offline (40 percent of Canada respondents), followed by flights (28 percent) and attractions (24 percent).

Accommodations, attractions, car rentals, events and flights significantly differed in terms of travel product purchases during pretrip for the latest trip between US and Canada respondents. US respondents were more likely

Table 4-6

Comparison of US and Canada Sample on Travel Product Purchase Behavior During Pretrip

	US								Canada							
	Online		Offline		On/offline		None		Online		Offline		On/offline		None	
	n	%	n	%	n	%	n	%	N	%	n	%	n	%	n	%
Travel Product Purchase Behavior																
Accommodations	451	34.0	381	28.7	125	9.4	371	27.9	242	21.5	445	39.5	107	9.5	331	29.4
χ^2=55.2, p=.000***																
Activities	64	4.8	228	17.2	50	3.8	986	74.2	34	3.0	201	17.9	34	3.0	856	76.1
χ^2=6.3, p=.096																
Attractions	64	4.8	270	20.3	59	4.4	935	70.4	32	2.8	268	23.9	38	3.4	787	70.0
χ^2=11.2, p=.011*																
Car Rentals	254	19.1	136	10.2	34	2.6	904	68.1	108	9.6	145	12.9	20	1.8	852	75.8
χ^2=47.9, p=.000***																
Events	88	6.6	184	13.9	47	3.5	1,009	76.0	48	4.3	189	16.8	33	2.9	855	76.0
χ^2=10.3, p=.016*																
Flights	443	33.4	206	15.5	67	5.0	612	46.1	165	14.7	309	27.5	55	4.9	596	53.0
χ^2=133.2, p=.000***																

* $p < .05$; ** $p < .01$; and *** $p < .001$

to purchase accommodations, car rentals and flights online than Canada respondents. Canada respondents were more likely to purchase accommodations and flights offline than US respondents.

Comparisons of US and Canada Samples on Trip Specific Behavior during Trip

In terms of trip specific behavior, latest trip behavior was examined in this study. Latest trip behavior included length of stay of the latest trip, destination of the latest trip, and the season of this latest trip (Table 4-7). These three elements were all significantly different between US and Canada respondents. Canada respondents were more likely to stay longer (7 nights or more) for the latest trip than US respondents. Four out of ten of US respondents stayed for three to six nights for the latest trip compared to 29 percent of Canada respondents. Canada respondents were more likely to travel out of North America than US respondents. US respondents were likely to travel out of state, but within the U.S. Almost half of Canada respondents (48 percent) traveled out of Canada, while 35 percent of US respondents left the U.S. US respondents were more likely to travel during the fall than other seasons for their vacation. Canada respondents were more likely to travel for their vacation during the summer than other seasons.

Table 4-7

Comparison of US and Canada Samples on Trip Specific Behavior During Trip

	US		Canada		Significant difference by country of residence	
	n	%	*n*	%	χ^2	*P-level*
Latest Trip Behavior						
Length of stay of the latest trip					42.6	*.000***
Weekend/short (1 to 2 nights)	168	12.6	138	12.3		
Up to 1 week (3 to 6 nights)	524	39.3	327	29.0		
2 weeks (7 to 13 nights)	401	30.1	355	31.5		
14 nights or more	241	18.1	308	27.3		
Destination of the latest trip					64.4	*.000***
Within province/state	286	21.4	259	23.0		
Out of province/state, within country	576	43.2	323	28.7		
Out of country, within North America	290	21.7	303	26.9		
Out of North America	182	13.6	242	21.5		
Season of the latest trip					20.0	*.000***
Winter	84	6.3	97	8.6		
Spring	181	13.6	158	14.0		
Summer	469	35.2	460	40.8		
Fall	600	45.0	413	36.6		

* *p* < .05; ** *p* < .01; and *** *p* < .001

Travel Information Search and Travel Product Purchase

Travel Information Search and Travel Product Purchase Influenced by Tourists' Demographics

Gender significantly differed in regard to **information search** on accommodations, activities, attractions, car rentals and flights in the U.S., and events and flights in Canada (Table 4-8). US male respondents were more likely to search for information (including online, offline and on/offline) on accommodations, activities, car rentals and flights than US female respondents. US male respondents were more likely to search for information on/offline on accommodations and activities and online on car rentals and flights than US female respondents. US female respondents were more likely to search for information online on attractions than US male respondents. Canada female respondents were more likely to search for information (including online, offline, on/offline) on events than Canada male respondents. Canada female respondents were more likely to search for information online on events than Canada male respondents. Canada female respondents were more likely to search for information on/offline on flights than Canada male respondents.

Table 4-8
Travel Information Search and Travel Product Purchase Influenced by Gender

	Gender	Travel Information Search				Travel Product Purchase			
		Online	Offline	On/offline	None	Online	Offline	On/offline	None
		Accommodations							
US	Male	50.2%	6.6	32.7	10.5	35.7%	29.3	9.0	26.0
	Female	52.8	5.3	25.3	16.7	32.7	28.3	9.7	29.3
		χ^2=16.2, p= .001**				χ^2=2.4, p= .496			
CA	Male	51.6%	6.1	31.8	10.5	25.4%	38.1	10.5	26.0
	Female	48.9	9.3	28.9	12.9	18.5	40.6	8.9	32.0
		χ^2=6.0, p= .114				χ^2=10.6, p= .014*			
		Activities							
US	Male	24.7%	9.8	22.7	42.8	5.7%	19.0	4.0	71.2
	Female	23.1	6.5	19.3	51.1	4.2	15.9	3.6	76.3
		χ^2=11.0, p= .012*				χ^2=4.6, p= .202			
CA	Male	25.7%	9.0	20.5	44.8	2.0%	19.3	3.7	75.0
	Female	25.0	9.8	23.0	42.2	3.6	16.8	2.5	77.0
		χ^2=1.4, p= .712				χ^2=4.6, p= .201			
		Attractions							
US	Male	27.9%	11.8	35.1	25.3	4.9%	19.6	4.8	70.7
	Female	34.4	8.3	31.2	26.1	4.7	20.8	4.2	70.2
		χ^2=9.8, p= .021*				χ^2=0.5, p= .919			
CA	Male	32.9%	9.4	34.9	22.8	3.1%	23.7	4.7	68.5
	Female	34.7	10.5	33.6	21.1	2.7	24.0	2.4	71.0
		χ^2=1.1, p= .772				χ^2=4.9, p= .177			
		Car Rentals							
US	Male	28.4%	6.5	9.2	55.9	24.5%	11.9	2.0	61.5
	Female	23.6	4.1	8.2	64.1	15.3	9.1	2.9	72.6
		χ^2=10.2, p= .017*				χ^2=23.6, p= .000***			
CA	Male	18.6%	6.4	5.9	69.1	12.7%	11.9	1.6	73.8
	Female	13.5	7.9	7.7	70.9	7.2	13.7	1.9	77.2
		χ^2=6.9, p= .077				χ^2=9.9, p= .020*			
		Events							
US	Male	26.2%	8.1	21.6	44.1	6.2%	13.7	3.5	76.6
	Female	28.5	5.4	20.3	45.8	6.9	13.9	3.6	75.6
		χ^2=4.7, p= .192				χ^2=0.3, p= .963			
CA	Male	24.2%	8.4	18.9	48.5	3.9%	15.8	3.3	77.0
	Female	30.7	9.3	21.4	38.6	4.5	17.6	2.7	75.2
		χ^2=11.5, p= .009**				χ^2=1.2, p= .742			
		Flights							
US	Male	46.9%	5.5	14.8	32.8	35.9%	17.6	4.9	41.6
	Female	42.0	4.2	13.0	40.8	31.6	14.1	5.1	49.2
		χ^2=9.0, p= .029*				χ^2=8.5, p= .037*			
CA	Male	31.3%	9.4	14.1	45.2	15.6%	24.8	5.7	53.8
	Female	27.6	8.3	21.6	42.5	14.0	29.4	4.1	52.5
		χ^2=10.5, p= .015*				χ^2=4.2, p= .236			

* p < .05; ** p < .01; and *** p < .001

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Tourists' gender significantly differed in regard to **purchasing** car rentals and flights in the U.S., and accommodations and car rentals in Canada (Table 4-8). US male respondents were more likely to purchase car rentals online than US female respondents. US female respondents were less likely to purchase flights than US male respondents. Canada male respondents were more likely to purchase accommodations and car rentals online than Canada female respondents.

Age significantly differed in regard to **information search** for accommodations, activities and flights in the U.S., and accommodations, activities, events and flights in Canada (Table 4-9). Younger US respondents (18 to 24 years old) and older respondents (55 years or more) were less likely to search for information online on accommodations. Younger US respondents were likely to search for information offline on accommodations. Older US respondents were likely to search for information on/offline on accommodations. US respondents who were younger were more likely to search for information online on activities. Younger US respondents were less likely to search for information online on flights, but more likely to search for information on/offline than other age groups. Younger Canada respondents were less likely to search for information online and on/offline on accommodations. Canada respondents who were younger were more likely to search for information online on activities and events. Younger Canada respondents were more likely to search for information on/offline on flights than other age groups.

Table 4-9

Travel Information Search and Travel Product Purchase Influenced by Age

	Age	Travel Information Search				Travel Product Purchase			
		Online	Offline	On/ offline	None	Online	Offline	On/ offline	None
		Accommodations							
US	18-24	37.5%	25.0	27.5	10.0	19.5%	39.0	7.3	34.1
	25-34	50.6	8.0	23.7	17.7	31.9	29.5	7.2	31.5
	35-44	60.6	4.0	24.4	10.9	36.3	27.7	10.6	25.4
	45-54	52.3	3.4	31.5	12.8	35.4	30.5	9.9	24.2
	55 or older	43.3	6.7	32.7	17.3	33.1	25.5	9.6	31.8
		χ^2=59.7, p= .000***				χ^2=15.0, p= .241			
CA	18-24	34.3%	11.4	20.0	34.3	25.0%	30.6	0	44.4
	25-34	46.5	9.3	28.3	15.9	18.3	44.0	8.2	29.6
	35-44	51.3	8.2	32.4	8.2	20.3	39.2	11.1	29.4
	45-54	52.9	5.4	31.3	10.4	21.9	39.4	9.1	29.6
	55 or older	51.1	9.2	29.7	10.0	26.1	36.5	10.9	26.5
		χ^2=32.4, p= .001**				χ^2=15.1, p= .235			
		Activities							
US	18-24	30.0%	10.0	30.0	30.0	4.9%	29.3	4.9	61.0
	25-34	29.7	7.6	22.9	39.8	6.0	20.7	2.8	70.5
	35-44	26.1	9.5	23.3	41.1	4.6	18.9	4.9	71.7
	45-54	22.4	7.8	21.9	47.9	5.2	16.9	4.9	72.9
	55 or older	17.0	6.0	13.0	64.0	3.6	10.9	1.7	83.8
		χ^2=52.1, p= .000***				χ^2=26.9, p= .008**			
CA	18-24	36.1%	13.9	16.7	33.3	0%	25.7	2.9	71.4
	25-34	30.7	10.5	24.9	33.9	3.5	23.4	4.3	68.8
	35-44	27.7	9.8	24.8	37.8	5.5	19.2	2.3	73.0
	45-54	24.2	6.7	21.5	47.5	1.3	15.8	2.4	80.5
	55 or older	15.8	10.5	15.8	57.9	1.3	11.7	3.5	83.5
		χ^2=44.5, p= .000***				χ^2=31.7, p= .002**			
		Attractions							
US	18-24	15.0%	12.5	45.0	27.5	4.9%	26.8	4.9	63.4
	25-34	29.7	11.2	29.7	29.3	4.4	22.3	4.0	69.3
	35-44	35.6	10.6	31.3	22.4	6.0	22.9	4.3	66.9
	45-54	31.5	9.1	35.9	23.4	3.6	19.5	5.7	71.1
	55 or older	31.3	8.0	31.3	29.3	5.3	15.9	3.3	75.5
		χ^2=17.0, p= .150				χ^2=12.4, p= .416			
CA	18-24	50.0%	8.8	20.6	20.6	0%	37.1	0	62.9
	25-34	35.8	7.8	34.2	22.2	1.9	24.9	4.3	68.9
	35-44	35.0	10.1	35.3	19.6	2.9	30.4	2.9	63.7
	45-54	33.1	10.1	37.5	19.3	3.7	21.1	1.7	73.5
	55 or older	29.3	12.7	30.6	27.5	3.0	15.7	5.7	75.7
		χ^2=16.2, p= .182				χ^2=29.7, p= .003**			

* p < .05; ** p < .01; and *** p < .001

Table 4-9
Travel Information Search and Travel Product Purchase Influenced by Age
(continued)

	Age	Travel Information Search				Travel Product Purchase			
		Online	Offline	On/offline	None	Online	Offline	On/offline	None
		Car Rentals							
US	18-24	10.0%	5.0	17.5	67.5	4.9%	7.3	0	87.8
	25-34	24.9	4.8	8.0	62.2	17.1	9.6	2.8	70.5
	35-44	26.1	6.6	9.5	57.8	20.0	11.4	2.9	65.7
	45-54	27.1	3.6	7.8	61.5	21.4	9.9	2.6	66.1
	55 or older	25.7	5.3	8.0	61.0	18.9	10.3	2.3	68.5
		χ^2=12.9, p= .378				χ^2=11.4, p= .498			
CA	18-24	17.1%	2.9	5.7	74.3	11.4%	17.1	0	71.4
	25-34	15.5	10.9	7.4	66.3	8.9	13.2	2.7	75.1
	35-44	15.1	5.6	7.5	71.8	8.8	11.7	2.6	76.9
	45-54	16.5	6.1	6.1	71.4	9.8	13.1	0.7	76.4
	55 or older	15.9	7.0	6.6	70.5	10.9	13.5	1.3	74.3
		χ^2=9.2, p= .689				χ^2=7.4, p= .830			
		Events							
US	18-24	25.0%	10.0	17.5	47.5	4.9%	24.4	2.4	68.3
	25-34	29.7	8.4	15.7	46.2	6.0	15.1	3.2	75.7
	35-44	32.2	5.2	23.3	39.4	8.3	14.3	3.7	73.7
	45-54	26.3	6.3	22.9	44.5	6.0	12.8	3.6	77.6
	55 or older	22.3	6.3	20.0	51.3	6.3	12.3	3.6	77.8
		χ^2=20.2, p= .064				χ^2=7.7, p= .807			
CA	18-24	38.9%	8.3	11.1	41.7	2.9%	31.4	0	65.7
	25-34	31.4	8.9	22.1	37.6	4.7	21.9	2.3	71.1
	35-44	29.4	8.8	24.2	37.6	5.2	13.4	3.9	77.5
	45-54	28.7	7.4	19.3	44.6	5.4	17.5	2.0	75.1
	55 or older	19.3	11.0	15.8	53.9	1.3	12.2	3.9	82.5
		χ^2=27.9, p= .006**				χ^2=26.7, p= .009**			
		Flights							
US	18-24	27.5%	5.0	25.0	42.5	17.1%	22.0	2.4	58.5
	25-34	47.8	7.6	12.9	31.7	35.1	17.5	7.2	40.2
	35-44	44.8	2.3	13.2	39.7	33.7	13.1	4.3	48.9
	45-54	45.8	4.4	12.0	37.8	34.1	13.0	5.5	47.4
	55 or older	39.7	5.7	15.7	39.0	32.8	18.9	4.0	44.4
		χ^2=22.9, p= .028*				χ^2=18.5, p= .101			
CA	18-24	29.4%	5.9	29.4	35.3	16.7%	36.1	5.6	41.7
	25-34	36.4	10.5	18.6	34.5	16.4	32.0	5.1	46.5
	35-44	26.5	7.2	19.9	46.4	13.4	25.7	5.2	55.7
	45-54	29.4	6.8	17.9	45.9	14.8	27.3	5.1	52.9
	55 or older	24.1	12.3	14.5	49.1	13.9	23.5	4.3	58.3
		χ^2=26.5, p= .009**				χ^2=10.5, p= .574			

* $p < .05$; ** $p < .01$; and *** $p < .001$

Age significantly differed in regard to **purchase** behaviors on activities in the U.S., and activities, attractions and events in Canada (Table 4-9). US respondents who were younger were more likely to purchase activities offline. Canada respondents who were younger were more likely to purchase activities offline. Younger Canada respondents were more likely to purchase attractions and events offline than other age groups.

Education significantly differed in regard to **information search** for activities, car rentals and flights in the U.S., and activities, attractions, car rentals, events and flights in Canada (Table 4-10). US respondents with higher education (college degrees or more) were more likely to search for information on activities, car rentals and flights than US respondents with lower education (less than a college degree). US respondents with higher education were likely to search for information online on flights than US respondents with lower education. Canada respondents with higher education were more likely to search for information on activities, events and flights than Canada respondents with lower education. Canada respondents with lower education were likely to search for information online on attractions. Canada respondents with higher education were likely to search for information on/offline on attractions.

In regard to **purchase**, *education* significantly differed on attractions, car rentals and flights in the U.S., and activities and car rentals in Canada (Table 4-10). US respondents with lower education were more likely to purchase attractions than respondents with higher education. US respondents with higher education were more likely to purchase car rentals and flights online than US

Table 4-10
Travel Information Search and Travel Product Purchase Influenced by Education

Education		Travel Information Search				Travel Product Purchase			
		Online	Offline	On/offline	None	Online	Offline	On/offline	N/A
		Accommodations							
US	Less than a college degree	48.5%	6.7	29.0	15.8	32.9%	26.8	10.2	30.1
	College degree or more	54.0	5.2	27.8	13.0	34.7	30.2	8.9	26.3
		χ^2=5.2, p= .158				χ^2=3.8, p= .281			
CA	Less than a college degree	52.0%	8.0	25.9	14.2	21.0%	39.8	7.4	31.9
	College degree or more	49.1	7.9	32.6	10.4	21.8	39.5	10.7	28.0
		χ^2=7.4, p= .059				χ^2=4.4, p= .222			
		Activities							
US	Less than a college degree	21.4%	6.4	19.1	53.1	4.4%	15.6	3.9	76.2
	College degree or more	25.6	9.0	21.9	43.6	5.2	18.4	3.7	72.8
		χ^2=12.5, p= .006**				χ^2=2.4, p= .488			
CA	Less than a college degree	23.1%	7.7	18.7	50.5	2.2%	13.8	2.7	81.3
	College degree or more	26.6	10.4	23.7	39.3	3.5	20.1	3.3	73.1
		χ^2=13.6, p= .004**				χ^2=9.8, p= .020*			
		Attractions							
US	Less than a college degree	32.9%	9.0	32.9	25.1	6.3%	21.7	5.1	66.9
	College degree or more	30.7	10.3	32.7	26.2	3.7	19.3	4.0	73.0
		χ^2=1.2, p= .751				χ^2=8.1, p= .044*			
CA	Less than a college degree	38.6%	8.5	28.4	24.6	3.2%	23.0	3.7	70.1
	College degree or more	31.3	11.0	37.4	20.2	2.5	24.4	3.2	69.9
		χ^2=14.1, p= .003**				χ^2=0.9, p= .822			

* $p < .05$; ** $p < .01$; and *** $p < .001$

Table 4-10
Travel Information Search and Travel Product Purchase Influenced by Education (continued)

	Education	Travel Information Search				Travel Product Purchase			
		Online	Offline	On/ offline	None	Online	Offline	On/ offline	N/A
	Car Rentals								
US	Less than a college degree	22.3%	3.2	9.4	65.1	15.2%	8.8	3.7	72.3
	College degree or more	28.1	6.5	8.1	57.4	22.1	11.4	1.7	64.8
		χ^2=15.0, p= .002**				χ^2=17.7, p= .001**			
CA	Less than a college degree	16.0%	4.5	5.7	73.8	11.1%	9.6	1.0	78.3
	College degree or more	15.7	8.7	7.5	68.1	8.8	14.7	2.1	74.4
		χ^2=8.8, p= .033*				χ^2=9.1, p= .028*			
	Events								
US	Less than a college degree	27.1%	5.5	23.4	44.1	8.1%	14.2	4.2	73.6
	College degree or more	27.9	7.3	18.9	45.8	5.6	13.6	3.0	77.8
		χ^2=4.9, p= .176				χ^2=5.1, p= .162			
CA	Less than a college degree	27.4%	8.5	15.2	48.9	5.9%	15.8	3.0	75.4
	College degree or more	28.3	9.1	23.1	39.5	3.3	17.4	2.8	76.5
		χ^2=13.5, p= .004**				χ^2=4.5, p= .213			
	Flights								
US	Less than a college degree	36.6%	4.4	14.7	44.2	26.8%	14.5	4.4	54.3
	College degree or more	49.5	5.0	13.0	32.5	38.4	16.3	5.6	39.8
		χ^2=25.2, p= .000***				χ^2=29.4, p= .000***			
CA	Less than a college degree	26.4%	6.2	19.2	48.3	13.5%	26.4	4.4	55.7
	College degree or more	30.7	10.3	17.9	41.2	15.3	28.1	5.0	51.5
		χ^2=9.6, p= .022*				χ^2=1.9, p= .599			

* p < .05; ** p < .01; and *** p < .001

respondents with lower education. Canada respondents with higher education were more likely to purchase activities than Canada respondents with lower education. Canada respondents with higher education were likely to purchase car rentals offline, and respondents with lower education were likely to purchase car rentals online.

Travel Information Search and Travel Product Purchase Influenced by Travel Experience

Number of vacation trips in recent 12 months significantly differed in regard to **information search** for accommodations, activities, attractions and car rentals in the U.S., and only car rentals in Canada (Table 4-11). US respondents who vacationed only once were less likely to search for information online on accommodations and car rentals compared to other respondents. US respondents who vacationed four times were more likely to search for information online on activities than others. Consistent patterns were not found in Canada.

Number of vacation trips in recent 12 months significantly differed in regard to the **purchase** of accommodations, car rentals and flights in the U.S., and activities and events in Canada (Table 4-11). US respondents who vacationed more were more likely to purchase accommodations and car rentals online. US respondents who vacationed five times or more were more likely to purchase flights online than others. Canada respondents who vacationed five times or more were more likely to purchase events offline than others.

Table 4-11
Travel Information Search and Travel Product Purchase Influenced by Number of Vacation Trips in Recent 12 Months

Number of vacation trips in recent 12 months		Travel Information Search				Travel Product Purchase			
		Online	Offline	On/ offline	None	Online	Offline	On/ offline	None
		Accommodations							
US	1	38.5%	9.3	31.9	20.3	27.9%	30.6	6.6	35.0
	2	54.0	3.6	27.0	15.4	32.4	34.1	7.6	25.9
	3	50.7	4.6	31.7	13.0	32.2	30.8	7.7	29.4
	4	58.6	7.9	23.6	9.9	37.6	23.2	12.4	26.8
	5 or more	53.5	6.1	27.5	12.8	38.5	23.4	12.6	25.5
		χ^2=29.6, p= .003**				χ^2=28.3, p= .005**			
CA	1	50.8%	7.9	24.9	16.4	15.7%	40.8	6.3	37.2
	2	51.5	8.8	27.9	11.8	20.2	41.3	9.4	29.0
	3	49.1	8.3	33.3	9.2	22.4	37.7	10.5	29.4
	4	47.9	7.4	33.7	11.0	24.1	42.0	11.1	22.8
	5 or more	50.0	6.9	32.2	10.9	25.9	35.8	10.4	27.9
		χ^2=10.0, p= .615				χ^2=16.5, p= .168			
		Activities							
US	1	20.9%	9.9	20.3	48.9	4.9%	14.8	3.8	76.5
	2	21.7	8.6	19.6	50.1	3.5	20.9	4.4	71.2
	3	22.5	3.5	27.5	46.5	6.3	18.2	3.1	72.4
	4	30.4	8.9	16.8	44.0	6.7	15.5	5.2	72.7
	5 or more	24.8	9.2	18.3	47.7	3.7	14.8	2.8	78.8
		χ^2=24.0, p= .020*				χ^2=13.9, p= .310			
CA	1	27.9%	11.1	15.8	45.3	1.6%	21.5	1.6	75.4
	2	27.9	9.1	21.8	41.2	2.9	16.6	3.5	77.0
	3	24.0	10.0	29.3	36.7	4.8	22.8	4.4	68.0
	4	23.5	8.6	21.0	46.9	3.1	13.0	4.3	79.6
	5 or more	21.3	8.4	20.8	49.5	2.5	14.9	1.0	81.6
		χ^2=18.2, p= .109				χ^2=21.7, p= .042*			
		Attractions							
US	1	30.8%	10.4	37.9	20.9	5.5%	21.3	3.3	69.9
	2	34.7	9.5	31.2	24.6	4.4	23.8	5.3	66.5
	3	27.1	11.3	37.7	23.9	5.2	20.6	3.8	70.3
	4	39.3	9.9	27.2	23.6	6.7	23.2	3.1	67.0
	5 or more	28.7	8.3	30.6	32.4	3.4	14.2	5.5	76.9
		χ^2=23.1, p= .027*				χ^2=18.3, p= .108			
CA	1	39.5%	9.5	32.6	18.4	0.5%	25.0	4.2	70.3
	2	39.1	10.3	29.1	21.5	2.3	25.7	2.9	69.0
	3	29.7	7.9	38.4	24.0	2.2	25.9	3.5	68.4
	4	28.0	13.4	35.4	23.2	4.9	16.0	4.9	74.2
	5 or more	29.7	10.4	37.6	22.3	5.0	23.4	2.0	69.7
		χ^2=17.7, p= .124				χ^2=18.7, p= .097			

* $p < .05$; ** $p < .01$; and *** $p < .001$

Table 4-11: Travel Information Search and Travel Product Purchase Influenced by Number of Vacation Trips in Recent 12 Months (continued)

Number of vacation trips in recent 12 months	Travel Information Search				Travel Product Purchase			
	Online	Offline	On/ offline	None	Online	Offline	On/ offline	None
Car Rentals								
US 1	17.6%	1.6	8.8	72.0	13.1%	8.2	1.6	77.0
2	28.5	5.0	9.2	57.3	17.4	14.4	2.9	65.3
3	23.6	6.7	9.2	60.6	18.2	9.4	2.8	69.6
4	24.6	2.6	8.9	63.9	19.1	5.2	2.1	73.7
5 or more	29.4	7.0	7.3	56.3	25.2	10.8	2.8	61.2
	χ^2=25.1, p= .014*				χ^2=29.1, p= .004**			
CA 1	14.2%	6.3	3.7	75.8	6.3%	14.6	1.0	78.1
2	14.7	7.3	9.7	68.3	9.9	12.0	1.8	76.3
3	17.0	7.9	10.0	65.1	9.6	14.0	2.6	73.7
4	15.3	9.8	3.1	71.8	11.7	12.3	1.8	74.2
5 or more	17.8	5.0	5.0	72.3	10.9	11.9	1.0	76.1
	χ^2=21.2, p= .048*				χ^2=7.0, p= .855			
Events								
US 1	22.0%	5.5	24.7	47.8	4.9%	16.4	2.2	76.5
2	27.9	5.9	20.5	45.7	5.6	14.4	3.2	76.8
3	27.5	8.1	22.5	41.9	8.7	13.6	3.8	73.8
4	31.4	7.9	20.9	39.8	9.3	11.9	3.1	75.8
5 or more	28.1	5.5	17.4	48.9	5.2	13.2	4.6	76.9
	χ^2=12.5, p= .405				χ^2=10.4, p= .578			
CA 1	30.5%	7.4	16.3	45.8	6.8%	13.1	1.6	78.5
2	30.2	7.6	18.8	43.4	3.2	17.0	2.9	76.8
3	24.5	10.0	28.4	37.1	3.1	16.7	6.1	74.1
4	23.2	12.8	18.9	45.1	2.5	13.0	2.5	82.1
5 or more	29.4	8.5	18.4	43.8	6.0	22.9	1.0	70.1
	χ^2=20.0, p= .067				χ^2=28.6, p= .005**			
Flights								
US 1	35.2%	4.4	17.0	43.4	25.7%	18.0	3.8	52.5
2	43.0	4.7	11.9	40.4	30.9	14.4	6.2	48.5
3	42.3	5.3	15.5	37.0	35.0	16.4	4.5	44.1
4	45.0	4.2	12.6	38.2	29.4	20.1	4.6	45.9
5 or more	50.8	4.9	12.8	31.5	41.2	11.7	5.2	41.8
	χ^2=16.2, p= .181				χ^2=23.1, p= .027*			
CA 1	21.7%	7.4	22.8	48.1	8.3%	32.8	5.2	53.6
2	30.9	7.4	17.4	44.4	15.2	28.1	2.6	54.1
3	28.4	11.8	21.0	28.9	18.0	25.9	7.0	49.1
4	32.7	8.6	15.4	43.2	14.2	26.5	7.4	51.9
5 or more	31.3	9.0	14.9	44.8	16.0	24.0	4.0	56.0
	$\chi^{2\ 15.9}$=, p= .197				χ^2=19.8, p= .072			

* p < .05; ** p < .01; and *** p < .001

Travel Information Search and Travel Product Purchase Influenced by General Internet Use

Years of Internet use significantly differed in regard to **information search** for flights by US respondents, and accommodations, activities, attractions, events and flights by Canada respondents (Table 4-12). US respondents who used the Internet longer were likely to search for information online on flights. Canada respondents who used the Internet less than two years were less likely to search for information online on accommodations, activities, attractions, events and flights than those who used the Internet for four to six years.

Years of Internet use significantly differed in regard to the **purchase** of flights in the U.S. and car rentals in Canada (Table 4-12). US respondents who used the Internet longer years were more likely to purchase flights online. Specific patterns were not found in Canada.

Time spent online per week did not significantly differ in US respondents' **information search**. This element significantly differed in regard to information search for accommodations by Canada respondents (Table 4-13). Canada respondents who spent 21 hours or more per week online were likely to search for information online on accommodations.

Time spent online per week significantly differed in **purchasing** events and flights in the U.S., however, it did not significantly differ in Canada (Table 4-13). US respondents who spent time online longer were more likely to purchase events and flights online.

Table 4-12
Travel Information Search and Travel Product Purchase Influenced by Years of Internet Use

	Years of the Internet use	Travel Information Search				Travel Product Purchase			
		Online	Offline	On/offline	None	Online	Offline	On/offline	None
	Accommodations								
US	Less than 2 years	42.9%	6.8	35.2	15.1	27.1%	32.1	6.3	34.4
	2-4 years	51.6	5.7	29.7	13.0	35.0	26.5	11.9	26.5
	4-6 years	53.5	5.0	25.7	15.7	33.5	29.3	8.9	28.3
	More than 6 years	55.8	6.5	24.4	13.3	38.0	28.2	8.8	25.0
	χ^2=13.5, p= .141					χ^2=16.1, p= .065			
CA	Less than 2 years	45.9%	10.2	27.6	16.3	14.7%	45.7	6.6	33.0
	2-4 years	50.3	7.4	32.8	9.5	23.0	40.1	9.0	28.0
	4-6 years	55.7	8.6	23.9	11.8	23.7	28.8	9.0	28.5
	More than 6 years	46.2	6.0	36.3	11.5	22.6	34.0	13.6	29.8
	χ^2=19.6, p= .021*					χ^2=16.5, p= .058			
	Activities								
US	Less than 2 years	18.3%	9.1	19.2	53.4	4.5%	17.2	1.8	76.5
	2-4 years	24.1	8.4	18.4	49.1	5.6	16.1	3.9	74.5
	4-6 years	24.4	7.9	22.3	45.4	4.2	17.3	4.7	73.8
	More than 6 years	26.3	6.5	22.4	44.8	4.9	18.8	3.6	72.7
	χ^2=9.8, p= .365					χ^2=5.1, p= .821			
CA	Less than 2 years	23.6%	8.7	24.6	43.1	2.0	15.7	1.5	80.8
	2-4 years	21.4	10.3	20.9	47.4	3.2	17.7	2.9	76.3
	4-6 years	29.0	10.2	17.2	43.6	3.5	17.6	3.2	75.7
	More than 6 years	28.2	7.3	27.8	36.8	3.0	20.0	4.7	72.3
	χ^2=18.1, p= .034*					χ^2=6.7, p= .672			
	Attractions								
US	Less than 2 years	28.3%	10.0	35.2	26.5	4.5%	22.6	4.5	68.3
	2-4 years	30.0	10.8	33.7	25.6	5.6	20.0	4.1	70.3
	4-6 years	32.0	8.9	32.8	26.2	5.0	19.1	4.5	71.5
	More than 6 years	36.0	9.4	29.2	25.3	3.9	21.1	4.2	70.8
	χ^2=5.6, p= .783					χ^2=2.4, p= .985			
CA	Less than 2 years	31.8%	11.3	36.4	20.5	2.0%	25.9	3.0	69.0
	2-4 years	33.6	13.5	33.6	19.3	2.6	24.5	2.6	70.2
	4-6 years	37.6	7.3	29.6	25.5	4.2	23.6	2.2	70.0
	More than 6 years	31.3	7.3	39.9	21.5	2.1	20.9	6.8	70.1
	χ^2=18.4, p= .031*					χ^2=14.0, p= .124			

* p < .05; ** p < .01; and *** p < .001

Table 4-12
Travel Information Search and Travel Product Purchase Influenced by Years of Internet Use *(continued)*

Years of the Internet use	Travel Information Search				Travel Product Purchase			
	Online	Offline	On/ offline	None	Online	Offline	On/ offline	None
Car Rentals								
US Less than 2 years	19.2%	6.4	5.5	68.9	14.9%	10.4	0.9	73.8
2-4 years	24.8	4.9	10.3	60.0	19.2	10.0	3.6	67.2
4-6 years	28.9	4.5	8.9	57.7	20.4	10.5	3.4	65.7
More than 6 years	27.3	5.2	8.4	59.1	20.8	10.1	1.3	67.9
	χ^2=13.7, p= .134				χ^2=11.5, p= .244			
CA Less than 2 years	19.5%	4.6	5.1	70.8	9.7%	11.7	0	78.6
2-4 years	15.1	7.9	7.1	69.8	9.7	15.0	1.1	74.2
4-6 years	14.6	8.9	8.6	67.8	9.9	14.1	2.2	73.7
More than 6 years	15.4	5.6	6.0	73.1	8.5	8.1	3.8	79.5
	χ^2=9.4, p= .400				χ^2=17.9, p= .037*			
Events								
US Less than 2 years	24.2%	3.7	22.4	49.8	4.1%	15.8	3.2	76.9
2-4 years	25.3	8.4	20.9	45.5	6.6	11.9	3.4	78.1
4-6 years	27.0	6.8	21.8	44.4	6.0	12.6	4.2	77.2
More than 6 years	33.8	5.5	17.9	42.9	9.1	16.6	2.6	71.8
	χ^2=14.6, p= .103				χ^2=11.4, p= .247			
CA Less than 2 years	20.0%	8.2	23.6	48.2	2.5%	13.2	1.5	82.7
2-4 years	23.8	10.8	19.3	46.0	5.0	17.1	2.1	75.8
4-6 years	34.7	8.0	18.2	39.2	4.8	18.5	3.2	73.5
More than 6 years	32.3	8.1	20.9	38.7	3.9	16.3	5.2	74.7
	χ^2=21.7, p= .010*				χ^2=12.0, p= .215			
Flights								
US Less than 2 years	32.0%	5.9	14.6	47.5	24.9%	15.8	3.2	56.1
2-4 years	40.3	4.7	16.5	38.6	32.8	16.5	5.1	45.5
4-6 years	48.6	5.5	13.4	32.5	34.8	16.8	7.1	41.4
More than 6 years	52.3	3.2	9.7	34.7	38.6	12.3	3.9	45.1
	χ^2=32.6, p= .000***				χ^2=22.5, p= .008**			
CA Less than 2 years	21.4%	7.1	21.9	49.5	8.2%	28.6	3.1	60.2
2-4 years	27.0	8.2	19.6	45.2	15.0	28.9	4.7	51.3
4-6 years	34.4	10.5	12.4	42.7	15.3	27.5	5.8	51.4
More than 6 years	32.2	8.6	20.6	38.6	18.7	23.4	6.0	51.9
	χ^2=21.7, p= .010*				χ^2=14.8, p= .095			

* p < .05; ** p < .01; and *** p < .001

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Table 4-13
Travel Information Search and Travel Product Purchase Influenced by Time Spent Online Per Week

Time spent online per week	Travel Information Search				Travel Product Purchase			
	Online	Offline	On/offline	None	Online	Offline	On/offline	None
Accommodations								
US 4 hours or less	55.2%	5.2	25.0	14.6	32.5%	30.2	10.3	27.0
5-10 hours	50.8	7.3	28.8	13.0	29.8	32.6	9.8	27.8
11-20 hours	49.8	3.1	31.7	15.4	38.9	26.6	7.5	27.0
21 hours or more	51.2	7.5	27.2	14.1	35.1	25.0	9.8	30.1
	χ^2=11.5, p= .246				χ^2=11.0, p= .277			
CA 4 hours or less	48.3%	7.3	33.7	10.8	19.1%	39.9	11.4	29.6
5-10 hours	48.7	7.7	32.6	11.0	22.3	38.5	8.7	30.4
11-20 hours	44.7	9.7	30.4	15.2	24.4	41.2	7.6	26.9
21 hours or more	60.2	7.4	21.2	11.3	21.4	38.5	9.8	30.3
	χ^2=18.7, p= .028*				χ^2=5.5, p= .793			
Activities								
US 4 hours or less	27.9%	8.4	20.1	43.5	6.8%	18.0	3.2	72.0
5-10 hours	23.7	10.2	20.3	45.8	2.8	19.4	2.2	75.6
11-20 hours	21.6	6.3	21.0	51.1	4.4	14.7	4.7	76.2
21 hours or more	21.9	6.6	21.0	50.6	5.7	16.7	4.8	72.9
	χ^2=10.5, p= .315				χ^2=12.9, p= .167			
CA 4 hours or less	24.8%	10.2	23.6	41.4	2.6%	22.2	2.9	72.2
5-10 hours	25.5	9.4	22.6	42.6	4.2	17.4	4.2	74.2
11-20 hours	26.5	8.4	20.6	44.5	1.7	13.0	3.8	81.5
21 hours or more	24.8	9.1	20.4	45.7	3.0	16.3	1.3	79.4
	χ^2=2.3, p= .985				χ^2=16.3, p= .061			
Attractions								
US 4 hours or less	31.8%	11.7	32.1	24.4	4.5%	18.6	3.2	73.6
5-10 hours	32.2	11.0	32.2	24.6	3.9	23.3	3.7	69.1
11-20 hours	29.2	10.0	32.9	27.9	3.8	21.9	3.4	70.8
21 hours or more	33.5	6.6	33.2	26.6	7.1	17.6	6.8	68.5
	χ^2=7.4, p= .596				χ^2=16.3, p= .061			
CA 4 hours or less	34.0%	11.9	35.8	18.3	3.2%	28.0	3.2	65.6
5-10 hours	32.7	9.1	34.0	24.3	1.6	19.8	3.2	75.3
11-20 hours	37.6	9.7	28.7	24.1	4.2	22.2	5.0	68.6
21 hours or more	32.3	9.5	37.5	20.7	2.6	24.4	2.1	70.9
	χ^2=9.4, p= .404				χ^2=13.6, p= .139			

* $p < .05$; ** $p < .01$; and *** $p < .001$

Table 4-13

Travel Information Search and Travel Product Purchase Influenced by Time Spent Online Per Week (continued)

Time spent online per week	Travel Information Search				Travel Product Purchase			
	Online	Offline	On/ offline	None	Online	Offline	On/ offline	None
Car Rentals								
US 4 hours or less	25.0%	6.5	6.8	61.7	17.4%	12.9	1.9	67.8
5-10 hours	27.1	5.1	8.5	59.3	19.4	12.4	1.7	66.6
11-20 hours	25.1	3.1	7.8	63.9	16.9	7.8	2.8	72.4
21 hours or more	25.1	5.7	11.4	57.8	22.9	7.7	3.9	65.5
	χ^2=9.7, p= .372				χ^2=16.5, p= .056			
CA 4 hours or less	15.7%	8.1	9.0	67.2	9.6%	14.9	2.0	73.4
5-10 hours	13.2	8.1	7.4	71.3	11.3	13.9	2.3	72.5
11-20 hours	17.3	5.9	6.3	70.5	9.2	13.0	0.4	77.3
21 hours or more	17.8	6.1	3.5	72.6	7.7	8.1	2.1	82.1
	χ^2=11.0, p= .275				χ^2=12.5, p= .184			
Events								
US 4 hours or less	30.8%	6.2	16.6	46.4	5.1%	15.1	1.9	77.8
5-10 hours	28.2	7.9	20.3	43.5	4.5	13.5	3.1	78.9
11-20 hours	25.1	6.6	20.7	47.6	6.9	15.7	3.1	74.3
21 hours or more	26.3	5.1	24.9	43.7	9.8	11.3	5.4	73.5
	χ^2=10.6, p= .305				χ^2=18.3, p= .032*			
CA 4 hours or less	21.8	8.1	22.1	48.0	2.3	19.6	1.8	76.3
5-10 hours	31.3	10.6	17.1	41.0	5.2	16.1	2.9	75.8
11-20 hours	28.2	9.7	20.2	42.0	5.0	17.6	3.8	76.5
21 hours or more	32.6	7.0	21.3	39.1	5.2	12.4	3.9	78.5
	χ^2=15.4, p= .080				χ^2=12.0, p= .213			
Flights								
US 4 hours or less	44.2%	4.9	13.6	37.3	31.5%	18.3	6.4	43.7
5-10 hours	42.7	5.6	13.3	38.4	31.2	19.7	3.7	45.5
11-20 hours	42.9	4.4	11.9	40.8	34.5	12.5	3.8	49.2
21 hours or more	46.7	4.2	15.9	33.2	36.6	11.3	6.5	45.5
	χ^2=6.2, p= .717				χ^2=19.4, p= .022*			
CA 4 hours or less	28.3%	9.3	19.2	43.1	13.5%	28.9	4.7	52.9
5-10 hours	28.7	10.0	18.1	43.2	16.2	26.9	5.8	51.0
11-20 hours	26.5	7.6	19.7	46.2	13.4	27.2	4.2	55.2
21 hours or more	33.9	7.8	15.2	43.0	15.5	25.8	4.7	54.1
	χ^2=5.8, p= .759				χ^2=3.2, p= .958			

* $p < .05$; ** $p < .01$; and *** $p < .001$

Speed of Internet connection significantly differed in regard to **information search** for accommodations, activities, car rentals and flights in the U.S., and activities and car rentals in Canada (Table 4-14). US respondents with high speed were more likely to search for information online on accommodations, activities, car rentals and flights than US respondents with regular speed. Canada respondents with high speed were more likely to search for information online on activities and car rentals than Canada respondents with regular speed. The gap of online usage in Canada for information search between high speed users and regular speed users was smaller than the gap in the U.S.

Speed of the Internet connection significantly differed in **purchasing** accommodations, activities, car rentals and flights in the U.S. Internet speed did not significantly differ in Canada (Table 4-14). US respondents with high speed were more likely to purchase accommodations, car rentals and flights online than US respondents with regular speed.

Table 4-14
Travel Information Search and Travel Product Purchase Influenced by Speed of Internet Connection

Speed of the Internet connection		Travel Information Search				Travel Product Purchase			
		Online	Offline	On/ offline	None	Online	Offline	On/ offline	None
		Accommodations							
US	High speed	57.1%	6.1	22.8	14.0	38.6%	29.4	8.1	23.9
	Regular speed	48.0	5.7	32.0	14.2	30.8	28.3	10.3	30.7
		χ^2=14.7, p= .002**				χ^2=12.7, p= .005**			
CA	High speed	50.3%	8.1	29.4	12.2	22.2%	39.6	9.2	28.9
	Regular speed	49.9	7.8	31.0	11.2	20.7	39.5	9.9	30.0
		χ^2=0.5, p= .911				χ^2=0.6, p= .907			
		Activities							
US	High speed	26.8%	7.2	22.8	43.3	5.9%	19.7	4.2	70.3
	Regular speed	21.8	8.3	19.2	50.7	4.0	15.5	3.5	77.0
		χ^2=9.4, p= .024*				χ^2=7.9, p= .049*			
CA	High speed	25.8%	10.1	24.5	39.7	3.4%	18.8	3.0	74.9
	Regular speed	24.8	8.8	19.0	47.4	2.5	16.9	3.0	77.6
		χ^2=8.2, p= .042*				χ^2=1.5, p= .675			
		Attractions							
US	High speed	32.1%	10.2	30.2	27.5	3.8%	21.4	4.5	70.3
	Regular speed	31.5	9.5	34.4	24.6	5.5	19.6	4.3	70.6
		χ^2=3.0, p= .386				χ^2=2.5, p= .476			
CA	High speed	32.5%	9.7	36.9	20.9	3.2%	21.8	3.5	71.5
	Regular speed	35.6	10.5	31.0	22.9	2.3	26.2	3.2	68.3
		χ^2=4.2, p= .242				$\chi^2$3.6, p= .302			
		Car Rentals							
US	High speed	29.6%	5.1	6.8	58.4	23.1%	10.0	2.5	64.4
	Regular speed	23.0	5.0	9.8	62.2	16.5	10.4	2.6	70.5
		χ^2=9.5, p= .023*				χ^2=9.0, p= .029*			
CA	High speed	16.8%	8.7	5.0	69.5	10.7%	12.9	1.8	74.6
	Regular speed	14.7	5.5	9.0	70.9	8.3	12.9	1.7	77.0
		χ^2=11.0, p= .011*				χ^2=1.9, p= .601			
		Events							
US	High speed	29.6%	8.0	18.8	43.6	6.8%	14.8	3.6	74.8
	Regular speed	26.1	5.5	22.2	46.2	6.4	13.3	3.5	76.8
		χ^2=6.5, p= .091				χ^2=0.8, p= .851			
CA	High speed	27.1%	9.5	22.6	40.8	4.7%	17.8	2.7	74.9
	Regular speed	28.8	8.4	17.5	45.3	3.8	15.7	3.2	77.2
		χ^2=5.6, p= .135				χ^2=1.7, p= .641			
		Flights							
US	High speed	51.8%	4.6	10.8	32.8	39.6%	16.1	4.9	39.4
	Regular speed	38.8	4.9	15.6	40.6	29.3	15.1	5.1	50.4
		χ^2=22.6, p= .000***				χ^2=18.7, p= .000***			
CA	High speed	31.8%	8.7	19.1	40.5	16.8%	27.8	4.9	50.6
	Regular speed	26.1	9.0	17.4	47.5	12.3	26.9	4.9	55.8
		χ^2=6.7, p= .083				χ^2=5.2, p= .156			

*p < .05; ** p < .01; and *** p < .001

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Credit card use for online purchase significantly differed in regard to

information search for accommodations and flights in the U.S., and car rentals

and flights in Canada (Table 4-15). US respondents with credit card use for

online purchasing were likely to search for information online on

accommodations and flights. US respondents who did not use credit cards for

online purchase were likely to search for information on/offline on

accommodations and flights. Canada respondents with credit card use were

likely to search for information online on car rentals and flights.

Credit card use for online purchase significantly differed in regard to the

purchase of accommodations, car rentals, events and flights in the U.S., and

accommodations, activities, attractions, car rentals, events and flights in Canada

(Table 4-15). US respondents with credit card use for online purchase were

likely to purchase accommodations, car rentals and flights online. US

respondents who did not use credit cards for online purchase were likely to

purchase accommodations and flights offline. Canada respondents with credit

card use were likely to purchase accommodations, car rentals and flights online.

Canada respondents who did not use credit cards were likely to purchase

accommodations, attractions, events and flights offline.

Table 4-15
Travel Information Search and Travel Product Purchase Influenced by Credit Card Use for Online Purchase

Credit card Usage for online purchase		Travel Information Search				Travel Product Purchase			
		Online	Offline	On/ offline	None	Online	Offline	On/ offline	None
		Accommodations							
US	Yes	53.2%	5.2	27.4	14.2	36.8%	26.3	9.8	27.1
	No	39.9	10.8	35.8	13.5	11.5	48.0	6.1	34.5
		χ^2=15.0, p= .002**				χ^2=50.9, p= .000***			
CA	Yes	52.4%	7.1	29.4	11.2	27.7%	34.0	10.9	27.4
	No	44.5	10.1	32.2	13.2	6.0	53.5	6.0	34.6
		χ^2=6.9, p= .077				χ^2=81.7, p= .000***			
		Activities							
US	Yes	24.3%	7.7	20.7	47.3	4.9%	16.9	3.7	74.5
	No	19.6	9.5	20.3	50.7	4.1	19.6	4.1	72.3
		χ^2=2.1, p= .556				χ^2=0.9, p= .827			
CA	Yes	25.9%	9.5	20.8	43.7	3.8%	16.5	3.7	76.0
	No	24.0	9.1	24.6	42.3	0.6	21.5	1.3	76.6
		χ^2=2.0, p= .578				χ^2=15.7, p= .001**			
		Attractions							
US	Yes	32.2%	9.8	31.5	26.4	5.1%	19.4	4.3	71.2
	No	27.7	9.5	42.6	20.3	2.7	27.7	5.4	64.2
		χ^2=7.7, p= .053				χ^2=7.3, p= .064			
CA	Yes	32.4%	10.2	33.6	23.8	3.7%	20.7	3.7	71.9
	No	37.9	9.8	35.6	16.7	0.3	31.9	2.5	62.3
		χ^2=7.6, p= .056				χ^2=23.8, p= .000***			
		Car Rentals							
US	Yes	26.3%	4.7	8.4	60.5	20.8%	9.9	2.2	67.0
	No	19.6	8.1	10.1	62.2	5.4	12.8	5.4	76.4
		χ^2=5.9, p= .118				χ^2=24.4, p= .000***			
CA	Yes	17.7%	7.7	7.1	67.5	11.8%	11.5	2.1	74.6
	No	10.7	6.0	6.6	76.7	4.1	16.1	0.6	79.1
		χ^2=10.7, p= .013*				χ^2=21.1, p= .000***			
		Events							
US	Yes	28.2%	6.7	20.3	44.8	7.4%	13.2	3.6	75.8
	No	22.3	4.7	25.0	48.0	0.7	18.9	3.4	77.0
		χ^2=4.2, p= .242				χ^2=12.0, p= .007**			
CA	Yes	29.0%	8.9	19.8	42.3	5.3%	14.6	3.6	76.5
	No	25.3	8.9	21.5	44.3	1.6	22.4	1.3	74.8
		χ^2=1.6, p= .650				χ^2=20.0, p= .000***			
		Flights							
US	Yes	46.1%	4.6	12.9	36.4	36.6%	13.7	5.1	44.6
	No	27.0	6.1	20.3	46.6	7.4	29.7	4.7	58.1
		χ^2=20.4, p= .000***				χ^2=60.5, p= .000***			
CA	Yes	32.3%	9.3	18.1	40.3	18.2%	25.5	6.3	50.0
	No	21.2	7.6	18.7	52.5	5.7	32.4	1.3	60.7
		χ^2=18.2, p= .000***				χ^2=45.3, p= .000***			

* p < .05; ** p < .01; and *** p < .001

Travel Information Search and Travel Product Purchase Influenced by Internet Use for the Latest Trip

Planning horizon for Internet use for the latest trip significantly differed in regard to **information search** for activities, attractions, car rentals and flights in the U.S., and accommodations, activities, attractions, car rentals and flights in Canada (Table 4-16). US respondents who used the Internet for a longer period for the latest trip were more likely to search for information on/offline for activities, attractions and flights. Canada respondents who used the Internet for a longer period for the latest trip were more likely to search for information on/offline for accommodations, activities, attractions and flights, and online for car rentals.

Planning horizon for Internet use for the latest trip significantly differed in **purchasing** accommodations, activities, car rentals and flights in the U.S., and accommodations, car rentals and flights in Canada (Table 4-16). US respondents who used the Internet for a longer period for the latest trip were more likely to purchase accommodations, activities and flights. US respondents who used the Internet for four months or more for the latest trip were more likely to purchase accommodations, activities, car rentals and flights offline than others. Canada respondent who used the Internet for a longer period for the latest trip were more likely to purchase accommodations on/offline, and car rentals and flights offline.

Table 4-16

Travel Information Search and Travel Product Purchase Influenced by Planning Horizon for Internet Use for the Latest Trip

Planning horizon for the Internet use for the latest trip	Travel Information Search				Travel Product Purchase			
	Online	Offline	On/offline	None	Online	Offline	On/offline	None
Accommodations								
US Less than 2 weeks	50.6%	7.0	24.4	18.0	30.3%	25.1	4.6	40.0
2-4 weeks	53.7	5.9	22.4	18.0	32.9	26.7	7.8	32.5
1-2 months	52.3	5.0	27.8	14.9	38.1	23.5	11.0	27.4
2-4 months	48.5	5.7	32.8	13.0	34.1	33.1	8.4	24.4
4 months or more	53.5	6.0	31.8	8.7	32.0	33.7	13.5	20.8
	$\chi^2 =20.6$, $p= .057$				$\chi^2 =40.3$, $p= .000$***			
CA Less than 2 weeks	55.4%	4.8	20.2	19.6	23.7%	36.7	1.8	37.9
2-4 weeks	50.9	12.4	24.3	12.4	16.4	43.8	7.1	32.7
1-2 months	48.3	6.3	32.4	13.0	22.0	38.1	10.6	29.2
2-4 months	46.5	9.2	33.6	10.6	19.3	38.1	12.8	29.8
4 months or more	50.6	6.3	36.8	6.3	26.0	40.5	13.0	20.4
	$\chi^2 =14.0$, $p= .000$***				$\chi^2 =38.5$, $p= .000$***			
Activities								
US Less than 2 weeks	18.6%	8.1	12.8	60.5	2.3%	10.3	1.1	86.3
2-4 weeks	23.9	5.9	14.9	55.3	1.6	17.3	4.7	76.5
1-2 months	23.8	8.5	20.6	47.0	4.6	15.3	3.6	76.5
2-4 months	25.4	7.7	23.4	43.5	7.4	16.1	3.3	73.2
4 months or more	25.4	9.4	27.4	37.8	6.9	23.8	5.0	64.4
	$\chi^2 =38.2$, $p= .000$***				$\chi^2 =40.8$, $p= .000$***			
CA Less than 2 weeks	23.8%	11.3	16.7	48.2	2.4%	17.3	1.2	79.2
2-4 weeks	23.6	8.0	14.2	54.2	0.9	17.7	2.7	78.8
1-2 months	27.0	9.7	21.1	42.2	2.1	18.7	4.3	74.9
2-4 months	27.9	11.0	23.7	37.4	3.7	17.9	2.3	76.1
4 months or more	24.2	8.2	30.9	36.8	5.2	18.1	4.1	72.7
	$\chi^2 =33.5$, $p= .001$**				$\chi^2 =14.4$, $p= .279$			

* $p < .05$; ** $p < .01$; and *** $p < .001$

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Table 4-16

Travel Information Search and Travel Product Purchase Influenced by Planning Horizon for Internet Use for the Latest Trip *(continued)*

Planning horizon for the Internet use for the latest trip	Travel Information Search				Travel Product Purchase			
	Online	Offline	On/ offline	None	Online	Offline	On/ offline	None
Attractions								
US Less than 2 weeks	21.5%	8.7	26.2	43.6	5.1%	14.3	1.7	78.9
2-4 weeks	37.6	9.4	25.9	27.1	3.5	21.2	5.5	69.8
1-2 months	32.7	9.3	30.6	27.4	5.3	21.4	2.8	70.5
2-4 months	29.4	9.7	34.8	26.1	4.7	18.7	4.7	71.9
4 months or more	34.1	11.0	42.8	12.0	5.6	23.1	6.6	64.7
	χ^2=70.1, p= .000***				χ^2=18.0, p= .117			
CA Less than 2 weeks	33.3%	10.1	22.0	34.5	1.8%	20.8	3.0	74.4
2-4 weeks	36.4	9.8	30.7	23.1	2.7	24.8	4.9	67.7
1-2 months	33.3	9.3	36.7	20.7	1.7	25.0	3.4	69.9
2-4 months	32.7	14.3	35.5	17.5	2.8	21.1	2.3	73.9
4 months or more	34.0	7.8	41.0	17.2	4.8	26.2	3.3	65.7
	χ^2=35.5, p= .000***				χ^2=11.7, p= .470			
Car Rentals								
US Less than 2 weeks	18.6%	1.7	6.4	73.3	13.1%	4.0	0.6	82.3
2-4 weeks	18.0	3.5	7.1	71.4	14.5	7.8	4.7	72.9
1-2 months	29.9	5.0	11.0	54.1	26.3	10.7	1.1	61.9
2-4 months	24.4	7.7	8.4	59.5	17.7	10.7	2.0	69.6
4 months or more	33.1	6.0	9.4	51.5	21.5	15.2	3.6	59.7
	χ^2=46.5, p= .000***				χ^2=52.7, p= .000***			
CA Less than 2 weeks	10.7%	5.9	3.6	79.9	7.1%	8.3	1.2	83.4
2-4 weeks	12.8	7.5	5.8	73.9	8.0	8.0	1.8	82.2
1-2 months	14.3	6.3	6.7	72.7	9.3	11.4	2.5	76.7
2-4 months	18.9	6.9	6.0	68.2	12.3	13.7	0.5	73.5
4 months or more	20.4	9.3	10.8	59.5	11.1	20.7	2.6	65.6
	χ^2=28.5, p= .005**				χ^2=34.9, p= .000***			

* p < .05; ** p < .01; and *** p < .001

Table 4-16

Travel Information Search and Travel Product Purchase Influenced by Planning Horizon for Internet Use for the Latest Trip *(continued)*

Planning horizon for the Internet use for the latest trip	Travel Information Search				Travel Product Purchase			
	Online	Offline	On/ offline	None	Online	Offline	On/ offline	None
Events								
US Less than 2 weeks	18.0%	5.8	20.3	55.8	5.7%	10.3	1.7	82.3
2-4 weeks	26.7	8.2	16.5	48.6	6.3	14.9	3.1	75.7
1-2 months	29.9	5.7	19.9	44.5	5.7	13.9	4.6	75.8
2-4 months	29.4	6.7	21.4	42.5	7.7	15.4	3.3	73.9
4 months or more	29.4	5.7	24.4	40.5	7.3	14.2	4.3	74.3
	χ^2=20.3, p= .062				χ^2=7.8, p= .798			
CA Less than 2 weeks	29.8%	11.3	13.7	45.2	5.9%	17.8	1.8	74.6
2-4 weeks	28.3	8.4	21.2	42.0	4.4	15.5	1.8	78.3
1-2 months	31.1	7.6	21.4	39.9	4.2	15.2	4.2	76.4
2-4 months	26.1	9.2	20.2	44.5	3.7	14.2	2.8	79.4
4 months or more	25.1	9.0	22.1	43.8	4.1	20.7	3.7	71.6
	χ^2=9.0, p= .706				χ^2=10.1, p= .604			
Flights								
US Less than 2 weeks	37.8%	1.7	7.6	52.9	25.7%	4.0	2.3	68.0
2-4 weeks	39.6	3.5	9.8	47.1	33.3	6.7	5.1	54.9
1-2 months	46.6	3.2	13.5	36.7	34.9	16.4	3.9	44.8
2-4 months	47.2	5.0	16.7	31.1	38.5	14.7	5.4	41.5
4 months or more	46.8	8.4	17.7	27.1	32.0	29.4	7.6	31.0
	χ^2=60.4, p= .000***				χ^2=117.8, p= .000***			
CA Less than 2 weeks	24.2%	2.4	14.8	58.6	13.7%	12.5	1.8	72.0
2-4 weeks	30.2	6.7	12.9	50.2	15.9	18.6	4.9	60.6
1-2 months	31.1	10.9	16.0	42.0	14.5	27.7	4.3	53.6
2-4 months	30.9	13.4	18.4	37.3	15.6	34.9	4.6	45.0
4 months or more	27.9	9.3	27.5	35.3	14.0	38.7	7.7	39.5
	χ^2=52.7, p= .000***				χ^2=71.5, p= .000***			

* $p < .05$; ** $p < .01$; and *** $p < .001$

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Time spent online for the latest trip significantly differed in regard to

information search for all six products in the U.S. and Canada (Table 4-17).

The more time US respondents spent online for the latest trip, the more they

were likely to search for information online and on/offline on all six products, and

the more they were likely to search for information offline on car rentals and

flights. However, they were less likely to search for information offline on

accommodations and activities. The more time Canada respondents spent

online for the latest trip, the more they were likely to search for information online

on activities, attractions, car rentals and flights, and the more they were likely to

search information offline on flights. However, they were less likely to search for

information offline on activities, attraction and events.

Time spent online for the latest trip significantly differed in **purchasing** all six

products in the U.S., and accommodations, activities, car rentals and flights in

Canada (Table 4-17). The more time US respondents spent online for the latest

trip, the more they were likely to purchase accommodations, activities,

attractions, car rentals and events online and on/offline, and flights on/offline. In

addition, they were more likely to purchase activities, attractions, car rentals and

flights offline. The more time Canada respondents spent online for the latest trip,

the more they were likely to purchase accommodations, activities and car rentals

online and on/offline, the more they were likely to purchase attractions, events

and flights on/offline, and the more they were likely to purchase car rentals and

flights offline. However, they were less likely to purchase accommodations

offline.

Table 4-17
Travel Information Search and Travel Product Purchase Influenced by Time Spent Online for the Latest Trip

Time spent online for the latest trip	Travel Information Search				Travel Product Purchase			
	Online	Offline	On/ offline	None	Online	Offline	On/ offline	None
Accommodations								
US 2 hours or less	45.9%	6.8	25.8	21.5	29.8%	27.6	5.9	36.7
3-5 hours	55.0	5.5	26.7	12.7	35.3	30.5	10.0	24.1
6 hours or more	55.6	5.0	32.9	6.5	37.0	28.5	13.5	21.0
	χ^2=47.1, p= .000***				χ^2=40.9, p= .000***			
CA 2 hours or less	44.7%	9.1	28.6	17.7	17.1%	40.5	6.9	35.4
3-5 hours	54.4	9.6	26.7	9.3	23.8	39.8	7.2	29.2
6 hours or more	52.3	5.1	35.7	6.9	24.8	38.7	15.1	21.4
	χ^2=36.2, p= .000***				χ^2=35.9, p= .000***			
Activities								
US 2 hours or less	18.6%	9.4	14.8	57.2	2.8%	14.2	2.0	80.9
3-5 hours	24.5	8.2	21.9	45.4	5.3	17.7	4.8	72.3
6 hours or more	29.7	6.0	26.4	37.9	7.0	20.0	4.8	68.3
	χ^2=47.4, p= .000***				χ^2=23.8, p= .001**			
CA 2 hours or less	19.0%	11.6	16.7	52.7	1.4%	16.2	1.8	80.6
3-5 hours	27.8	10.2	20.1	41.9	2.7	21.3	3.0	73.1
6 hours or more	30.3	6.3	30.0	33.4	5.4	16.5	4.8	73.2
	χ^2=50.0, p= .000***				χ^2=21.3, p= .002**			
Attractions								
US 2 hours or less	25.4%	9.8	25.4	39.3	3.2%	16.4	2.6	77.7
3-5 hours	33.9	9.9	33.4	22.8	5.3	19.3	5.0	70.4
6 hours or more	37.4	9.5	41.1	12.0	6.5	25.5	6.3	61.8
	χ^2=93.7, p= .000***				χ^2=28.9, p= .000***			
CA 2 hours or less	27.1%	12.1	28.3	32.5	1.4%	21.9	2.8	73.9
3-5 hours	28.0	10.8	32.0	19.2	4.2	26.3	3.3	66.2
6 hours or more	38.6	7.1	42.6	11.7	3.4	23.6	4.3	68.7
	χ^2=66.2, p= .000***				χ^2=10.3, p= .112			
Car Rentals								
US 2 hours or less	18.2%	2.0	7.6	72.1	12.6%	7.7	1.2	78.5
3-5 hours	25.5	6.3	9.1	59.1	21.0	11.2	2.1	65.6
6 hours or more	34.7	7.7	9.2	48.4	25.5	12.3	4.5	57.8
	χ^2=60.1, p= .000***				χ^2=49.6, p= .000***			
CA 2 hours or less	10.7%	7.2	4.6	77.5	7.6%	9.5	0.9	82.0
3-5 hours	15.2	6.3	3.6	74.9	9.0	11.7	2.1	77.2
6 hours or more	22.6	8.3	12.9	56.3	12.6	18.3	2.6	66.6
	χ^2=58.9, p= .000***				χ^2 26.7, p= .000***			

* p < .05; ** p < .01; and *** p < .001

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Table 4-17
Travel Information Search and Travel Product Purchase Influenced by Time Spent Online for the Latest Trip _(continued)_

Time spent online for the latest trip	Travel Information Search				Travel Product Purchase			
	Online	Offline	On/offline	None	Online	Offline	On/offline	None
Events								
US 2 hours or less	20.3%	7.0	17.4	55.3	4.7%	12.8	2.6	79.9
3-5 hours	27.9	7.2	21.4	43.5	7.6	17.2	3.6	71.6
6 hours or more	35.9	5.0	23.7	35.4	8.0	12.0	4.5	75.5
	χ^2=45.6, p= .000***				χ^2=13.6, p= .034*			
CA 2 hours or less	23.0%	10.4	18.8	47.8	3.7%	15.9	2.5	77.9
3-5 hours	33.2	7.8	18.6	40.4	5.1	18.6	2.7	73.6
6 hours or more	29.1	8.3	23.1	39.4	4.3	15.7	3.7	76.3
	χ^2=15.3, p= .018*				χ^2=3.5, p= .749			
Flights								
US 2 hours or less	40.8%	1.8	9.4	48.0	31.6%	8.7	3.0	56.6
3-5 hours	43.8	5.3	14.4	36.5	36.3	14.6	5.0	44.2
6 hours or more	49.1	7.2	18.2	25.4	33.0	24.8	7.5	34.8
	χ^2=60.6, p= .000***				χ^2=70.6, p= .000***			
CA 2 hours or less	27.9%	4.9	14.7	52.6	14.8%	19.9	3.7	61.6
3-5 hours	28.8	9.0	15.6	46.5	15.0	24.9	3.9	56.2
6 hours or more	30.2	13.7	25.6	30.5	14.3	40.0	7.1	38.6
	χ^2=54.2, p= .000***				χ^2=55.6, p= .000***			

* $p < .05$; ** $p < .01$; and *** $p < .001$

Travel Information Search and Travel Product Purchase Influenced by Latest Trip Behavior

Length of stay of the latest trip significantly differed in regard to **information search** for activities, attractions, car rentals and flights in the U.S., and all six products in Canada (Table 4-18). US respondents who stayed longer on their latest trip were more likely to search for information on/offline on accommodations, activities, car rentals and flights, and offline on flights. Canada respondents who stayed longer on their latest trip were more likely to search for information on/offline on accommodations, activities, attractions, car rentals and events, and online and offline on car rentals and flights.

Length of stay of the latest trip significantly differed in **purchasing** accommodations, activities, car rentals and flights in the U.S., and accommodations, car rentals, events and flights in Canada (Table 4-18). US respondents who stayed longer on their latest trip were more likely to purchase activities online, car rentals and flights offline, and activities and flights on/offline. Canada respondents who stayed longer on their latest trip were more likely to purchase flights online, car rentals and flights offline, and car rentals on/offline.

Table 4-18
Travel Information Search and Travel Product Purchase Influenced by Length of Stay of the Latest Trip

Length of stay of the latest trip		Travel Information Search				Travel Product Purchase			
		Online	Offline	On/offline	None	Online	Offline	On/offline	None
		Accommodations							
US	1-2 nights	60.2%	6.6	22.3	10.8	35.1%	34.5	5.4	25.0
	3-6 nights	54.3	4.6	26.8	14.3	36.5	29.4	6.9	27.2
	7-13 nights	47.6	7.1	29.3	16.0	31.5	27.7	12.1	28.7
	14 nights or more	46.9	5.9	34.3	13.0	31.7	24.6	13.3	30.4
		$\chi^2 = 16.3, p = .060$				$\chi^2 = 20.5, p = .015^*$			
CA	1-2 nights	65.2%	5.1	22.5	7.2	23.2%	49.3	6.5	21.0
	3-6 nights	54.4	6.4	28.1	11.0	26.7	41.1	4.9	27.3
	7-13 nights	42.9	9.7	32.1	15.3	16.7	37.3	10.7	35.3
	14 nights or more	46.7	9.2	33.7	10.5	21.2	35.8	14.7	28.3
		$\chi^2 = 27.7, p = .001^{**}$				$\chi^2 = 38.7, p = .000^{***}$			
		Activities							
US	1-2 nights	17.5%	8.4	17.5	56.6	3.6%	13.1	1.8	81.5
	3-6 nights	25.4	5.7	18.0	50.9	4.8	14.0	3.1	78.2
	7-13 nights	25.4	8.1	22.1	44.3	5.0	20.9	3.8	70.3
	14 nights or more	21.8	11.7	26.4	40.2	5.4	20.8	6.7	67.1
		$\chi^2 = 26.4, p = .002^{**}$				$\chi^2 = 23.3, p = .006^{**}$			
CA	1-2 nights	22.5%	8.7	11.6	57.2	2.2%	15.1	0.7	82.0
	3-6 nights	25.1	6.7	17.4	50.8	1.5	18.7	3.1	76.7
	7-13 nights	29.7	9.9	23.2	37.1	4.5	16.9	2.8	75.8
	14 nights or more	21.9	12.1	29.7	36.3	3.6	19.5	4.2	72.6
		$\chi^2 = 45.2, p = .000^{***}$				$\chi^2 = 12.0, p = .214$			
		Attractions							
US	1-2 nights	27.1%	8.4	29.5	34.9	3.6%	14.3	3.6	78.6
	3-6 nights	34.6	7.5	28.3	29.6	5.4	18.5	3.6	72.5
	7-13 nights	33.6	11.2	34.1	21.1	5.0	21.9	4.8	68.3
	14 nights or more	25.5	13.4	42.7	18.4	4.2	25.8	6.3	63.8
		$\chi^2 = 40.9, p = .000^{***}$				$\chi^2 = 15.6, p = .075$			
CA	1-2 nights	29.7%	10.9	26.8	32.6	1.4%	20.3	2.9	75.4
	3-6 nights	36.6	10.1	28.0	25.3	2.8	23.9	3.4	69.9
	7-13 nights	36.4	6.8	35.5	21.3	3.1	22.5	2.5	71.8
	14 nights or more	30.1	13.4	42.5	14.1	3.3	27.0	4.6	65.1
		$\chi^2 = 40.3, p = .000^{***}$				$\chi^2 = 7.4, p = .596$			

$^* p < .05; ^{**} p < .01;$ and $^{***} p < .001$

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Table 4-18
Travel Information Search and Travel Product Purchase Influenced by Length of Stay of the Latest Trip _(continued)_

Length of stay of the latest trip	Travel Information Search				Travel Product Purchase			
	Online	Offline	On/ offline	None	Online	Offline	On/ Offline	None
Car Rentals								
US	1-2 nights	16.9%	1.2	6.0	75.9	12.5%	2.4	1.8	83.3
	3-6 nights	22.6	4.0	8.6	64.8	17.2	8.8	1.5	72.5
	7-13 nights	30.5	3.8	8.9	56.7	25.2	10.8	2.8	61.2
	14 nights or more	30.1	12.1	10.0	47.7	17.9	17.9	5.0	59.2

χ^2=60.6, p= .000*** $\quad\quad$ χ^2=58.8, p= .000***

CA	1-2 nights	8.6%	2.2	2.2	87.1	2.9%	6.5	0	90.6
	3-6 nights	11.6	3.4	4.6	80.4	9.8	7.7	0.6	81.8
	7-13 nights	16.5	8.8	8.2	66.5	7.0	13.5	2.0	77.5
	14 nights or more	22.9	11.8	9.8	55.6	15.3	20.5	3.6	60.6

χ^2=71.9, p= .000*** $\quad\quad$ χ^2=70.1, p= .000***

Events

US	1-2 nights	30.7%	7.2	17.5	44.6	7.1%	14.3	2.4	76.2
	3-6 nights	31.0	6.1	20.3	42.6	8.6	13.8	3.3	74.4
	7-13 nights	23.7	7.6	19.6	49.1	6.0	14.6	3.0	76.3
	14 nights or more	24.3	5.0	26.4	44.4	2.9	12.5	5.8	78.8

χ^2=14.7, p= .100 $\quad\quad$ χ^2=13.9, p= .126

CA	1-2 nights	30.4%	10.1	16.7	42.8	8.7%	13.8	1.4	76.1
	3-6 nights	32.7	8.0	19.9	39.4	5.2	18.7	3.7	72.4
	7-13 nights	29.2	5.9	20.1	44.8	4.2	13.5	2.0	80.3
	14 nights or more	20.3	12.8	22.6	44.3	1.3	19.9	3.6	75.2

χ^2=21.8, p= .010* $\quad\quad$ χ^2=23.6, p= .005**

Flights

US	1-2 nights	27.7%	0.6	6.6	65.1	20.8%	2.4	3.0	73.8
	3-6 nights	46.7	1.9	10.9	40.5	34.8	10.1	3.3	51.8
	7-13 nights	47.8	5.9	15.5	30.8	29.8	18.6	5.8	35.8
	14 nights or more	43.1	12.1	21.8	23.0	28.3	31.3	9.2	31.3

χ^2=129.6, p= .000*** $\quad\quad$ χ^2=149.9, p= .000***

CA	1-2 nights	15.2%	2.9	3.6	78.3	7.3%	5.8	1.5	85.4
	3-6 nights	28.7	4.9	12.5	54.0	16.0	15.0	4.3	64.7
	7-13 nights	30.6	9.9	26.1	33.4	16.7	36.4	3.7	43.2
	14 nights or more	34.1	14.4	22.3	29.2	14.3	39.9	8.4	37.3

χ^2=139.9, p= .000*** $\quad\quad$ χ^2=144.7, p= .000***

* p < .05; ** p < .01; and *** p < .001

Destination of the latest trip significantly differed in regard to **information search** for accommodations, activities, attractions, car rentals and flights in the U.S., and accommodations, activities, car rentals and flights in Canada (Table 4-19). Respondents (both US and Canada) who traveled out of state/province were more likely to search for information on flights online, offline and on/offline than not search for information. US respondents who traveled farther were more likely to search for information on attractions offline and on/offline.

Destination of the latest trip significantly differed in **purchasing** activities, attractions and flights in the U.S. and Canada (Table 4-19). Respondents (both US and Canada) were less likely to purchase flights when traveling within state. US respondents who traveled farther were more likely to purchase flights offline and on/offline. Canada respondents who traveled out of province were more likely to purchase flights offline.

Season of the latest trip significantly differed in regard to **information search** for accommodations, activities, attractions, events and flights in the U.S., and activities, attractions, car rentals and flights in Canada (Table 4-20). Season significantly differed in **purchasing** activities, car rentals and flights in the U.S., and accommodations, car rentals and flights in Canada. However, no specific patterns in the data were found.

Table 4-19
Travel Information Search and Travel Product Purchase Influenced by Destination of the Latest Trip

Destination of the latest trip		Travel Information Search				Travel Product Purchase			
		Online	Offline	On/offline	None	Online	Offline	On/offline	None
		Accommodations							
US	Within state	54.0%	4.2	28.8	13.0	35.9%	28.2	9.5	26.4
	Out of state, within country	48.2	5.8	27.6	18.3	32.3	27.3	8.9	31.5
	Out of country, within North America	55.7	5.9	30.3	8.0	37.3	31.4	9.8	21.6
	Out of North America	52.5	8.3	26.5	12.7	30.8	29.7	10.4	29.1
		χ^2=21.6, p= .010*				χ^2=13.1, p= .159			
CA	Within state	59.7%	5.8	28.7	5.8	21.7%	47.3	7.4	23.6
	Out of state, within country	51.7	6.5	27.2	14.6	23.3	32.0	11.2	33.5
	Out of country, within North America	44.1	7.0	34.1	14.7	18.2	41.7	10.6	29.5
	Out of North America	44.6	13.6	31.4	10.3	23.1	38.4	8.3	30.2
		χ^2=36.2, p= .000***				χ^2=7.5, p= .585			
		Activities							
US	Within state	23.2%	7.0	18.9	50.9	4.6%	18.7	3.9	72.9
	Out of state, within country	18.3	8.1	19.5	54.0	3.8	13.7	3.0	79.5
	Out of country, within North America	34.8	5.6	20.6	39.0	7.3	18.1	2.8	71.8
	Out of North America	24.3	12.2	27.1	36.5	4.4	24.2	7.7	63.7
		χ^2=47.5, p= .000***				χ^2=31.5, p= .000***			
CA	Within state	26.7%	8.9	19.4	45.0	2.3%	17.1	1.6	79.1
	Out of state, within country	26.9	9.6	23.5	39.9	2.8	21.4	2.8	73.0
	Out of country, within North America	21.1	5.7	21.1	52.2	2.7	14.6	3.3	79.4
	Out of North America	27.2	14.4	23.0	35.4	4.1	17.8	4.5	73.6
		χ^2=25.2, p= .003**				χ^2=23.2, p= .006**			

* p < .05; ** p < .01; and *** p < .001

Table 4-19

Travel Information Search and Travel Product Purchase Influenced by Destination of the Latest Trip *(continued)*

Destination of the latest trip		Travel Information Search				Travel Product Purchase			
		Online	Offline	On/ offline	None	Online	Offline	On/ Offline	None
		Attractions							
US	Within state	33.7%	8.8	28.8	28.8	7.0%	19.7	3.5	69.7
	Out of state, within country	28.5	9.0	32.0	30.5	3.7	19.3	4.7	72.3
	Out of country, within North America	35.9	11.1	33.1	19.9	5.2	20.2	4.9	69.7
	Out of North America	32.0	11.6	40.9	15.5	4.4	24.7	4.4	66.5
		χ^2=27.9, p= .001**				χ^2=27.1, p= .001**			
CA	Within state	34.5%	8.5	31.0	26.0	2.7%	22.3	1.9	73.1
	Out of state, within country	36.8	10.8	31.6	20.7	3.1	27.2	4.6	65.0
	Out of country, within North America	30.8	9.4	36.1	23.7	3.6	22.5	3.3	70.5
	Out of North America	33.5	11.2	38.8	16.5	1.7	22.7	3.7	71.9
		χ^2=12.0, p= .211				χ^2=23.6, p= .005**			
		Car Rentals							
US	Within state	22.5%	5.6	6.0	66.0	14.1%	7.7	1.4	76.8
	Out of state, within country	25.2	2.3	11.6	60.9	21.7	8.7	3.1	66.4
	Out of country, within North America	30.0	7.7	6.6	55.7	21.6	12.5	2.1	63.8
	Out of North America	24.9	8.8	6.6	59.7	14.8	15.4	3.3	66.5
		χ^2=33.9, p= .000***				χ^2=1.6, p= .996			
CA	Within state	5.0%	3.1	2.3	89.6	2.7%	6.6	0	90.7
	Out of state, within country	16.0	7.7	8.3	67.9	13.0	13.7	1.2	72.0
	Out of country, within North America	22.4	5.4	7.0	65.2	11.3	13.9	3.0	71.9
	Out of North America	18.6	13.2	9.9	58.3	10.3	17.3	2.5	70.0
		χ^2=80.5, p= .000***				χ^2=15.4, p= .080			

* p < .05; ** p < .01; and *** p < .001

Table 4-19
Travel Information Search and Travel Product Purchase Influenced by
Destination of the Latest Trip (continued)

Destination of the latest trip		Travel Information Search				Travel Product Purchase			
		Online	Offline	On/ offline	None	Online	Offline	On/ Offline	None
		Events							
US	Within state	25.6%	7.7	19.6	47.0	7.4%	13.0	2.8	76.8
	Out of state, within country	27.1	6.2	21.3	45.4	7.8	13.6	4.0	74.6
	Out of country, within North America	29.3	4.9	20.9	44.9	5.9	15.3	3.5	75.3
	Out of North America	29.3	8.3	21.0	41.4	2.7	13.7	3.3	80.2
		χ^2=4.8, p= .854				χ^2=4.7, p= .862			
CA	Within state	27.0%	5.8	19.3	47.9	5.0%	15.1	3.1	76.7
	Out of state, within country	30.7	7.4	19.8	42.1	4.0	19.6	2.8	73.6
	Out of country, within North America	28.2	10.1	19.8	41.9	4.3	17.2	2.6	75.8
	Out of North America	24.7	12.8	22.6	39.9	3.3	14.5	2.9	79.3
		χ^2=12.9, p= .166				χ^2=16.1, p= .064			
		Flights							
US	Within state	32.6%	1.4	11.9	54.0	23.6%	9.2	3.2	64.1
	Out of state, within country	46.3	2.8	12.7	38.2	38.1	9.4	4.7	47.8
	Out of country, within North America	46.3	6.6	15.0	32.1	32.4	23.7	5.6	38.3
	Out of North America	50.8	13.3	17.7	18.2	35.2	31.9	8.2	24.7
		χ^2=96.6, p= .000***				χ^2=17.9, p= .037*			
CA	Within state	10.9%	2.7	6.2	80.2	3.5%	7.4	1.2	88.0
	Out of state, within country	33.4	5.0	13.9	47.7	19.9	18.0	5.6	56.5
	Out of country, within North America	33.8	10.7	21.7	33.8	16.2	36.8	3.6	43.4
	Out of North America	37.6	18.2	32.6	11.6	17.7	49.8	9.1	23.5
		χ^2=278.5, p= .000***				χ^2=58.5, p= .000***			

* p < .05; ** p < .01; and *** p < .001

Table 4-20
Travel Information Search and Travel Product Purchase Influenced by Season of the Latest Trip

Season of the latest trip		Travel Information Search				Travel Product Purchase			
		Online	Offline	On/ offline	None	Online	Offline	On/ offline	None
		Accommodations							
US	Winter	52.4%	2.4	25.0	20.2	38.1%	25.0	8.3	28.6
	Spring	46.1	7.9	33.1	12.9	31.5	31.5	10.5	26.5
	Summer	55.0	5.6	29.8	9.6	36.2	30.0	10.7	23.1
	Fall	50.7	5.9	26.2	17.2	32.4	27.3	8.2	32.0
		χ^2=21.4, p= .011*				χ^2=10.9, p= .284			
CA	Winter	46.4%	5.2	39.2	9.3	19.6%	43.3	8.2	28.9
	Spring	44.9	9.6	30.1	15.4	23.9	32.7	8.8	34.6
	Summer	52.1	7.8	30.4	9.8	20.5	42.7	9.8	27.0
	Fall	50.7	8.0	28.0	13.2	22.3	37.6	10.0	30.1
		χ^2=10.8, p= .293				χ^2=19.1, p= .024*			
		Activities							
US	Winter	22.6%	3.6	26.2	47.6	6.0%	16.7	11.9	65.5
	Spring	21.3	9.0	19.1	50.6	2.8	18.2	6.1	72.9
	Summer	24.4	9.0	25.5	41.1	6.4	19.3	3.2	71.1
	Fall	24.2	7.3	16.6	52.0	4.0	15.3	2.3	78.4
		χ^2=22.3, p= .008**				χ^2=29.0, p= .001**			
CA	Winter	35.1%	9.3	18.6	37.1	5.2%	21.9	4.2	68.8
	Spring	30.6	7.6	21.7	40.1	3.8	15.8	3.8	76.6
	Summer	27.5	9.8	25.6	37.1	3.1	22.5	3.3	71.2
	Fall	18.3	10.0	18.5	53.2	2.2	12.6	1.9	83.3
		χ^2=35.0, p= .000***				χ^2=11.0, p= .278			
		Attractions							
US	Winter	35.7%	2.4	33.3	28.6	2.4%	17.9	8.3	71.4
	Spring	33.1	7.9	29.8	29.2	4.4	24.3	5.0	66.3
	Summer	31.5	11.1	37.7	19.7	7.1	24.4	3.9	64.7
	Fall	30.9	10.3	29.7	29.1	3.5	16.3	4.2	76.0
		χ^2=22.9, p= .006**				χ^2=8.3, p= .506			
CA	Winter	42.9%	5.1	29.6	22.4	2.1%	25.8	4.1	68.0
	Spring	40.5	7.0	31.0	21.5	4.4	20.9	5.1	69.6
	Summer	34.1	11.7	35.0	19.1	2.8	29.4	3.9	63.8
	Fall	28.9	10.8	35.5	24.9	2.4	18.4	1.9	77.2
		χ^2=17.5, p= .041*				χ^2=8.9, p= .443			
		Car Rentals							
US	Winter	36.9%	3.6	8.3	51.2	21.4%	10.7	3.6	64.3
	Spring	21.3	5.1	11.2	62.4	19.3	9.9	2.8	68.0
	Summer	27.2	5.8	9.6	57.4	18.8	11.1	2.4	67.7
	Fall	24.0	4.7	7.1	64.2	19.0	9.6	2.5	69.0
		χ^2=14.4, p= .108				χ^2=24.8, p= .003**			
CA	Winter	22.4%	12.2	7.1	58.2	8.2%	19.6	3.1	69.1
	Spring	19.1	5.7	10.8	64.3	13.3	15.2	3.2	68.4
	Summer	11.1	7.0	5.9	76.1	7.6	12.0	1.3	79.0
	Fall	18.3	6.8	6.6	68.3	10.5	11.4	1.5	76.6
		χ^2=25.5, p= .002**				χ^2=48.1, p= .000***			

* p < .05; ** p < .01; and *** p < .001

Table 4-20
Travel Information Search and Travel Product Purchase Influenced by Season of the Latest Trip *(continued)*

Season of the latest trip		Travel Information Search				Travel Product Purchase			
		Online	Offline	On/offline	None	Online	Offline	On/offline	None
		Events							
US	Winter	33.3%	2.4	19.0	45.2	7.1%	15.5	6.0	71.4
	Spring	19.7	9.0	19.1	52.2	5.5	13.8	2.2	78.5
	Summer	30.2	5.1	24.6	40.0	7.5	13.7	3.0	75.8
	Fall	27.0	7.4	18.6	47.0	6.2	13.8	4.0	76.0
		χ^2=22.5, p= .008**				χ^2=7.9, p= .545			
CA	Winter	32.7%	9.2	12.2	45.9	3.1%	17.5	1.0	78.4
	Spring	33.8	8.9	17.2	40.1	3.2	14.6	4.4	77.8
	Summer	25.0	8.9	21.3	44.8	3.1	20.3	3.1	73.6
	Fall	27.9	9.0	22.2	40.8	6.3	13.6	2.4	77.6
		χ^2=10.3, p= .329				χ^2=4.3, p= .892			
		Flights							
US	Winter	53.6%	9.5	14.3	22.6	34.5%	20.2	7.1	38.1
	Spring	41.6	7.9	18.0	32.6	35.9	19.9	7.2	37.0
	Summer	40.9	3.9	15.2	40.0	29.3	15.4	4.9	50.3
	Fall	45.8	3.9	11.1	39.2	35.6	13.6	4.2	46.6
		χ^2=26.1, p= .002**				χ^2=125.4, p= .000***			
CA	Winter	36.1%	13.4	23.7	26.8	17.3%	39.8	6.1	36.7
	Spring	32.1	10.3	28.2	29.5	15.2	41.1	7.6	36.1
	Summer	23.3	7.8	15.0	53.9	10.9	21.1	4.4	63.6
	Fall	32.9	8.3	17.1	41.7	18.2	26.3	4.1	51.3
		χ^2=50.7, p= .000***				χ^2=255.0, p= .000***			

* $p < .05$; ** $p < .01$; and *** $p < .001$

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Summary of Testing Hypotheses One to Ten

Hypotheses one to ten were aimed at understanding which elements significantly differed in regard to travel information search and travel product purchase behaviors during pretrip. In the first part, US and Canada samples were compared on *general background, travel planning behavior during pretrip* and *trip specific behavior during trip*. These comparison studies between US and Canada examined whether country of residence significantly affected other independent variables. Hypotheses 1a and 4a were tested in the first part of chapter 4. The second part showed the results of testing Hypotheses 1b to 10c (excluding 4a). Independent variables, such as *general background, Internet use for the latest trip* and *trip specific behavior during trip*, were tested on travel information search behaviors and travel product purchase behaviors across six travel products.

To test Hypotheses one to ten, cross-tabulation and Chi-square were used to examine the statistical significance of differences on relationships between variables. Significance of difference of Hypotheses 1a and 4a was measured between US and Canada respondents. Significance of difference of Hypotheses 1b to 3d and 4b to 10c was measured on travel information search behaviors or travel product purchase behaviors with nominal scales, including the four category responses of online, offline, on/offline and none.

Summary of testing hypotheses one to ten shows results of Chi-square tests, specifically, whether hypotheses were accepted, partially accepted or not (Table 4-22). To accept a hypothesis, independent variables must significantly differ in

regard to travel information search or travel product purchase on all six travel products. Otherwise, hypotheses were partially accepted (on some of the six products) or rejected (no products).

Hypotheses Acceptance

Hypotheses 1a to 1d were partially accepted. *Country of residence* significantly differed in regard to travel **information search** for car rentals and flights. *Gender* significantly differed in regard to travel information search for five products (accommodations, activities, attractions, car rentals and flights) in the U.S., and it significantly differed for two products (events and flights) in Canada. *Age* significantly differed on travel information search for three products (accommodations, activities and flights) in the U.S. *Age* significantly differed on travel information search for four products (accommodations, activities, flights and events). *Education* significantly differed on travel information search for three products (activities, car rentals and flights) the U.S., but more in Canada (five products: activities, attractions, car rentals, events and flights).

Hypothesis 2a was partially accepted. *Number of vacation trips in recent 12 months* significantly differed on travel **information search** for four products (accommodations, activities, attractions and car rentals) in the U.S., but only one product (car rentals) in Canada.

Hypothesis 3b was rejected in the U.S., but partially accepted in Canada. *Time spent online per week* did not significantly differ on travel **information search** for any of the products in the U.S., but only one (accommodations) in

Canada. Hypotheses 3a, 3c and 3d were partially accepted. *Years of Internet use* significantly differed on travel information search for five products (accommodations, activities, attractions, events and flights) in Canada, but only one (flights) in the U.S. *Speed of Internet connection* significantly differed on travel information search for four products (accommodations, activities, car rentals and flights) in the U.S, but two products (activities and car rentals) in Canada. *Credit card use* for online purchase significantly differed on travel information search for accommodations and flights the U.S. and car rentals and flights in Canada.

Hypotheses 4a to 4d, which tested travel product **purchase** behaviors, were partially accepted. *Country of residence* significantly differed in purchasing accommodations, attractions, car rentals, events and flights. *Gender* significantly differed on purchase of car rentals and flights in the U.S. and accommodations and car rentals in Canada. *Age* significantly differed in purchasing three products (activities, attractions and events) in Canada, but only one (activities) in the U.S. *Education* significantly differed in purchasing three products (attractions, car rentals and flights) in the U.S. and two products (activities and car rentals) in Canada.

Hypothesis 5a was partially accepted. *Number of vacation trips in recent 12 months* significantly differed in **purchasing** three products (accommodations, car rentals and flights) in the U.S. and two (activities and events) in Canada.

Hypothesis 6c was rejected in Canada. *Speed of Internet connection* did not significantly differ in regard to travel product **purchase** in Canada, but it

significantly differed in purchasing four products (accommodations, activities, car rentals and flights) in the U.S. Hypothesis 6d was accepted in Canada. *Credit card use for online purchase* significantly differed in purchase of all six travel products in Canada. *Credit card use* significantly differed in purchasing four products (accommodations, car rentals, events and flights) in the U.S. Hypotheses 6a and 6b were partially accepted. *Years of Internet use* significantly differed in purchasing flights in the U.S. and car rentals in Canada. *Time spent online per week* significantly differed in purchasing flights in the U.S. and events in Canada.

Hypothesis 7a, which returned to travel **information search** behaviors, was partially accepted. *Planning horizon for Internet use for the latest trip* significantly differed on travel information search for four products (activities, attractions, car rentals and flights) in the U.S. and five products (accommodations, activities, attractions, car rentals and flights) in Canada. Hypothesis 7b was accepted in both the U.S. and Canada. *Time spent online for the latest trip* significantly differed on travel information search for all six products in the U.S. and Canada.

Hypothesis 8a, which addressed travel product **purchasing**, was partially accepted. *Planning horizon for Internet use for the latest trip* significantly differed in purchasing four products (accommodations, activities, car rentals and flights) in the U.S., and three products (accommodations, car rentals and flights) in Canada. Hypothesis 8b was accepted in the U.S., and partially accepted in Canada. *Time spent online for the latest trip* significantly differed in purchasing

all six products in the U.S., and four products (accommodations, activities, car rentals and flights) in Canada.

Hypothesis 9a, which returned to travel **information search** behaviors, was accepted in Canada, and partially accepted in the U.S. *Length of stay of the latest trip* significantly differed on travel information search for all six products in Canada and four products (activities, attractions, car rentals and flights) in the U.S. Hypotheses 9b and 9c were partially accepted. *Destination of the latest trip* significantly differed on travel information search for five products (accommodations, activities, attractions, car rentals and flights) in the U.S. and four products (accommodations, activities, car rentals and flights) in Canada. *Season of the latest trip* significantly differed on travel information search for five products (accommodations, activities, attractions, events and flights) in the U.S. and three products (activities, attractions and flights) in Canada.

Hypothesis 10a, which addressed travel product **purchasing**, was partially accepted. *Length of stay of the latest trip* significantly differed in purchasing four products (accommodations, activities, car rentals and flights) in the U.S. and four products (accommodations, car rentals, events and flights) in Canada. Hypotheses 10b and 10c were partially accepted. *Destination of the latest trip* significantly differed in purchasing three products (activities, attractions and flights) in the U.S. and Canada. *Season of the latest trip* significantly differed in purchasing products (car rentals and flights) in the U.S. and three products (accommodations, car rentals and flights) in Canada.

Table 4-21
Summary of Hypothesis Tests One to Ten

Hypotheses	Country of residence	Hypothesis acceptance (by # of products)	Hypothesis acceptance by each travel product[a]					
			Acc.	Act.	Att.	Car.	Eve.	Fil.
H1. Tourists' demographics significantly differ in regard to travel information search behaviors during pretrip								
a. Country of residence		PA (2)				***		***
b. Gender	US	PA (5)	**	*	*	*		*
	CA	PA (2)					**	**
c. Age	US	PA (3)	***	***				*
	CA	PA (4)	**	***		**	**	**
d. Education	US	PA (3)		**	*	**	*	
	CA	PA (5)			**	*	**	*
H2. Travel experience significantly differs in regard to travel information search behaviors during pretrip								
a. Number of vacation trips in recent 12 months	US	PA (4)	**		*	*	*	
	CA	PA (1)				*		
H3. General Internet use behaviors significantly differ in regard to travel information search behaviors during pretrip								
a. Years of Internet use	US	PA (1)	*	*	*			***
	CA	PA (5)	*		*		*	**
b. Time spent online per week	US	R (0)	*					
	CA	PA (1)						
c. Speed of Internet connection	US	PA (4)	**	*	*	*		***
	CA	PA (2)	*	*				
d. Credit card use for online purchase	US	PA (2)	**					***
	CA	PA (2)				*		***

a. Acc: Accommodations/ Act: Activities/ Att: Attractions/ Car: Car Rentals/ Eve: Events/ Fil: Flights
b. A: Hypothesis was accepted on all six products/ PA: Hypothesis was partially accepted on some product(s)/ R: Hypothesis was rejected
$* p < .05$; $** p < .01$; and $*** p < .001$

Table 4-21
Summary of Hypothesis Tests One to Ten *(continued)*

Hypotheses	Country of residence	Hypothesis acceptance (by # of products)	Acc.	Act.	Att.	Car.	Eve.	Fli.
H4. Tourists' demographics significantly differ in regard to travel product purchase behaviors during pretrip								
a. Country of residence	US	PA (5)	***		*	***	*	***
	CA	PA (2)				***		*
b. Gender	US	PA (2)	*			*		
	CA	PA (1)				*		
c. Age	US	PA (1)		**				
	CA	PA (3)		**	**		**	
d. Education	US	PA (3)		*	*	*		
	CA	PA (2)					**	***
H5. Travel experience significantly differs in regard to travel product purchase behaviors during pretrip								
a. Number of vacation trips in recent 12 months	US	PA (3)	**			**		*
	CA	PA (2)		*			**	
H6. General Internet use behaviors significantly differ in regard to travel product purchase behaviors during pretrip								
a. Years of Internet use	US	PA (1)						**
	CA	PA (1)				*		
b. Time spent online per week	US	PA (1)						*
	CA	PA (1)					*	
c. Speed of Internet connection	US	PA (4)	**	*		*	*	
	CA	R (0)						
d. Credit card use for online purchase	US	PA (4)	***	**		***	**	
	CA	A (6)	***	**	***	***	**	***

a. Acc: Accommodations/ Act: Activities/ Att: Attractions/ Car: Car Rentals/ Eve: Events/ Fli: Flights
b. A: Hypothesis was accepted on all six products/ PA: Hypothesis was partially accepted on some product(s)/ R: Hypothesis was rejected
* $p < .05$; ** $p < .01$; and *** $p < .001$

Table 4-21
Summary of Hypothesis Tests One to Ten (continued)

Hypotheses	Country of residence	Hypothesis acceptance (by # of products)	Hypothesis acceptance by each travel product[a]					
			Acc.	Act.	Att.	Car.	Eve.	Fli.
H7. Internet use for the latest trip planning significantly differs in regard to travel information search behaviors during pretrip								
a. Planning horizon for Internet use for the latest trip	US	PA (4)	***	***	***	***		***
	CA	PA (5)	***	**	***	**		***
b. Time spent online for the latest trip	US	A (6)	***	***	***	***	***	***
	CA	A (6)	***	***	***	***	*	***
H8. Internet use for the latest trip planning significantly differs in regard to travel product purchase behaviors during pretrip								
a. Planning horizon for Internet use for the latest trip	US	PA (4)	***	***		***		***
	CA	PA (3)	***			***		***
b. Time spent online for the latest trip	US	A (6)	***	**	***	***	*	***
	CA	PA (4)	***	**	***	***		***

a. Acc: Accommodations/ Act: Activities/ Att: Attractions/ Car: Car Rentals/ Eve: Events/ Fli: Flights
b. A: Hypothesis was accepted on all six products/ PA: Hypothesis was partially accepted on some product(s) R: Hypothesis was rejected
* $p < .05$; ** $p < .01$; and *** $p < .001$

Table 4-21
Summary of Hypothesis Tests One to Ten (continued)

Hypotheses	Country of residence	Hypothesis acceptance (by # of products)	Hypothesis acceptance by each travel product[a]					
			Acc.	Act.	Att.	Car.	Eve.	Fli.
H9. Latest trip behavior significantly differs in regard to travel information search behaviors during pretrip								
a. Length of stay of the latest trip	US	PA (4)	**	**	***	***		***
	CA	A (6)	**	***	***	***	*	***
b. Destination of the latest trip	US	PA (5)	*	***	**	***		***
	CA	PA (4)	***	**				
c. Season of the latest trip	US	PA (5)	***	***	***	**	**	**
	CA	PA (3)		***				
H10. Latest trip behavior significantly differs in regard to travel product purchase behaviors during pretrip								
a. Length of stay of the latest trip	US	PA (4)	*	**	***	***		***
	CA	PA (4)	***		***	***	**	*
b. Destination of the latest trip	US	PA (3)		***	**			***
	CA	PA (3)		**	**			
c. Season of the latest trip	US	PA (3)		**		**		***
	CA	PA (3)	***			***		***

a. Acc: Accommodations/ Act: Activities/ Att: Attractions/ Car: Car Rentals/ Eve: Events/ Fli: Flights
b. A: Hypothesis was accepted on all six products/ PA: Hypothesis was partially accepted on some product(s)/ R: Hypothesis was rejected
* $p < .05$; ** $p < .01$; and *** $p < .001$

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Association Between Travel Information Search and Travel Product Purchase

Finally, hypothesis 11 was tested (Travel information search behaviors and travel product purchase behaviors are associated, however, not perfectly). Contingency Coefficient analysis was conducted to compare the magnitude of association between travel information search and travel product purchase across six travel products. Cross-tabulation was also use to examine interrelationships between travel information search and travel product purchase by six travel products. A Contingency Coefficient estimate ranges from zero to one, with zero corresponding to no association and one to perfect association (Norusis, 2002). The largest value it can have depends on the number of rows and columns in the tables (Norusis, 2002). Since this data had four by four tables because of four categories in the nominal scale, online, offline, on/offline and none, the largest possible value of C is 0.87 (Norusis, 2002).

The highest association was found for car rental information search and purchase (C=.64 for US respondents; C=.63 for Canada), followed by flight information search and purchase (C=.63 for US; C=.63 for Canada) (Tables 4-23 to 4-28). The association between travel information search and product purchase on car rentals was strongest with online behaviors of US respondents, with 60 percent of those who searched for car rental information online and purchased online. Canada respondents also showed strong usage of the Internet for information search and purchasing car rentals, with 49 percent of those who searched for online and also purchased online. The next highest association was for another transportation mode (flights). Greater numbers of

these Internet users who were studied searched for information and purchased flights on their latest trip (65 percent of US respondents and 41 percent of Canada respondents).

On other product categories, Contingency Coefficients ranged from .49 for accommodation information searching and purchasing by US respondents and .47 by Canada respondents, to lower levels of associations for travel product purchases of activities, attractions and events. These coefficients ranged from a low of .21 for Canada respondents and attraction products to .37 for Canada respondents and event products.

Table 4-22
Association of Travel Information Search and Travel Product Purchase during Pretrip on Accommodations

Travel Information Search	Travel Product Purchase							
	US				Canada			
	Online	Offline	On/ offline	None	Online	Offline	On/ offline	None
Online	26.1%[a]	13.1	4.3	8.3	17.1%[a]	18.9	5.6	8.6
Offline	0.2	2.6	0.3	2.7	0.4	4.0	0.2	3.4
On/offline	7.0	10.9	4.6	5.7	3.8	15.1	3.7	7.5
None	0.8	1.9	0.2	11.2	0.1	1.5	0.1	10.0
	C= .49				C= .47			

a. Total percent reported

Table 4-23
Association of Travel Information Search and Travel Product Purchase during Pretrip on Activities

Travel Information Search	Travel Product Purchase							
	US				Canada			
	Online	Offline	On/ offline	None	Online	Offline	On/ offline	None
Online	3.0%[a]	4.9	1.3	14.7	1.2%[a]	6.0	1.1	17.0
Offline	0.2	1.9	0.2	5.5	0.4	2.3	0.4	6.4
On/offline	0.8	5.9	1.7	12.2	0.5	5.3	1.2	15.0
None	0.8	4.3	0.5	41.9	0.6	4.4	0.5	37.6
	C= .33				C= .23			

a. Total percent reported

Table 4-24
Association of Travel Information Search and Travel Product Purchase during Pretrip on Attractions

Travel Information Search	Travel Product Purchase							
	US				Canada			
	Online	Offline	On/offline	None	Online	Offline	On/offline	None
Online	3.2%[a]	5.9	1.4	21.0	1.3%[a]	9.9	1.3	21.4
Offline	0.2	2.2	0.1	7.4	0.4	2.7	0	7.1
On/offline	1.3	10.3	2.7	18.6	0.8	8.9	1.8	22.6
None	0.2	1.7	0.2	23.6	0.4	2.3	0.4	18.8
	C= .33				C= .21			

a. Total percent reported

Table 4-25
Association of Travel Information Search and Travel Product Purchase during Pretrip on Car Rentals

Travel Information Search	Travel Product Purchase							
	US				Canada			
	Online	Offline	On/offline	None	Online	Offline	On/offline	None
Online	15.3%[a]	3.5	0.8	5.9	7.7%[a]	4.1	0.4	3.5
Offline	0.5	2.7	0.1	1.7	0.5	3.1	0.3	3.3
On/offline	2.3	2.1	1.4	3.0	0.9	2.9	0.8	2.2
None	1.1	1.7	0.2	57.6	0.4	2.8	0.2	66.8
	C= .64				C= .63			

a. Total percent reported

Table 4-26
Association of Travel Information Search and Travel Product Purchase during Pretrip on Events

Travel Information Search	Travel Product Purchase							
	US				Canada			
	Online	Offline	On/offline	None	Online	Offline	On/offline	None
Online	3.6%[a]	4.5	1.0	18.5	3.0%[a]	6.5	0.8	17.5
Offline	0.3	1.4	0.3	4.6	0	2.2	0.2	6.6
On/offline	2.1	5.2	2.1	11.6	1.0	5.4	1.7	12.1
None	0.7	2.7	0.2	41.4	0.2	2.7	0.3	39.7
	C= .36				C= .37			

a. Total percent reported

Table 4-27
Association of Travel Information Search and Travel Product Purchase during Pretrip on Flights

Travel Information Search	Travel Product Purchase							
	US				Canada			
	Online	Offline	On/offline	None	Online	Offline	On/offline	None
Online	28.4% [a]	5.5	2.4	7.6	12.0% [a]	7.9	2.8	6.6
Offline	0.2	3.3	0.4	0.9	0.4	5.7	0.3	2.5
On/offline	3.2	4.5	1.9	4.0	1.8	10.8	1.8	4.0
None	1.6	2.2	0.2	33.7	0.5	2.9	0	40.1
	C= .63				C= .63			

a. Total percent reported

Summary of Testing Hypothesis Eleven

The results of the Contingency Coefficient estimation showed that association patterns of information search and purchase vary by product category (Table 4-29). Contingency Coefficient statistics were similar for the US and Canada data.

Hypothesis 11 (travel information search behaviors and travel product purchase behaviors are associated, however, not perfectly) was not fully accepted. Travel information search and travel product purchase on car rentals and flights were strongly associated as the C values were close to the largest possible value (0.87). Travel information search and travel product purchase on activities and attractions were associated but not strongly associated.

Table 4-28
Summary of Associations

	US Contingency Coefficient	Canada Contingency Coefficient
Car Rentals	.64	.63
Flights	.63	.63
Accommodation	.49	.47
Events	.36	.37
Activities	.33	.23
Attractions	.33	.21

CHAPTER 5

SUMMARY, DISCUSSION AND IMPLICATIONS

This chapter serves as a synthesis of the hypotheses, literature, methods and results previously discussed. The chapter is organized into the following topics: (1) a summary, (2) discussion of findings, (3) theoretical implications, (4) managerial implications, (5) future research, (6) limitations of the results, and (7) final comments.

Summary

The problem statement of this research was to understand online travel planning strategies during the pretrip stage for a general population sample of Internet users, and to examine which factors significantly encourage or discourage online travel information search and product purchase during pretrip planning. Specifically, the study sought to answer the following research questions: (1) what factors significantly affect online travel information search during pretrip; (2) what factors significantly affect online travel product purchase during pretrip; and (3) how do online travel information search and online travel product purchase interrelate with each other.

A conceptual model of travel planning and travel behaviors was developed from *a conceptual model of case-based vacation planning* by Stewart and Vogt (1999) (Figure 1-1). Travel behaviors were separated into three stages, pretrip, trip and post-trip. This research focused on travel information search and product purchase behaviors during the pretrip stage. To understand different

Internet uses for travel information search and travel product purchase during pretrip planning, several variables which affect travel information search and product purchase behaviors during pretrip were identified from the literature (Figure 1-2). *General background, trip specific behavior during trip,* and *Internet use for the latest trip during pretrip* were developed as independent variables. To understand the interrelationship between travel information search and travel product purchase behaviors during pretrip, association of travel information search and travel product purchase were examined across six travel products. Hypotheses were developed from 1a to 11 as a result of combination of this research questions and the literature review.

The subjects of this study were 2,470 US and Canada residents (54 percent of responses from US and 46 percent from Canada), whose age is 18 years old or more. They had web access, were willing to complete the online instrument, reported web usage for travel or vacations (i.e., planning, researching, reserving, or paying credit card for travel products) and took at least one vacation in the past 12 months from November 2000 to October 2001.

This research was based on secondary data analysis using data collected between November 8th and December 18th, 2001 by the CTC and SECOR. The data were separately analyzed by US and Canada residents. To test Hypotheses 1a to 10c, cross-tabulation and Chi-square were used for examining statistical significance of difference on relationship between independent variables and travel information search or travel product purchase across six travel products. Contingency Coefficient analysis was used to test Hypothesis 11

to compare the magnitude of association between travel information search and travel product purchase across six travel products. Cross-tabulation was also used in testing Hypothesis 11 to provide details of associations in variables.

US respondents were more likely to travel in the past year, spend time online per week and used a credit card for online purchase than Canada respondents. Canada respondents were more likely to have higher education levels, use a high speed of Internet connection and stay longer on the latest trip than US respondents. US respondents were more likely to travel out of state but within country and travel during the fall compared to Canada respondents. Canada respondents were more likely to travel out of North America and travel during the summer compared to US respondents. Time spent online per week did not significantly differ in regard to travel information search behaviors in the U.S. However, time spent online for the latest trip significantly differed in regard to information search for all six products in both the U.S. and Canada and purchases for all six products in the U.S. Speed of Internet connection did not significantly differ on purchasing behaviors in Canada. Length of stay of the latest trip significantly differed on information searching for all six products in Canada. Other independent variables significantly differed in regard to information search and product purchase for some travel products. Travel information search and product purchase on car rentals and flights were strongly associated. Travel information search and travel product purchase on activities and attractions were associated but not strongly associated.

Discussion of Findings

One of the findings of this study was that travel information search and travel product purchase behaviors during pretrip are different. Respondents were more likely to use the Internet for their travel information search, but they were less likely to use the Internet for their travel product purchase during pretrip. According to Tables 4-5 and 4-6, US respondents searched for information more online than offline on all six products. But they purchased only accommodations, car rentals and flights more online than offline. Canada respondents also searched for information more online than offline on all six products, but they purchased all six products more offline than online. This result supports Stewart and Vogt's (1999) findings: the plans developed by planners will be subject to change as they are actuated; and people plan more than they will actuate. This study also found that credit card use for general online purchase was more likely to significantly affect travel product purchase than information search behaviors. This result is somewhat consistent with Weber and Roehl's (1999) research, which found that travelers who purchase online have more years of Internet use experience and more browser use per week than travelers who did not purchase online.

Another finding of this study was travel information search and product purchase behaviors are different by county of residence. US respondents were more likely to search for information and purchase online and less likely to search for information and purchase offline, than Canada respondents. In the tests of Hypotheses 1a and 4a, country of residence significantly differed in

regard to travel information search on car rentals and flights, and in regard to travel product purchase on accommodations, attractions, car rentals, events and flights. Country of residence was controlled during hypothesis testing to compare US and Canada results. Many results showed inconsistent results between US and Canada respondents. US respondents were more likely to take vacations, spend time online per week, purchase online with credit cards, and travel out of state but within country, than Canada respondents. Canada respondents were more likely to travel out of North America, stay longer on their latest trip, use a high-speed Internet connection, and search for information and purchase offline, than US respondents. As Pastore (2000b) suggested, Canada respondents were more likely to spend greater amounts of time surfing the web than US residents, then use offline purchase channels. Another interesting finding was that although Canada respondents were more likely to use high-speed Internet, the speed of Internet connection only affected US respondents' Internet use.

A third finding was that people use various channels, such as online, offline and both on/offline, for travel information search and product purchase. This research tested different behaviors of online, offline, on/offline and none across six travel products, while past studies just tested which demographic profiles use (or not use) the Internet with no measure of on/offline usage patterns or differentiation of offline marketing channels. Examples of these past findings include Weber and Roehl's (1999) study, which reported that online users were likely to be 26 to 55 years old and more educated. Korgaonkar and Wolin (1999) found gender not to be significantly correlated with online information search, but

males were more likely to purchase than women. This study found that US male respondents were more likely to search for information on and purchase travel transportation products (i.e., car rentals and flights) than females, and US females were more likely to search for attraction information online than males. Additionally, younger respondents (both US and Canada) were more likely to search for information online and offline on activities and purchase activities offline, than older respondents. US respondents with higher education levels were more likely to use the Internet for both travel information search and travel product purchase than those with less education. Results for Canada respondents showed that those with lower levels of education were more likely to search for information online on attractions and purchase car rentals online than respondents with higher education levels. Therefore, while past research has focused on "who" was more likely to use the Internet, this thesis study showed "who" uses the Internet and "how" it is used for information search and purchasing, across the primary travel product categories.

A fourth finding was travel information search and product purchase behaviors were more likely to relate to a specific purpose of Internet use. Pastore (1999) suggested that Internet users have developed their own online strategy for each purpose of Internet use. Online information search and purchase behaviors are different by Internet users' different purpose(s). As shown in results of Hypotheses 3b, 7b and 8b, time spent online for general Internet use did not significantly differ in regard to travel information search and product purchase in the U.S.; however, time spent online for a specific purpose

of Internet use (Internet use for the latest trip) significantly differed in regard to travel information search and product purchase in the U.S. This result also supports Stewart and Vogt's (1999) research which found that experience teaches people how to plan.

The final finding of this study was that patterns of travel information search and product purchase vary by travel product categories. According to Hypothesis tests 1a to 10c, searching for information on or purchasing flights and car rentals were most likely to be affected by independent variables. The results of the Contingency Coefficient estimation also varied by travel products (Table 4-34). The highest association was found for car rental information search and purchase, followed by flights and accommodations. The lowest association was found for attraction information search and purchase, followed by activities and events. This result supports past research. For instance, Fodness and Murray (1999) suggested features of each travel product clearly affect information search; Stewart and Vogt (1999) found that the amount of information searched for and purchasing patterns differed by travel products; and Woodside and McDonald (1993) presented a general system framework for understanding different tourists' choice by travel products.

Theoretical Implications

Stewart and Vogt (1999) found three unique characteristics of planning from case-based vacation planning: the plans developed by all planners will be subject to change as they are actuated; people plan more than they will actuate, as they

compensate for congestion and uncertainty by overplanning; and experience teaches people how to plan. Case-based vacation planning theory is well supported in the Internet environment. Internet enhances the information search process and encourages consumers to purchase travel products prior to leaving for their vacation. Case-based vacation planning suggests that travel behaviors are separated by three stages, pretrip, trip and post-trip, and travel products were differently searched for and purchased. This research, based on online travelers' behaviors, shows consistent results with case-based vacation planning.

Managerial Implications

This thesis found people use the Internet differently for travel information search and product purchase during pretrip. Travel marketers are required to understand different Internet uses as "a functional information source" and "shopping outlet" for marketing. Travel websites need to be designed to guide effective and efficient travel information search and travel product purchase.

Professionals have focused on understanding online travelers' socio-demographic profiles for their marketing management. According to this study, males were likely to search for information and purchase transportation products, females were likely to search for information on attractions, younger people were likely to search for information online and offline on and purchase offline activities, and Canada respondents with lower education were likely to search for information online on attractions and purchase car rentals online. These results

suggest demographic differences exist for travel Internet usage and marketing managers should design information systems to facilitate those differences.

During pretrip, more information search occurs than purchase. Many online information searchers switch to offline for their purchase. This study also found that people who used the Internet longer were more likely to use online and offline together. Marketers need to continue collaborating with offline travel product providers. Moreover, marketers need to develop new target marketing strategies for information searchers who switch to offline for purchase, use both online and offline for purchase, or drop out. Different marketing promotions and pricing structures (e.g., discounts) may attract them to use online for their purchase.

People were shown to purchase accommodations, car rentals and flights online. These three products have been provided through by private companies which are leading online travel-related businesses. Through the Internet, these companies were able to reduce cost of promotion, commission to travel agencies, paper tickets, personnel for management and so on. Moreover, the Internet has enhanced direct and fast communication with customers for better services. This research found that many people also searched for information on attractions and activities. This research suggests that activities, attractions and events should be provided through the Internet as new online markets. According to Stewart and Vogt's study (1999), these products are the most changeable products to purchase during trip. In the future, mobile technology will be

generally used to provide these changeable products while people are on their trip.

Canada residents were more likely to search for information and they were more likely to purchase offline. Michalak and Jones (2003) found that Canadian retailers hesitate to develop e-commerce business because IT business requires a high-risk, innovative, fast-moving culture that simply does not exist in Canada's business culture. Because of lack of opportunities to use Canada websites, Canada consumers visit US websites. However, for the purchase of travel products, US websites may be inconvenient for Canada residents because of the currency exchange rate and delivery system (e.g., mailing systems through post office takes longer because it is international mail). This may explain why Canada residents were more likely to search for travel information online, but purchase offline. US travel websites could provide special deals to Canada residents, such as faster delivery or currency exchange benefits to encourage Canada residents to purchase online. Travel-related businesses in Canada need to be engaged in e-commerce and develop more travel websites to attract Canada residents, and possibly US residents.

Future Research

Internet use for travel planning is a reflection of general Internet use, as well as an extension of traditional travel planning and purchasing behaviors. Travel studies have accepted research methods from general Internet use studies to understand online travel behaviors. Most previous research studies have

focused on providing demographic profile information on Internet travelers (Morrison et al., 2001). This research examined variables from general Internet use studies, and also new variables (e.g., country of residence, length of stay of the latest trip, destination of the latest trip, season of the latest trip) from traditional travel planning and purchasing behavior studies based on literature reviews. It is recommended that these relationships be retested with different samples. In addition, more comprehensive and creative scientific research is needed to better comprehend travel e-commerce trends (Morrison et al., 2001).

This research focused on those independent variables that significantly differ on travel information search and travel product purchase behaviors. However, this study could not explain cause-effect relationship between independent variables and travel information search or travel product purchase. For example, this research found that US respondents' length of stay of the latest trip significantly differed in regard to travel information search behaviors. But this result has two possible explanations; US respondents searched for more information and found more interesting attractions and activities, so they decided to stay longer; or, US respondents were thinking to stay longer, so searched for more information. Future research needs to study these cause-effect behaviors to better understand online travelers' behaviors.

Travel information search and product purchase behaviors are different between US and Canada respondents. National cultural differences could be reasons for the differences. However, another reason is possible for the differences. In the Internet environment, even a two-year-gap causes a big

difference in web use behaviors. Amazon.com is famous as a "first mover." It first launched an Internet bookstore, and this first mover advantage enabled Amazon.com to build a brand name and loyalty that could not have been reversed even with the massive advertising and marketing campaign of Barnes & Noble (Michalak & Jones, 2003). According to Michalak and Jones (2003), Canada lags roughly three years behind the US in delivering business solutions over the Internet. Thus, three-year-gap may have caused significant differences in the Internet use for travel planning between US and Canada. Future travel Internet research needs to consider that a technological gap, specifically related to the Internet, could cause different patterns on travel information search and travel product purchase.

Limitations of the Results

There are some limitations of the results:

1. The original data this research used were collected through online surveys. Therefore, the sample is not representative of the general population. As shown in a description of the respondent demographic profile in chapter 4, younger and older age groups were underrepresented compared to national population data.

2. Due to the limitations of the secondary data used in this study, the methodologies that could be applied for further and more in-depth analysis were limited (So & Morrison, 2003).

3. Associations of travel information search and travel product purchase behaviors during pretrip were shown in Tables 4-23 to 4-28. Since this study

focused on pretrip behaviors, a response of "none." It could be interpreted in several ways.

4. Chi-square tests used in this thesis research for testing Hypotheses 1a to 10c showed significant differences between independent variables and dependent variables. In some cases, even though an independent variable significantly differed travel information search or travel product purchase, a specific pattern was not found.

Final Comments

This research was seeking to identify differences and interrelationships between travel information search and product purchase behaviors during pretrip. The problem statement of this research was to understand online travel planning strategies during pretrip stage for a general population sample of Internet users, and to examine which factors significantly encourage or discourage online travel information search and product purchase during pretrip planning. The purpose of this analysis was to clarify similarities and differences in trip planning and travel behaviors between online and offline information searchers and purchasers so that destination marketing organizations can better respond to consumer's travel planning behaviors. This study was aimed to help tourism marketers develop better strategies for providing information desired by potential travelers and efficient information search and purchase channels. It has become clear that consumers separately treat the Internet as "a functional information source" and "shopping outlet." Consumers were likely to have

different Internet use strategies for each purpose of Internet use (e.g., for spring break vacation trip, for banking, for trading stock and so on). The Internet was used differently for travel information search and travel product purchase. To understand different uses of the Internet for travel information search and travel product purchase, several unique features of this study were attempted, that is: the study focused on pretrip behaviors; six travel products were separately analyzed; country of residence was controlled to compare the results between US and Canada respondents; and, new elements related to trip specific behaviors were added as independent variables. It is hoped that these new attempts will stimulate travel research on travel-related Internet use studies.

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APPENDIX

Appendix 1
Selected Survey Questions and its Measurement Scales

	Original Survey Question	Original Measurement Scale	Modified Measurement Scale
General Background:			
Tourists' Demographics			
Country of residence	Q1. Please enter either your ZIP code, or the first three digits of your POSTAL code	*Open-ended*	*Nominal* -USA -Canada
Gender	Q2. Gender	*Nominal* -Male -Female	*no change*
Age	Q3. What is your age?	*Ordinal* -18 to 24 -25 to 29 -30 to 34 -35 to 39 -40 to 44 -45 to 49 -50 to 54 -55 to 59 -60 to 64 -65 to 70 -71 or older	*Ordinal* -18 to 24 -25 to 34 -35 to 44 -45 to 54 -Older than 54
Education	Q9. What is the highest level of education you have completed?	*Nominal* -Less than high school -Some high school -Graduated high school -Some university/ college/ technical school -Graduated university/ college/ technical school	*Nominal* -Less than a college degree -College degree or more
Travel Experience			
Number of vacation trips in recent 12 months	Q31. How many vacation, leisure or get-away trips have you taken in the past 12 months?	*Ordinal* -1, 2, 3, 4, and 5 or more	*no change*

	Original Survey Question	Original Measurement Scale	Modified Measurement Scale
Internet Use			
Years of Internet use	Q24. How long have you been using the Internet to surf/browse the World Wide Web?	*Ordinal* -Less than 6 months -6 months to 1 year -1 to 2 years -2 to 4 years -4 to 6 years -More than 6 years	*Ordinal* -Less than 2 years -2 to 4 years -4 to 6 years -More than 6 years
Time spent online per week	Q23. How many hours, in total, do you personally surf/browse the Internet for work or personal reasons in an average week?	*Ordinal* -2 hours or less -3 to 4 hours -5 to 10 hours -11 to 20 hours -21 to 30 hours -More than 30 hours	*Ordinal* -Less than 5 hours -5 to 10 hours -11 to 20 hours -More than 20 hours
Speed of Internet connections	Q22. What is the connection speed of the computer you used the most for planning your last leisure trip on the Internet? (select one)	*Nominal* -High speed (e.g. T1, Cable, ISDN, ADSL) -Regular speed (e.g. 28-56K)	*no change*
Credit card use for online purchase	Q27. Have you purchased anything on the Internet with a credit card? (select one)	*Nominal* -Yes -No	*no change*

Travel Planning Behavior During Pretrip:

Internet Use for the Latest Trip

	Original Survey Question	Original Measurement Scale	Modified Measurement Scale
Planning horizon for Internet use for the latest trip	Q38. How long before taking this trip to (destination) did you begin planning/researching it on the Internet? (select one)	*Ordinal* -Same day -The same week -1 to 2 weeks -2 to 4 weeks -1 to 2 months -2 to 4 months -4 to 6 months -6 to 12 months -More than 1 year	*Ordinal* -Less than 2 weeks -2 to 4 weeks -1 to 2 months -2 to 4 months -More than 4 months
Time spent online for the latest trip	Q39. How many hours in total, did you spent on the Internet planning/researching your trip to (destination)? (select one)	*Ordinal* -Less than ½ hour -½ hour to 1 hour -1 to 2 hours -3 to 5 hours -6 to 10 hours -More than 10 hours	*Ordinal* -2 hours or less -3 to 5 hours -6 hours or more

Appendix 1
Selected Survey Questions and its Measurement Scales *(continued)*

	Original Survey Question	Original Measurement Scale	Modified Measurement Scale
Travel Information Search for the Latest Trip			
Accommodations Activities Attractions Car rental Events Flights	Q49. Before you traveled to (destination), where did you most learn or research about the following? (select one) (N/A means Not Applicable) -Accommodations (description, availability, prices, facilities) -Activities (hiking, bird watching, rock climbing, etc.) -Attractions/sight-seeing (monuments, museums, etc.) -Car rental (prices, availability) -Events (attending sporting events, theatre, festivals, concerts, etc.) -Flight/airfares (schedules, availability)	*Nominal* -Online -Offline -Both -N/A	*no change*
Travel Product Purchase for the Latest Trip			
Accommodations Activities Attractions Car rental Events Flights	Q54. Prior to leaving on your trip to (destination), please select those items that you purchased and the method in which they were purchased (select a response for each item) -Accommodation/over-night lodging (hotel, motel, hostel, B&B, camping etc) -Activities available at/around destination (scuba, horseback riding, ski lift/pkgs, etc) -Attractions/sight-seeing (monuments, museums, etc) -Car rental -Events (sporting, theatre, festival, concerts, etc) -Flights/airfare	*Nominal* -Online -Offline -Both -N/A	*no change*

Appendix 1
Selected Survey Questions and its Measurement Scales *(continued)*

	Original Survey Question	Original Measurement Scale	Modified Measurement Scale
Trip Specific Behavior During Trip:			
Latest Trip Behavior			
Length of stay of the latest trip	Q37. Number of nights away from home?	*Ordinal* -1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, and 20 or more	*Ordinal* -Weekend/short (1 to 2 nights) -Up to 1 week (3 to 6 nights) -2 weeks (7 to 13 nights) -14 nights or more
Destination of the latest trip	Q35. Where is this destination?	*Nominal* -Within province/state -Out of province/state, within country -Out of country, within North America -Out of North America	*no change*
Season of the latest trip	Q36. When did this trip start? (November 2000 to October 2001)	*Ordinal* -November 2000 -December 2000 -January 2001 -February 2001 -March 2001 -April 2001 -May 2001 -June 2001 -July 2001 -August 2001 -September 2001 -October 2001	*Nominal* -Winter (Dec. to Feb.) -Spring (Mar. to May.) -Summer (Jun. to Aug.) -Fall (Sep. to Nov.)