Cruise tourists’ perceptions of destination: Exploring push and pull motivational factors in the decision to take a cruise vacation

Lincoln James Whyte

Master of International Economics & Finance (University of Queensland)
Master of Business in International Business (University of Queensland)
Bachelor of Arts in Economics and Psychology (University of Hawaii)

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Abstract

Cruise tourism is an increasingly popular and profitable industry that has been experiencing growth rates since the 1980s that are greater than the travel industry as a whole. Despite this growth, research about cruise tourism remains relatively underrepresented in the academic literature, with limited research into the motivational factors that influence the decision to take a cruise vacation. This research explores the motivational factors that influence the decisions of tourists to take a cruise vacation by using the push-pull framework. Push factors are the internal psychological motives that drive the need or desire to travel (Crompton, 1979) while pull factors are the specific attributes of the cruise destination (onboard and onshore) that draw tourists towards a specific cruise line, ship, or destination.

Research was conducted using a mixed-methods approach in a three-stage sequential design. In the first stage of research, one-on-one interviews (20 participants) were conducted to explore participants’ personal constructs of destination image in the context of cruise vacations. Repertory Grid Analysis and open-ended questions were used to identify the onboard and onshore attributes that travellers use to compare and differentiate between cruise vacations. The responses were presented from the cruise travellers’ point of view, representing personally relevant criteria that are used in the decision-making process (Coshall, 2000; Hankinson, 2004; Young, 1995). These results were then used to create a new measurement scale for cruise destination attributes that accounts for the unique aspects of cruising and that allows researchers to separately measure the importance of both onboard and onshore attributes.

In the second stage, online surveys (344 participants) were conducted to refine the list of attributes elicited from Stage 1 to a quantity that is suitable for inclusion in a quantitative survey instrument in Stage 3. The online survey also tests the ability of the instrument to determine the relative importance of onboard and onshore attributes in tourists’ choice of a specific cruise.

The refined cruise destination attribute scale in the Stage 3 online study (503 participants) permitted, for the first time, an effective measurement of the relative importance of onboard and onshore attributes in tourist choices of a specific cruises. The results revealed that, when deciding on a cruise vacation, the majority of travellers place greater importance on the onboard attributes than on the onshore attributes. This supports the recent development by the cruise industry of new ships that are self-contained destinations, and of marketing campaigns that position the cruise ship as the focal point of cruise vacations, with cruise destinations being of secondary importance (Weaver, 2005c; Weeden et al., 2011; Wood, 2000). Although onboard attributes were of greater importance overall to many participants, this was not true for all. Further analysis identified three distinct groups: firstly, the onboard preference group ($n = 251$); secondly, the onshore preference group ($n = 65$); and thirdly, a neutral preference group ($n = 189$). These groups represent different
market segments. Furthermore, open-ended questions were used to identify which circumstances would increase or decrease the importance of onboard or onshore attributes in the decision-making process. Combining the new measurement scale with the Leisure Motivation Scale (Ryan & Glendon, 1998) allowed for push-pull relationship to be measured for the first time in the cruise context.

Regression analysis and canonical correlation analysis were used to explore the push-pull relationship. They revealed several combinations of push and pull variables that may identify potential product bundles. Understanding the push-pull relationship is beneficial because destination choice is influenced by the perceived link between push and pull factors (Oh, Uysal, & Weaver, 1995). Furthermore, cruise lines and destinations can use these product bundles to develop more effective target marketing strategies, as well as to develop and improve the cruise vacation experience in order to satisfy the travel motives of cruise travellers. In addition to these market segments, further market segments were identified in the in the process of identifying and differentiating the onboard-onshore preference groups mentioned earlier.

Results from these three stages of research produced a number of theoretical, methodological, and practical contributions to cruise tourism research and to the cruise industry. This study contributes to the development of a stronger theoretical base for studying cruise travel motivation, and the cruise tourism industry as a whole, by addressing several research limitations that were identified in the literature; re-examining the way that destination attributes of cruise tourism are researched; and re-conceptualizing the cruise destination to incorporate both onboard and onshore components. Methodological contributions include the first successful application of destination image methods—such as Repertory Grid Analysis—to the context of cruise tourism, the development of a new cruise destination attribute scale, the application of the Leisure Motivation Scale to measure travel motives in the cruise context, and an analysis of the push-pull (motivation-attribute) relationship in the cruise context. Practical contributions include the identification of the most important push and pull items and factors in the decision to cruise, the determination of the relative importance of onboard and onshore attributes when deciding on a cruise vacation, and the development of potential market segments, including segmentation based on the push-pull relationship and the creation of onboard-onshore preference groups. These contributions have implications for both cruise lines and cruise destinations, for marketing and developing the cruise product.
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Contributions by others to the thesis

No contributions by others.

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<td>ANOVA</td>
<td>Analysis of variance</td>
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<tr>
<td>BREA</td>
<td>Business Research &amp; Economic Advisors</td>
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<td>CCA</td>
<td>Canonical correlation analysis</td>
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<td>CDAS</td>
<td>Cruise Destination Attribute Scale</td>
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<tr>
<td>CD-RGA</td>
<td>Cruise Destination Repertory Grid Analysis</td>
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<tr>
<td>CL</td>
<td>Cruise line</td>
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<td>CLIA</td>
<td>Cruise Lines International Association</td>
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<td>FOC</td>
<td>Flags of Convenience</td>
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<td>PCT</td>
<td>Personal Construct Theory</td>
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<td>PAF</td>
<td>Principal Axis Factor Analysis</td>
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<td>RG</td>
<td>Repertory Grid</td>
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<tr>
<td>RGA</td>
<td>Repertory Grid Analysis</td>
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<tr>
<td>SPSS</td>
<td>Statistical Package for the Social Sciences</td>
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<tr>
<td>UN</td>
<td>United Nations</td>
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<tr>
<td>UNWTO</td>
<td>United Nations World Tourism Organization</td>
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<tr>
<td>US/ USA</td>
<td>United States/ United States of America</td>
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CHAPTER 1: INTRODUCTION

1.1 Background to the Study

The cruise industry is considered to be one of the fastest growing segments of the tourism industry in the world (Hosany & Martin, 2012; Vogel, 2011b; Weaver, 2008). Since 1980, its global growth has been 7.6% per annum, outpacing the travel industry as a whole while maintaining strong growth potential (Cruise Lines International Association [CLIA], 2011a). The industry has proven profitable for both cruise lines and regional economies. For example, in 2014 several of the major cruise lines reported increased profits from the previous year, including Carnival Corporation & Plc (2014), who reported a profit of US$1.2 billion, Royal Caribbean Cruises Ltd (2014), who reported US$756 million, and Norwegian Cruise Lines Holdings Ltd. (2014), who reported US$338 million. In the United States, the cruise industry contributed over US$20 billion in US-based spending in 2013, growing at an average rate of 2% annually from 2007 to 2013 (Business Research & Economic Advisors [BREA], 2011, 2014).

The increasing popularity and profitability of the cruise industry has led to an increase in competition which has required cruise lines and destinations to adapt their business models (Aggett, 2011; Coleman, Meyer, & Scheffman, 2003; Kwortnik, 2006; Perucic, 2007; Sun, Jiao, & Tian, 2011). Traditionally, competition within the industry has included cruise lines competing against other cruise lines and destinations competing against other destinations. However, cruise lines have now begun marketing and designing new ships to be the focal point of the cruise vacation (Weaver, 2005c), competing with both cruise lines and their destinations. In order to sustain current growth and profitability in an increasingly competitive market, cruise lines and destinations need to develop a more thorough understanding of their individual and combined roles in the cruise vacation experience. To achieve this, it is necessary to identify the specific onboard and onshore aspects of cruise vacations that attract individuals to cruising, and how these satisfy the travel motives of cruise travellers. This is accomplished in the present study by (a) creating a comprehensive list of cruise destination attributes that separately accounts for onboard and onshore components; (b) refining this list and developing a Cruise Destination Attribute Scale; and (c) incorporating these attributes into the push-pull motivation framework.

1.1.1 Push – Pull Framework & Unique Characteristics of Cruising

Despite the achievements and increasing importance of the industry, cruise-specific research is underrepresented in the academic literature (de la Vina & Ford, 2001; Kerstetter, Yen, & Yarnal, 2005; Klein, 2011; Luković, 2013; Papathanassis & Beckmann, 2011), with cruise motivation
accounting for only a small portion of published studies (Hung & Petrick, 2011b; Jones, 2011). In particular, those attributes that draw travellers towards cruise vacations, known as pull factors, are significantly under researched. The push-pull motivation framework, which represents the push (travel motives) and pull (destination attributes) factors, is widely used in leisure and travel literature; however, there has been limited application of the framework to measure and understand push motives, pull factors, and the interrelationship between the two in the context of decision-making about cruise vacations.

The push-pull framework refers to the socio-psychological motives that push individuals into travelling and the characteristics that are specific to particular destinations that pull those individuals to them (Crompton, 1979; Dann, 1977, 1981; Kim, Lee, & Klenosky, 2003; Uysal & Jurowski, 1994; Yuan & McDonald, 1990). Although motives create the need and desire to travel, they operate independently from the choice of travel mode or the destination (Dann, 1977). Many travel motivation studies apply a less-strict definition of motives, in which internal push factors and external destination pull factors are combined without distinction, with the two often grouped together under the umbrella term of “motivations”.

A number of characteristics unique to cruise travel create further complexities in the identification and measurement of push and pull factors (Teye & Paris, 2011). The onboard attributes of a cruise ship are additional pull factors, and the ship itself can be considered both a means of transportation and a part of the destination. It is even possible for the ship itself to be considered the primary or sole destination. Another unique characteristic is that cruise vacations generally visit multiple port destinations over the course of the trip, with only a limited amount of time spent in each port. Cruise passengers can also stay on the ship when in dock, foregoing the destination port.

In related literature, the unique characteristics of cruising itself are often not taken into account when studying cruise travel motivations. The concept and implications of the cruise ship as the primary destination, or as a co-destination with the ports of call (destinations where the cruise stops) are also often overlooked (Teye & Paris, 2011). This results in an incomplete understanding of cruise vacation pull factors through failure to thoroughly examine the unique aspects of cruising as a vacation type as well as the distinction between onboard and onshore pull factors. Without a distinction between these two factors, the literature fails to explore the relative importance of onboard and onshore attributes and the relationship between attributes and travel motives. Thus, a more thorough examination of cruise travel motivation that incorporates push factors (travel motives) and pull factors (cruise destination attributes)—including onboard and onshore attributes—will benefit the cruise industry and cruise tourism research. Although the push-pull
framework has been widely used in motivation research, the framework is not without criticisms. Much of this criticism is related to studies that have been conducted on the separate components of push and pull. This criticism is discussed in more detail in Chapter 2.

A better understanding of the attraction of cruise vacations can be gained by re-examining the ways that pull factors are studied in cruise research. To do so, the cruise destination needs to be re-conceptualized from the tourists’ point of view, identifying the destination attributes that they associate with the onboard and onshore aspects of the cruise destination. Next, the importance that both onboard and onshore attributes play in the cruise decision-making process needs to be measured, along with their relationship. To accomplish this, a specialised pull factor measurement scale is required, which can account for both the onboard and onshore aspects of cruising, and for the unique characteristics of cruise travel. Cruise-specific motivation studies and cruise destination attribute studies must also overcome many of the limitations generally found throughout the cruise literature.

1.1.2 LIMITATIONS FOUND IN THE CRUISE LITERATURE

As a relatively new and understudied field, cruise literature has several limitations. These include research fragmentation, managerialism, restricted access, sampling limitations, and narrow geographic focus. Research fragmentation is a result of the multi-disciplinary nature of cruise research and the relative youth of the field of study. Research is spread over a wide array of topics and disciplines, with studies published in numerous sources, many of which are found outside of tourism journals. While the field is diverse, a thorough review of cruise-related academic publications revealed a greater concentration of studies that relate to business, management, and economic issues than those that relate to sociology, psychology, the environment, geography, engineering, and technology (Papathanassis & Beckmann, 2011). A major contributor to this concentration on specific topics is managerialism, which refers to the tendency of research to focus on economic issues with a managerial perspective (Papathanassis & Beckmann, 2011). Klein (2011) and Vogel (2011a) consider much of the literature to have a “technical orientation”—referring to topics such as economics and statistics, human resources and education, marketing, strategy and policy—or “practical orientation”, which focuses on performative measures of the operation of cruise companies. Although this thesis does make a practical contribution to the cruise industry, its focus is travel behaviour. Its research methods are developed to avoid several of the limitations described above, and to provide results that are relevant to cruise passengers, without researcher or industry bias.

A further contributor to managerialism is the ability of gatekeepers to restrict access to information and research participants from researchers whose interests do not align with the
industry (Vogel, 2011a). Direct access to cruise passengers (and crew) aboard ships or at ports of call is restricted by gatekeepers such as cruise lines, airports, ports, and tour companies. This creates difficulties for researchers to gain access to potential research participants, limiting the quantity and quality of any research conducted (Papathanassis & Beckmann, 2011). To overcome this obstacle, online panel surveys were aimed at a large group of participants who present a wide variety of cruise travel options (e.g., cruise length, cruise region, time of year, size of ship, etc.).

Restricted access to participants contributes to the sampling limitations found throughout the cruise-related literature. Small sample sizes and narrow sampling frames prevent much of the existing literature from being beneficial to a wider audience or to the industry as a whole, with numerous studies based on samples from just one or two cruise ships. These limited sample sizes and sample frames make it difficult to generalise findings beyond the individual ships, itineraries, cruise lines, or regions under study. Additionally, there tends to be a significant geographic limitation, with most studies focusing on the Caribbean cruise region. Although the Caribbean has long been the most significant cruise region, the Caribbean’s market share has been decreasing (CLIA, 2012b) due to growing emerging markets such as Asia, Australia and the Pacific, and South America (BREA, 2014). As cruise markets develop around the world, it is becoming increasingly important to conduct research beyond the Caribbean.

The geographic focus on the Caribbean and the sampling limitations of studies conducted both in the Caribbean and elsewhere do not allow results to be generalised to other cruise regions or to the industry as a whole. In fact, relatively few studies have been conducted on a scale broad enough to produce generalisable results. Although studies that are focused on specific regions or sample characteristics have their place, developing research methods applicable to the industry as a whole—that identify push and pull factors representative of cruising and cruise destinations in general—will allow future research to be conducted in a more efficient manner and permit comparisons across cruise regions and sample groups. Many studies in the literature have obtained relatively-large samples that represent more than a single geographical region or cruise market by utilizing online panel surveys (CLIA, 2008, 2011b; Hung & Petrick, 2010, 2011a, 2011b, 2012a, 2012b; Xie, et al., 2012). This approach has been adopted in the present study, which thus addresses a number of the limitations and gaps found in the literature in order to produce more generalisable results and develop a more complete understanding of the push and pull factors that relate to cruise tourism.

1.2 Research Aim, Objectives and Approach

The cruise industry has increasingly marketed and developed the cruise experience with the cruise ship as the focal point of the cruise vacation. Speculation as to whether the ship is becoming
the primary destination has surfaced in the literature, with ports of call becoming secondary destinations to the ship itself (Jones, 2011; Teye & Paris, 2011; Weaver, 2005c; Weeden et al., 2011; Wood, 2000). There has, however, been no attempt to investigate the relative importance of the ship compared to the destinations in the decision-making process of cruise travellers. Rather than focusing on issues from the perspective of cruise passengers, much of the current research tends to align with the interests and goals of the cruise industry (Klein, 2011), with several other limitations stemming from the power and influence exerted by cruise lines (Papathanassisi & Beckmann, 2011). This research sought to better understand cruise travellers by objectively exploring the importance of push and pull factors in their decision to take a cruise vacation. The cruise industry is becoming increasingly competitive (Perucic, 2007), with the North American share of the global cruise market being eroded by a shift in supply (the relocation of ships) and demand (the source of passengers) to emerging markets (BREA, 2014). These changes to the structure of the global cruise market increase the necessity of a deeper understanding of cruise travellers—particularly the factors that influence their decision-making process—while the limitations and shortcomings found in the literature require a methodological re-evaluation of how cruise tourism and cruise motivation is studied.

The principal aim of this thesis is to explore the push and pull motivational factors that influence the decisions of tourists to take a cruise vacation, with the principal research question being how cruise destination attributes can be re-examined. To achieve the aim of this thesis and answer this question, this thesis has three specific research objectives:

1. To identify the onboard and onshore attributes that contribute to the perceptions that cruise tourists have about the cruise destination;
2. To determine the relative importance of onboard and onshore attributes when tourists choose a specific cruise; and
3. To explore the relationship between push factors (travel motives) and pull factors (cruise destination attributes), including both onboard and onshore attributes, in the decision to cruise.

A post-positivist paradigm has guided the research approach of this thesis: its ontology, epistemology, methodology, and axiology. The research aim and objectives of this study were addressed using a mixed methods approach across the three stages of data collection. Figure 1.1 illustrates the conceptual model of the study, and is followed by a brief description of the three stages of research and how they contribute to the research objectives.
**Stage 1: Identifying Cruise Destination Attributes**

The goal of the first stage of research was to identify the onboard and onshore attributes that contribute to tourists’ perceptions of the cruise destination (Research Objective 1). Data were collected through one-on-one interviews using repertory grid analysis and open-ended questions to elicit the personal constructs of destination image that individuals had in the context of an upcoming cruise vacation. Repertory grid analysis (RGA) is strongly rooted in psychological theory as a way to operationalise Kelly’s (1955) Theory of Personal Constructs. RGA was chosen because of its ability to efficiently elicit unconstrained responses from the point of view participants. These responses represent meaningful criteria that are used in decision-making and also provide a systematic framework to reduce interviewer bias (Coshall, 2000; Hankinson, 2004; Pike, 2007; Young, 1995). Participants were required to have previously been on a cruise vacation or to be in the process of booking one at the time of the interviews. Participants meeting these criteria were chosen to ensure that data accurately represented the attributes considered when planning a cruise vacation.

Stage 1 produced a comprehensive list of the most notable cruise destination attributes (both onboard and onshore) and provided an insight into the concept of cruise destination image from the passengers’ perspective rather than items predetermined by researchers or by those of most concern to the cruise industry. This attribute list contributed to the development of a pull factor measurement scale that incorporates, yet distinguishes between, onboard and onshore cruise
destination attributes. This enables a more thorough examination of cruise destination attributes and the relative importance of onboard and onshore attributes (Research Objective 2).

**Stage 2: CDAS Pilot Study**

The main goal of Stage 2 was to refine the list of attributes elicited from Stage 1 to a number suitable for inclusion in a quantitative survey instrument in Stage 3, and to test that instrument’s ability to determine the relative importance of onboard and onshore attributes in tourists’ choice of a specific cruise. Data were collected through a predominantly quantitative, web-based questionnaire, with several open-ended questions included to gain further insights. An online questionnaire was considered the most effective surveying method to reach a relatively large, varied, and geographically-dispersed sample of travellers and to avoid the previously outlined limitations common in cruise tourism literature. Participants were mainly from North America and met the criteria for the CLIA (2011b) target market: aged 25 years or older with an annual household income of US$40,000 or greater. In addition, participants were required to have taken at least one cruise vacation or be in the process of booking an upcoming cruise vacation.

The survey instrument consisted of five sections:

1. Socio-demographics and cruise travel behaviour;
2. Onboard attributes;
3. Onshore attributes;
4. Questions regarding the relative importance of onboard, onshore, and the cost/ value aspects of cruising; and
5. The attributes of cruising as a vacation type.

Factor analysis identified underlying factor groups of onboard and onshore attributes, as well as aspects of cruising as a vacation type. Factor analysis was also used to decrease the number of items within each of the item sets. Two methods were tested to measure the relative importance of onboard and onshore attributes:

1. A series of direct question that related to the overall importance of onboard and onshore attributes, and
2. A comparison of the mean scores of the onboard and onshore attribute item sets.

As a result of the pilot study, the section directly addressing the relative importance of onboard and onshore attributes was improved in order to more effectively compare the importance given to the two sources of pull factors when deciding on a cruise vacation.
Stage 3: Online Panel Study

The goals of Stage 3 were to determine the relative importance of onboard and onshore attributes when tourists choose a specific cruise (Research Objective 2) and to explore the interrelationships between push and pull factors (Research Objective 3). The third and final stage of research was conducted in a similar manner to Stage 2, utilizing a predominantly quantitative online questionnaire completed by members of an online panel, which ensured that a large and varied sample was obtained. The survey instrument from the CDAS pilot study was successfully refined into a more concise questionnaire, decreasing the time required to complete the survey and eliminating redundant items. The Leisure Motivation Scale (Ryan & Glendon, 1998) was added to the questionnaire as a proven measure of travel motives (push factors). This allowed for the push-pull relationship between travel motives and onboard and onshore cruise destination attributes to be explored.

Factor Analysis was conducted on the four item sets that were related to travel motives, onboard attributes, onshore attributes, and cruising as a vacation type, with Cronbach’s alpha calculated to test reliability. Several methods were used to examine the relative importance of onboard and onshore attributes at both the factor level and at the individual item level, including descriptive statistics and a direct comparison question specifically designed to address the topic. From this examination, preference groups were created, based on those who placed greater importance on onboard attributes, onshore attributes, or those whose responses were neutral. Next, ANOVAs and cross-tabulations were conducted to identify group differences and to develop market segments based on the preferences of travellers. Finally, the push-pull relationship between travel motives and cruise attributes was explored by using regression analysis and canonical correlation analysis, revealing related factors and identifying potential product bundles.

Developing the Cruise Destination Attribute Scale

The Cruise Destination Attribute Scale (CDAS) was developed over the three stages of this thesis and followed Churchill’s (1979) procedures for developing new multi-item measurement scales. This ensured that a valid and reliable instrument was constructed to measure and compare the importance of onboard and onshore attributes. The new measurement scale provides academic and industry researchers with a tool to measure the importance of those cruise destination attributes that attract tourists to a specific cruise line, ship or destination. This information can be used to develop more effective marketing materials and to inform product development that provides cruise tourists with more satisfying vacation experiences.
1.3 Research Contributions

Despite being a widely-used and accepted method of effectively measuring travel motivation, the push-pull approach to travel motivation has had limited application in the cruise literature (T. Huang, 2009; Josiam et al., 2009). Pull factors (cruise destination attributes) have received particularly inadequate research. This study makes a significant contribution to the existing knowledge and understanding of cruise tourism and cruise tourists. Developing a greater understanding of the push motives that drive tourists to travel and the pull factors that influence the decision to take a specific cruise has enabled four major contributions.

**Exploring destination image in the cruise tourism context**

A number of the unique features of cruise tourism require an adaptation of destination image to fit the cruise context. This thesis explores cruise destination image in a novel way by adapting multiple, proven destination image techniques in order to explore cruise destination image, including the use of repertory grid analysis.

**Re-conceptualizing the cruise destination**

Through an exploration of cruise destination image, the concept of the cruise destination was re-conceptualized to account for the important attributes of the cruise ship and the unique features of cruising in general, and by identifying the cruise ship as a co-destination with the ports of call. A new measurement scale was needed to quantitatively measure this re-conceptualized cruise destination. Over the course of the three stages of this thesis, the Cruise Destination Attribute Scale was developed, refined, and tested, thereby providing a number of theoretical, methodological, and practical implications for cruise researchers and the cruise industry.

**Measuring the relative importance of onboard and onshore attributes**

Developing the Cruise Destination Attribute Scale not only allowed this to be the first study to separately measure the importance of both onboard and onshore cruise destination attributes, but it also allowed for the relative importance of the two sources of pull factors to be measured for the first time. Three potential segmentation groups were identified from the results, based on preferences for onboard or onshore attributes.

Identifying the most important onboard and onshore attributes, determining the relative importance of the two, and developing preference groups has revealed a number of practical implications for the cruise industry. These implications are related to marketing and development of the cruise product, as well as theoretical implications for cruise research.

**Exploring the push-pull relationship in the cruise tourism context**
The push-pull framework has been applied extensively in the tourism literature and, to a lesser extent, in cruise tourism research; however, a very limited number of tourism studies, and no cruise tourism studies, have measured the relationship between push and pull factors. Measuring the push-pull relationship using regression analysis, as well as canonical correlation analysis, has indicated a number of potential product bundles for market segmentation based on strongly-related push and pull factors.

1.4 Outline of this Thesis

This thesis consists of seven chapters. The current chapter has provided a brief introduction to the current state of the cruise industry, related research, and the purpose of this study. Chapter 1 also presents the research aim, objectives and approach that guide this thesis, and several contributions this research can make. It concludes with delimitations of scope and definitions of the key terms found throughout the thesis. Chapter 2 expands on the review of the cruise industry and related literature, providing a knowledge base for the thesis and indicating areas of research to which the study aims to contribute. Chapter 3 justifies the paradigm and methodology followed in this thesis and provides an overview of the methods followed during the three stages of data collection. Because of the sequential design of the three stages of data collection, the method, analysis, results, and discussion for each stage will be presented in separate chapters, beginning with Chapter 4 for Stage 1, Chapter 5 for Stage 2, and Chapter 6 for Stage 3. Chapter 7 provides a summary of the key findings and contributions. The final chapter also discusses the overall conclusions of the thesis, along with its limitations and suggestions for future research.

1.5 Delimitations of Scope

This thesis is subject to three main delimitations. Firstly, the majority of the research that is conducted in this thesis focuses on English-speaking North American tourists who have previously taken a cruise vacation; therefore, results may not be generalisable to tourists residing outside North America or those who have not yet been on a cruise vacation. This does not improve upon the limitations found in the studies of North American cruise passengers, but to conduct a study with a globally-representative sample was not feasible given the sample size required, potential language barriers and time constraints. Therefore, obtaining a representative sample of North American cruise travellers was much more practical. Focusing on North American cruise travellers also ensured that the largest source of cruise passengers was represented. In 2014, US residents accounted for 51.4% of global passenger demand, with Canadian residents accounting for another 3.2% (CLIA, 2015a). This study did, however, resolve the limitations that arise from a focus on a single cruise region that participants visited. Future research can take a cross-cultural approach to identify possible differences between passengers from different source markets.
Secondly, although this thesis drew on psychological theories to guide its examination of tourist decision-making—specifically travel motivation and personal construct theory—a full analysis and discussion of the psychological bases of motivation are beyond its scope. Thirdly, the measurement scales used for data collection also delimit this thesis. An existing measurement scale was used to measure travel motives (Leisure Motivation Scale) on the basis that it has been proven in multiple areas of leisure and travel motivation research. In addition, a new and hitherto untested measurement scale was created to measure the specific pull factors for cruise tourism.

1.6 Definitions of Key Terms

The key terms encountered in this thesis are defined below to provide the context in which they are used.

- **Available bed days**: Bed days are the number of days that all beds (berths) are occupied in a calendar year. For example, a single passenger on a seven-day cruise equals seven passenger bed days (BREA, 2011). Available bed days are also referred to as passenger bed days.

- **Cruisers**: Those who have taken a cruise vacation at any point in their lives. Includes both current cruisers and past cruisers (Park 2006; Park & Petrick 2009b).
  - **Current-cruisers**: Those who have taken at least one cruise vacation within the previous five years (Park 2006; Park & Petrick 2009b).
  - **First-time cruisers**: Those who have never taken a cruise vacation before, but are on their first cruise at the time of the study being conducted. The term is usually used when conducting studies during a cruise vacation to distinguish them from repeat cruisers (T. Huang, 2009; Jones, 2011; Petrick, 2004b; Teye & Leclerc, 1998).
  - **Non-cruisers**: Those who have never taken a cruise vacation (Park 2006; Park & Petrick 2009b).
  - **Past-cruisers**: Those who have taken a cruise vacation before, but not in the past five years (Park 2006; Park & Petrick 2009b).
  - **Repeat cruisers**: Those who have taken a cruise vacation before and are currently on another cruise at the time of the study being conducted. The term is usually used when conducting studies during a cruise to distinguish them from first-time cruisers (T. Huang, 2009; Jones, 2011; Petrick, 2004b; Teye & Leclerc, 1998).

- **Cruise destination**: The geographical region in which the cruise sails and/or the ports of call, including the port(s) of embarkation/disembarkation, and the cruise ship itself.
• **Cruise destination attributes:** The tangible (for example, cultural/ historical attractions, ship amenities/ facilities, natural environment) and intangible (for example, atmosphere, convenience, expectations, image, perceptions) factors related to the ship and ports of call that draw potential travellers to choose a cruise vacation and a specific destination, cruise line, cruise ship, and/ or shore excursions.

  o **Onboard attributes:** The tangible or intangible attributes specific to the cruise ship (or cruise travel in general) that attract tourists to choose a cruise vacation, a specific cruise line, or a specific ship. Examples include ship amenities and facilities (e.g., cabins, pools, gym, spa, sports facilities, bars, restaurants), entertainment (e.g., casinos, games, shows/ performances, presentations, classes), convenience (e.g., organized tours, all-inclusive/ most expenses prepaid, visit multiple destinations), and security (Teye & Paris, 2011; Xie et al., 2012).

  o **Onshore attributes:** Attributes specific to the ports of call of a cruise vacation. These are equivalent to destination attributes in non-cruise-related destination studies.

• **Cruise tourism:** “A socio-economic system generated by the interaction between human, organizational and geographical entities, aimed at producing maritime-transportation-enabled leisure experience” (Papathanassis & Beckmann, 2011, p. 166).

• **Destination image:** An individual’s perceptions of the attributes and holistic impressions of a destination. This includes the functional characteristics (concerning tangible aspects), psychological characteristics (concerning intangible aspects), traits common to destinations in general, and traits unique to the specific destination (Echtner & Ritchie, 1991).

• **Ports of call:** The destinations at which the cruise ship stops during the vacation.

• **Potential cruisers:** “People who have not cruised but are interested in taking a cruise in the future” (Xie et al., 2012, p. 152).

• **Pull factors:** The tangible and intangible core attributes and attractors of a destination that influence travellers to choose one destination over another. These include a destination’s activities, atmosphere, culture and history, image, market ties, natural environment, unique features, and tourism superstructure (Crouch & Ritchie, 1999; Dann, 1977; Echtner & Ritchie, 1991; Uysal & Jurowski, 1994).

• **Push factors (travel motives):** Internal socio-psychological motives responsible for the need or desire to travel (Crompton, 1977; Dann, 1977, 1981; Uysal & Jurowski, 1994; Yuan & McDonald, 1990).
CHAPTER 2: LITERATURE REVIEW

2.1 Introduction to Chapter 2

The first chapter, which introduced this thesis, began with a brief synopsis of the current state of the cruise industry and cruise tourism research in Section 1.1. Chapter 2 builds upon this introduction with a more detailed discussion of the cruise industry and related literature that is relevant to this study. Chapter 2 aims to identify gaps in the literature and build a theoretical foundation to support the research of this thesis. It begins with a general overview of the cruise industry, followed by a more detailed examination of the North American market—the focal point of this study. The wider topic of cruise tourism research is critically explored, identifying several limitations in the current literature. Because of the relative scarcity of literature that relates to cruise motivation, research work relating to travel motivation is instead reviewed, with a focus on cruise tourism where possible. The chapter concludes by examining the push-pull framework, with a detailed consideration of both push and pull factors followed by a review of the push-pull relationship in relation to cruise tourism.

2.2 Cruise Industry Overview

The cruise industry is a genuinely globalized industry. The major players are multinational corporations that are created through foreign international capital investment, joint ventures, mergers, and acquisitions (Brida, Garrido, & Devesa, 2012; Perucic, 2007). Ships sail in all regions of the world and are often registered in countries that are different from the companies that own them. Registration in certain countries (e.g., Bahamas, Belize, Bolivia, Honduras, Liberia, Panama, Sri Lanka) is referred to as flying “flags of convenience” (FOC) and enables cruise lines to decrease costs (lower registration fees, taxes, and wages) and avoid national and international labour, safety, and environmental regulations (Boy, 2011; Chin, 2008; Mentzer, 1989; Perucic, 2007). The use of FOC has also helped to create the nationally and culturally diverse workforce found on those ships (Brida et al., 2012; Gibson, 2008; Testa, 2009; Weaver, 2005a; Wood, 2000). Chin (2008) summarizes the outcome of FOC as allowing ships to be “…built in one country, owned by those living in another country, registered and flagged in a third country, possibly managed by a company in the fourth country and crewed by seafarers from all over the world” (p. 9).

Faced with global competition and increasing numbers of international passengers, the physical and capital mobility of cruise lines enable them to relocate ships to meet demand (Brida, et al., 2012; Cruise Lines International Association [CLIA], 2011a; Perucic, 2007; Wood, 2000). These examples indicate the globalized nature of the supply-side of the cruise industry; however, the demand-side is also globalized. Cruise passengers can be segmented, based on whether they are
local to the region of the cruise they are taking, or are part of a long-haul market and travel to another region for their cruise vacation (Henry, Hamlin, & Simpson, 2015).

Carnival Corporation & plc, Royal Caribbean Cruises Ltd. and Norwegian Cruise Line Holdings Ltd. are the three major competitors that dominate the global cruise industry. Together, these corporations comprise 19 individual cruise lines (Table 2.1) and account for 81.6% of all passengers and 76.7% of all revenue (Cruise Market Watch. 2016). These companies share a number of similarities. For example, they all use multi-brand strategies, cover all market segments, and have relatively younger ships than other cruise lines (Dowling, 2006).

<table>
<thead>
<tr>
<th>Table 2.1 Major Cruise Companies and Subsidiaries: % of Global Passengers</th>
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</thead>
<tbody>
<tr>
<td><strong>Carnival Corporation &amp; plc (48.1%)</strong></td>
</tr>
<tr>
<td>Carnival (21.3%)</td>
</tr>
<tr>
<td>Princess (7.9%)</td>
</tr>
<tr>
<td>Costa Cruises (7.4%)</td>
</tr>
<tr>
<td>AIDA Cruises (3.7%)</td>
</tr>
<tr>
<td>Holland America (3.0%)</td>
</tr>
<tr>
<td>P&amp;O Cruises (1.7%)</td>
</tr>
<tr>
<td>P&amp;O Cruises Australia (1.2%)</td>
</tr>
<tr>
<td>Cunard Line (0.9%)</td>
</tr>
<tr>
<td>Ibero Cruises (0.8%)</td>
</tr>
<tr>
<td>Seabourn CL (0.2%)</td>
</tr>
</tbody>
</table>

Sources: Cruise Market Watch, 2016

This dominance by only three major firms is one of the oligopolistic characteristics of the cruise industry. In addition to this restriction to three firms, cruise lines are capable of exerting power over port cities and countries (Cerveny, 2007; Lester & Weeden, 2004); their products are comparable but highly differentiated (Vogel, 2011b; Wie, 2005); and their competition faces the high entry barriers of ship building costs and gaining access to port berths. Although the threat to these three major cruise corporations from new entrants is limited, competition within the market is strong (Lester & Weeden, 2004; Teye & Leclerc, 1998). Furthermore, cruise lines compete with other sectors of the travel industry, including airlines, sightseeing destinations such as Las Vegas and Orlando, land-based hotels, all-inclusive resorts, and theme-parks such as Disneyland (Kwortnik, 2006; Teye & Leclerc, 1998; Wood, 2000). This competition with land-based tourism providers has increased in recent years as the major cruise lines have implemented vertical integration strategies into tour operations, lodging, transportation, and excursion firms (Chin, 2008). The land-based side of the cruise industry is also strongly competitive, with destinations competing to become homeports (where cruises begin and/ or end) and ports of call on cruise itineraries (intermediate stops) (Brida, Pulina, Riaño, & Zapata-Aguirre, 2012). This competition is particularly fierce in regions that depend heavily on tourism, such as Alaska and the Caribbean (Lester & Weeden, 2004; Marti, 2007).
Growth in the cruise industry was fairly volatile from the end of World War II to the 1980s. The industry benefited from the post-World War II boom but encountered competition from the airline industry in the 1950s. To increase capacity, cruise companies began converting freight ships into passenger vessels; however, this period of growth was eventually curtailed by the 1974 oil crisis. A growing demographic of wealthy, aging baby boomers with more leisure time for travel supported expansion in the 1980s and presented strong growth potential for the 1990s (Page, 1987). It was predicted that expansion and growth would not continue at such a significant rate (Hobson, 1993); however, the modern cruise industry demonstrated its strength and versatility by maintaining growth after the terrorist attacks in the United States on September 11th, 2001 as cruise lines repositioned ships to US markets such as Alaska (Dowling, 2006). This tactic was used again when growth in the Caribbean slowed and ships were repositioned to Europe (Ebersold, 2008). Strength was maintained through the global financial crisis in the first decade of the new century (Lukovic & Bozic, 2011).

Following the 2009 recession, ships in the US were repositioned to Europe, Asia, Australia, and the South Pacific from 2010 to 2013 (BREA, 2014), which helped maintain industry growth. From 1990 to 2014, the cruise industry experienced a 7.75% average annual growth in passengers worldwide. Emerging source markets of passengers supported this growth with a 16.90% average annual growth rate in this market during the same time period; meanwhile, the dominant North American market experienced a slower average annual growth rate of 5.40% (calculated with data from BREA, 2014; CLIA, 2015a). Annual passenger numbers broke 10 million worldwide for the first time in 2004 (CLIA, 2011a) and were predicted to exceed 25 million by 2015 (Peisley, 2006, as cited in Page, 2008). According to the most recent data from CLIA (2015a), global passenger numbers reached over 22 million in 2014. Figure 2.1 depicts the steady growth of the industry from 1990–2014, with a dramatic increase in passengers from countries outside of North America contributing to recent growth.

The increase in passengers aboard cruises outside North America has been significant, and these large and relatively untapped markets have sustained industry growth. Emerging markets have enabled cruise lines to smooth out demand fluctuations in North America by relocating ships elsewhere, which helps prevent overcapacity within a region (Hobson, 1993). Consequently, in recent years the cruise industry has been shifting capacity (in terms of available bed days1) away from North America towards Asia, Australia and the Pacific, and South America. This has contributed to a 20% increase in capacity in these three regions in 2013 (BREA, 2014). These

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1 Bed days are the number of days that all beds (berths) are occupied in a calendar year. For example, a single passenger on a seven-day cruise equals seven passenger bed days (BREA, 2011).
emerging markets open opportunities for new research to identify the unique needs and characteristics of each of the markets.

**Figure 2.1 Annual Cruise Passengers: 1990-2014 (in millions)**

![Graph showing annual cruise passengers from 1990 to 2014](image)

The growth maintained by the cruise industry appears even more remarkable when compared to the travel industry as a whole. Between 1980 and 2005, average annual growth in the cruise industry was 13.9%, growing from 1.8 million passengers to 14.47 million worldwide. During the same time period, the travel industry as a whole experienced a 6.6% increase in global tourist arrivals, from 285.9 million to 327.2 million (Perucic, 2007). Worldwide passenger numbers will continue to grow, with 18 new ships entering the market in 2014 (CLIA, 2015a) and another 84 scheduled for delivery between 2015 and 2022 (CLIA, 2014).

From 1990 to 2010, passenger numbers by segment length have grown by 181% for 2–5 day cruises, 301.6% for 6–8 day cruises, 643.6% for 9–17 day cruises, and 1,343.8% for 18+ day cruises, a total growth of 292.7%. During the same time period, the 2–5 day segment had its market share eroded by 10.8% as demand shifted to longer cruises. Growth of the 9–17 day segment increased by 8.5%, while the 6–8 day and 18+ day segments grew in market share by 1.1% and 1.2% respectively, helping to lengthen the average cruise from 6.7 to 7.3 days (CLIA, 2011a). It is important to study passengers aboard cruises of differing segment lengths because passenger motivation may differ between cruises of different lengths (Jones, 2011). Although specific research on motivational differences across different segment lengths has not been conducted,

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2 Figures sourced from Perucic (2007) differ from CLIA (2011a), possibly due to measurement methods as CLIA only accounts for member cruise lines. Other factors may be responsible for the discrepancies in data presented from different sources. This could include the source of data, which is often restricted or inaccessible (see section 2.3.2.3 on restricted access).
noticeable differences have been found in passenger characteristics for shorter cruises compared with longer cruises (Table 2.2).

<table>
<thead>
<tr>
<th>Shorter Cruises (2-5 or 6-8 day)</th>
<th>Longer Cruises (over 8-day)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Passengers tend to:</strong></td>
<td><strong>Passengers tend to:</strong></td>
</tr>
<tr>
<td>Be younger</td>
<td>Be older</td>
</tr>
<tr>
<td>Have more modest incomes</td>
<td>Have higher incomes</td>
</tr>
<tr>
<td>Have less education</td>
<td>Be more educated</td>
</tr>
<tr>
<td>Be more likely to work full-time</td>
<td>Be more likely to be retired or semi-retired</td>
</tr>
<tr>
<td>Be interested in mass-market destination, like the Caribbean</td>
<td>Be interested in more exotic destination, like South America</td>
</tr>
<tr>
<td>Be new to cruising</td>
<td>Have already experienced cruising</td>
</tr>
</tbody>
</table>

Source: Mancini, 2004, as cited in Perucic, 2007, p. 671

In addition to cruises that vary by segment length, there are other characteristics that create niche markets and offer specific cruise vacations to accommodate to a variety of tastes. These include ships of varying sizes ranging from intermediate/ yacht-like (< 500 passengers), small (500 to 999), medium (1,000 to 1,999), large (2,000 to 2,999), to very large (3,000+) (CLIA, 2011b). These ships can offer more intimate, private, or specialized vacations such as on smaller luxury or expedition ships or can offer a little bit of everything for everyone on the larger “mass market” ships. The cruises are categorised under four (non-mutually exclusive) segments (CLIA, 2011b):

1. Destination;
2. Luxury;
3. Premium; and
4. Contemporary.

The Caribbean and Mediterranean are by far the largest markets in terms of passenger bed days, accounting for a combined global share of over 54% (Table 2.3). Of the top six regions, only the Mediterranean has managed to increase its market share, as traditionally dominant markets have been faced with strong competition from emerging markets (Weeden, Lester, & Thyne, 2011).

<table>
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<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>1. Caribbean</td>
<td>13.50</td>
<td>36.20</td>
<td>-5.50</td>
<td>33.70</td>
</tr>
<tr>
<td>3. Europe/ Scandinavia</td>
<td>24.61</td>
<td>8.47</td>
<td>-0.50</td>
<td>7.90</td>
</tr>
<tr>
<td>5. Bahamas</td>
<td>7.20</td>
<td>6.50</td>
<td>-1.40</td>
<td>6.05</td>
</tr>
<tr>
<td>6. West coast of Mexico</td>
<td>-32.6</td>
<td>3.51</td>
<td>-3.10</td>
<td>3.27</td>
</tr>
<tr>
<td>7. Transatlantic</td>
<td>111.20</td>
<td>3.10</td>
<td>1.08</td>
<td>2.90</td>
</tr>
<tr>
<td>8. Australia/ New Zealand/ South Pacific</td>
<td>101.20</td>
<td>2.9</td>
<td>0.93</td>
<td>2.70</td>
</tr>
<tr>
<td>9. Trans Panama Canal</td>
<td>-3.91</td>
<td>2.69</td>
<td>-0.94</td>
<td>2.50</td>
</tr>
<tr>
<td>10. South America</td>
<td>81.70</td>
<td>2.60</td>
<td>0.67</td>
<td>2.40</td>
</tr>
<tr>
<td>11. Hawaii</td>
<td>-23.90</td>
<td>2.19</td>
<td>-1.50</td>
<td>2.14</td>
</tr>
</tbody>
</table>

Source: CLIA, 2012a, 2012b
The industry retained current customers and attracts new passengers by rapidly adapting and providing new destinations, ship designs, onboard and onshore activities, themes, and segment lengths to cater for demand. Thus, modern cruise ships have become a combination of a “…floating resort hotel, sightseeing vessel, gourmet restaurant, food court, nightclub, shopping centre, entertainment complex, and recreation facility…” (Kwortnik, 2008, p. 293), representing all sectors of tourism, including transportation, accommodation, food and beverage, attractions, and tour operators (Brida & Zapata, 2010). These additional features of cruise vacations help further differentiate cruising from competition from land-based accommodation (e.g., hotels and resorts) and alternative modes of transportation (e.g., airlines), demonstrating that cruise ships are much more than floating resorts. From an industry perspective, cruise lines also differ from hotels and resorts in revenue management and sources (Biehn, 2006; Maddah, Moussawi-Haidar, El-Taha, & Rida, 2010; Vogel, 2011b), in several aspects of labour—from both an employee and employer perspective (Teye & Leclerc, 1998; Thompson, 2002)—and in the importance of travel agents for bookings (Teye & Leclerc, 1998) to name a few.

2.2.1 North American Cruise Industry

The North American cruise market is the largest in the world. It is the biggest source of cruise passengers and has the largest number of passengers departing on cruises from its ports, mainly from the United States. In 2010, the number of US residents who took a cruise reached, for the first time, 10 million: 67% of global passengers. 65% of global cruise passengers, a total of 9.69 million, embarked on a cruise from a US port (BREA, 2011). By 2013, the percentage of passengers embarking on cruise ships from the US decreased to 57% (9.96 million; BREA, 2014) and, in 2014 the percentage of global passengers sourced from the US had decreased to 51.4% (11.327 million). North Americans, including Canadians (3.2%, 0.714 million), account for slightly less than 55% of the 22.04 million global cruise passengers (CLIA, 2015a). This decrease in the global share of cruise passengers and cruise departures was largely due to a shift in capacity and growth in emerging markets. Despite the decreasing global share of the industry, cruise travel has outpaced general leisure travel within the United States by 22% between 2008 and 2014 (CLIA, 2016).

Capacity (measured in available bed days) in the North American market increased by 7.67% from 1981 to 2010 (CLIA, 2011b), followed by annual growth rates of 11.7%, 9.3%, 5.5%, and 2.7% from 2010 to 2013 (BREA, 2014). Although the North American market shows continued growth potential, emerging regions have been eroding its share of the global market. The declining global share of the North American market is the result of strong growth in the Mediterranean market and the shift of capacity to markets in Europe, Asia, Australia, and the
Pacific (BREA, 2014). These regional cruise markets are in different lifecycle stages: the North American market exhibits signs of maturity, including a declining share of global passenger numbers and revenue, intense price competition, the attempt to maximize onboard revenue by increasing ship size and onboard amenities, expansion into new ports, and the creation of new itineraries (Jones, 2011; Weeden et al., 2011). This maturation, plus increased competition from emerging markets, requires cruise lines and destinations to deepen their understanding of the travel behaviour of cruise tourists in order to remain competitive.

2.3 Cruise Tourism Research

Cruise tourism is a “…socio-economic system generated by the interaction between human, organizational and geographical entities, aimed at producing maritime-transportation-enabled leisure experiences” (Papathanassis & Beckmann, 2011, p. 166). This definition indicates the multi-disciplinary nature of cruise tourism, which is researched by numerous fields other than tourism, such as business (Langenfeld & Li, 2008; Prosser & Leisen, 2003), education (de Groot, 2011), economics (Coleman et al., 2003; Vogel, 2009), engineering (Kim & Kim, 2011; Lee, Rhee, & Choi, 2011; Pérez Arribas & Piñeiro, 2007), environmental studies (Erize, 1987; Guyer & Pollard, 1997; Johnson, 2002), geography (Charlier & McCalla 2006; Marti, 1991; McCalla, 1998), hospitality (Brownell, 2008; Pizam, 2004, 2008; Toh, Rivers, & Ling, 2005), human resources (Lukas, 2011; Raub & Streit 2006; Wiscombe, McGirl, & Piontek, 2011), law (Wilson, 2012), marketing (Sun et al., 2011), medicine (Bansal et al., 2007; Chimonas et al., 2008; Gahlinger, 2000), psychology (Joseph, Brewin, Yule, & Williams, 1993), sociology (Marchioni, 2009; Thompson, 2002), and transportation (Diakomihalis, 2007). Cruise tourism research began to expand in the 1990s but only gained attention in the 2000s. Nevertheless, cruise-specific research, related or not to tourism, still remains relatively underrepresented in the literature (de la Vina & Ford, 2001; Luković, 2013; Sun et al., 2011). Two problems that face researchers are the unique characteristics of cruise tourism and several limitations in the current literature. These issues are outlined below.

2.3.1 Unique Characteristics of Cruise Tourism

Cruise tourism has a number of characteristics unique to cruise ships and cruising in general that differentiate it from other forms of travel and tourism (Teye & Paris, 2011). These present a number of challenges for cruise travellers, cruise lines, cruise destinations, and cruise tourism researchers. The first unique aspect of cruise tourism is that the cruise ship combines elements across all sectors of tourism (Brida & Zapata, 2010). Not only are modern cruise ships both a means of transportation and part of the destination, but they can even be considered the primary or sole destination. The cruise ship thus provides its own source of attraction (pull factors) that competes...
with the ports of call on the cruise itinerary. This competition between ships and ports can manifest by passengers spending less (or no) time onshore when docked in port (Huijbens, 2015), or by passengers spending more money onboard and less money at ports of call (Weaver, 2005a).

Cruise lines often entice travellers with low, all-inclusive ticket prices that barely cover costs, while generating profits from onboard revenue through amenities such as bars, casinos, shops, fine dining restaurants and the sale of shore excursions (Klein, 2011; Vogel, 2011b). These onboard offerings compete with port destinations for passenger money. The sale of shore excursions through the cruise line can be particularly problematic for port destinations, as cruise lines bring the competition ashore to the destinations. Although cruise lines do not generally operate shore excursions, they benefit by receiving 50% to 90% of prices paid by passengers, while the tour operator receives the remainder. It has also been found that when passengers have unsatisfactory experiences while on shore excursions it is possible for the blame to be redirected to the destination or tour operator, rather than aimed at the cruise line (Klein, 2006, 2011).

The competition between cruise lines and ports is taken a step further with the use of private islands as ports of call. Private islands allow cruise lines to completely bypass traditional destinations, and thereby reduce onshore spending, local employment, and economic benefits in local destinations (Wilkinson, 1999). This practice involves cruise lines buying or leasing private destinations to use as ports of call on different cruise itineraries. At these private destinations, the cruise line often provides the activities, shopping, food and beverages, and other services (Wilkinson, 1999). In 1977, Norwegian Cruise Line was the first to begin sailing to a private island in the Caribbean—Great Stirrup Cay, which it later bought and renamed Pleasure Island (Showalter, 1995; Wilkinson, 1999). Private cruise destinations have also been developed in Alaska; in 2004, the historic salmon cannery at Point Sophia was converted into a tourism destination, named Icy Strait Point, as Alaska’s first purpose-built, privately developed destination (Cerveny, 2007).

Another unique characteristic of cruise travel is that cruise vacations typically stop at multiple port destinations with only a brief amount of time spent in each port. Research has found that short time periods in port have an effect on cruise tourist behaviour, such as limiting their spending and visitation patterns. Henthorne (2000) identified a positive correlation between the amount of time that cruise passengers spent in the shopping markets of Ocho Rios, Jamaica, and the amount of money that they spent. The relationship between time spent in port and passenger expenditure has also been examined by comparing cruise passengers with overnight visitors who spent more time in the destinations under study. However, this method yields conflicting results, depending on the destination. For example, Wilkinson (1999) found that cruise visitors to the
Bahamas spent less per day than overnight visitors, whereas Dwyer and Forsyth (1996, 1998) found that cruise passengers in Australia spent more per day than overnight visitors. Because many cruise passengers extend their trip by spending time in the homeport before or after the cruise, comparing home ports to ports of call is another method used in the literature to explore variations that relate to time spent at a destination. This too yields conflicting results on spending: Teye and Paris (2011) found that more money was spent in the homeport of Miami than in the cruise’s five Caribbean ports of call, while Brida et al. (2012) found spending to be greater in Cartagena de Indias, Colombia, when it was a port of call rather than when it was a homeport. In the US, visitors staying overnight at a homeport were found to spend more per visit than port of call passengers, and port of call passengers spent more than homeport visitors who arrived on the day of the cruise (BREA, 2014).

As indicated above, limited time spent onshore also influences visitation patterns. Jaakson (2004) found that passengers walking off the ship—not on guided tours—in Zihuatanejo, Mexico, would limit themselves to the core tourist area, where tourist-related shops and retail outlets are concentrated, and fewer entered the periphery around the core, where there was a clear transition to a mix of tourist and non-tourist related establishments. Even fewer were found to go beyond the periphery to areas with a clear local focus. This limited penetration into the port cities has been noted elsewhere, particularly for less developed ports. Teye and Paris (2011) found that passengers would remain closer to the ship in less developed ports but travel further from the ship in more developed ports. Andriotis and Agiomirgianakis (2010) also noted that participants indicated that they did not have sufficient time in port to experience all the activities that they desired.

An extreme example of time spent and distance travelled in port, and another unique feature of cruise vacations, is when tourists venture no distance from the ship because they spend no time ashore. Cruise passengers have the option of not leaving the ship when docked at ports of call (Teye & Paris, 2011). In markets such as the Caribbean, there are “cruises to nowhere” in which ships sail into international waters and return to the port of disembarkation without making any stops at port (Lee & Collin, 2013). This creates a clear problem for port of call destinations competing with cruise lines. In response, destinations need to develop strategies that encourage passengers to go ashore and experience the port of call. Although it is beyond the scope of this thesis to examine how the number of passengers exiting the ship may be increased, several factors that influence whether passengers choose to go ashore have been identified. For example, Wilkinson (1999) found that passengers were more likely to go ashore at the more developed ports of call in the Bahamas.
(e.g., Nassau, Freeport) than in the remaining less developed ports. Destinations where tenders\(^3\) are necessary also have more passengers who choose not to go ashore. Douglas and Douglas (2004) noted that, during poor weather on the Pacific island cruises they studied, passengers were less likely to go ashore when a tender was required, whereas passengers would spend more time and money inside local shops, bars, and restaurants, despite poor weather, at ports not requiring a tender. Similarly, Teye and Paris (2011) found that passengers spent the least money and travelled the shortest distance from the single port out of six that required a tender\(^4\).

Brief exposure to destinations—and the possibility of not going ashore—limits the number of activities and other destination attributes that cruise tourists can experience at each destination. This unique feature of cruising has been found to influence post-cruise satisfaction (Andriotis & Agiomirgianakis, 2010) and may also have pre-cruise implications for potential passengers and cruise destinations. The short time in each port may influence the cruise travellers’ destination choice. Possible scenarios include:

1. Choosing a cruise itinerary based on the most time spent at a preferred destination;
2. Avoiding destinations that passengers feel they will not have enough time to visit; and
3. Repeat visits (whether on a cruise or land-based vacation) to destinations they did not get to fully experience.

The reduced number of attributes that a traveller has time to experience may limit the pulling power of a destination to a smaller number of core attributes. In response, destinations must develop promotional strategies that assure potential cruise visitors that they will have enough time to experience desired attributes, as well as tours and shore excursions that allow cruise passengers to adequately experience the destination in a shorter time.

In addition to the challenges that these unique characteristics present to cruise lines and destinations, they raise a number of research issues. The unique characteristics of cruise vacations create difficulties in defining the “cruise destination” and in identifying the role of the cruise ship and multiple ports of call as co-destinations during the decision-making process of potential cruise travellers. In order to define the cruise destination, it is necessary to first define a travel destination—in the traditional sense—to determine if a cruise ship can be considered a destination in itself. A definition of the cruise destination and potential cruise destination attributes can be developed from this. The United Nations (UN) defines the main destination of a tourism trip as:

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\(^3\) Tenders are used when ports cannot accommodate a cruise ship (the port may be too small or shallow), in which case, the ship docks offshore and a small tender ferries passengers ashore.

\(^4\) While beyond the scope of this thesis, the differences found between ports that require a tender and those that do not highlight several areas in which future research can investigate the behavioral and economic impact of tenders.
[T]he place visited that is central to the decision to take the trip. However, if no such place can be identified by the visitor, the main destination is defined as the place where he/ she spent most of his/ her time during the trip. Again, if no such place can be identified by the visitor, then the main destination is defined as the place that is the farthest from the place of usual residence. (UN, 2010, p. 13)

A cruise ship has the potential to satisfy all three of these criteria and could be considered the main destination of a tourism trip. More research is needed, however, to better identify whether the ship can be considered “The place visited that is central to the decision”:

1. CLIA (2011b, 2015b) market profile studies have found that passengers generally rate the destination as more important than the “property or ship” when deciding on a cruise; however, their methodology did not just compare the ship to the destination, but included cost (highest rated), overall experience, and facilities. Furthermore, by measuring the relative importance of multiple onboard and onshore attributes, a more accurate representation of the ship’s importance could be identified;

2. Passengers spend a significant amount of time onboard the cruise ship—up to 80% of total vacation time—and do not generally spend more than one or two days at a single port (Underwood, 1993, as cited in Weaver, 2005c; Wood, 2004, as cited in Weaver, 2005c);

3. In the case of cruises, the furthest location from one’s usual place of residence could be the port or the ship; however, the difference between the ship and port would be insignificant, even when tenders are used. Additionally, it has been found that passengers do not usually travel great distances from the ship (Jaakson, 2004; Teye & Paris, 2011), making the difference in distance between the ship and the furthest port of call even less significant.

The UN World Tourism Organization (UNWTO) defines a local tourism destination as:

[A] physical space in which a tourist spends at least one overnight. It includes tourism products such as support services and attractions and tourist resources within one day’s return travel time. It has physical and administrative boundaries defining its management, and images and perceptions defining its market competitiveness. Local destinations incorporate various stakeholders often including a host community, and can nest and network to form larger destinations. Destinations could be on any scale, from a whole country (e.g., Australia), a region (such as the Spanish ‘Costas’) or island (e.g., Bali), to a
village, town or city, or a self-contained centre (e.g., Center Parc or Disneyland). (UNWTO, 2007, p. 1)

The UNWTO definition also permits a cruise ship to be considered a destination in itself. The first component of this definition technically eliminates individual port cities from being local tourism destinations on a cruise vacation, as ships are generally not docked overnight in a given port of call. Although several cruise lines are beginning to increase the number of itineraries offering overnight stays in key ports (CLIA, 2013), the majority of port visits are limited to day visits only. Following other UN (2010) definitions, cruise passengers are “tourists” or “overnight visitors” to the cruise ship, while only being “same-day visitors” or “excursionists” to the individual ports of call.

Thus a cruise ship can be considered a travel destination in itself, allowing for the cruise destination to be defined herein as:

The geographical region in which the cruise sails, and/or the ports of call, including the port(s) of embarkation/disembarkation, and the cruise ship itself.

Using definitions of destination attributes and pull factors from previous studies (Crouch & Ritchie, 1999; Uysal & Jurowski, 1994), this study defines cruise destination attributes as:

The tangible (e.g., cultural/historical attractions, ship amenities/facilities, natural environment) and intangible (e.g., atmosphere/ambiance/mood, convenience, expectations, image, perceptions) factors related to the ship and ports of call that draw potential travellers to choose a cruise vacation and/or a specific cruise region, cruise line, and cruise ship.

The unique characteristics of cruise vacations thus require a new definition of cruise destination, accounting for the multiple ports of call and the cruise ship as co-destinations, as well as the possibility of the ship being the primary or sole destination. The unique characteristics of cruise vacations were also considered when developing a definition of the cruise destination attributes, accounting for the onboard and onshore aspects of cruising. In addition to a lack of adequate definition of cruise destination and cruise destination attributes, cruise tourism literature is restricted by several research limitations.

2.3.2 Limitations of Cruise Tourism Research

Tourism as a field of research in general has been described as “…pre-paradigmatic and multidisciplinary…”, leading to “…fragmentation, managerialism and [a] lack of unifying theoretical perspectives characterizing empirical research…” (Papathanassis & Beckmann, 2011, p.153). As a sub-category of tourism research, cruise tourism is subject to these research and
theoretical limitations. To better understand the current state of cruise research the following five subsections will more closely examine several limitations found in the literature.

2.3.2.1 Research Fragmentation

Cruise-specific publications have grown exponentially over the past few decades. Figure 2.2 displays the number of publications by discipline from 1983 to 2009. Business and management articles accounted for the largest growth and overall number of publications (39%), with the remainder spread across numerous disciplines, such as sociology and psychology (18%), economics (17%), environment and geography (10%), and engineering and technology (6%). The two trend lines in the figure show that studies related to sociology and psychology (e.g., motivation) have grown at a slower rate than the total number of publications. It is thus clear that the field has recently experienced increased attention from researchers, with more than 70% of the cruise-related articles listed published between 2000 and 2009.

![Figure 2.2 Cruise-Related Publications by Discipline 1983-2009](image)

Source: Adapted from Papathanassis & Beckmann, 2011, p. 162

The multidisciplinary nature of cruise research has led to research fragmentation. Fragmentation is characteristic of research that is not concentrated within a specific field or that is not conducted by specialised researchers. Because there are no cruise-specific journals, cruise-related research articles are spread across numerous sources, many outside the field of tourism (Papathanassis & Beckmann, 2011). As a result of their database mining research, Papathanassis and Beckmann unearthed just 145 cruise-related articles across 59 different scientific journals

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5 It is possible that less than 100% of the cruise related publications during the specified time period were included in the study by Papathanassis and Beckmann (2011) and thus, the following statistics may not be definitive data; however, this is the most thorough and complete review of this type to date.
published between 1983 and May 2010. Just over half (57%) were located in tourism journals. In addition to this scatter of sources, 82% (143 of 174) of the authors of these journals had only one cruise-related publication, indicating a lack of specialisation in the field.

Another measure of research fragmentation is the variety of keywords used in cruise-related publications. This presents a difficulty for cruise researchers when conducting literature searches. Within the 145 cruise-related publications under study, Papathanassis and Beckmann (2011) found that 85% of the keywords appeared once, and that 18 of the 145 articles failed to list “cruise(s)” or “cruising” as key words. Additionally, the search term “cruise tourism” is not used as a consistent description of the field, with alternative names being “nautical tourism” (Lück, 2007; Luković, 2013; Weaver, 2008), “marine tourism”, and “maritime tourism” (Diakomihalis, 2007; Lois, Wang, Wall, & Ruxton, 2004; Papathanassis & Beckmann, 2011; Wild & Dearing, 2000).

Papathanassis and Beckmann (2011) identify research fragmentation and the lack of specialisation as signs of the field’s infancy and suggest that fragmentation will decrease as further research occurs. There have, in fact, been three recent cruise-research issues of tourism journals (Journal of Hospitality and Tourism Management, Vol. 18, 2011; Tourism in Marine Environments, Vol. 10, 2015; Tourism in Marine Environments, Vol. 11, 2016). These special issues acknowledge the need for a centralized source of cruise-related publications and initiate the reduction of research fragmentation, while mitigating the wide variety of keywords. Furthermore, an increasing number of researchers who focus on the cruise industry have been publishing multiple studies related to the field (e.g., J.G. Brida; N. Douglas; R. Dowling; P. Gibson; J. Huang; D.L. Kerstetter; B. Marti; J.F. Petrick; A. Weaver; C.M. Yarnal). As an increase in cruise-related studies improve the depth of the field, research must also focus on increasing its breadth, because current research remains focused on economic, business, and management issues, which are symptoms of managerialism in cruise research.

2.3.2.2 Managerialism in Cruise Research

Managerialism is the tendency of research to focus on economic issues within a managerial perspective, thus limiting the scope of research (Papathanassis & Beckmann, 2011). Mattila (2004) finds this problematic, concluding that, by focusing on “real world” issues, hospitality and tourism research tends to be relevant to managers and other stakeholders, in contrast to mainstream consumer research, which has a heavier emphasis on theory development. Klein (2011) and Vogel (2011a) find cruise literature to be technical or practical in orientation. Technically-oriented research focuses on topics such as economics and statistics, human resources and education, marketing, and strategy and policy, while practically-orientated research focuses on the performative measures of cruise lines operation. Klein (2011) suggests that these topics are relevant
to the interests and goals of the cruise industry, while Vogel (2011a) finds a lack of emancipatory research that critically analyses the cruise industry. Both of these views support Papathanassiou and Beckmann’s (2011, p.154) diagnosis of managerialism in cruise research. Mattila (2004) allowed that managerialism is acceptable so long as research or theoretical credibility are not jeopardized; however, credibility is currently impeded by the restrictive nature of the industry and by the presence of gatekeepers.

2.3.2.3 Restricted Access to Research Participants

Restricted access to research participants and data is a major issue in the current state of cruise tourism research. Direct access to cruise passengers and to crews aboard ships or at ports of call can be restricted by gatekeepers such as cruise lines, airports, ports, and tour companies (Papathanassiou & Beckmann, 2011; Larsen, Marnburg, & Øgaard, 2012; Weeden et al., 2011). These restrictions have the potential to impede researchers’ access to passengers, thus limiting the social and behavioural study of cruise tourism (Weeden et al., 2011). Others also suggest that because these gatekeepers are motivated by profit, their interest is to deny access to researchers that may expose negative aspects of their businesses, and whose results are not based on performance (Vogel, 2011a). Consequently, access would only be granted to researchers whose topics are in the interests of the cruise industry, which would exacerbate the issue of managerialism in the literature. This was found to be the case for Klein, who is rumoured to be banned from cruise ships after revealing the dark side of the cruise industry in a number of books (2002a, 2002b, 2005).

The notion of cruise ships being “social cocoons”, isolated from the rest of the world, further reinforces the inaccessibility of cruise passengers to outsiders such as researchers (Vogel, 2009, as cited in Papathanassiou & Beckman, 2011). Restricted access to cruise passengers not only leads to managerialism, but also can impede researchers from obtaining large sample sizes or conducting studies across multiple cruise lines. This has a direct negative impact on attempts to generalise and apply findings.

2.3.2.4 Narrow Sampling Frames

Although there has been a significant increase in cruise-specific research, results are often limited by narrow sampling frames and, therefore, are incapable of generalisation beyond the individual study. Research is often conducted using a sample from a single sailing, and, therefore, from a single ship, cruise line, itinerary, trip length, geographic region, and a single point of the cruise season (Douglas et al., 2010; Hosany & Martin, 2012; Lobo, 2008; Marti, 1991, 1992; 1993; 1996).

Note: the researcher did not attempt to contact any cruise lines or potential gatekeepers over the course of this research, and thus did not experience restricted access to participants. Instead the study was designed using an online-panel to source a large and varied sample of recent cruise passengers.
Other studies have been conducted aboard more than one sailing. However, they still represent a limited number of the cruise variables mentioned above (Marti, 1986; Petrick, 2002, 2003, 2004a, 2004b, 2004c, 2005a, 2005b, 2011; Petrick & Sirakaya, 2004; Petrick, Tonner, & Quinn, 2006; Sirakaya, Petrick, & Choi, 2004; Teye & Leclerc, 1998, 2003). Table 2.4 represents the sample characteristics and data collection methods used in several cruise motivation studies.

<table>
<thead>
<tr>
<th>Study</th>
<th>Topic/ Focus</th>
<th>Sample size</th>
<th>Ships</th>
<th>Cruise lines</th>
<th>Itineraries (Total sailings)</th>
<th>Data collection method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andriotis &amp; Agiomirgianakis, 2010</td>
<td>Motivation</td>
<td>164</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>In-person surveys at a single port</td>
</tr>
<tr>
<td>de la Vina &amp; Ford, 2001</td>
<td>Vacation attributes</td>
<td>297</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Mail survey</td>
</tr>
<tr>
<td>Jones, 2011</td>
<td>Motivation, vacation attributes, information sources</td>
<td>306</td>
<td>2</td>
<td>1</td>
<td>2 (6 Sailings)</td>
<td>In-person surveys onboard</td>
</tr>
<tr>
<td>Petrick &amp; Durko, 2015</td>
<td>Motivation, segmentation</td>
<td>792</td>
<td>1</td>
<td>1</td>
<td>1 (2 Sailings)</td>
<td>Survey delivered to rooms onboard</td>
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<tr>
<td>Petrick et al., 2007</td>
<td>Decision-making process</td>
<td>72</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>Onboard focus groups</td>
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<tr>
<td>Qu &amp; Ping, 1999</td>
<td>Motivation, satisfaction</td>
<td>330</td>
<td>5</td>
<td>5</td>
<td>-</td>
<td>In-person surveys at a single port</td>
</tr>
<tr>
<td>Teye &amp; Leclerc, 2003</td>
<td>Motivation (Caucasian &amp; Ethnic minorities)</td>
<td>339</td>
<td>2</td>
<td>1</td>
<td>2 (2 Sailings)</td>
<td>In-person surveys onboard</td>
</tr>
<tr>
<td>Teye &amp; Paris, 2011</td>
<td>Motivation</td>
<td>173</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>In-person surveys onboard</td>
</tr>
<tr>
<td>Thurau et al., 2007</td>
<td>Motivation, vacation attributes</td>
<td>187</td>
<td>2</td>
<td>-</td>
<td>2 (5 Sailings)</td>
<td>In-person surveys at 2 ports</td>
</tr>
<tr>
<td>Xie, Kerstetter, &amp; Mattila, 2012</td>
<td>Onboard attributes</td>
<td>407 (254 cruisers)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Online survey</td>
</tr>
</tbody>
</table>

The problematic use of data from a single site or limited geographical area is also common in wider travel and tourism research. Studying the trends in tourism research, Ballantyne, Packer, and Axelsen (2009) reviewed 144 articles within the top three tourism journals (*Tourism Management, Annals of Tourism Research, Journal of Travel Research*) that covered the top four tourism topics (tourist/visitor studies, tourism planning, destinations, marketing). Data from approximately half of the sampled articles were found to have been collected from a single site or a limited geographical area. Although this demonstrates that narrow sampling frames are not unique to cruise research, the practice nevertheless decreases the scope of practical application and theoretical significance in an already scarce body of research. The use of broader sampling frames will open up the possible development of cruise research norms and allow for cross-examination between studies that have been conducted across cruise variables.
2.3.2.5 Narrow Geographic Focus

In addition to cruise research being heavily focused on a small number of topics (e.g., business and management, health and safety, environmental), there tends to be a narrow geographic focus of research. A significant amount of research has been conducted in, or specifically for, the Caribbean cruise region. Combined with narrow sampling frames, this narrow geographic focus further limits the ability to generalise and apply findings. The Caribbean focus is partly because it has long been the main cruise region for the North American market and thus, the world cruise market (CLIA, 2011b). In 2011, the Caribbean accounted for 33.7% (36.2 million) of global passenger bed days (see Table 2.3; CLIA, 2012ba, 2012b). As the global cruise market continues to change, however, North Americans—the Caribbean’s main source of cruise passengers—comprise a smaller share of this total (CLIA, 2015a). This increases the importance of conducting research that focuses on the unique aspects of regions outside of the Caribbean, or that is applicable to multiple regions or to cruising in general. The focus on the Caribbean has left studies of other regions underrepresented. This includes cruise destinations that are not small islands with beaches. Fortunately, the increasing popularity of the field has led to a recent increase of studies conducted in other regions, from Asia to the Arctic. Non-destination-specific studies that cover cruising in general also contribute to the research by improving research methods and the theoretical base of cruise tourism research.

2.3.2.6 Summary of Cruise Research Limitations

These limitations can be overcome and the field of cruise tourism research further developed by continuing the application and adaptation of interdisciplinary theories from fields such as psychology, sociology, and economics (Mattila, 2004), while adopting an academic perspective that is free from external influences by the cruise industry. This goal is supported by Papathanassis (2011) who proclaimed in the 2011 International Cruise Conference report that the literature:

[I]s still characterized as pre-paradigmatic and fragmented…There is still a lack of unifying paradigms and theories shedding light into the cruise phenomena… a significant number of quantitative papers are based on narrow sampling frames (i.e., participants selected from a single cruise, company and/or destination) and have a descriptive focus, suggesting that they are by-products of company–financed, market–research projects. Issues of research data availability/ access and validity, as well as the absence of domain–specific methodological approaches, contribute to this state of affairs. (p. 509)

As the field of cruise research continues to grow, future studies that address these limitations will help to improve the current state of research.
2.4 Travel Motivation

Consumer decisions are affected by both internal and external factors. Examples of internal factors include motives, intrapersonal constraints, images, attitudes, beliefs, intentions, and personality, while external influences include destination attributes, marketing, information sources, interpersonal constraints, and structural constraints (Crawford, Jackson, & Godbey, 1991; Dann, 1977; Sirakaya & Woodside, 2005). The study of these factors is important for decision-making research, given that it is unlikely that a single unifying theory that describes, explains, or predicts consumer decisions will emerge (Sirakaya & Woodside, 2005). Although motives are only one of many variables that influence travel behaviour, they are the driving force behind all human behaviour and are, therefore, critical (Fodness, 1994). Thus, understanding the internal motives that trigger and direct the desire to travel is an essential foundation for understanding and predicting tourist behaviour (Mansfeld, 1992; Pearce & Caltabiano, 1983). A more complete understanding of travel behaviour can emerge when motives are combined with other factors, such as the external factors that influence the decision-making process behind the choice of destination and travel mode.

Just as there are many variables that influence travel behaviour, there are also many approaches to studying travel motivation. In a review of the literature, Dann (1981) identified seven common approaches to studying the motivation of tourists:

1. Travel as a response to what is lacking yet desired;
2. Destination “pull” in response to motivational “push”;
3. Motivation as fantasy;
4. Motivation as classified purpose;
5. Motivational typologies;
6. Motivation and tourist experiences; and
7. Motivation as auto-definition and meaning.

Many of these approaches are interdependent; yet possess distinct strengths and weaknesses. The most appropriate approach depends on research objectives. These approaches most commonly build (to some degree) on the unmet needs and desires described in Maslow’s (1943b) hierarchy of needs theory of motivation (Figure 2.3). Maslow explained that “If we are interested in what actually motivates us, and not in what has, will, or might motivate us, then a satisfied need is not a motivator.” A higher-order need will take over once lower-order needs have been satisfied (p. 393).
From the seven approaches above, the following build on the work of Maslow: travel as a response to what is lacking yet desired—focusing solely on travel motives; destination “pull” in response to motivational “push” (also known as the push-pull framework)—measuring both push factors (motives) and external pull factors related to destinations; motivation as fantasy—focusing on the fantasy elements of push factors, while ignoring more culturally “normal” desires; and motivation typologies—which build on other approaches by creating classifications of tourist typologies based on motivation (Dann, 1981). The third approach, motivation as fantasy, has a more limited application than the first two because it focuses on a narrow range of motives and excludes external influences. Examples of fantasy motivations include Dann’s (1977) “anomie”—the desire to get away from everyday life, to escape, relax, and socialize with others—“ego-enhancement”—the ability to act outside of one’s social position while on vacation—as well as “trip drop”—telling stories to others before or after the vacation in order to create envy. Anomie and ego-enhancement are also examples of motivational typologies that exhibit common characteristics that differentiate one group from another (Table 2.5).
Table 2.5 Anomie and Ego-enhancement Tourists

<table>
<thead>
<tr>
<th>Anomie</th>
<th>Ego-enhancement</th>
</tr>
</thead>
<tbody>
<tr>
<td>More likely to be:</td>
<td>More likely to be:</td>
</tr>
<tr>
<td>Married</td>
<td>Singles</td>
</tr>
<tr>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Younger</td>
<td>Older</td>
</tr>
<tr>
<td>Higher SES</td>
<td>Lower socio-economic status (elderly/ female have lower SES)</td>
</tr>
<tr>
<td>From small towns and rural areas</td>
<td>From large cities</td>
</tr>
<tr>
<td>Repeat visitors</td>
<td>First-time visitors</td>
</tr>
<tr>
<td>Those with above average knowledge of the destination</td>
<td>Less knowledgeable (possibly because of first-time visitors)</td>
</tr>
<tr>
<td>Place of residence (Caribbean, US, Europe possibly because of rural/small town people)</td>
<td>Country of residence (Canada, UK, but not sure why)</td>
</tr>
</tbody>
</table>

Source: Dann, 1977, pp. 191-193

Many studies demonstrate that travel motivation follows Maslow’s hierarchy of needs (Beard & Ragheb, 1983; Mill & Morrison, 2002, as cited in Jang, Bai, Hu, & Wu, 2009; Pearce & Caltabiano, 1983; Ryan & Glendon, 1998; Todd, 1999). Tourists progress through Maslow’s hierarchy through increased travel experience in order to satisfy higher-order needs. This is the basis of Pearce’s travel motivation theory, the travel career pattern (formerly travel career ladder; Pearce & Caltabiano, 1983; Pearce & Lee, 2005). Other studies that build on Maslow’s hierarchy view tourist motivation as the desire for something different, novel, or more relaxing. Travel is often contrasted with the home situation and the stresses of work and daily life. Examples include “wanderlust”—the desire for something new—and “sunlust”—the desire for a different climate or environment (Gray, 1979, as cited in Mansfeld, 1992). These desires are also expressed in motivation factors such as escape and relaxation, learning and discovery, novelty, and climate (Andriotis & Agiomirgianakis, 2010; Elliot & Choi, 2011; Hung & Petrick, 2011b; Teye & Paris, 2011).

The push-pull framework is the best suited, out of the above seven approaches to studying travel motivation, to the research aim and objectives of this thesis. Separating push and pull allows for an independent analysis of these factors, enabling an analysis of the often-overlooked relationship between the two. Additionally, their separation allows pull factors to be further distinguished into onboard and onshore attributes, enabling the relative importance of these attributes to be explored. In the following section, the push-pull framework and its application to travel and cruise travel research is explored in more detail.

2.5 Push - Pull Framework

The push-pull framework is a widely accepted approach to the study of motivation that addresses both the internal psychological motives that push individuals to travel and the external destination-specific attributes that pull individuals to specific locations (Crompton, 1979; Dann, 1977; Chon, 1989; Oh, Uysal, & Weaver, 1995; Uysal & Jurowski, 1994; Yuan & McDonald,
This approach sees motivation as a “…dynamic process of internal psychological factors (needs and wants) that generate a state of tension or disequilibrium within individuals” (Crompton & McKay, 1997, p. 427). These unmet needs and wants (push factors) evoke the desire for vacation, as well as directing the potential tourist towards a specific destination. The choice of this is determined by attributes specific to the destination, known as pull factors (Crompton, 1979; Dann, 1977, 1981; Kim et al., 2003). Push factors are often measured using a needs-based approach, which includes motives such as the self-actualization and esteem needs of Maslow’s (1943b) hierarchy (Figure 2.3), as well as desires to escape from one’s everyday environment, to relax, and the need for social interaction and bonding with friends and family (Hung & Petrick, 2011b; Teye & Paris, 2011). Pull factors are often attribute-based, such as hotel and resort amenities, the local people, culture, history, climate, scenery, and attractions (Dann, 1981; Hu & Ritchie, 1993).

It is beneficial to study the multiple factors that influence traveller behaviour and decision-making as many studies follow a one-dimensional approach that is based on needs alone (Ryan, 1997, as cited in McCabe, 2000). Logically, the internal socio-psychological push factors are antecedent to the external destination pull factors because the desire to travel generally precedes the choice of destination (Crompton, 1979; Dann, 1977, 1981). In other words, individuals first feel a need or desire to travel and then decide on a specific destination. This decision is based on the destination attributes that will seem to satisfy the initial needs or desires. Thus, while pull factors are not necessary to the desire to travel, they “…both respond to and reinforce ‘push’ factor motivations” (Dann, 1981, p. 191). Tourists, therefore, are pushed by their internal needs and desires while being pulled by destination attributes that satisfy those needs and desires (Goossens, 2000; Pesonen, 2012). The push-pull relationship is dynamic, with tourists seeking to satisfy multiple needs simultaneously while also seeking multiple destination attributes (Baloglu & Uysal, 1996; Oh, Uysal, & Weaver, 1995). These motivations may vary across individuals, market segments, destinations, and decision-making processes (Kozak, 2002; Pesonen, Komppula, Kronenberg, & Peters, 2011; Uysal & Hagan, 1993, as cited in Kozak, 2002).

Motivation has been the subject of extensive study in many fields such as consumer behaviour, education, psychology, sociology, and tourism (Jones, 2011). Motivation research, however, has only more recently been applied to the field of cruise tourism. Much of the related literature has followed the needs-based approach (Hung & Petrick, 2011b, 2012a; Qu & Ping, 1999; Teye & Leclerc, 2003), with the push-pull framework being little utilized. Although several studies have included both push and pull items, they do not often label them separately as push or pull, instead including all items in a single measurement scale without distinction, referring to the entire
item set as motives or motivations (Andriotis & Agiomirgianakis, 2010; Teye & Paris, 2011). This practice has been criticized by researchers such as Mansfeld (1992), who argued that research approaches that use a single scale that combines both push and pull factors to operationalise motivation represent “…a confusion between person-specific motivations and [destination specific] attributes” (p. 405). Dann (1977, 1981) also found that researchers often confuse push and pull factors, labelling pull factors as motives. Alternatively, Moore, Cushman, and Simmons (1995; based on the work of Hoyenga and Hoyenga, 1984) defend the use of a combined item set, stating that:

[T]his may be a terminological dispute since incentive theories of motivation in the psychological literature are still termed "motivational" theories despite the fact that incentive is dependent upon properties of external events, especially stimuli associated with goal objectives… Whether from changes in internal states or external stimuli, the "pleasure" (broadly defined) that results represents a motive for behaviour. (p. 72)

A literature search conducted by the current researcher only managed to identify three cruise-related studies using the push-pull framework. These were two Master’s theses (T. Huang, 2009; Lu, 2001, as cited in Josiam et al., 2009) and one research paper (Josiam et al., 2009). All three studies used the same push-pull measurement scale, which contained eight push factors, and eight pull factors (mostly related to the ship). These studies had three focuses: the motivation, satisfaction, and involvement of Taiwanese tourists who cruised in North America (T. Huang, 2009); the motivation, perceptions, and satisfaction of Chinese tourists who cruised in North America (Josiam et al., 2009); and a case study on the motivation and experience of passengers aboard two different 4-star cruise ships (Lu, 2001, as cited in Josiam et al., 2009). In these cruise-related studies, as in many travel motivation studies, the relationship between push and pull factors is often left unexplored. The review of the literature found no studies that attempted to measure or explore the interaction between push and pull factors in cruise context, and only a limited number of studies in the broader tourism literature (Baloglu & Uysal, 1996; Kim et al., 2003; Kluin & Lehto, 2012; Oh et al., 1995; Pesonen et al., 2011; Pyo, Mihalik, & Uysal, 1989; Uysal & Jurowski, 1994; Uysal & O’Leary, 1986).

As noted above, the push-pull framework is widely used in motivation research; however, it is not without criticism. Many of these arise from the needs-based approach on which the push factor component is based. Criticisms of needs-based motivational theories include the inability to predict behaviour based on needs alone, and that the motives that are included, in an attempt to cover a wide variety of needs, are too general (Kay, 2003). In relation to pull factors, destination

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7 Unable to obtain a copy of the thesis by Lu
image studies have been criticized because the majority of them focus too heavily on attribute lists and fail to address the more holistic and unique components of destinations (Echtner & Ritchie, 2003). Despite these criticisms, the push-pull framework provides a strong base for understanding consumer behaviour and can be successfully implemented in marketing and product development (Schiffman & Kanuk, 1997, as cited in Kay, 2003). This study notes of these potential limitations and aims to reduce their impact as much as possible.

2.5.1 ANALYSING THE PUSH - PULL RELATIONSHIP

Although the push-pull framework has existed since the 1970s, it was only later that researchers began to empirically examine the actual relationship between the push and pull factors (Klenosky, 2002). Despite this study of push and pull factors, only a limited number of travel-related studies have included them, and none were related to cruise tourism. Many of the early studies, as well as more recent ones, have used canonical correlation analysis (CCA) toanalyse the relationship between push and pull factors (Baloglu & Uysal, 1996; Kluin & Lehto, 2012; Oh et al., 1995; Pyo, Mihalik, & Uysal, 1989; Uysal & O’Leary, 1986), while other studies have used multiple regression analysis (Uysal & Jurowski, 1994), Pearson’s bivariate correlation analysis (Kim et al., 2003; Pesonen et al., 2011), and means-end theory (Klenosky, 2002).

The means-end theory differs from the other approaches, as it is the only qualitative method that can explore the push-pull relationship. It conducts semi-structured interviews that use a laddering technique to identify the key attributes of the destinations (or products) under consideration. By probing for deeper meaning in the attributes, connections can be made between them and the reasons why they are important to participants, identifying the benefits provided by specific attributes. With further investigation the researcher can reveal the personal values (push factors/ motives) that the benefits help to reinforce (Klenosky, 2002).

In tourism literature, canonical correlation analysis (CCA) has helped to predict international tourism demand in Turkey (Uysal & O’Leary, 1986), gather information about the perceptions and preferences of pleasure travellers from the United States to Canada (Pyo et al., 1989), identify product bundles for Australian international pleasure travellers (Oh et al., 1995), develop market segments for German overseas pleasure travellers (Baloglu & Uysal, 1996), and test the association between travel motivations and family leisure activity choices (Kluin & Lehto, 2012). Canonical correlation analysis, or any other analysis, has not been used to identify the relationship between travel motives and cruise destination attributes.

Examples of the types of relationships that can be identified and the practical applications can be found in Oh et al. (1995), where four potential product bundles, based on canonical variates, were identified: sports/ activity; safety/ comfort; luxury; and culture/ novelty. This last bundle was
further broken down into culture/history and novelty/adventure. These product bundles represent combinations of attributes that relate to specific push items and can be viewed as the attributes of a destination that satisfy the travel needs of the participants. For example, destinations with historical attractions, local festivals, and cultures that differ from the participant’s (amongst other attributes) were found to attract travellers seeking knowledge and to learn new things (amongst other motives). Participants who scored positively on all push and pull items in a product bundle were then assigned to segments based on those product bundles, resulting in four overlapping market segments: safety/comfort seekers, culture/history seekers, novelty/adventure seekers, and luxury seekers. These market segments could, in turn, be used to design promotional material and inform decisions about destination development (Oh et al., 1995).

Because the cruise literature has not yet explored the push-pull relationship, cruise lines and cruise destination marketers can benefit from analysis specifically relating to cruise tourism by identifying different combinations of attributes that attract travellers to specific cruise destinations and by understanding how this may differ, based on travel motives. To gain a deeper understanding of the push-pull framework, the two components, push and pull, will be individually explored, as studies that focus on just one aspect (or combine the two without distinction) are more abundant in the literature.

2.5.2 Push Factors (Travel Motives)

Motives are the internal psychological processes that “push” individuals to behave or act in certain ways. In the context of travel, push motives are responsible for the desire or need to travel (Crompton, 1979; Elliot & Choi, 2012; Goossens, 2000). These processes are multi-dimensional, dynamic, seldom work in isolation, and their strength and influence varies over time (Crompton, 1979; Oh, Uysal, & Weaver, 1995; Teye & Leclere, 2003). An understanding of these motives is essential for cruise lines to develop onboard experiences and marketing materials (Petrick & Durko, 2015). There are a number of common motives prevalent in cruise-specific—and other tourism—motivation studies. This should be expected, as motives are responsible for the drive to travel, regardless of travel type or destination (Crompton, 1979; Dann, 1977).

Internal motives that relate to the need or desire to escape and relax are highly influential and important in the decision to travel (Boo & Jones, 2009; Crompton, 1979; Dann, 1977; Iso-Ahola, 1982). Examples from the literature include: “to seek solitude and isolation”, “to have a life with no fixed schedules”, “to get a break from your day-to-day environment”, “to relax and relieve stress” (Elliot & Choi, 2011), “to mentally relax”, “to physically relax”, “to avoid the hustle and bustle of daily life” (Jones, 2011), and to “escape from normal life” (Qu & Ping, 1999).
Motives related to family, friends, and socializing are also highly important in decision-making. Travelling, and cruising in particular, is a very social event. Only 2% of the 1,600 cruisers (participants who have taken a cruise vacation) surveyed in the CLIA 2014 North American Cruise Market Profile Study sailed alone (CLIA, 2015b) and, given the contained nature of cruise ships, passenger interaction with other passengers and with the ship’s crew is unavoidable (Berger, 2006; Yarnal & Kerstetter, 2005). Examples of measurement items that relate to family, friends, and socializing are to “spend time with others”, to “have fun and a good time” (Teye & Paris, 2011), “to be together with my family”, “to travel with friends” (T. Huang, 2009), and “to make new friends” (Teye & Leclerc, 2003).

Another highly important motive for travelling and cruising is related to learning, exploration, discovery, and novelty. There are many commonly reported responses or measurement items that reflect these motives: being able to visit multiple destinations (T. Huang, 2009); visiting and discovering new destinations and things (Andriotis & Agiomirgianakis, 2010; Elliot & Choi, 2011; T. Huang, 2009; Jones, 2011); experiencing nature, the environment and scenery (Andriotis & Agiomirgianakis, 2010; T, Huang, 2009; Qu & Ping, 1999; Teye & Paris, 2011); enjoying interesting ports-of-call (Teye & Paris, 2011); and culturally-related interests such as experiencing, understanding, and learning about new cultures or ways of life (Andriotis & Agiomirgianakis, 2010; Hung & Petrick, 2011b, 2012a; Qu & Ping, 1999). Factors relating to learning and exploration (particularly learning about new cultures) have been found to be important in the decision to cruise, both for those who have already cruised and those who have not yet (Hung & Petrick’s, 2011b, 2012a), as well as for different ethnicities (Teye & Leclerc, 2003).

Motivation factors and items from the above studies provide examples of the most important and most influential push motives reported in the literature. Additionally, there are several other motives that research participants have rated as being less important or influential in the cruise decision-making process than those mentioned above. Items relating to Maslow’s (1943b) esteem and self-actualization needs have been found in multiple studies to be less influential or important to tourists when making the decision to cruise. Examples of these items include “I cruise to help me feel like a better person”, “I cruise to increase my feelings of self-worth”, “I cruise to derive a feeling of accomplishment”, “I cruise to photograph an exotic place to show friends” (Hung & Petrick, 2012a), ‘social status’, and ‘self-discovery’ (Qu & Ping, 1999).

As noted above, several studies have demonstrated the influence and importance played by relaxation and a desire to escape the stresses of work and everyday life in the cruise decision-making process. It is, therefore, not surprising that studies have found exercise, sport, or physical activities to be of less importance to cruise passengers. Related items include “to be challenged
physically/ to feel physically energized” (Elliot & Choi, 2011), “to use my physical abilities/ skills in sport” (Jones, 2011), and to “get some exercise, engage in physical activities” (Teye & Paris, 2011).

The examples presented above represent some of the common motives for cruising and the individual items that are used to measure them. Although the last few examples are less important in the decision-making process than others previously mentioned, it is important for cruise lines and destinations to understand that these factors may still play a supporting role.

2.5.2.1 Measuring Push Factors (Motives)

Travel as a subsector of leisure has several characteristics that differentiate it from leisure as a whole; however, the methods used to measure push motives in leisure studies can be easily adapted for tourism research. In an early piece of tourism research, Leiper (1979) sought to define tourism, tourists and the tourism industry. In doing so, he identified many ways in which tourism is unique and different from other forms of leisure and non-leisure travel. Moore, Cushman, and Simmons (1995) provide a succinct summary of these differences:

- Travel requires a greater withdrawal from one’s place of residence;
- Travel is of longer duration;
- Travel is less frequent, causing it to be more anticipated, savoured, and remembered;
- Travel offers people a wider variety of opportunities to socialize;
- Travel is more expensive;
- Travel is more exclusive; and
- Travel is more discrete, causing it to be more memorable.

Despite these differences between travel and leisure in general, Moore et al. (1995) found a comparison between them to be too simplistic because that categorizes all forms of leisure (tourism aside) into one homogeneous group, regardless of the differences between the other leisure activities. Additionally, there are numerous examples within the literature that indicate differences in consumer behaviour (such as motivation) across different leisure activities. Thus, Moore et al. (1995) conclude that differences between travel and leisure do not make travel unique from leisure as a whole, and that measuring aspects of tourism, such as motives, should draw from leisure research, ultimately benefiting both areas of study. Ryan and Glendon’s (1998) tourism-specific version of the Leisure Motivation Scale is a prime example of travel motivation research that builds on leisure literature.

Ryan and Glendon successfully adapted Beard and Ragheb’s (1983) Leisure Motivation Scale (LMS) for use in tourism. Beard and Ragheb’s (1983) original LMS was built upon leisure
and recreation research, as well as from basic psychological theories about motivation, such as stimulus-seeking and stimulus-avoidance behaviour, relaxation, and competence-effectance. Their final measurement scale contained 48 items within four factors:

1. Intellectual;
2. Social;
3. Competency/ mastery; and
4. Stimulus avoidance.

Due to time constraints in using such a large number of motivation items in addition to the other questions in their study (holiday behaviors/experiences and satisfaction), Ryan and Glendon (1998) shortened the LMS to 14 items based on those with the highest factor loadings (see Table 2.6).

The LMS has several strengths compared to other travel motivation measurement scales. For example, researchers often use different measurement scales and item sets when measuring motivation, which limits opportunities for cross-study comparison. Additionally, there are few attempts by researchers to replicate results of previous studies and to validate measurement scales. Furthermore, many researchers pick and choose questionnaire items ad hoc and conduct research with small, unrepresentative samples (Ryan & Glendon, 1998). These weaknesses of travel motivation research are equally true of cruise-specific motivation studies.

As a relatively new area of research, many studies have aimed to develop measurement scales for different variables that account for unique aspects of cruising compared to other forms of travel and leisure; however, travel motives are not a variable requiring a cruise-specific measurement scale. Tourism is not fundamentally different from leisure when measuring certain factors such as motivation (Moore et al., 1995). Additionally, travel motives are responsible for the drive to travel, regardless of travel type or destination (Crompton, 1979; Dann, 1977); however, cruise-specific (that is destination-specific) items that would be more appropriately included in a separate pull-factor measurement scale are often included in motivation measurement scales (Dann, 1981). Therefore, a cruise-specific measurement scale is not necessary, especially if cruise- and destination-specific items are removed from the list of motives and placed in a separate pull factor scale.

The LMS has had limited use in cruise travel motivation research (Jones, 2011), while other studies have created cruise-specific measurement scales (Hung & Petrick, 2011b). The majority of cruise motivation studies have used quantitative techniques, while the use of qualitative methods in measuring travel and cruise motivation is much less common. In other studies, such as that of Hung and Petrick (2011b), strict procedures have been followed for developing quantitative
questionnaires. These include the use of qualitative methods in preliminary stages of research. Hung and Petrick, like many other researchers, developed their new quantitative measurement scale following Churchill’s (1979) recommended procedures for developing new multi-item measurement scales. For Hung and Petrick, this included in-depth interviews, a review by a panel of experts, and quantitative pilot testing. Other methods used to develop push factor item sets have omitted the qualitative component and sourced items from the related literature and/or consultation with experts (Andriotis & Agiomirgianakis, 2010; Josiam et al., 2009; Qu & Ping, 1999; Teye & Paris, 2011). These studies often combined both push and pull items without distinction and without exploring the relationship between the two.

As mentioned above, a cruise-specific motivation scale is not necessary. Rather travel and leisure motivation research needs a standardized measurement scale that has been created through sound methodology that can be replicated in multiple studies. For these reasons—and considering the strengths of the Leisure Motivation Scale—this study has chosen to implement Ryan and Glendon’s (1998) version of the LMS to measure travel motives, while separately addressing push factors in a newly developed cruise destination attribute scale.

In addition to the measurement issues mentioned above, cruise tourism research faces a number of research limitations. In addition to those detailed in Sections 2.3.2.1–2.3.2.6, Qu and Ping (1999) have identified further measurement problems. These include the measurement of motives from a single answer (e.g., the single most motivating item), which ignores the relationship between motives (Crompton, 1979), and using a single item (e.g., “escape from normal life”) to represent broad and complex motive categories (e.g., escape and relaxation), which they cannot accurately measure (Jacoby, 1978). Although the above studies are examples of the limitations found in the cruise motivation literature, the research methods are not necessarily limiting within the studies in terms of addressing the specific requirements of the research that they conducted. These examples are provided to help guide future research, as they have helped guide this research by indicating areas for improvement. Addressing limitations and methodological weaknesses will help to improve the current state of cruise tourism research by building a stronger theoretical base and by clarifying the practical and theoretical implications of results by identifying broader trends in cruise tourism. In addition, cross-study comparisons can be strengthened by establishing sound research methods to determine baselines and by replicating the use of the measurement scales that are used to measure variables such as travel motives.

2.5.3 Pull Factors (Destination Attributes)

Pull factors reinforce push motives (Dann, 1981) and influence destination choice (Crompton, 1979; Dann, 1981). This has led researchers to study pull factors in travel-related
decision-making (Sirakaya & Woodside, 2005), destination choice-set (Crompton, 1992; Crompton & Ankomah, 1993), destination image (Goodrich, 1978), motivation (Crompton, 1979; Dann, 1981; Goossens, 2000; Hanqin & Lam, 1999), and visitor behaviour studies (Kim et al., 2003). Motivation research has often contrasted push and pull factors; consequently, because push factors are intrinsic or intangible, research has often focused on the external and tangible nature of pull factors, such as the physical attributes of destinations (Baloglu & Uysal, 1996; Boo & Jones, 2009; Oh et al., 1995). For example, destination image studies often focus on the physical attributes of a destination, while the intangible components of destination image (e.g., holistic impressions) are not as frequently investigated (Echtner & Ritchie, 1991). In contrast, this study draws on the broader destination literature (e.g., motivation, destination attributes, destination competitiveness, destination image) to develop a more comprehensive concept that emphasizes the pulling effect of both tangible (e.g., attributes) and intangible (e.g., imagery) elements. The inclusion, in the research conducted later in this thesis, of all types of pull factors—such as attributes and imagery—is important, as they influence the decision-making processes of consumers (MacInnis & Price, 1987).

This thesis defines pull factors as the tangible and intangible core attributes and attractors of a destination that influence travellers to choose one destination over another. These include, but are not limited to, a destination’s activities, atmosphere, culture, history, image, market ties, physiography, unique features, and tourism superstructure (Crouch & Ritchie, 1999; Dann, 1977; Echtner & Ritchie, 1991; Uysal & Jurowski, 1994). These destination attributes are pull factors for cruise vacations, as they are for other vacation types; however, cruise vacations feature additional pull factors, from the cruise ship itself to other unique aspects of cruise travel.

2.5.3.1 Cruise Vacation Pull Factors

A cruise vacation exerts an attractive pull that arises from attributes such as transportation, accommodation, catering, onboard entertainment, recreational activities, domestic and foreign ports of call, and shore excursions (Silvestre, Santos, & Ramalho, 2008). Cruise vacations differ from land-based travel because of the additional attributes offered onboard ships (onboard attributes). These onboard attributes, combined with attributes of the multiple port destinations (onshore attributes), lead passengers to choose a specific itinerary, cruise line, cruise ship, and shore excursions. Although cruise vacations offer unique attributes, the influence of pull factors has been unclear or incomplete in the existing cruise literature.

Pull factors specific to destinations are often confused or conflated with push motives in broader travel research (Dann, 1981) as well as in cruise-specific research (Andriotis & Agiomirgianakis, 2010; Qu & Ping, 1999; Teye & Leclerc, 2003; Teye & Paris, 2011; Thurau et al., 2007). Few researchers have conducted dedicated studies into the pull factors of cruise motivation.
(Field et al., 1985; T. Huang, 2009; Jones, 2011; Xie et al., 2012) and only Jones (2011) and T. Huang (2009) have separately measured the influence of both push and pull factors\(^8\) in the same study; however, neither examined the relationship between them.

In addition to studying both the push and pull components of cruise motivation, it is important to understand the relationship between the pull factors that are related to the ship and those that are related to the ports of call. Xie et al. (2012) have taken the first step to clearly distinguish onboard from onshore attributes by developing a pool of onboard pull factors. Xie et al. compiled their list of onboard attributes from a major cruise review websites and through in-depth interviews. To ensure that a large and representative sample of attributes was identified, 95 reviews (out of 1,956) were chosen at random, representing 19 different cruise ships from various cruise lines and ships of varying sizes. These items were then tested with five cruisers and five potential cruisers during in-depth interviews. After a final review by the researchers, 28 onboard attributes were retained. Although this study provided a detailed report of the onboard attributes that influenced cruise travellers’ decisions, Xie et al. did not measure and compare the influence of onshore attributes.

Onboard attributes are a unique feature of cruise vacations, providing their own attractive pull, while onshore attributes are equivalent to destination attributes in travel motivation studies; however, tourists’ knowledge of the limited time spent in each port may affect the role that onshore attributes play in the decision-making process. A more detailed discussion of onboard and onshore attributes is presented in the following sub-sections.

2.5.3.2 Onboard Attributes

Decisions about travel destinations are influenced by several factors, including the mode of travel (e.g., cruising versus other types of travel). These decisions are influenced by the attributes of the ship that differentiate cruise vacations from other travel products (Xie et al., 2012). Once a cruise has been chosen, the destination choice of potential tourists has two unique implications for cruise vacations. In addition to selecting a geographical destination, tourists must choose a cruise line, and a specific ship from that cruise line, to sail on—if more than one is available in the desired region (Petrick et al., 2007). Onboard attributes are the tangible or intangible attributes specific to the cruise ship (or cruise travel in general) that attract tourists to choose a cruise vacation, a specific cruise line, or a specific ship. Examples include a ship’s amenities and facilities (e.g., cabins, pools, gym, spa, sports facilities, bars, restaurants); entertainment (e.g., casinos, games, shows, performances, presentations, classes); convenience (e.g., organized tours, all inclusive or most expenses prepaid, visiting multiple destinations); and security (Teye & Paris, 2011; Xie et al.,

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\(^8\) The study by Jones (2011) measures motives and vacation attributes

- The ship provides a considerable number of pull factors, and can be considered a destination in itself;
- Cruise vacations are to an extent all-inclusive pre-paid vacations;
- Cruises typically have multiple destinations;
- Time in each destination is limited by short durations in port and tight schedules; and
- Passengers have the option of visiting a destination or staying aboard the ship.

There is limited research on the influence that onboard attributes have on the cruise decision-making process, with the exception of Xie et al. (2012), who conducted a thorough study that focused solely on the onboard attributes of cruising. Several studies have included a limited number of onboard attributes among other pull factors, or have mixed onboard attributes with push factors (CLIA, 2011b; De La Vina & Ford, 2001; Field, Clark, & Koth, 1985; T. Huang, 2009; Jones, 2011; Teye & Paris, 2011).

Cruise Lines International Association (CLIA) is a large and useful source of data for researchers. Although some CLIA data regarding pull factors is vague and lacks depth, it provides a basis from which to build. Approximately 1,000 CLIA member travel agents completed the most recent Consumer Cruise Lifestyle Trends Survey (CLIA, 2011c). The survey asked only a limited number of questions using a structured response format with limited answer options9. This resulted in unclear answers. The survey would have benefited from the participants being cruise travellers as well as travel agents. This survey found accommodation to be the most important factor that influences the choice of cruise line, followed by cuisine, entertainment, spa/wellness, and shore excursions. The survey also found that, relative to other options, accommodation and cuisine were gaining in importance. Price was the most important factor that related to accommodation, followed by in-cabin amenities, Wi-Fi, adjoining rooms, and branded bedding. The study also surveyed consumer dining preferences, special dietary requests, interest in spa/wellness facilities, interest in onboard entertainment, and shore excursions. The agents that were surveyed also reported that clients find that onboard spa/wellness facilities, accommodation, and entertainment had improved significantly in the three years before the study and to be of comparable quality to those offered by land-based vacations.

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9 However, the survey was released in a PowerPoint slide layout via CLIA's website and did not contain much information about the methodology. What were the specific questions asked? How were the questions answered? (e.g., open ended, multiple choice, ranking).
In addition to CLIA reports, several academic studies contain examples of onboard attributes (Field et al., 1985; Jones, 2011; Teye & Paris, 2011); however, these studies present onboard and onshore attributes as a single item set without distinction. Furthermore, item sets containing a mix of onboard and onshore attributes often also contained push factors (travel motives) within the same item set. Xie et al. (2012) were the only researchers to specifically study the influence of onboard attributes in the cruise decision-making process. Xie et al. searched through cruise review websites and conducted in-depth interviews to develop an online questionnaire containing 28 onboard attributes, the largest collection of onboard attributes in a single study. Results from the study generally supported the hypotheses that: (a) “Potential cruisers will attach a higher level of importance to onboard attributes deemed unimportant by cruisers”; and (b) “Potential cruisers will attach a similar level of importance to onboard attributes deemed important by cruisers” (p. 154).

In the study by Xie et al. (2012), both cruisers and potential cruisers ranked items similarly, with three core attributes (cabin, restaurants, food) ranking in the top five. This supported the findings by CLIA (2011c) and Jones (2011), which both reported the importance of accommodation and dining. The results from experienced cruisers showed that little importance was given to the recreation and sport attributes, supplementary attributes, and fitness and health attributes (Xie et al., 2012). These attributes were related to some of the motives that were found to be less important in the cruise literature: exercising, sport or physical exertion (Elliot & Choi, 2011; Teye & Paris, 2011) and competence-mastery motives (Jones, 2011). The “children attributes” dimension contained the two least important onboard attributes (babysitting services and children’s centre and programs)—supporting the findings by Jones (2011) that child facilities were of less importance than other cruise attributes (however, it is unclear if Jones referred to onboard or onshore child facilities).

2.5.3.3 Onshore Attributes

Onshore attributes of cruise tourism are equivalent to destination attributes in traditional land-based travel research. Onshore attributes are the natural or manmade resources of a specific area, comprising both tangible and intangible elements. Examples of tangible elements include accommodation, tourist and shopping facilities, climate, the natural environment, and wildlife. Examples of intangible elements include the atmosphere, aura, friendliness of locals, local culture and history, nightlife, and safety (Crouch & Ritchie, 1999; Echtner & Ritchie, 1991; Jones, 2011; Uysal & Jurowski, 1994; Yuan & McDonald, 1990). These attributes contribute to the overall competitiveness of a destination (Crouch, 2011; Crouch & Ritchie, 1999; Enright & Newton, 2004; Hu & Ritchie, 1993) and directly and/or indirectly impact visitor satisfaction based on expectations.
and performance (Eusébio & Vieira, 2011; Huang & Sarigöllü, 2008; Martilla & James, 1977; Meng, Teplanon, & Uysal, 2008).

While not necessarily essential to the success and profitability of a destination, Crouch and Ritchie (1999) consider a destination’s core resources and attractors to be the “fundamental reasons that prospective visitors choose one destination over another” (p. 146). Crouch and Ritchie also note that destination managers have varying degrees of influence and control over these factors. These core resources and attractors include a destination’s physiography (e.g., nature, landscape, climate, aesthetics, visual appeal), culture and history, market ties (e.g., ethnic ties from immigration and business ties), activities, special events, and tourism superstructure (e.g., accommodation, food services, transportation, major attractions). Crouch and Ritchie’s conceptual model of destination competitiveness also includes additional attributes of the destination that are related to the destination’s competitive (micro) environment, global (macro) environment, supporting factors and resources (e.g., infrastructure, facilitating resources, enterprise, and accessibility), destination management (e.g., marketing, service, information, organization, and resource stewardship), and qualifying determinants (e.g., location, dependencies, safety, cost).

2.5.3.4 Measuring Pull Factors (Destination Attributes)

Cruise-related push factors (travel motives) can be reliably measured using existing measurement scales from travel and leisure studies; however, this is not the case for the measurement of pull factors in cruise research. As mentioned above, cruise travel is a unique sub-sector of the travel industry: the cruise ship itself acts as a co-destination to the ports of call, providing an additional set of attributes that exert their own pull force, and which attract travellers to cruise vacations or towards a specific ship or cruise line. In other words, the source of the attraction of cruise destinations comes from both onboard and onshore attributes. Pull factors are heavily studied in travel and cruise research; however, the existing literature presents an incomplete picture of cruise vacation pull factors because it often fails to include and/or separately measure both onboard and onshore attributes. Additionally, the distinction between destination attributes and destination image in the literature is often confused. Both destination attributes and destination image can be used to measure pull factors (Hung & Petrick, 2012b), while destination attributes are also commonly used for quantitative measurement of destination image (Echtner & Ritchie, 1991). The following subsections review destination image and personal construct theory to explore different methods of measuring cruise destination attributes.

Destination Image

After an extensive review of image research, including product, brand, store, corporate, and destination image, Echtner and Ritchie (1991) found the definitions of destination image in the
literature imprecise, vague, and often not explicitly stated. This prompted them to develop a more accurate definition of cruise destination image:

[D]estination image is defined as not only the perceptions of individual destination attributes but also the holistic impression made by the destination. Destination image consists of functional characteristics, concerning the more tangible aspects of the destination, and psychological characteristics, concerning the more intangible aspects. (p. 43)

This definition characterizes the image of a destination as consisting of the perceptions of individual attributes and of holistic impressions. These include functional characteristics (concerning tangible aspects), psychological characteristics (concerning intangible aspects), traits common to destinations in general, and traits unique to a specific destination (Echtner & Ritchie, 1991). Destination image is formed from personal factors (psychological and social), information sources (commercial and non-commercial), and previous experience (Baloglu & McCleary, 1999; Echtner & Ritchie, 1991). It is important to note that individuals can form an image of a destination without experiencing commercial forms of information and without having previously been there (Echtner & Ritchie, 1991). This can lead to differences in perceptions of a destination before and after the trip (Pearce, 1982). Therefore, when measuring destination image it is important to report whether data were collected before or after the trip, especially for the purpose of cross-study comparisons. In relation to cruise tourism, results may differ between first-time and repeat cruisers (onboard attributes) and/or first-time and repeat visitors of specific port destinations (onshore attributes).

Destination image allows individuals to differentiate between destinations and can influence destination choice (Young, 1995). In an early study to examine the relation between tourists’ preferences for travel destinations and their perceptions of those destinations, Goodrich (1978) confirmed that tourists’ perceptions of a destination, based on familiarity and knowledge of destination attributes, could influence destination choice. Travellers’ perceptions of destination attributes and their influence on destination choice have since been found to differ according to a number of variables, including culture (Richardson & Crompton, 1988), gender (Meng & Uysal, 2008), travel purpose, destination familiarity (Hu & Ritchie, 1993, as cited in Kim et al., 2003), push motives (Pesonen et al., 2011), the destination itself (Kozak, 2002; Turnbull & Uysal, 1995), country of residence (Kozak, 2002), and whether or not the traveller has visited the destination before (Fallon & Schofield, 2006).

To date there is no consensus on how to measure and operationalise destination image. As with Goodrich’s study (1978), the majority of destination image studies require participants to rate
destination attributes using a structured questionnaire; however, the validity of structured questionnaires has been heavily criticized in this context (Dann, 1996; Echtner & Ritchie, 1991; Pearce, 1982; Pike, 2007). Echtner and Ritchie (1991) found that structured questionnaires fail to measure holistic imagery and features that are unique to certain destinations. From a review of the destination image literature, Echtner and Ritchie (1991) and Pike (2002) found that the majority of researchers conceptualize and measure destination image in terms of destination attributes and not in terms of holistic impressions or unique features. Echtner and Ritchie suggest that destination image be measured using a combination of destination attributes and holistic imagery, both of which contain functional and psychological characteristics, as well as common and unique traits (Figure 2.4).

**Figure 2.4 Components of Destination Image**

![Diagram showing components of destination image](image)

Sources: Adapted from Echtner & Ritchie, 1991, 1993
Note: This image should be interpreted as three-dimensional

Criticisms of the overuse of structured methods (Echtner & Ritchie, 1991) have led to a significant increase in studies that are conducted with qualitative and mixed method designs (Tasci, Gartner, & Cavusgil, 2007). Quantitative methods are generally used to measure cognitive aspects of destination image (e.g., objective beliefs/knowledge of destination attributes), while qualitative or mixed methods are used to measure affective aspects of destination image (e.g., subjective attitudes and feelings towards a destination) or both cognitive and affective image (Baloglu & McCleary, 1999; Tasci et al., 2007). Echtner and Ritchie (1991) suggest that extensive research should be conducted when developing quantitative measurement scales to ensure that all aspects of destination image are accounted for. A method that is well suited for developing quantitative
measurement scales is repertory grid analysis, which incorporates qualitative data collection that can be quantitatively analysed or used to develop quantitative measurement scales.

**Personal Construct Theory and Repertory Grid Analysis**

Kelly’s Personal Construct Theory (PCT) is a constructivist model of human representational processes. This model is designed to understand how individuals experience the world, to understand human behaviour, and to explore how humans negotiate their environment (Bannister & Fransella, 1986, as cited in Young, 1995; Liseth, Bezdek, Ford, & Adams-Webber, 1991). PCT views individuals as private scientists who observe and analyse the world around them in order to guide future actions (Grice, 2002; Harrison & Sarre, 1971). According to PCT, individuals accomplish this by psychologically processing events and by comparing similar and contrasting attributes. The resulting similar and contrasting attributes, or personal constructions, are the way in which individuals make sense of the events in their lives (Kelly, 1977).

Although PCT originated in clinical psychology, it has been applied to a variety of topics: consumer behaviour, management training, religion, retail stores, and technology (Coshall, 2000; Pike, 2007). In some instances, PCT as originally conceived may not be wholly sufficient to explore destination image; however, the theory is flexible, allowing adaptation without compromising the theory’s basis (Harrison & Sarre, 1971). Personal construct theory not only provides a theoretical framework for studying personal constructs but also provides a methodology for exploring personal constructs through semi-structured interviews by using repertory grid analysis (RGA) (Young, 1995). PCT and RGA are suitable for exploring perceptions of destination image (Embacher & Buttle, 1989) because the empirical methods associated with PCT “…come very close to being a ready-made approach to the study of environmental images” (Harrison & Sarre, 1971, p. 365).

Although growing, RGA is still an underutilized method that both qualitatively and quantitatively explores tourists’ constructs of destination image (Botterill, 1989; Botterill & Crompton, 1987; Coshall, 2000; Embacher & Buttle, 1989; Hankinson, 2004; Pearce, 1982; Pike, 2003, 2007). Tourism researchers have adopted PCT and RGA to extract personal constructs of destination image in a number of contexts: perceptual changes of the visited location and country of origin before and after British tourists visited Greece or Morocco (Pearce, 1982); perceptions of English vacationers of Austria as a summer destination (Embacher & Buttle, 1989); tourists’ image of museums and art galleries in London, England (Coshall, 2000); short-break holidays by car in New Zealand (Pike, 2003) and Australia (Pike, 2007); and brand image of UK destinations from a business tourism perspective (Hankinson, 2004).
The most significant aspect of RGA is that it can elicit the attributes of destination image that tourists use to evaluate and compare alternative destinations without the influence of literature reviews or the opinion of experts (Young, 1995). Additionally, RGA has several advantages over competing approaches to measuring destination image:

- RGA is rooted in strong psychological theory (Coshall, 2000);
- Data is collected and analysed economically (Hankinson, 2004; Pike, 2007);
- RGA provides a more systematic framework and reduces interviewer bias compared with other qualitative methods (Hankinson, 2004);
- RGA provides structure to the interview without constraining participant responses, as occurs in structured questionnaires (e.g., bipolar scales, Likert-type scales; Coshall, 2000; Hankinson, 2004; Young, 1995);
- Subject matter is not predetermined by the researcher and is relevant to, and presented from, the tourists’ point of view (Coshall, 2000; Hankinson, 2004; Young, 1995);
- RGA can generate an exhaustive item set that can be refined and used in quantitative studies (Embacher & Buttle, 1989; Hankinson, 2004; Pike, 2003, 2007; Young, 1995);
- RGA can be used as a single-stage replacement for a two-stage process of conducting in-depth interviews and structured questionnaires (Hankinson, 2004);
- Responses are personally relevant to participants and represent meaningful criteria used in decision-making (Coshall, 2000; Hankinson, 2004; Young, 1995); and
- Data can be analysed using parametric and non-parametric statistics (e.g., factor analysis, cluster analysis, content analysis, frequency counts; Hankinson, 2004).

In the literature, Park’s PhD dissertation (2006) was the only cruise tourism study to be identified that applied RGA. The focus of Park’s dissertation was to contribute to a better understanding of current non-customers and to develop practical approaches to enable the cruise industry to tap this market. Current non-customers include non-cruisers (those who have never cruised before) and past-cruisers (those who have cruised before, but not in the past five years). Participants were asked to collect at least 12 photographs or images that represented their thoughts and feelings about cruise vacations for use in one-on-one RGA interviews. Park found that participants had difficulty grouping and defining their self-selected images using the triad technique, leading to meaningless and unsuitable results. RGA was abandoned after the 11th interview and replaced with a modified exercise in which participants grouped their images into common themes.

Park’s study focused on cruising in general rather than on exploring destination image by a comparison of specific cruise destinations. In the study of land-based destinations, RGA is often
used to elicit the personal constructs of destination image by comparing multiple destinations (Cosshall, 2000; Embacher & Buttle, 1989; Hankinson, 2004; Pike, 2003, 2007); therefore, RGA may be more effective in comparing multiple cruise destinations than in exploring cruising in general. The use of RGA to compare cruise destinations and to compare cruising to other vacation types would identify a significant list of cruise destination attributes—tangible and intangible—and those related to both onboard and onshore aspects of cruising. A more detailed review of how to conduct RGA can be found in the Stage 1 “Method” section of Chapter 4 (section 4.2.2.2).

2.5.4 The Relative Importance of Onboard and Onshore Attributes

A topic that has recently received attention in the literature is the degree to which shore excursions and ports of call influence the choice of tourists regarding specific cruise vacations. Recent studies have questioned whether travellers are attracted to cruising by attributes onboard resort-like cruise ships or those attributes of the ports of call. It has even been suggested that the ship is becoming the primary destination, with the ports of call becoming secondary destinations (Jones, 2011; Teye & Paris, 2011; Weaver, 2005c; Weeden et al., 2011; Wood, 2000). Weaver (2005c) describes this process as “destinization”. He argues that cruise ships are no longer just means of transportation but are becoming the centrepiece of cruise vacations and where tourists spend the majority of their time and money while on holiday. Despite these claims, the only evidence that supports this argument is provided by the marketing campaigns of cruise lines and their attempts of revenue capture through containment. Without empirical testing, the relative importance of the ship and of the destinations in the decision to cruise cannot be quantified. There is thus a need to study this relationship.

The image of the ship as the primary destination can be traced back to Carnival Cruise Line’s product differentiation strategy in the 1970s (Dickinson & Vladimir, 2008; Kwortnik, 2006). Carnival decided to market and promote their company with the larger vacation market as their competition, rather than focusing on competing solely within the cruise industry. With the new mantra of “The fun ships of Carnival” (Dickinson & Vladimir, 2008, p. 164), the ship and the onboard experience became the focus of marketing material. This strategy of the cruise ship being the focal point was replicated as cruise lines positioned their product to compete with land-based resorts such as Disneyland and those in Orlando and Las Vegas (Wood, 2000). Today, cruise lines compete with the very port cities they visit, trying to capture revenue from passengers. This is done through marketing and by designing new ships as destinations (Weaver, 2005c). Cruise lines are attempting to maximize capacity to increase onboard revenue, which is their main profit source. Some major cruise lines only break even from ticket sales, with onboard revenue being the sole source of profits (Vogel, 2011b), accounting for 10–20% or more of total revenue (Dickinson &
Vladimir, 2008, p. 261). Tickets are sometimes sold at a loss to fill staterooms and maximize capacity in order to increase potential onboard sales from the subsequent captive market. Thus Vogel (2011b) has suggested that there are two distinct markets within the cruise industry, the market for cruises (ticket sales) and the market for onboard goods and services. Onboard competition is non-existent because cruise lines and onboard vendors have monopoly control, at least while at sea or when passengers are not ashore. Vogel (2011b) goes as far as to claim, “…cruises are not offered as an end but rather as a means to generate onboard revenue” (p. 223). Weaver (2005b, 2005c) similarly refers to cruise ships as mobile tourism enclaves designed for revenue capture through containment.

The use of private islands and beaches in the Caribbean and Bahamas (see Section 2.3.1) is another example of the containment and revenue capture utilized by cruise lines which creates direct competition with onshore destinations and extends the range of pull factors attributable to cruising rather than the onshore environment. Private destinations are often restricted to a single cruise line (and possibly its affiliates) and are not accessible by the local population. Furthermore, many of the activities—such as shopping, food and beverage, and other services—are provided by the cruise line and onboard staff, therefore bypassing any local labour or businesses (Wilkinson, 1999).

These examples of marketing and sales tactics, ship design, and private destinations demonstrate that cruise lines believe it beneficial to market, promote, and operate their ships as the focal point of cruise vacations, and to control the spending of passengers. Research conducted to validate such approaches are examples of what Klein (2011) refers to as research that aligns with the interests and goals of the cruise industry. There have been no empirical studies to determine the relative importance of onboard and onshore attributes from the passenger perspective, and the role that each play in the choice of a specific cruise vacation. Although no studies have been conducted that separately analyse the pull factors of the ship and ports of call, it is possible to gain some initial insight into this topic through viewing existing literature.

The CLIA Cruise Market Profile Study (CLIA, 2008, 2011b, 2015) is conducted every two to three years, enabling researchers to track changes over time. One question of particular importance within this study is: “Many elements are considered when planning a vacation; the destination, the property or ship, the facilities, the experience, and the cost. Please divide the percentage that each factor plays in your selection of a cruise” (CLIA, 2011b, p. 103). This question has resulted in fairly constant results since 2004; however, the elements that are listed have increased with newer editions of the survey (Figure 2.5). In 2004, answer options included destination, property/ship, and cost. Overall experience was added in 2006 and facilities were
added in 2011. Results remained nearly identical for 2006 and 2008, with the destination (33%) being the most important element of consideration when planning a trip, followed by cost (28% and 29%, respectively), overall experience (23%) and lastly the property/ship (15%). The 2011 survey saw a fairly equal 2–3% from each element transferred to the new element, facilities (11%). The two most recent surveys, from 2011 and 2014, show a decrease in the importance of destination from 30% down to 24%, with a slight increase in facilities (+2%), the property/ship (+2%), and cost (+2%).

**FIGURE 2.5 FACTORS INFLUENCING CRUISE SELECTION BY YEAR**

The data in Figure 2.5 show: the combined response of both cruisers (those who have been on a cruise vacation) and non-cruiser/vacationers (those who have been on a vacation but have not cruised) for 2004, 2006, 2008, and 2011; separate cruiser and non-cruiser/vacationer data for 2011; and cruisers-only data for 2014. The grouping of cruisers and non-cruisers/vacationers in previous studies inaccurately compares cruise ships with hotel properties across the two vacation types. Although cruisers and non-cruisers/vacationers have very similar responses, cruise ships are not the equivalent of floating hotels and are thus not directly comparable with land-based hotels and resorts. For example, cruise ships offer more than resort style accommodation, providing...
transportation, entertainment, food and beverage, tour operators, etc. (as detailed at the end of Section 2.2). These results show that from 2004 to 2014, the destination is consistently considered to be more important than the property/ship when making vacation decisions. However, in the most recent survey (2014) there was a slight decrease in the importance of the destination and a slight increase in the importance of the property/ship (with the destination still more important). Despite the simplicity of the question asked and data provided, a multi-item measure of the relative importance of ship and destination would provide a more detailed understanding of how passengers compare the ship to destinations. It would also provide more information about how specific attributes of the destination or cruise vacation influence selection of that vacation. Furthermore, responses are framed in relation to their influence on vacation selection in general, not cruising specifically; the results are presented with the following caption: “Distribution of Factors Influencing Vacation (Not Cruise) Selection” (CLIA, 2011b, p.97). A question specific to cruise vacations would be more valuable to cruise researchers.

Elsewhere in the literature, extracting onboard and onshore attributes from item sets used to measure destination attributes can draw inferences to the relative importance. For example, Teye and Paris (2011) conducted a study to determine the motivations of passengers for taking a cruise vacation, the activities they undertake during the cruise, and the likelihood of their returning to the Caribbean ports of call on future land-based vacations. Unlike the CLIA (2011b) study that measured the pull of the destination and ship as single items, the motivation item set used by Teye and Paris (2011) contained a combination of push and pull items (35 items in total). Although Teye and Paris did not examine the relative importance of onboard and onshore items, a rough comparison is possible from an analysis of the results from items that could be categorized as either onboard or onshore. Table 2.6 lists the onboard and onshore motivation items by mean scores. Items that were not specific to the ship or ports of call were omitted from the table, while two of the five items that had been removed by Teye and Paris (2011) due to cross-loading during the factor analysis were included in the table below, being clearly identifiable onshore attributes. One of the other two items removed—“service, having everything needed readily available”—was related to the onboard aspect of cruising; unfortunately, no data were available for that item, so it was not included in the table below. The final factor, “climate”, included one item related to the destination climate and one item related to previous experience with the cruise line. These two items could be considered to be onboard and onshore attributes respectively, and are included in the table. The item, “ship life”, was included in the table; however, Teye and Paris (2011) only mentioned that item once (in “Table 3: Motivation Items”, p. 23) so it was not included in their factor analysis.
Table 2.6 contains a large number of onshore attributes at the top of the list with onboard attributes scattered throughout its middle and bottom. Excluding the two items that could be considered onshore attributes or related to the cruise line’s offerings (onboard attributes), the average mean for the 11 onshore attributes was 3.67, while the average mean score for the seven onboard attributes was 3.37. This suggests that onshore attributes are considered more important than onboard attributes when deciding to take a cruise. However, caution is necessary when interpreting Table 2.6: it is not an exhaustive list of either onboard or onshore attributes, as this was not the intention of the study. Additionally, some items were specific to the ports of call or the itinerary of the particular cruise under study (e.g., “cruise the Caribbean” and “enjoy mild tropical weather”), while others were general onshore attributes that could be used in cruise studies from other regions (e.g., “interesting ports-of-call” and “experience nature, the outdoors, beautiful scenery”).

### Table 2.6 Onboard and Onshore Attributes (Teye & Paris, 2011)

<table>
<thead>
<tr>
<th>Onboard/Onshore Attributes</th>
<th>Motivation Item</th>
<th>Mean*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Onshore</td>
<td>Cruise in the Caribbean</td>
<td>4.13</td>
</tr>
<tr>
<td>Onshore</td>
<td>Experience nature, the outdoors, beautiful scenery¹</td>
<td>4.06</td>
</tr>
<tr>
<td>Onshore</td>
<td>Interesting ports-of-call</td>
<td>3.96</td>
</tr>
<tr>
<td>Onshore</td>
<td>Enjoy mild tropical weather²</td>
<td>3.96</td>
</tr>
<tr>
<td>Onshore</td>
<td>Explore new sights in countries on this itinerary</td>
<td>3.93</td>
</tr>
<tr>
<td>Onshore</td>
<td>Experience something entirely different, discover something new</td>
<td>3.87</td>
</tr>
<tr>
<td>Onshore</td>
<td>Experience fresh clean air, water, and environment³</td>
<td>3.80</td>
</tr>
<tr>
<td>Onboard</td>
<td>Ship life⁴</td>
<td>3.65</td>
</tr>
<tr>
<td>Onshore</td>
<td>Experience the culture of the countries while at ports-of-call</td>
<td>3.63</td>
</tr>
<tr>
<td>Onboard</td>
<td>Personalized, quality service, luxury of the ship itself²</td>
<td>3.58</td>
</tr>
<tr>
<td>Onshore</td>
<td>Experience life in the countries visited</td>
<td>3.56</td>
</tr>
<tr>
<td>Onboard</td>
<td>Fine dining opportunities</td>
<td>3.51</td>
</tr>
<tr>
<td>Onboard</td>
<td>Most expenses prepaid, no worry about a hotel or dining bill</td>
<td>3.48</td>
</tr>
<tr>
<td>Onboard</td>
<td>Experience many activities and events in a relatively short time</td>
<td>3.46</td>
</tr>
<tr>
<td>Onboard/Onshore</td>
<td>Sample each destination for possibility of returning later for an extended visit/holiday⁵</td>
<td>3.45</td>
</tr>
<tr>
<td>Onboard/Onshore</td>
<td>Enjoy the cruise line’s organized guided tours while at the ports-of-call⁴,⁵</td>
<td>3.19</td>
</tr>
<tr>
<td>Onboard</td>
<td>Diverse, organized activities</td>
<td>3.04</td>
</tr>
<tr>
<td>Onboard</td>
<td>Comfort and security from being with people of similar interests</td>
<td>2.88</td>
</tr>
<tr>
<td>Onshore</td>
<td>Try new cuisines at the different countries visited¹</td>
<td>2.80</td>
</tr>
<tr>
<td>Onshore</td>
<td>Shop in new destinations while docked at the ports-of-call⁴</td>
<td>2.65</td>
</tr>
</tbody>
</table>


Note: 1 = Not important, 5 = Very important

¹Item removed from further analysis by Teye & Paris for cross-loading
²Item from Climate factor
³Item from Convenience/ship-based factor, but considered to be an onshore attribute for this study
⁴Item not included in any factor, not mentioned in removed items
⁵Although this item clearly relates to ports of call (onshore attributes), taking cruises to sample destinations for future land-based visits is a noted attribute of cruise vacations (CLIA, 2011a), as are guided tours

Another study where it was possible to draw inferences about the relative importance of onboard and onshore attributes is Field et al. (1985). This was a study to determine the socio-demographic profiles of Alaskan cruise passengers, including a minor component measuring the importance of 11 cruise features as a proxy for motivation. Data collection procedures in this study
were much more extensive than many of the cruise studies mentioned throughout this thesis, with surveys distributed to all cabins on 15 of the 121 cruises \( n = 2,844 \) of the 1979 Alaskan cruise season. This was done to ensure the representativeness of passengers on different cruise lines and ships, cruises throughout the season, and from all three ports of embarkation at the time (Los Angeles, San Francisco, and Vancouver). Although there was no reference to, or comparison of onboard or onshore attributes, the attributes were easily identifiable as onboard or onshore attributes (Table 2.7).

### Table 2.7 Onboard and Onshore Attributes (Field et al., 1985)

<table>
<thead>
<tr>
<th>Order of Importance</th>
<th>Onboard/Onshore Attributes</th>
<th>Motivation Item</th>
<th>Mean*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Onshore</td>
<td>General scenery</td>
<td>1.11</td>
</tr>
<tr>
<td>2</td>
<td>Onshore</td>
<td>Seeing wildlife</td>
<td>1.44</td>
</tr>
<tr>
<td>3</td>
<td>Onshore</td>
<td>Seeing how Alaskans live and work today</td>
<td>1.66</td>
</tr>
<tr>
<td>4</td>
<td>Onshore</td>
<td>Good weather</td>
<td>1.68</td>
</tr>
<tr>
<td>5</td>
<td>Onshore</td>
<td>Learning about Alaskan history</td>
<td>1.72</td>
</tr>
<tr>
<td>6</td>
<td>Onshore</td>
<td>Learning about the native culture</td>
<td>1.76</td>
</tr>
<tr>
<td>7</td>
<td>Onboard</td>
<td>Aboard ship presentations</td>
<td>1.85</td>
</tr>
<tr>
<td>8</td>
<td>Onboard</td>
<td>Entertainment events aboard the ship</td>
<td>2.04</td>
</tr>
<tr>
<td>9</td>
<td>Onboard</td>
<td>Meeting people aboard the ship</td>
<td>2.05</td>
</tr>
<tr>
<td>10</td>
<td>Onshore</td>
<td>Learning about Russian-American history</td>
<td>2.19</td>
</tr>
<tr>
<td>11</td>
<td>Onboard</td>
<td>Participating in games and sports aboard the ship</td>
<td>2.55</td>
</tr>
</tbody>
</table>

Source: Field et al., 1985  
Note: 1 = Very important; 2 = Somewhat important; and 3 = Not important

This table has a similar pattern to Table 2.6, with a large number of onshore attributes at the top of the list with onboard attributes scattered throughout the middle and bottom of the list. This could be due to greater importance being placed on destination-related attributes by Alaskan cruise passengers. As with the previous table, caution is necessary when interpreting Table 2.7, as it is not an exhaustive list of attributes of either the ship or destination— this was not the intention of the study. Furthermore, a limited number of items were included, items were measured on a three-point scale, the study only focused on Alaska, and the study is now quite dated.

The final example of inferring the relative importance of onboard and onshore attributes is Jones (2011), who conducted one of the few studies that attempted to separately measure the influence of motives and vacation attributes (destination attributes) on the choice to cruise. Data were collected aboard a single ship with two different itineraries (six total sailings) in the Caribbean. Participants were asked to rate the degree to which vacation attributes influenced the choice to cruise. Results did not show a clear preference for either onboard or onshore attributes, as the most influential attributes were a combination of both (comfort, accommodation, get away, climate, scenery). These examples demonstrate the scarcity of studies that differentiate between onboard and onshore attributes and the lack of examination of the relative importance of onboard and onshore attributes. The inferences that can be made from comparing the onboard and onshore

55
attributes provide inconclusive evidence about any preference for the onboard or onshore aspects of cruising. A purposive study of this relationship is required.

2.6 Summary of Chapter 2

The cruise industry is one of the fastest growing sectors in the travel industry, experiencing a near 8% annual growth rate since 1980 (CLIA, 2011a). Despite this, cruise-related research is underrepresented in the literature and faces several limitations. These include a fragmentation of research that is due to the multidisciplinary nature of the field and its relative infancy; the tendency for cruise research to focus on economic issues within a managerial perspective (i.e., managerialism); restricted access to cruise passengers in order to collect data (i.e., gate keepers); limitations of results due to small sample sizes and narrow sampling frames (e.g., single sailing, single ship, single itinerary, single cruise line); the tendency of research to focus on specific topics (e.g., economics, health and safety, environment); and the tendency of research to focus on specific geographic regions (e.g., the Caribbean).

As the cruise industry continues to grow and to become more competitive in relatively mature markets such as North America, it must develop a greater understanding of cruise tourist behaviour. While motivation is only one of many variables that can help explain tourist behaviour, it is one of the most important to study as it is the key driving force behind human behaviour (Baloglu & Uysal, 1996; Crompton, 1979; Fodness 1994; Iso-Ahola, 1982; Maslow, 1943a; Oh et al., 1995). The push-pull framework allows for the separate study of the internal motives that push individuals to travel, and of the external destination attributes that pull travellers to specific cruise lines, ships, and destinations. The push-pull framework also allows for a clearer and more accurate distinction between travel motives and cruise destination attributes. This enables the push-pull relationship to be explored, something which is often overlooked in the literature. Although it was noted that the general types of motives that are associated with the desire to cruise do not differ from other forms of travel, cruise-specific pull factors do differ significantly from other vacation types and have not been explored in any great detail.

It was found that cruise motivation studies do not generally distinguish between push and pull factors and often confusingly refer to destination attributes as motivations. Motivation is an internal psychological process that operates independent to external factors; therefore, it cannot include destination specific attributes because the motives for travel are independent of destinations or travel type (Crompton, 1979; Dann, 1977). Because of this confusion of the differences between push and pull factors, the benefits of measuring both have been limited in cruise research. The literature additionally fails to distinguish between onboard and onshore attributes as two separate sources of pull factors and they are often grouped into a single item set without differentiation.
This chapter has identified several shortcomings in the literature that need to be addressed in future research, as well as revealing the importance of an investigation of the relationship between push and pull factors and the relationship between onboard and onshore attributes. A theoretical foundation has been laid for the thesis to follow, and the research methodology is presented in the following chapter.
CHAPTER 3: METHODOLOGY

3.1 Introduction to Chapter 3

The research methods in this thesis have been designed to overcome several of the limitations found in the literature, introduced in the previous chapter (see Section 2.3.2). To improve the representativeness of samples and their potential application to the cruise industry (or specific cruise region), samples should be relatively large and represent passengers from a wide variety of cruise variables. This requires participants who have been on cruises that represent different cruise lines, ship sizes, itineraries, destinations, and during different points of the year or cruise season for a given region.

The primary purpose of this chapter is to introduce the methodology that has guided this thesis and to provide an overview of the research procedures. Chapter 3 begins with a review of the research aim and objectives that structure this thesis. A methodological review of research paradigms and methods that are common in tourism research is presented together with a more in-depth discussion of the post-positivist paradigm and the mixed-methods approach that guided this study. The specific research methods (and justifications for the chosen methods) for each of the three stages will be presented separately in their respective chapters (Chapters 4–6) due to the sequential nature of the three stages of research.

3.2 Research Aim and Objectives

The principal aim of this thesis, presented in section 1.2 of the introductory chapter, is to explore the push and pull motivational factors that influence the decisions of tourists to take a cruise vacation. The specific objectives of this research are to:

1. Identify the onboard and onshore attributes that contribute to cruise tourists’ perceptions of the cruise destination;
2. Determine the relative importance of onboard and onshore attributes in tourists’ choices of specific cruises; and
3. Explore the relationship between push factors (travel motives) and pull factors (cruise destination attributes), including both onboard and onshore attributes, in the decision to cruise.

3.3 Research Paradigm

A research paradigm is a set of beliefs, assumptions, and values that form the perspectives that are used to interpret reality. There are four components to such a paradigm:
1. Ontological: “the nature of reality”, how the world is perceived;
2. Epistemological: “the relationship between the researcher and the participants”;
3. Methodological “a set of guidelines for conducting research”; and

The research paradigm of a study influences the choice of methodology and the methods to be followed. The definitions of these terms are presented in Table 3.1.

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paradigm</td>
<td>A set of beliefs</td>
</tr>
<tr>
<td>Ontology</td>
<td>The nature of reality</td>
</tr>
<tr>
<td>Epistemology</td>
<td>The nature of the relationship between the researcher and the participants/subjects/objects</td>
</tr>
<tr>
<td>Axiology</td>
<td>Values, ethics, and associated ethical practice</td>
</tr>
<tr>
<td>Methodology</td>
<td>A set of guidelines for conducting research</td>
</tr>
<tr>
<td>Method</td>
<td>The tools for empirical material/ data collection and interpretation, (re)construction/ analysis</td>
</tr>
</tbody>
</table>

Source: Jennings, 2010, p. 36.

There are five main paradigms used in tourism research:

1. Positivism;
2. Post-positivism;
3. Interpretive social science approach;
4. Critical theory orientation; and
5. Participatory.

Other research paradigms include pragmatism, critical realism, chaos theory, feminist perspectives, and postmodernism. The most predominant paradigms in tourism research are positivism and post-positivism (Jennings, 2007, 2010). An overview of these paradigms is provided in Table 3.2, comparing them by ontology, epistemology, methodology, and axiology.

This thesis is situated within a post-positivist paradigm. Post-positivism is deductive in nature and concerned with the empirical testing of theories to demonstrate causal relationships that can be considered representative, or generalisable (Jennings, 2010). The ontological basis of post-positivism acknowledges that “truth” can only be known imperfectly or probabilistically (Jennings, 2010). Like positivism, the epistemology of post-positivism positions the researcher as generally objective and value free; however, post-positivism acknowledges the potential for researcher bias (Jennings, 2007, 2010). In another similarity to positivism, the researcher’s position is value-neutral, as any researcher should theoretically be able to reach identical results by using the same data and methods (Tribe, 2001). Although post-positivist research is primarily conducted through quantitative methods, the incorporation of qualitative methods has been more prevalent through the use of mixed methods. Mixed methods research design helps to improve internal and external
validity, as well as reliability (Henderson, 2011; Jennings, 2007). Data analysis is generally conducted by using statistical calculations from quantitative data (Jennings, 2010).

Table 3.2 Overview of Main Paradigms in Tourism Research

<table>
<thead>
<tr>
<th>Ontology</th>
<th>Positivism</th>
<th>Post-positivism</th>
<th>Interpretive Social Sciences</th>
<th>Critical Theory Orientation</th>
<th>Participatory</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Universal truths/ laws</td>
<td>Fallible truths produced by social/ historical circumstances</td>
<td>Multiple realities</td>
<td>Complex world organized by overt/ hidden powers</td>
<td>Collective participative co-construction of realities</td>
</tr>
<tr>
<td>Epistemology</td>
<td>Objective</td>
<td>Objective albeit possibility of researcher bias acknowledged</td>
<td>Inter-subjective</td>
<td>Subjective</td>
<td>Situated/ reflexive (Inter)-subjective-objective</td>
</tr>
<tr>
<td>Methodology</td>
<td>Quantitative</td>
<td>Primarily quantitative; may use some qualitative</td>
<td>Qualitative</td>
<td>Predominantly qualitative, some quantitative</td>
<td>Qualitative Quantitative Mixed methods</td>
</tr>
<tr>
<td>Axiology</td>
<td>Knowledge is propositional/ of intrinsic value</td>
<td>Knowledge is propositional/ of intrinsic value</td>
<td>Knowledge is propositional/ transactional/ a way to achieve social emancipation</td>
<td>Knowledge is propositional/ transactional/ a way to achieve social emancipation</td>
<td>Knowledge is experiential, practical/ transformative. Some instances of transactional knowledge</td>
</tr>
<tr>
<td>Ethics</td>
<td>Value-free</td>
<td>Value-free</td>
<td>Value-laden</td>
<td>Value-laden</td>
<td>Value-laden</td>
</tr>
</tbody>
</table>

The axiology of both post-positivism and positivism views knowledge as intrinsically valuable and propositional, yielding facts or realities (Jennings, 2010). Post-positivism seeks to be value-neutral, or value-free; however, it is possible for value positions to be imposed by seeking empirical input into the study design (Tribe, 2001). As with Tribe’s findings for tourism research in general, much of the cruise literature is pre-imposed with an industry value base. This is a product of research being conducted for the cruise industry or for a specific cruise line, resulting in what Papathanasssis and Beckmann (2011) refer to as managerialism in cruise research.

3.4 Research Methodology

Research methodology is the set of principles or guidelines by which research is conducted and the researcher produces knowledge (Jennings, 2010). When choosing between a qualitative, quantitative, or mixed methods approach, travel and tourism researchers must consider which is most appropriate for their research.

3.4.1 Quantitative Research Methodology

Quantitative methodology uses statistical analysis to deduce causal relationships between variables. Data tends to be numerical and is represented in tables and graphs, with results extrapolated to the population under study (Jennings, 2010).
quantitative research is probability sampling (e.g., random sampling, stratified random sampling, cluster sampling, sampling using multiple probability techniques). The aim is to achieve representativeness through random selection of a relatively large number of participants from a population or a specific subgroup or strata (Teddlie & Yu, 2007).

### 3.4.1.1 Quantitative Methods for Measuring Motivation

There are several approaches to measuring motivation that are prevalent in the leisure, travel, and cruise tourism literature. These include the indirect method, destination attribute method, importance-rating method and self-perception method (Huang, 2010; Todd, 1999). The indirect method asks open-ended questions that are not necessarily specific to motivation (e.g., positive and negative holiday experiences; Todd, 1999). Results are then content-analysed and coded to reveal common themes or motives, often following Maslow’s (1943b) hierarchy of needs theory (Crompton, 1979; Fodness, 1994; Pearce & Caltabiano, 1983).

The destination attribute method asks participants to rate the importance of destination attributes in choice of travel destination (Todd, 1999). The underlying motivations that create the desire to travel are then inferred from the ratings of importance given to the attributes (Cossens, 1989, as cited in Todd, 1999; Heung, Qu, & Chu, 2001). This method, henceforth, will be referred to as the attribute-rating method. Because of the lack of separation between internal motives and external destination attributes in the literature, the push-pull motivation framework is helpful when using the attribute-rating method as it separately measures motives and destination attributes.

The importance-rating method (Huang, 2010; Todd, 1999) and self-perception method (Huang, 2010) are similar, often differing only in the wording of questions and answer choices. The former is a more subjective rating of the level of importance of motivational statements or items, while the latter asks participants how much they agree or disagree that motivational statements apply to them on a personal level (Huang, 2010). Both methods use a rating scale for answer choices.

Comparing the above methods, Todd (1999) reported that the attribute-rating method should not be used as a substitute for the importance-rating method to measure tourism motivation, and demonstrated that they do not consistently measure the same underlying constructs. Todd also found that the indirect method has a weak association with the attribute-rating or importance-rating methods. Huang (2010), however, did find the self-perception and importance-rating approaches to be consistent, similarly reliable, and appropriate methods for measuring travel motivations. These findings led Todd (1999) to advise caution when comparing results obtained in studies from the various methods, as “…there is no empirical basis on which to assume they are measuring a similar construct” (p. 1023). Huang (2010) proposed that future research would benefit from adopting a
multi-trait–multi-method model that merges the self-perception and importance-rating methods that contain the same item sets (Bollen, 1989, as cited in Huang, 2010; Marsh & Grayson, 1995, as cited in Huang, 2010).

Recent cruise motivation studies have applied several of these measurement approaches to measure travel motivation, including the attribute-rating method (Cruise Lines International Association [CLIA], 2011b; de la Vina & Ford, 2001; Jones, 2011), self-perception method (Hung & Petrick, 2011b), indirect method (Swain, 2008), and the importance-rating method (Andriotis & Agiomirgianakis, 2010; Elliot & Choi, 2011; T. Huang, 2009; Jones, 2011; Qu & Ping, 1999; Teye & Leclerc, 2003; Teye & Paris, 2011; Thurau et al., 2007). Of these approaches, the importance-rating method is the most commonly used in the cruise-related literature.

After consideration of the benefits and limitations of the above methods, the importance-rating method was selected to measure both push and pull factors in Stages 2 and 3 of this thesis. The importance-rating method was selected because of the relative ease of administering and interpreting its results (Hauser, 1991, as cited in Huang & Sarigollu, 2008). Its prevalence in the literature also allows the comparison of its results with other studies. Furthermore, stated importance techniques such as the importance-rating method have been found to be more useful than other methods for measuring pull factors (Huang & Sarigollu, 2008).

### 3.4.2 Qualitative Research Methodology

Qualitative methodology seeks in-depth information using an inductive approach. Empirical material is generally textual and is interpreted through key themes and motifs to develop a representation of a “slice of life” (Jennings, 2010). Interpretivism is the primary paradigm followed in qualitative leisure and travel research (Henderson, 2011), while purposive sampling is the main sample selection technique (e.g., sampling to achieve representativeness or comparability, sampling special or unique cases, sequential sampling, sampling using multiple purposive techniques). In qualitative research, a relatively small number of participants are specifically selected, based on the requirements of the research questions in an attempt to gain in-depth information (Teddlie & Yu, 2007). This characteristic was a deciding factor for the use of purposive sampling in Stage 1 of this thesis.

### 3.4.3 Mixed Methods Research Methodology

Mixed methods research can be defined as “…research in which the investigator collects and analyses data, integrates the findings, and draws inferences using both qualitative and quantitative approaches or methods in a single study or a program of inquiry” (Tashakkori & Creswell, 2007, p. 4). Common sampling techniques include basic mixed methods sampling
strategies (e.g., stratified purposive sampling—quota sampling and purposive random sampling), sequential mixed methods sampling, concurrent mixed methods sampling, multilevel mixed methods sampling, and sampling using multiple mixed methods sampling techniques (Teddlie & Yu, 2007).

Quantitative and qualitative methods both face potential validity issues and, due to the complexity of motivation as a psychological process, no method is error free: both quantitative and qualitative studies are subject to limitations inherent in the data they collect. According to Dann (1981), these limitations include the possibility that participants may not wish to reflect on real travel motives, may be unable to reflect on real travel motives, may not wish to express real travel motives, or may not be able to express real travel motives. Crompton (1979) also found that participants have difficulty articulating their socio-psychological motives for travelling, suggesting that these motives might be more latent in nature; he described them as part of a “hidden agenda”.

The validity of quantitative studies is dependent upon the statements or items listed in the questionnaire (Huang, 2010). This is an inherent problem with using structured response questions because researchers cannot guarantee that the list exhausts all possibilities. Qualitative studies using unstructured or semi-structured methods (e.g., open-ended questions) are commonly used during the early stages of research to develop more effective quantitative questionnaires, especially for new or understudied areas (Huang, 2010; Mason, Augustyn, & Seakhoa-King, 2010). This type of mixed or multi-method design is also known as a sequential study design and is common in cruise and tourism studies (Fodness, 1994; Hung & Petrick, 2010, 2011a, 2011b, 2012a, 2012b; Park & Petrick, 2009b; Testa, Williams, & Pietrzak, 1998). The research conducted in this thesis follows a sequential approach, with an initial qualitative stage (Stage 1) followed by two predominantly quantitative stages (Stages 2 and 3).

3.5 Overview of Procedures

This study adopts a mixed method approach, using a three-stage, sequential design to address the research aim and objectives. Similar research designs have been successfully utilized in motivation studies in the fields of travel (Fodness, 1994) and cruise tourism (Hung & Petrick, 2011b). Stage 1 of this thesis begins with an exploratory study that addresses the first research objective: to identify the onboard and onshore attributes that cruise travellers use to compare and differentiate between cruise vacations—personal constructs of cruise destination image. Stage 2 consists of the Cruise Destination Attribute Scale (CDAS) pilot study. Its purpose is to refine the list of attributes elicited from Stage 1 into an amount that is suitable for inclusion in a quantitative survey instrument, and to test the instrument’s ability to address the second research objective: to determine the relative importance of onboard and onshore attributes in the choice by tourists of a
specific cruise. Stage 3 consists of an online panel study that is designed to further address the second research objective, as well as to accomplish the third objective, which is to explore the relationship between travel motives (push factors) and cruise destination attributes (pull factors), including both onboard and onshore attributes in the decision to cruise.

Each stage of research builds on the one before, and the method used in each stage is dependent on the results of the previous stage. Consequently, each stage is presented as a separate study over Chapters 4–6, with each chapter including a method, results, and discussion section. The final chapter (Chapter 7) integrates and summarises the findings from the three stages of research with theoretical, methodological, and practical contributions. As the development procedures for the CDAS occurred during all three stages of the research, an overview of these is provided below, followed by the ethical considerations of this research and a review of this chapter.

### 3.5.1 Developing the Cruise Destination Attribute Scale (CDAS)

The pull factor (cruise destination attribute) measurement scales that were found in the literature do not adequately measure both onboard and onshore attributes of cruise vacations, nor do they clearly distinguish between them (see Section 2.5.3). Furthermore, these measurement scales fail to address the many unique aspects of cruise tourism (see Section 2.3.1). These findings demonstrate the need for a new cruise-specific pull factor measurement scale. The development of a cruise-specific destination attribute scale will not only equip researchers with a more comprehensive method to assess the importance of different pull factors in cruise tourists’ decision making but will also allow the direct comparison of the relative importance of onboard and onshore attributes. Additionally, such a scale can be combined with a push factor measurement scale to measure the push-pull relationship (see Stage 3 of this thesis).

The CDAS was developed following Churchill’s (1979) recommended procedures for developing new multi-item measurement scales (Figure 3.1). Churchill’s methods have been followed by numerous studies, including the development of several travel-specific measurement scales related to destination image (Echtner & Ritchie, 1993), tourist motivation (Fodness, 1994), cruise motivation (Hung & Petrick, 2011b), and cruise travel constraints (Hung & Petrick, 2010, 2012b).

The first step in the development of the CDAS was to specify the domain of the construct—the cruise destination and the related attributes (Procedure 1). This was accomplished by exploring the unique characteristics of cruise travel, by defining the cruise destination (see Section 2.3.1), and by examining the cruise, travel, and leisure literature that related to pull factors, destination attributes, destination image, and destination competitiveness. The initial sample of items (Procedure 2) was generated from the interviews conducted in Stage 1. In Stage 2, the first round of
data was collected (Procedure 3) using an online survey and the initial measurement scale was refined through factor analysis (Procedure 4). The Stage 3 study collected the second round of data using an online survey (Procedure 5), assessed the reliability and validity of items (Procedure 6 & 7), and calculated descriptive statistics for the item sets (Procedure 8).

**Figure 3.1 Cruise Destination Attribute Scale Measurement Procedures**

![Diagram of measurement procedures]

Source: Adapted from Churchill, 1979 (p. 66)

### 3.6 Ethical considerations

To ensure that research was conducted ethically, this thesis adhered to the University of Queensland’s (2013) underlying principles of ethical research:

a) The requirement to do good;
b) The duty to avoid causing harm; and
c) Respect of the person.

The university gave ethical clearance before any research was conducted. Participants were fully informed of the purpose of the research before the interviews and surveys were conducted and were reminded that their participation was voluntary, and that they could withdraw at any time.
during the study. Names and contact details have not been retained to ensure the anonymity of participants in all three stages of data collection.

3.7 Summary of Chapter 3

Chapter 3 previewed the methodology and research methods followed in the three stages of research. Research was situated in a post-positivist paradigm and a three-stage mixed-methods sequential design was developed to achieve the principal research aim. This research aim was to explore the push and pull factors that influence the decision of tourists to take a specific cruise. The goal of Stage 1 was to identify the onboard and onshore cruise destination attributes that cruise tourists use to compare and differentiate between cruise destinations (Research Objective 1). The purpose of Stage 2 was to refine the list of attributes elicited from the Stage 1 to an amount suitable for inclusion in a quantitative survey instrument, and to test the instrument’s ability to address the second research objective. Stage 3 was designed to explore the relative importance of onboard and onshore attributes in the cruise decision-making process (Research Objective 2), as well as to explore the relationship between push factors (travel motives) and pull factors (cruise destination attributes)—including both onboard and onshore attributes—in the decision to cruise (Research Objective 3).

Because each stage of research builds on and is dependent on the stage before it, the three stages of research are presented as separate studies in their respective chapters (Chapters 4–6). Each of the three stages has its own goals that contribute to the overall research aim and objectives. Results are framed in relation to the aim and objectives of the thesis, followed by discussion of how the results relate to the relevant literature. Chapter 7 concludes this thesis, with a summary of the key findings, significant contributions, research limitations, and directions for future research.
CHAPTER 4: IDENTIFYING CRUISE DESTINATION ATTRIBUTES — STAGE 1

4.1 Introduction to Chapter 4

This chapter presents the research method, results, and summary of findings for the first stage of data collection. Stage 1 had two main goals. Its first goal, and the first objective of the research as a whole, was to re-conceptualize the cruise destination from the tourists’ point of view. The definitions of the cruise destination and the cruise destination attributes that were developed in the literature review (see Section 2.3.1) reflected the perspective of the cruise industry. Stage 1 sought to complement this industry viewpoint with an exploration of the way that the cruise destination is perceived from the perspective of the cruise traveller and to identify important cruise destination attributes from the point of view of the consumer. Doing so would lead to a better understanding of the different sources of pull factors exerted by cruise vacations and help identify numerous onboard and onshore attributes that influence the cruise decision-making process.

The second goal of Stage 1 was to generate an initial sample of onboard and onshore attributes for the Cruise Destination Attribute Scale (CDAS). Numerous researchers have criticized the use of the structured questionnaires typically found in destination image literature because they tend to focus on destination attributes that are pre-determined by the researcher and they fail to measure holistic imagery and the unique characteristics of a specific destination (Dann, 1996; Echtner & Ritchie, 1991; Pearce, 1982; Pike, 2007). Therefore, this initial stage sought to develop a more comprehensive understanding of cruise destination pull factors by exploring more than just the physical or tangible attributes of a destination. This deeper understanding of cruise destination image could then be used to develop a comprehensive item set for quantitative data collection.

4.2 Stage 1 Method

Four methods were used to collect data during the one-on-one interviews in Stage 1:

1. Multiple-choice questionnaires to measure variables in socio-demographics and cruise travel behaviour;
2. Repertory grid analysis (RGA), with different cruise destinations as the elements of interest;
3. RGA, with different vacation types as the elements of interest; and
4. Open-ended questions to elicit destination images of cruising as a vacation type, as well as images that specifically relate to onboard and onshore aspects of cruise vacations.
4.2.1 Stage 1 Participants

Participants in Stage 1 were initially contacted with the aid of the researcher’s personal and professional contacts who work in the cruise and travel industry. The researcher and the participants were not currently or formerly employed in the cruise or travel industry. Participants were selected using the gradual selection principle, in which selection is based on relevance to the research rather than representativeness (Teddlie & Yu, 2007). Participants were required to have previously been on at least one cruise vacation and to fit the CLIA (2011b) target market: aged 25 years or older with an annual household income of $40,000 or greater. Cruise vacations in this study were defined as overnight (minimum 1 night) leisure travel aboard a commercial cruise line. While previous cruise experience is not necessary for conducting RGA—destination image can be formed without first-hand experience (Echtner & Ritchie, 1991)—previous cruise and travel experience is desirable as it allows participants to draw on past experience and knowledge of cruise tourism to generate a significant amount of useful data. This may improve the efficiency of interviews and reduce the sample size that is required to obtain a satisfactory volume of data.

Although there is no set rule for determining sample size, destination image studies have demonstrated that large samples are not required, when using RGA, to obtain useful results (Pike, 2003; Young, 1995). For example, Pike (2007) found that no new constructs are normally elicited after 20 to 40 repertory grid interviews. Frost and Braine (1967, as cited in Pike, 2005) also observed that, due to the commonality of constructs that are elicited from participants, only idiosyncratic constructs are elicited after 20 to 40 interviews. In his own work, Pike (2003) reached data redundancy after 15 interviews, with 50% of statement themes being represented in the first two interviews, and 80% being reached after the seventh interview. Previous destination image studies using RGA have been of varying sample sizes: $n = 1$ (Botterill, 1989; Botterill & Crompton, 1987); $n = 10$ (Pearce, 1982); $n = 20$ (Naoi, et al., 2006); $n = 24$ (Pike, 2007); $n = 25$ (Embacher & Buttle, 1989; Hankinson, 2004; Pike, 2003); $n = 50$ (Young, 1995); and $n = 97$ (Pearce, 1982).

There were a total of 20 participants (11 female and 9 male) in the Stage 1 study. The use of three destination image exercises (two RGAs plus four open-ended questions) provided a satisfactory volume of data with a small number of participants, with little new information being elicited in later interviews. The majority of participants were current cruisers ($n = 18$), who have cruised within the past five years, while two were past-cruisers, who have cruised before, but not in the past five years (Park 2006; Park & Petrick, 2009b). As the interviews were conducted in Vancouver, British Columbia, participants were predominantly Canadian ($n = 14$), with the remainder being American ($n = 4$), British ($n = 1$), and Australian ($n = 1$).
Many of the socio-demographic and cruise travel behaviour characteristics of the participants were representative of North American cruise passengers according to CLIA Market Profile Studies. In comparison with the most recent CLIA market studies (2011b, 2015b), Stage 1 participants were more likely to have cruised in the past year, more likely to have taken longer cruises, and less likely to have cruised with children of any age. Over half of the participants travelled with just one other person on their most recent cruise \((n = 12)\), with the most common travel partners being a spouse \((n = 10)\), friends \((n = 6)\), or a partner or companion \((n = 5)\). A complete comparative summary of the socio-demographic and cruise travel behaviour responses from Stage 1, as well as the second and third stages of research from this thesis, can be found in Table A.4 and Table A.5 of Appendix A.

Although the small sample size of Stage 1 did not cover a broad range of passenger profiles, the purpose of this stage of the research was not to produce generalisable results. It was, rather, to explore cruise destination image from the passengers’ perspective and to identify onboard and onshore attributes related to cruise destination image.

### 4.2.2 Stage 1 Data Collection Procedure

No previous studies had attempted to separately analyse both the onboard and onshore attributes of cruise vacations in detail. Therefore, without previous research to guide this study, it was decided that multiple methods would be used to elicit cruise destination images from participants. This was done to ensure that a significant amount of data was obtained and that the data thoroughly accounted for both onboard and onshore elements of cruising. Furthermore, RGA is more effective when combined with conventional qualitative research methods, due to the number of descriptive rather than evaluative statements that it often obtains (Sampson, 1972). Consequently, multiple interview techniques, consisting of two RGA exercises and a set of open-ended questions, were conducted.

Data were collected between September and November 2013 in 20 individual, semi-structured interviews, each lasting for approximately one hour. Four methods of data collection were used:

1. A multiple-choice questionnaire related to socio-demographic and cruise travel behaviour variables;
2. RGA focusing on popular cruise destinations (CD-RGA);
3. RGA focusing on popular vacation types (VT-RGA); and
4. Open-ended questions developed to explore destination image.
The order of the VT-RGA, CD-RGA, and open-ended questions was alternated in each interview. In addition to the repertory grids and questionnaires that were completed during interviews, the researcher took hand written notes.

Participants were briefed before the interviews began on the purpose of the interview and the triadic method to be used for the repertory grid exercises. This included a walk-through example using automobile manufacturers (Embacher & Buttle, 1989; Pike, 2007). In this example, automobile manufacturers (e.g., BMW, Mercedes, Ford) were the elements of interest and the general attributes of the cars produced by those manufacturers were the constructs (e.g., foreign imports/ domestic; luxury cars/ more economical; more prestigious/ more ordinary). Participants were reminded that the interview was not a test, that there were no right or wrong answers (Coshall, 2000; Hankinson, 2004), and that it did not matter if they had previously visited any of the destinations or not, nor if they had been on the different types of vacations or not (Pike, 2007). Participants were then given a participant information sheet and asked to complete a participant consent form. A complete list of questions from Stage 1 can be found in Appendix B.

4.2.2.1 Socio-demographic and Cruise Travel Behaviour Variables

Interviews began with the participants completing multiple-choice questionnaires that were designed to obtain information on socio-demographics and cruise travel behaviour for the purpose of developing passenger profiles (19 questions). The socio-demographic information that was collected included gender, age, nationality, marital status, education, and employment status. Cruise behaviour information included the number of previous cruises, details of the participant’s first cruise vacation (geographic region and length of cruise), details of the participant’s most recent cruise vacation (time since last cruise, length of cruise, size and composition of travel party, and the geographic region), and details of the participant’s future cruise plans (if they had booked or were planning a cruise, length of the cruise, size and composition of the travel party, and geographic region).

4.2.2.2 Repertory Grid Analysis

The use of RGA is a powerful methodological strategy as it allows participants to express their own personally-relevant responses rather than imposing predetermined attributes that may not be relevant to all cruise tourists (Caldwell & Coshall, 2003). In a cruise-specific study, Park (2006) had to abandon RGA because he found that the data retrieved from his sample of non-customers (those who have never cruised, or haven’t cruised in the past five years) was unsuitable. Although Park (2006) found RGA unsuitable, his research methods differed quite substantially from this study. Park required participants to collect their own images, which created difficulties in conducting the triadic method because the images already represented the participants’ perceptions.
of cruise vacations. Additionally, his participants’ lack of cruise experience may have hindered their ability to provide adequate responses.

There are two key considerations involved in the application of RGA. The first is the selection of elements (Pike, 2007). Elements are the objects of interest in a given study from which constructs will be elicited. When selecting the elements to be studied, it is important for them to be homogeneous (drawn from the same category), representative of most aspects of the area under study, unambiguous (specific, simple, and readily understood), and relevant to the study population (Easterby-Smith, 1980; Easterby-Smith, Thorpe, & Holman, 1996). In the current study, two separate repertory grid exercises with different sets of elements were used to elicit participants’ constructs of cruise destination image. Although not essential when conducting RGA, the researcher preselected the elements in order to achieve comparability between repertory grids (Young, 1995).

In the first RGA exercise, the Cruise Destination RGA (CD-RGA), the elements of interest were the ten most appealing cruise destinations for US travellers (Table 4.1). Cruise destinations were selected as elements in order to elicit constructs of cruise destination image based on geographic cruise regions. This is similar to traditional destination image studies that use RGA (Coshall, 2000; Hankinson, 2004; Pike, 2003, 2007). The CD-RGA produced onshore attributes associated with the different geographical destinations, as well as onboard attributes related to the cruise ship in the setting of different cruise regions.

<table>
<thead>
<tr>
<th>Geographic Destination</th>
<th>Appeal*</th>
<th>Total Bed-days (2010)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rank</td>
<td>%</td>
</tr>
<tr>
<td>Caribbean/ Eastern Mexico</td>
<td>1</td>
<td>45%</td>
</tr>
<tr>
<td>Alaska</td>
<td>2</td>
<td>24%</td>
</tr>
<tr>
<td>Bahamas</td>
<td>3</td>
<td>23%</td>
</tr>
<tr>
<td>Hawaii</td>
<td>4</td>
<td>15%</td>
</tr>
<tr>
<td>Bermuda</td>
<td>(Tied)</td>
<td>15%</td>
</tr>
<tr>
<td>Mediterranean/ Greek Islands/ Turkey</td>
<td>6</td>
<td>14%</td>
</tr>
<tr>
<td>Europe</td>
<td>7</td>
<td>13%</td>
</tr>
<tr>
<td>Panama Canal (Trans Canal)</td>
<td>8</td>
<td>8%</td>
</tr>
<tr>
<td>West coast of Mexico</td>
<td>9</td>
<td>6%</td>
</tr>
<tr>
<td>Canada/ New England</td>
<td>(Tied)</td>
<td>6%</td>
</tr>
</tbody>
</table>

Sources: CLIA, 2011a, 2011b

*Participants (from the US) were asked, “Where do you plan to go on your next cruise vacation trip?” Results are based on those who reported that they probably/ definitely will cruise (CLIA, 2011b, p. 77)

In the second RGA exercise, the Vacation Type RGA (VT-RGA), the researcher chose nine common vacation types that compete with cruise vacations or that would provide a wide range of comparison and contrast with cruise vacations (Amadeus North America & CLIA, 2011; Boksberger & Laesser, 2009; Chandra & Menezes, 2001; CLIA, 2011b; Statistics Canada, 2006;
Tideswell & Faulkner, 1999; Wood, 2000; Yarnal, Kerstetter, & Yen, 2005). The ten elements in the VT-RGA were:

1. Cruise vacation;
2. All-inclusive resort;
3. Rail/ bus tour;
4. Amusement/ theme park;
5. Road trip/ RV;
6. City/ urban vacation;
7. Beach vacation;
8. Eco-tour;
9. Backpacking; and
10. Camping/ outdoors vacation.

Vacation types were selected as elements to elicit constructs of cruise destination image that focused on the unique aspects of the cruise ship and of cruising, relative to other types of vacations.

The second key consideration in the application of RGA is to elicit constructs (Pike, 2007). Kelly (1977) described a construct as a “…construed dimension, embodying both likeness and difference, [a] reference axis…”, specifically noting that “…constructs are personal affairs; regardless of the words he uses, each person does his own construing” (p. 361). More specifically, constructs are a bipolar discrimination used by individuals to perceive and interpret the differences and similarities between objects within a category and to indicate the terms used to describe those objects (Embacher & Buttle, 1989; Pike, 2003, 2007; Suto & Nadas, 2010; Young, 1995). The construct of a travel destination is the way that individuals perceive some destinations to be similar yet different from others based on destination attributes (pull factors), which for cruise vacations includes both onboard and onshore attributes.

Many studies use constructs of destination image that are sourced from previous research (Naoi, Airey, Iijima, & Niininen, 2006); however, eliciting constructs from participants provides a more accurate depiction of destination image from the tourists’ perspective (Young, 1995). It is also important that constructs are elicited from participants and not chosen by the researcher. This maintains flexibility and avoids the researcher imposing his/her views on the participant (Easterby-Smith, et al., 1996). The two most common ways of eliciting constructs using RGA are the triadic method (minimum context form) and the full context method (Hankinson, 2004). The triadic method involves presenting three elements written on cards (or displayed using images) and asking participants to indicate how any two of the three elements are similar to each other, yet different from the third. The full context form presents the participants with all elements at once and asks
them to describe ways in which groups are similar or dissimilar (Coshall, 2000; Hankinson, 2004; Pike, 2003, 2007).

The description of similarity is the construct statement and of dissimilarity is the contrast statement. This construct-contrast pair (Coshall, 2000)—also known as the polar descriptors (Hankinson, 2004)—defines the construct. It should be noted that the elicited construct-contrast pair does not necessarily consist of grammatical opposites. This is an advantage of RGA over semantic differential scales because individuals do not always perceive their environment in terms of grammatical opposites. Furthermore, constructs do not need to be factually correct, as decision-making is based on individual perceptions, not verifiable facts (Coshall, 2000; Hankinson, 2004).

The two separate RGA exercises in this study (CD-RGA and VT-RGA) followed the triadic method, using the minimum context form to elicit participants’ constructs of cruise destination image. Compared with the full context form in which all elements are presented at once (Embacher & Buttle, 1989), the triadic method provides greater structure and allows participants to generate more specific constructs by comparing a smaller number of elements at a given time.

In this study, there would be a total of 120 possible triad combinations in a complete test for each RGA exercise. To decrease the time required to complete each exercise, and to streamline the interview process to make it less taxing for participants, a reduced number of triads was desirable. Although there are no specific rules to determine the number of triads presented during an RGA exercise (Fransella & Bannister, 1977, as cited in Young, 1995), this study used a balanced incomplete block design for the CD-RGA. With ten elements, the CD-RGA required 30 triad combinations to ensure every possible pair of cruise destinations appeared exactly twice (see Table A.1 of Appendix A for the complete list of triads). For the CD-RGA, the numbers presented in the triads in Table A.1 correspond to the respective rankings of the ten most appealing cruise destinations presented previously (see Table 4.1). For example, the first triad (1, 2, 3) represents the Caribbean/ Eastern Mexico, Alaska, and the Bahamas, while the last triad (10, 5, 4) represents Canada/ New England, Bermuda, and Hawaii.

The VT-RGA followed the same balanced incomplete block design procedures that were used to determine the triad combinations in the CD-RGA; however, in this exercise, only the nine triad cards that contained the first element (cruise vacations) were presented to participants during interviews. This resulted in cruise vacations being present on all nine triad cards, while the

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10 Possible triad combinations in a complete test = n(n-1)(n-2)/6 (Burton & Nerlove, 1976). For each RGA exercise in this study: n = 10; [10(10-1)(10-2)/6] = 120

11 Triad combinations in a balanced incomplete block design (b) = (number of triads in a complete test)(λ/n-2), where λ represents the desired number of triads in which each pair of items will appear. Alternatively, the following formula can be used: b = 2n(n-1)/6, with the following conditions: rn = 3b and λ = 2r/n-1, where r = number of replications of each element (Burton & Nerlove, 1976). For the CD-RGA exercise in this study: n = 10, λ = 2; 2*10(10-1)/6 = 30.
remaining elements appeared twice each. Having an element appear more frequently or on every card is beneficial for studies with a particular focus (Coshall, 2000). Because this study is focused on cruise vacations, having triad cards that analyse three non-cruise vacations would be irrelevant to the research objectives.

When conducting RGA, the choice of the similar and dissimilar elements and the construct statements of how the elements were similar or dissimilar are entirely the choice of the participants. Additionally, whether or not participants are allowed to repeat construct statements is entirely the choice of the researcher. When repetition of statements was not allowed, Pike received a mean of 12 statements per participant (2007) and a mean of 22 statements per participant in a separate study (2003). In contrast, Young (1995) received a mean of 109 statements per participant in a study that allowed repetition. During the initial interviews of this study, participants were encouraged not to repeat construct statements in order to keep data at a manageable level; however, the first participant continued to repeat statements and, when reminded to try to provide only new statements, the flow of the interview was disrupted as the participant spent time trying to recall previous statements in an attempt not to repeat them. Therefore, in subsequent interviews there was no strict adherence to participants repeating construct statements. This saved time, as many statements differed only slightly and would be grouped together during analysis and for use at later stages of this study. As noted by Young (1995), many of the apparently different constructs are essentially variations of each other and can be seen as synonyms for a given construct. For example, the first part of the basic construct hot—cold was described using similar weather related descriptions such as warm, hot, humid, and scorching.

For the CD-RGA, participants were presented cards with three cruise destinations printed on the front (e.g., Figure 4.1) and verbally asked the question, “If you were considering a cruise vacation, in what important ways are two of these cruise destinations alike, yet different from the third?” (Adapted from Pike, 2007).

Participants were encouraged to continue listing ways in which the destinations were similar and dissimilar, with probing questions used when participants had difficulty generating further constructs. Once the participant could no longer provide new statements for a given triad, the next card was presented and the previous steps were repeated. Interviews were concluded when participants reached a point where no new statements could be generated (Coshall, 2000). Because this point was reached in both of Pike’s studies (2003, 2007) after a mean of 11 triads per participant, a variation on the procedure used in previous studies (Young, 1995) was introduced. To ensure that all triad combinations were presented multiple times, participant number 1 began with
the first triad and continued in order, with subsequent participants picking up where the previous participant concluded. A mean of ten triad cards per participant was presented during the CD-RGA.

**Figure 4.1 Example of CD-RGA Triad Card (Card 1)**

| Caribbean/ Eastern Mexico | Alaska | Bahamas |

For the VT-RGA, participants were presented cards with three vacation types printed on the front (e.g., Figure 4.2) and verbally asked the question, “If you were considering a vacation, in what important ways are two of these vacation types alike, yet different from the third?” The same steps were followed as the CD-RGA with the exception that each participant was shown all nine of the vacation-type triad cards in order.

**Figure 4.2 Example of VT-RGA Triad Card (Card 1)**

| Cruise vacation | All-inclusive resort | Rail/ bus tour |

During both RGA exercises the researcher completed a repertory grid, examples of which can be found in Tables A.2 (cruise destination) and A.3 (vacation type) of Appendix A. Completed repertory grids display the three elements of the triad (indicated by circles), the two similar elements (circles crossed out), the dissimilar element (circle left open), the construct of the similar elements, and the contrasting construct of the dissimilar destination where applicable.

Participants were encouraged, but not required, to provide bipolar construct-contrast statements, as it is possible to elicit destination images using unipolar responses that focus on the construct statement alone. For example, a bipolar statement for weather could be *hot—cold*, while the unipolar statement could be *hot*, implying the opposite being ‘cold’. This is possible because constructs are bipolar in nature; by stating what something is, one is also stating what it is not (Young, 1995); however, the contrasting statement is not always obvious, as a construct-contrast pair does not necessarily consist of grammatical opposites (Coshall, 2000; Hankinson, 2004).
Additionally, it has been demonstrated that it is more difficult and time-consuming to elicit the contrasting statement than it is to elicit the initial construct statement (Harrison & Sarre, 1975; Young, 1995). Therefore, given that two separate RGA exercises—along with open-ended questions and multiple-choice questions—it was necessary to allow participants to provide unipolar responses in order to keep interviews to a reasonable length. Furthermore, bipolar statements were not necessary for developing the quantitative measurement scale used in Stages 2 and 3.

There was only one incidence (out of 200 cards shown) of a participant being unable to differentiate between the elements presented on a triad card during the CD-RGA and there was no incidence (out of 180 cards shown) during the VT-RGA. This demonstrated the ability of participants to differentiate between destinations and it validated the diversity of the elements chosen for the study. The diversity in elements is important for eliciting a wide range of constructs because very similar elements will produce fine distinctions, while less similar elements will produce more broad distinctions (Pearce, 1982).

4.2.2.3 Open-ended Questions

In addition to the two RGA exercises, open-ended questions were asked to further elicit destination images of cruise vacations in general, as well as imagery specifically related to both the onboard and onshore elements of cruise vacations. Echtner and Ritchie (1993) developed a series of three open-ended questions that are designed to measure all dimensions of destination image (functional holistic, psychological holistic, and unique components), from which the following three open-ended questions were adapted for cruise vacations, with the addition of a fourth:

1. What images or characteristics come to mind when you think of a cruise vacation?
2. How would you describe the atmosphere or mood that you would expect to experience on a cruise vacation?
3. Please list any distinctive or unique tourist attractions or features of a cruise vacation, for example, how does a cruise vacation differ from other types of vacation?
4. When you are thinking of taking a cruise vacation, what are the things that most influence your decision about which cruise to take?

Participants were encouraged to provide as many answers as possible to each question. Once a participant was unable to provide any further responses they were asked to answer the question specifically to the onboard and onshore elements of a cruise vacation. If the participant’s initial responses tended to focus on onshore elements then they were first asked to specifically to think about onboard elements before returning to further onshore elements (and vice versa) in an attempt to elicit additional responses. The use of multiple questions that were designed to target specific areas of destination image led to fewer responses being repeated during this exercise.
compared to the RGA exercises where participants were asked the same question of each triad card they were presented. Additionally, the open-ended questions elicited a greater number of unique responses as participants provided more detailed responses.

4.2.3 Data Analysis

The large list of unique construct statements needed to be reduced in order to be included in a structured questionnaire. This would make Stage 1 data useful to subsequent research in Stages 2 and 3. It would also reduce the time required for participants to complete an online survey that contained, in a single survey instrument, cruise destination attribute (pull factor) questions as well as socio-demographic, cruise travel behaviour, and travel motive (push factor) questions.

Construct statements elicited during Stage 1 and the frequency with which participants reported them was recorded in an Excel spreadsheet. The frequency count spreadsheet listed all construct statements provided by participants during Stage 1 and identified whether construct statements were provided during the CD-RGA, the VT-RGA, or any one of the four open-ended questions. The total number of times that participants provided an individual construct statement was also recorded. After the completion of an interview, the construct statements were entered into the frequency count spreadsheet under general categories to assist in future categorization (e.g., physiography, tourism superstructure, activities, social, intangible, convenience/accessibility, safety, culture/history, price/value). Statements related to onboard and onshore elements were grouped separately under similar category titles. These general categories were sourced from the related literature (Crouch & Ritchie, 1999; Dann, 1977; Echtner & Ritchie, 1991; Uysal & Jurowski, 1994).

4.3 Stage 1 Results and Discussion

The results and discussion of the different sections of Stage 1 are presented in the following order:

1. Cruise destination RGA;
2. Vacation type RGA;
3. Open-ended questions;
4. Overall construct elicitation; and
5. Reducing the overall number of constructs elicited.

4.3.1 Cruise Destination Repertory Grid Analysis

During the cruise destination repertory grid procedure (CD-RGA), 30 triad cards were used, with each card being presented 6–8 times during the study. This resulted in each cruise destination appearing 54–61 times. Table 4.2 displays the number of times that participants perceived a pair of
repertory grid elements (i.e., cruise destinations) that were similar and different, using the triadic method. Two destinations are chosen as similar (different) identifies cruise regions that participants perceive to have similar (dissimilar) offerings based on destination attributes. This potentially identifies cruise regions that pose the greatest (weakest) competition for one another from the perspective of the cruise passenger.

The purpose of RGA was to understand how individuals make sense of events in their lives by eliciting personal constructs. These constructs represent the attributes that underlie individual perceptions of the elements, expressed in terms of similar or contrasting statements (Kelly, 1977). There were a total of 988 construct statements elicited from the 20 participants during the CD-RGA with a mean of 49.40 per participant. Participants averaged ten triad cards per CD-RGA exercise, and a mean of 4.94 constructs per card. Developing a quantitative questionnaire from this study required a focus on the unique constructs that were elicited, thereby, excluding repetitions of constructs by an individual or across the study sample. A total of 481 unique constructs were elicited during the CD-RGA. A description of the general constructs, as well as specific examples of construct statements that were elicited from the CD-RGA, has been combined with those elicited during the VT-RGA and the open-ended questions and is presented in Section 4.3.5.

<table>
<thead>
<tr>
<th>Table 4.2 Cruise Destinations Perceived to be Similar/ Different</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Caribbean/ E. Mexico</td>
</tr>
<tr>
<td>2. Alaska</td>
</tr>
<tr>
<td>3. Bahamas</td>
</tr>
<tr>
<td>4. Hawaii</td>
</tr>
<tr>
<td>5. Bermuda</td>
</tr>
<tr>
<td>6. Mediterranean</td>
</tr>
<tr>
<td>7. Europe</td>
</tr>
<tr>
<td>8. Panama Canal</td>
</tr>
<tr>
<td>9. West coast of Mexico</td>
</tr>
<tr>
<td>10. Canada/ New England</td>
</tr>
<tr>
<td>Sum being perceived different</td>
</tr>
</tbody>
</table>

4.3.2 VACATION TYPE REPERTORY GRID ANALYSIS

Each of the 20 participants was shown all nine triad cards (one card at a time) during the vacation type repertory grid procedure (VT-RGA). This resulted in each vacation type being presented 40 times throughout the study; with the exception of cruise vacations, which appeared
180 times (being present on every card). Consequently, the triad cards did not contain all possible combinations of non-cruise vacation types. Due to this, an analysis of two non-cruise vacation types is not possible because results can only be analysed between cruising and another vacation type. The missing pairs of non-cruise vacation types are represented in Table 4.3 by the cells containing a dash (\(-\)) instead of a numerical value (e.g., the elements ‘Rail/ Bus Tour’ and ‘Amusement/ Theme Park’ were never presented on the same triad card).

Table 4.3 displays the total number of times that participants perceived a pair of repertory grid elements (i.e., vacation types) that were similar and different using the triadic method. Cruise vacations were most commonly perceived to be similar to all-inclusive resorts and least similar to camping/ outdoors vacations and amusement/ theme parks. There were a total of 882 total construct statements elicited from the 20 participants during the VT-RGA, with a mean of 44.10 per participant. All participants completed the nine vacation type triad cards and produced a mean of 4.90 constructs per card. There were 563 unique constructs elicited from the VT-RGA exercise that could be used to develop a quantitative questionnaire, which is slightly more than the number elicited from the CD-RGA.

**Table 4.3 Vacation Types Perceived to be Similar/ Different**

<table>
<thead>
<tr>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived to be Similar</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cruise Vacation</td>
<td>-</td>
<td>32</td>
<td>9</td>
<td>4</td>
<td>13</td>
<td>6</td>
<td>18</td>
<td>9</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>All-inclusive Resort</td>
<td>8</td>
<td>-</td>
<td>1</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Rail/ Bus Tour</td>
<td>31</td>
<td>19</td>
<td>-</td>
<td>13</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Amusement/ Theme Park</td>
<td>36</td>
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</tr>
<tr>
<td>Road Trip/ RV</td>
<td>27</td>
<td>-</td>
<td>7</td>
<td>-</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>City/ Urban Vacation</td>
<td>34</td>
<td>-</td>
<td>7</td>
<td>-</td>
<td>-</td>
<td>11</td>
<td>11</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Beach Vacation</td>
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<td>-</td>
<td>17</td>
<td>-</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Eco-tour</td>
<td>31</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>9</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>17</td>
<td>-</td>
</tr>
<tr>
<td>Backpacking</td>
<td>30</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>18</td>
<td>-</td>
<td>-</td>
<td>16</td>
<td>-</td>
</tr>
<tr>
<td>Camping/ Outdoors Vacation</td>
<td>40</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Perceived to be Different
4.3.3 Open-ended Questions

There were a total of 1,110 total construct statements\(^{12}\) elicited from the 20 participants through the open-ended questions with a mean of 55.50 per participant. For the purpose of developing a quantitative questionnaire, there were 781 unique constructs elicited. The open-ended questions produced more unique construct statements than the CD-RGA or the VT-RGA.

4.3.4 Summary of Construct Statements Elicited from Stage 1

A total of 2,980 construct statements were elicited during the Stage 1 interviews, of which 1,825 were unique statements. These statements consisted of a mix of bipolar and unipolar statements from the two repertory grid exercises, as well as unipolar statements from the four open-ended questions. Table 4.4 summarizes the data that was collected during the three exercises, and displays the total number of construct statements elicited, before accounting for repeated answers and the number of unique statements obtained by subtracting the number of statements repeated across the sample from the total number of construct statements.

The above table shows that the open-ended questions produced a greater number of construct statements than the CD-RGA or the VT-RGA. Of these, an even larger proportion were unique construct statements. This does not necessarily reflect the relative effectiveness of this research method in eliciting constructs from participants because other factors must be taken into consideration. These include the order in which the three exercises were presented to the participants, the time required to complete each exercise, and the amount of input required by the researcher to keep participants producing more statements (e.g., using probing questions). Furthermore, many unique statements were similar and could be seen as variations or synonyms of a given construct (Young, 1995). Open-ended questions proved to be better at eliciting different wordings of constructs, resulting in a larger number of unique constructs, although not necessarily a greater variety of construct content. This became more evident in the process of reducing the total number of construct statements for use in a quantitative questionnaire.

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\(^{12}\) Although participants’ responses to the open-ended questions were not provided in the form of a construct, they will be referred to as such for simplicity in order to combine them with constructs elicited during the two RGA exercises and to refer to the responses as a whole.
<table>
<thead>
<tr>
<th>Cruise Destination RGA</th>
<th>Mean</th>
<th>St. Dev.</th>
<th>Min</th>
<th>Max</th>
<th>Total</th>
<th>% Of Combined Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total construct statements</td>
<td>49.40</td>
<td>14.57</td>
<td>20</td>
<td>75</td>
<td>988</td>
<td>33.15%</td>
</tr>
<tr>
<td>Unique construct statements</td>
<td>24.05</td>
<td>7.07</td>
<td>13</td>
<td>37</td>
<td>481</td>
<td>26.36%</td>
</tr>
<tr>
<td>Vacation Type RGA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total construct statements</td>
<td>44.10</td>
<td>15.39</td>
<td>18</td>
<td>77</td>
<td>882</td>
<td>29.60%</td>
</tr>
<tr>
<td>Unique construct statements</td>
<td>28.15</td>
<td>11.00</td>
<td>9</td>
<td>54</td>
<td>563</td>
<td>30.08%</td>
</tr>
<tr>
<td>Open-ended Questions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total construct statements</td>
<td>55.50</td>
<td>17.36</td>
<td>25</td>
<td>84</td>
<td>1,110</td>
<td>37.25%</td>
</tr>
<tr>
<td>Unique construct statements</td>
<td>39.05</td>
<td>14.86</td>
<td>13</td>
<td>67</td>
<td>781</td>
<td>42.79%</td>
</tr>
<tr>
<td>Combined Totals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total construct statements</td>
<td>149.00</td>
<td>31.89</td>
<td>98</td>
<td>206</td>
<td>2,980</td>
<td>100%</td>
</tr>
<tr>
<td>Unique construct statements</td>
<td>91.25</td>
<td>24.17</td>
<td>48</td>
<td>139</td>
<td>1,825</td>
<td>100%</td>
</tr>
</tbody>
</table>

### 4.3.5 REDUCING THE NUMBER OF CONSTRUCT STATEMENTS

A total of 1,825 unique construct statements were elicited during the interviews; however, many of these statements were similar and, as previously mentioned, could be read as synonyms for a given construct. These unique statements were reduced through several steps to develop the initial sample of items for developing the CDAS (Figure 4.3). Similar procedures for developing attribute lists were followed by Caldwell and Coshall (2003), Pike (2003, 2007), and Young (1995).

**Figure 4.3 Refinements of the Cruise Destination Attributes**

The first step in refining the results from Stage 1 required the reduction of the quantity of total unique statements. This item set consisted of all statements provided by participants in Stage 1, with duplicates removed \((n = 1,825)\). Unique statements that were similar in content or varied only slightly in wording were grouped into construct categories by the rearrangement and grouping of statements using a spreadsheet \((n = 296)\). A frequency count of the number of participants providing each statement was calculated and entered into the spreadsheet. Participants who repeated statements multiple times were only entered once for that statement. The sum of the frequency counts for all statements within a construct category was then calculated to identify the most commonly reported construct categories. Construct categories with an overall frequency count of seven or greater were extracted and analysed, based on their construct classifications.

Table 4.5 presents the main construct categories and attribute labels for onboard and onshore statements. The construct categories and attribute labels presented in Table 4.5 represent the most common attributes that contribute to the participants’ perceptions of cruise destination...
image. In relation to the objectives of this study, the items in Table 4.5 represent the onboard and onshore attributes that cruise tourists use to compare and differentiate between cruise destinations (Research Objective 1).

There are several different construct classifications that RGA may elicit (Fransella & Bannister, 1977, as cited in Young, 1995). These include: situational constructs that are related to spatial characteristics or features of a destination (e.g., coastal cruises/ transoceanic cruises); permeable constructs which are open-ended or applicable to the majority of elements (e.g., warmer/colder); impermeable constructs which are overly restrictive or relevant only to some elements (e.g., tropical beaches/no tropical beaches); vague constructs with unclear meanings (e.g., easier/less easy); and evaluative constructs that appraise or judge a destination’s attributes (e.g., more interesting/more boring).

Of these classifications, evaluative constructs are the most important to RGA studies (Young, 1995), whereas constructs that are situational, extremely permeable, extremely impermeable, and vague are not as effective in comparing elements (Easterby-Smith, 1980; Easterby-Smith, et al., 1996; Young, 1995). Although the nature of RGA leads participants to discriminate between elements on a descriptive basis more frequently than on an evaluative basis, a sizable number of useful statements was obtained by using multiple data collection methods, as suggested by Sampson (1972). After removing construct categories with frequency counts of less than seven and those that were not useful, 105 attribute labels remained and were combined with those found in the related literature (n = 75). The researcher and his supervisors examined the combined items to remove any redundancies. Echtner and Ritchie (1993) and Hung and Petrick (2011b) followed similar methods by using a panel of judges. A total of 123 attribute items were retained for the CDAS Pilot Study in Stage 2. These items consisted of 43 onboard attributes, 49 onshore attributes, 26 attributes related to cruising as a vacation type, and five items related to the relative importance of onboard, onshore, and the cost/value aspects of cruising. The 123 items were then rewritten to fit the context of the questions for the questionnaire.
<table>
<thead>
<tr>
<th>Onboard Related Statements</th>
<th>Onshore Related Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physiography</strong></td>
<td><strong>Physiography</strong></td>
</tr>
<tr>
<td>Climate</td>
<td>General statements about the climate</td>
</tr>
<tr>
<td>Impact of weather on use of ship facilities</td>
<td>Importance of the weather</td>
</tr>
<tr>
<td>Scenery from ship</td>
<td>Variations of warm vs. cooler climate</td>
</tr>
<tr>
<td><strong>Tourism Superstructure (of the ship)</strong></td>
<td>General statements about the geography</td>
</tr>
<tr>
<td>Accommodation (general)</td>
<td>Statements related to island destinations</td>
</tr>
<tr>
<td>Accommodation facilities and amenities</td>
<td>Geographic location/ ease of getting to the destination</td>
</tr>
<tr>
<td>Cabin size</td>
<td>Statements about specific destinations</td>
</tr>
<tr>
<td>Cabin types</td>
<td>References to coastal waters</td>
</tr>
<tr>
<td>Food services</td>
<td>Scenery and landscape</td>
</tr>
<tr>
<td>Variety of food/ restaurants</td>
<td>Diversity/ variety of landscape and scenery</td>
</tr>
<tr>
<td>Availability of food/ drink (at any time)</td>
<td>References to the water/ ocean</td>
</tr>
<tr>
<td>Types of food/ restaurants</td>
<td>Warmer vs. colder waters</td>
</tr>
<tr>
<td>Quantity of food</td>
<td>Rough vs. calm seas</td>
</tr>
<tr>
<td>Quality of food/ restaurants</td>
<td>Presence of other boats/ ship traffic</td>
</tr>
<tr>
<td>Specific cruise line/ loyalty programs</td>
<td>Beaches</td>
</tr>
<tr>
<td>Ship quality</td>
<td>Time of year/ season</td>
</tr>
<tr>
<td>Ship size</td>
<td>Itinerary/ ports of call</td>
</tr>
<tr>
<td>Ship characteristics</td>
<td>Unique destinations</td>
</tr>
<tr>
<td>Services</td>
<td>Exotic destinations</td>
</tr>
<tr>
<td>Type of cruise (e.g., river, repositioning, etc.)</td>
<td>Interesting destinations</td>
</tr>
<tr>
<td>Luxury</td>
<td>Limited experience of destinations (due to time constraints)</td>
</tr>
<tr>
<td>Comfort</td>
<td>Destination/ port of call variety</td>
</tr>
<tr>
<td>Information and booking</td>
<td>Wildlife</td>
</tr>
<tr>
<td><strong>Activities/ Special Events</strong></td>
<td><strong>Tourism Superstructure (of the ports/ cities)</strong></td>
</tr>
<tr>
<td>Onboard entertainment</td>
<td>Type of destinations (e.g., city, beach town, rural, etc.)</td>
</tr>
<tr>
<td>Variety of activities</td>
<td>Size of ports</td>
</tr>
<tr>
<td>Nightlife/ evening activities</td>
<td>Size of port cities/ towns</td>
</tr>
<tr>
<td>Activities for kids</td>
<td>Accommodation facilities (for before/ after cruise)</td>
</tr>
<tr>
<td>Onboard parties</td>
<td>Well-known/ popular destinations</td>
</tr>
<tr>
<td>Water-based activities</td>
<td>Major attractions</td>
</tr>
<tr>
<td>Themed cruises</td>
<td>Level of destination development</td>
</tr>
<tr>
<td><strong>Social Aspects</strong></td>
<td>Food services</td>
</tr>
<tr>
<td>Staff</td>
<td>Transportation</td>
</tr>
<tr>
<td>Meeting people</td>
<td>Seasonal economies</td>
</tr>
<tr>
<td>Age of other passengers</td>
<td>Currency considerations</td>
</tr>
<tr>
<td>Number/ presence of children onboard</td>
<td><strong>Activities/ Special Events</strong></td>
</tr>
<tr>
<td>Mood/ demeanour of others</td>
<td>Water-based activities</td>
</tr>
<tr>
<td>Socializing</td>
<td>Beach and sun related activities</td>
</tr>
<tr>
<td>Activity levels</td>
<td>Tours and excursions (guided and non-guided)</td>
</tr>
<tr>
<td>Variety of people</td>
<td>Shopping</td>
</tr>
<tr>
<td>Number of people</td>
<td>Variety of sightseeing opportunities</td>
</tr>
<tr>
<td>Size of travel party</td>
<td>Entertainment</td>
</tr>
<tr>
<td>Group dynamics</td>
<td>Outdoors/ adventure activities</td>
</tr>
<tr>
<td>Identifying with target market of specific cruise</td>
<td>Variety of activities</td>
</tr>
<tr>
<td><strong>Intangible</strong></td>
<td>Beach vacations compared to other vacation types</td>
</tr>
<tr>
<td>Relaxing</td>
<td><strong>Social Aspects</strong></td>
</tr>
<tr>
<td>Stress relieving</td>
<td>Interaction with local businesses</td>
</tr>
<tr>
<td>Feeling of confinement</td>
<td>Friendliness of locals</td>
</tr>
<tr>
<td>Escape</td>
<td>Variety of people (locals and other tourists)</td>
</tr>
<tr>
<td>Atmosphere/ mood</td>
<td>Meeting new people</td>
</tr>
<tr>
<td>Onboard environment</td>
<td>Feel of overcrowding (size of local population/ number of tourists)</td>
</tr>
<tr>
<td>Personal feelings/ emotions</td>
<td><strong>Intangible</strong></td>
</tr>
<tr>
<td>Expectations</td>
<td>Relaxing/ laid back atmosphere</td>
</tr>
<tr>
<td>Novelty</td>
<td>Busyness of ports/ destinations</td>
</tr>
<tr>
<td>Environment</td>
<td>Process of getting off the boat</td>
</tr>
<tr>
<td>Excitement</td>
<td>Touristy feeling</td>
</tr>
<tr>
<td>Fun vs. boring</td>
<td>New destinations vs. repeat visits</td>
</tr>
<tr>
<td><strong>Convenience/ Accessibility</strong></td>
<td>Personal mood/ feeling associated with the destinations</td>
</tr>
<tr>
<td>Service</td>
<td>General atmosphere</td>
</tr>
<tr>
<td>Cash free</td>
<td></td>
</tr>
</tbody>
</table>
As with similar studies (Caldwell & Coshall, 2003; Naoi, et al., 2006; Pike, 2003; Young, 1995), the methods that were used to resolve the total number of statements to common themes and then to attribute labels can be criticized as subjective. The resulting attribute labels are not exactly those elicited from participants but rather an amalgamation of responses, which relied on the researcher’s discretion. However, avoiding total subjectivity in this process would require using the exact terms given by participants with no further categorization, resulting in an extremely large survey instrument: numerous items would measure the same general construct or items would be relevant only to a small subset of the population under study (Naoi, et al., 2006). To find participants who would be willing to complete such a questionnaire would slow the data collection process and the large volume of data collected would hinder data analysis and prevent any useful conclusions being drawn. The procedures followed in this study attempted to avoid as much subjectivity as possible by first allowing participants to present constructs from their own point of view during the Stage 1 interviews. Grouped responses only contained items that clearly fit the categories. Furthermore, the unavoidable subjectivity involved in the reduction of data was not a significant issue for this thesis because its ultimate goal was to develop large item sets of broad statements that represent a variety of cruise destination attributes.

### 4.4 Summary of Findings

The purpose of the Stage 1 study was to identify the onboard and onshore attributes that cruise tourists use to compare and differentiate between cruise destinations (Research Objective 1). This was accomplished by eliciting participants’ personal constructs of cruise destination image
with the use of two separate RGA exercises and four open-ended questions, specifically designed to measure all aspects of destination image. The first repertory grid exercise focused on eliciting onshore attributes related to popular cruise destinations, as well as onboard attributes of the cruise ship in the setting of different cruise regions. The second repertory grid exercise focused on eliciting attributes related to the unique aspects of the cruise ship and cruising relative to other types of vacations. The four open-ended questions focused on eliciting onboard and onshore attributes related to the functional holistic, psychological holistic, and unique components of cruising and cruise destinations, as well as attributes that influence decision-making when booking a cruise vacation.

One-on-one interviews were conducted with 20 participants who had previously been on at least one cruise vacation. The two repertory grid exercises and open-ended questions produced a total of 2,980 construct statements related to cruising and cruise destinations, of which 1,825 were unique statements (statements not repeated by the participant or by others in the study). Examples of some of the most commonly reported onboard attributes included the ship’s features (e.g., size of the ship, accommodation, variety and types of food and restaurants), onboard activities (e.g., entertainment, themed cruises, nightlife), social aspects (e.g., staff interaction, meeting new people, variety of people), and the convenience provided by cruise vacations (e.g., having everything available in one place, visiting multiple places while staying in the same room every night, having everything planned for you). Examples of some of the most commonly reported onshore attributes included the physiography (e.g., weather/ climate, geography, wildlife), tourism superstructure (e.g., size of the ports and port city, major attractions, infrastructure), activities available (e.g., water-based, tours and excursions, entertainment), and local culture and history (e.g., local history, cultural attractions, experiencing different cultures than one’s own).

The unique statements elicited in the study were reduced on a basis of common themes and topics to a list of 107 items. The items elicited from the interviews were combined with items commonly found in the literature, resulting in a set of 123 items. This set included 43 onboard attributes, 49 onshore attributes, 26 attributes related to cruising as a vacation type, and five items related to the relative importance of onboard, onshore, and the cost/ value aspects of cruising. These items formed the basis of the online questionnaire that was used in the Stage 2 study to test the instrument’s ability to determine the relative importance of onboard and onshore attributes in tourists’ choice of a specific cruise.

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CHAPTER 5: CDAS PILOT STUDY — STAGE 2

5.1 Introduction to Chapter 5

The first stage of research generated an initial set of cruise destination attributes, including those related to the onboard and onshore aspects of cruise vacations. These were generated as personal constructs using cruise destination image exercises before being adapted for a quantitative questionnaire in this stage of research. This Stage 2 questionnaire focused on the onboard and onshore attributes, as well as the attributes of cruising as a vacation type, that influence tourists’ decisions to take a specific cruise. Stage 2 was a pilot study to reduce this list of attributes to a number suitable for inclusion in the survey instrument that would be used in Stage 3. It also tested the instrument’s ability to determine the relative importance of onboard and onshore attributes in tourists’ choices for a specific cruise. This chapter presents the research method, results, and initial discussion of the results for Stage 2. As this was conducted as a pilot study, the major implications and findings that relate to cruise destination attributes and the attributes of cruising as a vacation type are presented with the Stage 3 results in Chapter 6. The more general implications of the results obtained in this study are presented in the final Chapter 7.

5.2 Stage 2 Method

An online survey was created out of the results from Stage 1 and was distributed to potential participants through emails containing information about the study and a link to the survey. An online survey was chosen as the most effective method to access a large and varied participant base. It improved the potential scope and generalisations from the study that could be related to the extant literature. The survey’s responses were analysed using descriptive statistics and factor analysis.

5.2.1 Stage 2 Participants and Procedure

This CDAS pilot study sought a sample that would be similar to the target market of the Cruise Lines International Association (CLIA, 2011b): 25 years or older with an annual household income of at least $40,000. The survey focused principally on North American tourists who had been on at least one cruise vacation or were in the process of booking an upcoming cruise vacation; however, the survey was open to participants from any country. Cruise vacations in this study were defined as overnight (minimum 1 night) leisure travel aboard a commercial cruise line. To conduct factor analyses on the cruise destination attributes (onshore attributes, onboard attributes, and attributes of cruising as a vacation type), a participant to item ratio of 5:1 or greater was sought (Osborne & Costello, 2004). The Onshore attribute item set was the largest, containing 49 items; therefore, a minimum of 245 participants was desired. Out of 559 initiated surveys, a total of 344
participants completed the online survey during June and July 2014 (61.5% completion rate). Emails containing a description of the study and a link to the online survey were sent to potential participants. These participants were accessed through mailing lists from the researcher’s personal contacts in the cruise and travel industry, as well as paid email distributions through marketing companies. Stage 1 participants were excluded from this, and further, stages of research.

5.2.1.1 Socio-demographic and Cruise Travel Behaviour Variables

A total of 344 surveys were completed, taking an average of 21 minutes to complete. There were slightly more male than female participants (52% to 48%), with a combined average age of 58. The majority of participants were from the United States (80%) and Canada (15%). Participants had a high level of education, with 81% having a college, graduate, or technical-trade degree. Participants were most commonly employed full-time (47%) or were retired (37%); 46% had an annual household income greater than $100,000. Many participants were familiar with cruising as 83% had been on at least one cruise vacation. The majority of those who had previously been on a cruise vacation had been on multiple cruises. Over half had taken three or more cruises and 31% had taken six or more.

The profiles of participants from Stage 2 were comparable to those from previous CLIA market profile studies in terms of socio-demographic and cruise travel behaviour variables (CLIA, 2011b, 2015b), and can thus be considered representative of the North American cruise market. The most notable differences between CLIA studies and the CDAS pilot study was that participants from the current study tended to be older (60+), had higher incomes, and had been on more previous cruises. A complete side-by-side summary of the socio-demographic and cruise travel behaviour questions for all three stages of this thesis can be found in Tables A.4 and A.5 in Appendix A.

When the responses regarding participants’ first cruise vacation, the most recent, and the next planned cruise vacations were compared, two trends were identified that warrants future research but are beyond the scope of this study. These trends relate to changes in travel behaviour as travellers gain cruise experience. The first trend was a decrease in participants who reported visiting certain destinations—particularly the Caribbean and Alaska—over the three stages (first cruise–most recent cruise–next cruise). This may indicate a change of preference for certain cruise regions as travellers gain more cruise experience. The second trend was a decrease in shorter cruise lengths (under nine days) and an increase in longer cruises (over nine days) from first to most recent cruise, and from most recent to next planned cruise. This suggests that cruise travellers book longer cruises as they gain cruise experience.
5.2.2 **Stage 2 Survey Instrument**

The CDAS pilot study instrument was an online questionnaire developed using Qualtrics online survey software. The first part of the questionnaire contained 19 multiple-choice questions about socio-demographics and cruise travel behaviour, similar to those in the Stage 1 study. The main component of the questionnaire consisted of four item sets that related to onboard attributes, onshore attributes, cruising as a vacation type, and the relative importance between onboard, onshore, and cost/ value aspects of cruising. These item sets were rated using a seven-point scale:

1. Not at all important;
2. Very unimportant;
3. Somewhat unimportant;
4. Neither important nor unimportant;
5. Somewhat important;
6. Very important; and
7. Extremely important.

Open-ended questions were also included in order to gain further insights or to provide answers not possible in the structured response options.

Cruise destination attributes in the CDAS pilot study were derived from the Stage 1 study detailed in the previous chapter. Cruise destination attributes were split into four item sets of questions: onboard attributes (43 items); onshore attributes (49 items); the relative importance of onboard, onshore, and the cost/ value aspects of cruising (5 items); and cruising as a vacation type (26 items). Onboard attributes consisted of the tangible and intangible aspects specific to a cruise ship or to cruise travel in general (e.g., onboard facilities and amenities, visiting multiple destinations while staying in the same room every night, meeting new people), while onshore attributes consisted of the tangible and intangible aspects specific to cruise vacation ports of call (e.g., local culture and history, tourist attractions, various activities). The final item set of questions related to the relative importance of onboard, onshore, and cost/ value aspects. These questions were based on a similar question from CLIA market profile studies (CLIA, 2011b, 2015). The CLIA question was described in detail in Section 2.5.4 of the literature review. The final item set was related to the unique aspects of cruising as a vacation type (e.g., having everything provided in one place, pre-set schedules, sampling destinations for future visits). The complete Stage 2 questionnaire is reproduced in Appendix C.

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13 “Many elements are considered when planning a vacation; the destination, the property or ship, the facilities, the experience, and the cost. Please divide the percentage that each factor plays in your selection of a cruise” (CLIA, 2011b, p. 103)
5.2.3 Stage 2 Data Analysis

Exploratory factor analysis (EFA) and, specifically, principal axis factoring (PAF) was conducted to identify underlying factor groupings of onboard and onshore attributes, as well as the attributes of cruising as a vacation type. This enabled the CDAS to be further developed by identifying items for removal. Cronbach’s alpha was calculated to determine the internal consistency of the items.

Using IBM’s Statistical Package for the Social Sciences (SPSS, Version 22), PAF with varimax rotations were performed on each of the three item sets from the CDAS pilot study (onboard attributes, onshore attributes, and attributes of cruising as a vacation type). The sample size \( n = 344 \) resulted in factor analysis participant to item ratios of 8:1 for onboard attributes (43 items), 7:1 for onshore attributes (49 items), and 13:1 for cruising as a vacation type (26 items). Although a ratio of 10:1 or greater is preferable, ratios of less are common. In a study that analysed more than 1,700 publications listed on PsycINFO that conducted EFA, Costello and Osborne (2005) found that 63.2% of the studies used a participant to item ratio of 10:1 or less.

Initial factor analyses followed Kaiser’s (1960) rule for determining the number of factors, based on those with eigenvalues greater than or equal to one; however, for the onboard and onshore attribute item sets, scree tests and further analysis suggested that fewer factors would be more appropriate. Less than three strong, non-cross-loading items was evidence of weak factors and required further analysis by manually entering fewer factors to be extracted (Costello & Osborne, 2005). Individual items were considered for removal based on their significantly low factor loadings (< .40), cross-loading strongly on multiple factors (> .40), having relatively-low mean scores of importance for deciding on a cruise, and face validity.

Reliability was measured by using Cronbach’s alpha for each factor from the three item sets in the CDAS pilot study. Cronbach’s (1951) coefficient alpha is one of the most commonly used measures of internal consistency for tests or scales. Cronbach’s alpha examines the inter-relatedness of a set of items to determine the extent to which the items measure the intended concept or construct. Alpha is a correlation coefficient between 0 and 1, with values ranging from 0.70 to 0.95 being generally acceptable levels; however, values greater than 0.90 may indicate the inclusion of redundant items that test the same question (Tavakol & Dennick, 2011).

5.3 Stage 2 Results and Discussion

The results and discussion of the different sections of Stage 2 are presented as follows:

1. Onboard attributes;
2. Onshore attributes;
3. Attributes of cruising as a vacation type;
4. The relative importance of onboard, onshore, and cost/value aspects of cruising; and
5. The relative importance of onboard and onshore attributes.

5.3.1 Onboard Attributes

The initial factor analysis of the onboard attribute item set suggested that there were five factors, based on eigenvalues that were greater than 1; however, the scree test suggested that there were three factors. Further inspection also suggested that fewer than five factors were appropriate because only two items from the fifth factor loaded greater than .400 without cross-loading. After removing numerous consecutive items and rerunning PAF with varimax rotation, there were still factor groupings that contained several cross-loading items. An oblique rotation (promax) with the same number of factors was conducted and resulted in cleaner factors. Factor analyses and item removal reduced the initial item set from 43 to 17 onboard destination attribute items within three factors:

1. Onboard Environment;
2. Onboard Social Interaction; and
3. Onboard Recreation.

All items loaded greater than .400, ranging from .468 to .995, with no cross-loadings (Table 5.1). Cronbach’s alpha for the reduced item set was .94, suggesting that the onboard attribute item set was internally consistent. There were no items whose removal would have improved alpha.

Participants’ cruise decisions were most influenced by onboard attributes that were related to the Onboard Environment factor (mean = 6.02 out of 7.00), followed by Onboard Recreation (5.08), and Onboard Social Interaction (4.88). The top five individual items with the greatest importance rating were all from the Onboard Environment factor:

1. The ship and its facilities are clean and in good appearance (6.29);
2. The ship has a variety of food and restaurants available onboard (6.24);
3. The ships’ food and restaurants are of high quality (6.11);
4. The ship provides a comfortable environment (6.10); and
5. The ship's accommodation facilities are of high quality (5.98).

The three least important items were:

1. The cruise line/ship is known for having a diverse group of passengers (4.64; Onboard Social Interaction);
2. The ship will provide an exciting atmosphere (4.91; Onshore Recreation); and
3. The ship provides opportunities to meet new people while onboard (4.94; Onboard Social Interaction).

<table>
<thead>
<tr>
<th>FACTORS/ ITEMS</th>
<th>Factor Loadings</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factor 1: Onboard Environment</strong></td>
<td></td>
<td>6.02</td>
</tr>
<tr>
<td>The ship and its facilities are clean and in good appearance</td>
<td>0.995</td>
<td>6.29</td>
</tr>
<tr>
<td>The ship provides a comfortable environment</td>
<td>0.956</td>
<td>6.10</td>
</tr>
<tr>
<td>The ship will provide a safe environment while onboard</td>
<td>0.930</td>
<td>5.87</td>
</tr>
<tr>
<td>The ships’ food and restaurants are of high quality</td>
<td>0.866</td>
<td>6.11</td>
</tr>
<tr>
<td>The ship will not feel overly crowded or busy</td>
<td>0.847</td>
<td>5.86</td>
</tr>
<tr>
<td>The ship will provide a relaxing/stress-relieving atmosphere</td>
<td>0.830</td>
<td>5.83</td>
</tr>
<tr>
<td>The ship’s accommodation facilities are of high quality</td>
<td>0.814</td>
<td>5.98</td>
</tr>
<tr>
<td>The ship will have places available to enjoy your personal space</td>
<td>0.814</td>
<td>5.91</td>
</tr>
<tr>
<td>The ship has a variety of food and restaurants available onboard</td>
<td>0.725</td>
<td>5.91</td>
</tr>
<tr>
<td><strong>Factor 2: Onboard Social Interaction</strong></td>
<td></td>
<td>4.88</td>
</tr>
<tr>
<td>The ship provides opportunities to meet new people while onboard</td>
<td>0.881</td>
<td>4.94</td>
</tr>
<tr>
<td>The ship will provide opportunities to socialize with other passengers</td>
<td>0.818</td>
<td>4.96</td>
</tr>
<tr>
<td>The cruise line/ship is known for having a diverse group of passengers (e.g., passengers of different ages, nationalities, places of residence, etc.)</td>
<td>0.799</td>
<td>4.64</td>
</tr>
<tr>
<td>The cruise line/ship is known for having friendly passengers</td>
<td>0.797</td>
<td>5.00</td>
</tr>
<tr>
<td><strong>Factor 3: Onboard Recreation</strong></td>
<td></td>
<td>5.08</td>
</tr>
<tr>
<td>The ship has good onboard entertainment facilities and amenities (e.g., casino, bars, night clubs, lounges, show rooms, etc.)</td>
<td>0.793</td>
<td>5.13</td>
</tr>
<tr>
<td>The ship has good swimming pools/hot tubs</td>
<td>0.683</td>
<td>5.05</td>
</tr>
<tr>
<td>The ship has good onboard health &amp; fitness facilities and amenities (e.g., gym, spa, lap pools, sports facilities, etc.)</td>
<td>0.633</td>
<td>5.23</td>
</tr>
<tr>
<td>The ship will provide an exciting atmosphere</td>
<td>0.468</td>
<td>4.91</td>
</tr>
</tbody>
</table>

Note: Scale runs from 1 to 7, with 7 being the highest score

These results suggest that, when booking a cruise vacation, comfort, dining, and accommodation have the most influence on the choice of cruise ship within a given cruise region, while social opportunities exercise the least amount of influence.

**5.3.2 Onshore Attributes**

Initial PAF of the 49 onshore attribute items resulted in eight factors with eigenvalues greater than one, while the scree test suggested five factors. It was decided that the number of factors should be less than eight because the eighth, seventh, and sixth factors all had less than three factors that loaded greater than .400 without cross-loading on other factors. After trial and error with several different numbers of factor groups, it was found that specifying five factors created the strongest factor groups. Items were removed one at a time while PAF was again conducted after each removal. The result was that 23 onshore destination attribute items were retained (Table 5.2).

These items were contained within five factors:

1. Safety and Comfort;
2. Learning and Exploration;
3. Visual Surroundings;
4. Onshore Activities; and
5. Destination Development.

All items loaded greater than .400—ranging from .449 to .862—with no cross-loadings. Cronbach’s alpha for the reduced item set was .94, suggesting that the onshore attribute item set was internally consistent. Again, there were no items whose removal would have improved alpha.

Table 5.2 reveals the onshore attributes that have the greatest influence on participants’ cruise decisions. These attributes were related to the Safety and Comfort factor (mean = 5.58 out of 7.00), followed by Learning and Exploration (5.23), Visual Surroundings (5.09), Destination Development (4.45), and Onshore Activities (3.88). The top five individual onshore items that were most important when deciding which cruise to take were:

1. The ports to be visited are safe to explore on your own or without a guide (5.71);
2. The ports to be visited have acceptable standards of hygiene and cleanliness (5.68);
3. It is easy to get to/ from the cruise terminal at the start/ end of the cruise (5.59);
4. The local people at the ports to be visited are friendly towards tourists (5.61); and
5. The ports to be visited have historical sites and attractions to visit (5.32).

The first four items were from the Safety and Comfort factor, while the fifth was from the Learning and Exploration factor. The three least important items were all from the Onshore Activities factor:

1. The ports to be visited have good bars or nightclubs onshore (3.34);
2. The ports to be visited offer water-based activities (3.73); and
3. The ports to be visited offer sun and sand activities (3.86).

These three items were also the three lowest-rated items of any of the three item sets (onboard, onshore, cruising as a vacation type).
Table 5.2 Onshore Destination Attributes and Factor Groups (Stage 2)

<table>
<thead>
<tr>
<th>FACTORS/ ITEMS</th>
<th>Factor Loadings</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factor 1: Safety and Comfort</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The ports to be visited have acceptable standards of hygiene and cleanliness</td>
<td>0.792</td>
<td>5.68</td>
</tr>
<tr>
<td>It is easy to get to/from the cruise terminal at the start/end of the cruise</td>
<td>0.772</td>
<td>5.59</td>
</tr>
<tr>
<td>The ports to be visited have well marked signage and finding locations is not difficult</td>
<td>0.748</td>
<td>5.31</td>
</tr>
<tr>
<td>The ports to be visited are safe to explore on your own or without a guide</td>
<td>0.741</td>
<td>5.71</td>
</tr>
<tr>
<td>The local people at the ports to be visited are friendly towards tourists</td>
<td>0.704</td>
<td>5.61</td>
</tr>
<tr>
<td><strong>Factor 2: Learning and Exploration</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The ports to be visited offer opportunities to learn about the local culture</td>
<td>0.830</td>
<td>5.27</td>
</tr>
<tr>
<td>The ports to be visited offer opportunities to learn new things</td>
<td>0.780</td>
<td>5.31</td>
</tr>
<tr>
<td>The ports to be visited have historical sites and attractions to visit</td>
<td>0.637</td>
<td>5.32</td>
</tr>
<tr>
<td>The ports to be visited are places you have never been before</td>
<td>0.585</td>
<td>5.17</td>
</tr>
<tr>
<td>The ports to be visited have natural features (e.g., mountains, waterfalls, parks, forests, beaches, lakes, rivers, etc.)</td>
<td>0.478</td>
<td>5.10</td>
</tr>
<tr>
<td><strong>Factor 3: Visual Surroundings</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The ports to be visited offer varied or diverse scenery</td>
<td>0.766</td>
<td>5.06</td>
</tr>
<tr>
<td>The ports to be visited offer beautiful scenery</td>
<td>0.717</td>
<td>5.28</td>
</tr>
<tr>
<td>The ports to be visited are likely to have good weather at the time of the cruise</td>
<td>0.618</td>
<td>5.13</td>
</tr>
<tr>
<td>The ports to be visited are not all similar</td>
<td>0.515</td>
<td>4.70</td>
</tr>
<tr>
<td>The ship stops at multiple ports of call</td>
<td>0.480</td>
<td>5.30</td>
</tr>
<tr>
<td><strong>Factor 4: Onshore Activities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The ports to be visited offer sun &amp; sand activities (e.g., going to the beach, warm weather activities, etc.)</td>
<td>0.862</td>
<td>3.86</td>
</tr>
<tr>
<td>The ports to be visited offer water-based activities (e.g., swimming, snorkelling, scuba-diving, surfing, fishing, water sports, etc.)</td>
<td>0.804</td>
<td>3.73</td>
</tr>
<tr>
<td>The ports to be visited have good bars or nightclubs onshore</td>
<td>0.600</td>
<td>3.34</td>
</tr>
<tr>
<td>The ports to be visited offer activities that are compatible with my interests (e.g., hiking, golf, tennis, horse back riding, etc.)</td>
<td>0.547</td>
<td>4.35</td>
</tr>
<tr>
<td>The ports to be visited offer music and performances while onshore</td>
<td>0.449</td>
<td>4.14</td>
</tr>
<tr>
<td><strong>Factor 5: Destination Development</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The ports to be visited are well-known and popular places to visit</td>
<td>0.774</td>
<td>4.29</td>
</tr>
<tr>
<td>The ports to be visited have well-known/popular landmarks and attractions</td>
<td>0.754</td>
<td>4.62</td>
</tr>
<tr>
<td>The ports to be visited are well developed (e.g., infrastructure, economy, government, environment, education, health, etc.)</td>
<td>0.636</td>
<td>4.43</td>
</tr>
</tbody>
</table>

Note: Scale runs from 1 to 7, with 7 being the highest score

After Safety and Comfort, the Learning and Exploration factor contained some of the highest rated items, including those related to history and culture. Related studies in the literature provide conflicting results for the importance of items similar to the learning and exploration items found in this study. For instance, of the 12 vacation attributes measured in the study by Jones (2011), both first-time and repeat cruisers did not rate history (mean = 3.23 and 3.78 out of 7.00, respectively) or culture (mean = 4.26 and 4.81, respectively) as highly as other items in the survey, such as comfort, accommodation, get away, and climate—the highest rated items. The reason for these conflicting results may be due to data collection methods. The participants in Jones’ study were surveyed while aboard ships in the Caribbean and were asked questions about their current cruise, whereas, the participants in this research were surveyed about cruising in general, without a specific destination attached to the questions. This may simply demonstrate that cruise travellers are attracted to destinations for their cultural or historical attributes in general; however, certain destinations, such as the Caribbean—may have attributes that attract different cruise tourists. This
further illustrates the need for research on cruising in general as well as on regions other than the Caribbean because many findings are not generalisable beyond the scope of the studies in which they appear. Studies in the related literature do not contain comprehensive and separate lists of onboard and onshore attributes, so it is difficult to draw meaningful comparisons with the literature beyond identifying items and factor groups that appear to be similar to those in this study. The use of narrow sampling frames and other research limitations further hinder comparison across studies.

These results suggest that, when booking a cruise vacation, the choice of cruise region is most influenced by concerns about exploring the ports of call (e.g., safety, perception by locals, ability to navigate), as well as by opportunities for cultural and historical experiences, while the specific activities that may be available are less influential.

5.3.3 Attributes of Cruising as a Vacation Type

Initial factor analysis of the attributes of cruising as a vacation type, based on eigenvalues greater than 1, suggested three factors, which was confirmed by further analysis. Initial PAF were run with varimax rotation; however, after several items had been removed, promax rotations yielded clearer factor groupings. The 26 initial items were reduced to 17 items within three factors:

1. Ease of Travel;
2. Ease of Planning; and
3. Opportunities for Social Engagement.

All items loaded greater than .400, ranging from .526 to .995, with no cross-loadings (Table 5.3). Cronbach’s alpha for the reduced item set was .95, suggesting that the cruising as a vacation type item set was internally consistent. As with the onboard and onshore attribute item sets, there were no items whose removal would have improved alpha.

The attributes for cruising as a vacation type reveal that participants’ cruise decisions were most influenced by items that related to the Ease of Travel factor (mean = 5.84 out of 7.00), followed by Opportunities for Social Engagement (4.81), and Ease of Planning (4.58). The Ease of Travel factor contained the top-five individual items with the highest importance rating:

1. Cruising allows you to stay in the same room every night, while still visiting multiple places (6.29);
2. Cruising allows you to visit multiple destinations (5.99);
3. Cruising provides a high level of luxury (5.97);
4. Cruising provides a worry-free/ carefree experience (5.89); and
5. Cruising provides you with everything you need in one place (5.88).

The three lowest-rated items were:
1. Cruising does not require a lot of pre-trip planning (4.53; Ease of Planning);
2. Cruising appeals to people with common interests to yourself (4.53; Opportunities for Social Engagement); and
3. Cruising provides a close social environment (4.58; Opportunities for Social Engagement).

These results suggest that some of the most important aspects that are unique to cruising as a vacation type are related to the safety, comfort, and convenience of cruising.

Table 5.3 Attributes of Cruising as a Vacation Type and Factor Groups (Stage 2)

<table>
<thead>
<tr>
<th>FACTORS/ ITEMS</th>
<th>Factor Loadings</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factor 1: Ease of Travel</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cruising allows you to stay in the same room every night, while still visiting multiple places</td>
<td>0.995</td>
<td>6.29</td>
</tr>
<tr>
<td>Cruising allows you to visit multiple destinations</td>
<td>0.972</td>
<td>6.29</td>
</tr>
<tr>
<td>Cruising provides an easy way to travel</td>
<td>0.895</td>
<td>5.71</td>
</tr>
<tr>
<td>Cruising provides a high level of comfort</td>
<td>0.848</td>
<td>5.73</td>
</tr>
<tr>
<td>Cruising provides a worry-free/ carefree experience</td>
<td>0.842</td>
<td>5.89</td>
</tr>
<tr>
<td>Cruising provides you with everything you need in one place (e.g., accommodation, restaurants, entertainment, activities, transportation, etc.)</td>
<td>0.789</td>
<td>5.88</td>
</tr>
<tr>
<td>Cruising provides a high level of safety and security</td>
<td>0.776</td>
<td>5.82</td>
</tr>
<tr>
<td>Cruising provides a high level of luxury</td>
<td>0.759</td>
<td>5.97</td>
</tr>
<tr>
<td>Cruising allows you to sample destinations for possible return visits</td>
<td>0.716</td>
<td>5.53</td>
</tr>
<tr>
<td>Cruising provides a relaxing and stress-relieving vacation</td>
<td>0.714</td>
<td>5.57</td>
</tr>
<tr>
<td><strong>Factor 2: Ease of Planning</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cruising does not require a lot of pre-trip planning</td>
<td>0.847</td>
<td>4.53</td>
</tr>
<tr>
<td>Cruising does not require much effort once on vacation</td>
<td>0.824</td>
<td>5.07</td>
</tr>
<tr>
<td>Cruising has a pre-set schedule</td>
<td>0.680</td>
<td>4.70</td>
</tr>
<tr>
<td>Cruising allows you to experience the feeling of being on a ship</td>
<td>0.526</td>
<td>4.93</td>
</tr>
<tr>
<td><strong>Factor 3: Opportunities for Social Engagement</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cruising provides the opportunity to meet and get to know new people</td>
<td>0.950</td>
<td>4.63</td>
</tr>
<tr>
<td>Cruising provides a close social environment</td>
<td>0.834</td>
<td>4.58</td>
</tr>
<tr>
<td>Cruising appeals to people with common interests to yourself</td>
<td>0.822</td>
<td>4.53</td>
</tr>
</tbody>
</table>

Note: Scale runs from 1 to 7, with 7 being the highest score

5.3.4 The Relative Importance of Onboard, Onshore, and Cost/Value Aspects of Cruising

This section of the online survey asked participants, “When choosing which cruise you will take, how important to you are each of the following?” An item set containing five items was presented:

1. The ports of call and all they have to offer while onshore;
2. The specific cruise ship/ cruise line and all it has to offer while onboard;
3. The overall experience of the vacation provided by the ports of call and the cruise ship;
4. The cost/ value of the cruise (cruise fare only); and
5. The cost of getting to and from the cruise.

The five items in this set were not designed to measure a single construct, so factor analysis was not appropriate. Of the five items, the overall experience was the highest-rated (6.07 out of
7.00), followed by cost (5.98), onshore attributes (5.78), onboard attributes (5.67), and the cost of getting to and from the cruise (5.56).

Although the formatting of questions from the two most recent CLIA market profile studies (2011b, 2015b) differed from that of this thesis, results do permit comparisons between several aspects that relate to the relative importance of onboard, onshore, and the cost/value aspects of cruising. Specifically, these comparisons were with the destination (i.e., onshore attributes), the property/ship (i.e., onboard attributes), cost, and overall experience (Table 5.4). The 2011 and 2014 CLIA market profile studies (2011b, 2015b) asked participants to allocate percentages to the influence of each of five given factors in their vacation selection (cost, destination, overall experience, property/ship, and facilities). Participants from the 2011 study who had previously been on at least one cruise vacation (the participant group most similar to the sample in this thesis) reported that the destination was the most important, followed by cost, overall experience, the property/ship, and facilities. Similar results were found for those who had travelled but had never been on a cruise. In the 2014 report (in which all had previously cruised), cost was listed as the most important, followed by destination, overall experience, the property/ship, and facilities.

Table 5.4 Onboard, Onshore, and Cost/Value Aspects of Cruising

<table>
<thead>
<tr>
<th>Stage 2 of this Thesis</th>
<th>CLIA Study for 2011</th>
<th>CLIA Study for 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Overall experience (6.05 out of 7)</td>
<td>1. Destination (35%)</td>
<td>1. Cost (29%)</td>
</tr>
<tr>
<td>2. Cost (5.98)</td>
<td>2. Cost (22%)</td>
<td>2. Destination (24%)</td>
</tr>
<tr>
<td>3. Onshore attributes (5.78)</td>
<td>3. Overall experience (19%)</td>
<td>3. Overall experience (20%)</td>
</tr>
<tr>
<td>4. Onboard attributes (5.67)</td>
<td>4. Property/ship (12%)</td>
<td>4. Property/ship (15%)</td>
</tr>
<tr>
<td>5. Facilities (11%)</td>
<td>5. Facilities (13%)</td>
<td></td>
</tr>
</tbody>
</table>

Source: CLIA, 2011b, 2015b

Table 5.4 reveals that the onboard aspects of cruise vacations are the least important of the listed aspects to vacation decisions, both for the two most recent CLIA studies and this thesis. This is significant because the CLIA market profile studies are the only examples in the literature that attempt to measure the relative importance of onboard and onshore attributes. The following section further explores the relative importance of onboard and onshore attributes.

5.3.5 The Relative Importance of Onboard and Onshore Attributes

The previous section determined the relative importance of onboard and onshore attributes by the responses to the two questions that asked participants to rate the importance of the ports of call and all that they have to offer while onshore, and the specific cruise ship/cruise line and all it has to offer while onboard. In addition to this, the relative importance of onboard and onshore attributes was analysed by comparing the mean scores of the onboard and onshore attribute item sets and the mean scores of the top individual items from each item set (Table 5.5).
The mean score for the onboard attribute item set (mean = 5.27 out of 7.00; n = 43) was greater than the mean score for the onshore attribute item set (mean = 4.86; n = 49), with the 15 highest-rated individual items all belonging to the former set. Although no studies were found in the literature that attempted to measure the relative importance of onboard and onshore cruise destination attributes by using a multi-item scale, this thesis analysed item sets found in the literature that contained a mix of items clearly identifiable as onboard or onshore attributes (see Section 2.5.4). In Stage 2 of this study, the average score of the onboard items was greater than the onshore items. This is supported by comparing it with the relative importance of items found in studies such as the one conducted by Jones (2011), where the average score of the onboard items was also greater than the average score of the onshore items.

This contradicts the findings from the previous section, where onboard and onshore attributes were each measured using a single item, with the onshore aspects of cruising receiving a greater score (mean = 5.78) than onboard attributes (mean = 5.67). These results were significant at a .01 level using ANOVA. As mentioned, this result was corroborated by responses in the CLIA market profile studies where, in the five most recent CLIA market profile studies (2004, 2006, 2008, 2011, 2014), the destination was always rated more highly than the property/ship in terms of influencing the vacation selection (CLIA, 2011b, 2015b). Additionally, when inferring the relative importance of onboard and onshore items in the studies by Field et al. (1985) and Teye and Paris (2011), the average score of the onshore items was greater than the average score of onboard items.

These conflicting results may be due to a number of factors. It is possible that several of the most important attributes were not present in the onshore attribute item set, resulting in a lower mean than when participants were directly asked to rate the importance of onshore attributes in general. This is, however, unlikely because the onshore attribute items were derived from the Stage 1 study, where items were elicited from participants with significant cruise experience and knowledge by using multiple proven techniques for identifying such items. Another possibility was that the item sets exhibited a cumulative effect in which the attributes as a whole are greater than

---

Table 5.5 Relative Importance of Onboard and Onshore Attributes (Stage 2)

<table>
<thead>
<tr>
<th>Average mean of:</th>
<th>Onboard Attributes</th>
<th>Onshore Attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top 5 Items</td>
<td>6.14</td>
<td>5.65</td>
</tr>
<tr>
<td>Top 10 Items</td>
<td>6.01</td>
<td>5.52</td>
</tr>
<tr>
<td>Top 15 Items</td>
<td>5.94</td>
<td>5.45</td>
</tr>
<tr>
<td>Top 20 Items</td>
<td>5.84</td>
<td>5.39</td>
</tr>
<tr>
<td>Top 30 Items</td>
<td>5.63</td>
<td>5.26</td>
</tr>
<tr>
<td>All Items</td>
<td>5.27</td>
<td>4.86</td>
</tr>
<tr>
<td>(43 Onboard items; 49 Onshore items)</td>
<td>5.27</td>
<td>4.86</td>
</tr>
<tr>
<td>Overall Importance of Onboard/Onshore Attributes (Q22.1, n = 324 &amp; Q22.2, n = 324)</td>
<td>5.67</td>
<td>5.78</td>
</tr>
<tr>
<td>Overall Importance of Onboard and Onshore Attributes Combined (Q22.3, n = 322)</td>
<td>6.05</td>
<td>5.78</td>
</tr>
</tbody>
</table>

Note: The means have a maximum value of 7.00
the sum of their parts, and that this effect was stronger in relation to onshore than onboard attributes. The third item in this section of the questionnaire (Q22.3) supported this, asking participants to rate the combined importance of onboard and onshore attributes. It resulted in a mean greater than either onshore or onboard attributes alone (mean = 6.05). The combined effect of the two sources of pull factors suggests a complementary relationship in which the two sources are not completely separable and where the whole may be greater than the sum of the parts.

A third possibility is that many of the onboard attributes operate similarly to “hygiene” items in the satisfaction/dissatisfaction literature. Motivation-hygiene theory (also known as the two-factor theory) suggests that the factors that cause satisfaction (motivators) are different from the factors that create dissatisfaction (hygiene factors) (Herzberg, 1974). In this study onboard attributes may be negative in their absence but not necessarily positive in their presence; for example, although the cleanliness of the ship is highly important, and would impact decision-making if absent, it is mostly assumed to be a condition that will be met and so does not contribute a great deal to the choice of a cruise.

The conflicting results obtained in this stage of the research (individual and aggregated items versus overall impressions), along with conflicting results from the literature, are inconclusive as to whether onboard or onshore attributes are more important or influential in the cruise decision-making process. Stage 3 of this thesis further explores this issue by introducing a revised question to directly measure the relative importance of onboard and onshore attributes.

5.4 Summary of Findings

Chapter 5 presented the method, results, and discussion of the CDAS pilot study (Stage 2). The purpose of this stage was to reduce the list of cruise destination attributes elicited in Stage 1 to a number suitable for inclusion in a quantitative survey instrument, as well as to test the instrument’s ability to determine the relative importance of onboard and onshore attributes in tourists’ choice of a specific cruise. A total of 344 participants, representative of North American cruise passengers, completed the online questionnaire. Participants in this study tended to be older, have higher incomes, and have more cruise experience than those from CLIA market studies (2011b, 2015b).

Factor analysis was conducted to categorize items into factor groups and to reduce the number of items within the three item sets. Onboard attributes were reduced from 43 to 17 items within three factor groups:

1. Onboard Environment;
2. Onboard Social Interaction; and
3. Onboard Recreation.

Onshore attributes were reduced from 49 to 23 items within five factor groups:

1. Safety and Comfort;
2. Learning and Exploration;
3. Visual Surroundings;
4. Onshore Activities; and
5. Destination Development.

Attributes of cruising as a vacation type were reduced from 26 to 17 items within three factor groups:

1. Ease of Travel;
2. Ease of Planning; and
3. Opportunities for Social Engagement.

These reduced item sets are utilized in the Stage 3 survey instrument to measure cruise destination attributes (pull factors) and, along with the 14-item Leisure Motivation Scale (Ryan & Glendon, 1998), to measure travel motives (push factors), and socio-demographic and cruise travel behaviour items.

The most important onboard attribute factor was the Onboard Environment (nine items), which received the nine highest ratings of all onboard items. For the onshore attribute factors, participants rated the Safety and Comfort, and Learning and Exploration, factors the highest, with four of the five most important individual items belonging to the Safety and Comfort factor. The Ease of Travel factor was the most important from the cruising as a vacation type item set, with the ten items comprising that factor receiving the ten highest ratings of the 17-item list.

Two methods were used to measure the relative importance of onboard and onshore attributes, but these led to conflicting results. When calculating the mean of all items within the two item sets, onboard attributes were rated as more important (mean = 5.27) than onshore attributes (4.86); however, when participants were directly asked the importance of onboard and onshore attributes in general, onshore attributes (mean = 5.78) were rated as more important than onboard attributes (5.67). Conflicting results were also obtained when analysing the existing literature; however, the existing studies did not aim to measure the relative importance of onboard and onshore cruise destination attributes. The method of measuring the relative importance between onboard and onshore cruise destination attributes will be re-examined in Stage 3 to understand how the two methods in Stage 2 yielded conflicting results.
CHAPTER 6: ONLINE PANEL STUDY — STAGE 3

6.1 Introduction to Chapter 6

The first two stages of research, presented in Chapters 4 and 5, paved the way for this final stage of research, the online panel study. The cruise destination attribute scale (CDAS) and other items included in the Stage 3 questionnaire were elicited from participants in Stage 1 and refined in Stage 2. In Stage 3, the refined item sets were combined with the Leisure Motivation Scale (LMS) (Ryan & Glendon, 1998) to form a push factor measurement scale, allowing—for the first time—the push-pull relationship to be explored in the context of a cruise vacation. The purpose of this final stage was to determine the relative importance of onboard and onshore attributes in tourists’ choice of a specific cruise (Research Objective 2) and to explore the push-pull relationship between travel motives and cruise destination attributes in the decision to cruise (Research Objective 3). This chapter contains the method, results, and discussion of this final stage of research.

6.2 Stage 3 Method

The Stage 3 survey instrument was pilot-tested with 20 individuals before the final online panel survey was conducted \((n = 503)\). The final survey instrument consisted of 20 socio-demographic and cruise travel behaviour items measured through multiple-choice questions, 14 travel motives from the LMS, 17 onboard attributes, 22 onshore attributes, and 16 attributes of cruising as a vacation type. An additional slider-format question directly measured the importance of onboard and onshore attributes on a percentage scale that totalled 100%. This slider question was accompanied by two open-ended questions that identified the circumstances that would alter the relative importance of onboard and onshore attributes.

6.2.1 Stage 3 Participants and Procedure

The Stage 3 study, like the CDAS pilot study, sought a sample of participants that was representative of the socio-demographic characteristics of the North American cruise industry. This sample, which represented the world’s largest source-market of cruise passengers, maintained consistency with related research and permitted comparisons across studies. Quotas and qualifying questions were used to achieve an equal representation of male and female participants—from the United States (80%) and Canada (20%)—who had been on a cruise vacation in the previous 12 months. This study focused on cruise passengers from North America because they represent the world’s largest source of cruise passengers, nearly 55% (CLIA, 2015a).

A significantly large and diverse sample is necessary to incorporate the many variables of cruising (e.g., different ships, cruise lines, itineraries, destinations, segment lengths, ship sizes, time
of year/ cruise season) and to avoid the sampling limitations found in the literature (see Section 2.3.2 of Chapter 2). Additionally, a sufficiently large sample was required to conduct factor analysis and canonical correlation analysis. The onboard attribute item set contained the largest number of items (22 items) and thus required a sample of at least 220 participants to meet a 10:1 participant to item ratio (Osborne & Costello, 2004). This is a more stringent ratio than that of 5:1 in Stage 2. This study aimed to reach a wide range of cruise tourists to ensure that it was representative and generalisable, and so sought a sample size of at least 500 participants. The final sample size of Stage 3 was 503, representing a participant to item ratio of nearly 23:1 for the largest item set.

The Stage 3 survey instrument was pilot-tested with a small sample of participants. For instrument development, it has been suggested that the pilot sample size should be between 25–40 participants (Herztog, 2008; Johanson & Brooks, 2010). Given that the majority of the questionnaire had been tested in Stage 2, with the exception of the LMS—it had been tested and extensively replicated elsewhere—it was decided that a sample size of 20 would be sufficient to test the final survey instrument. An online research company was employed to source the participants and to distribute emails that contained information about the study and a link to the online survey. Pilot study data were collected during October and November 2014 and did not result in any changes to the final questionnaire.

Data for the final study were collected in November 2014. Participants for the final study were sourced through a Qualtrics Online Sample. As with the CDAS pilot study in Stage 2, the research company did not contribute to the content of the study and was only used to source participants and to provide the survey platform. The use of an online survey distributed through an online panel was the most effective way to gain access to a large and varied sample of cruise travellers across North America. This was important for improving the scope and generalisability of this study because the results of a significant number of cruise tourism studies have been limited by small sample sizes and/ or narrow sampling frames (see Sections 2.3.2.4 and 2.3.2.5).

6.2.1.1 Socio-demographic and Cruise Travel Behaviour Variables

As with Stages 1 and 2, socio-demographic and cruise travel behaviour variables were analysed using descriptive statistics in order to develop passenger profiles. Stage 3 participants had significantly more cruise experience than those in the 2011 CLIA market profile study. Over 60% of participants from the online panel survey had been on three or more cruises, while only 40% (CLIA, 2011b) and 38% (CLIA, 2008) of the CLIA study participants had been on three or more cruises. Participants in this study could not be compared to the most recent CLIA (2015b) market profile study because participants there were only reported as having been on one or multiple
cruises. Participants from Stage 3 were less likely to travel with a spouse or adult children, and were more likely to sail alone than those in the two most recent CLIA market profile studies (CLIA, 2011b, 2015b). As with the previous stages, several incidental findings were noted in Stage 3 relating to cruise travel behaviour across participants’ first, most recent, and next planned cruise vacation. These trends are briefly discussed at the end of the results section (Section 6.3.7).

Compared to the first two stages of this thesis, Stage 3 participants were most likely to have been on two to five cruises (Stage 1: 40%; Stage 2: 36%; and Stage 3: 61%). Stage 2 contained the largest percentage that had been on more than six cruises (Stage 1: 20%; Stage 2: 31%; Stage 3: 23%). Stage 3 participants were more likely to be working full-time (Stage 1: 50%; Stage 2: 47%; Stage 3: 58%) and less likely to be retired (Stage 1: 40%; Stage 2: 37%; Stage 3: 17%), while also being more likely to have booked an upcoming cruise at the time of the survey or to be in the process of planning an upcoming cruise prior to booking (Stage 1: 40%; Stage 2: 65%; Stage 3: 90%). Tables A.6 and A.7 of Appendix A provide a complete summary of socio-demographic and cruise travel behaviour variables for the three stages of research in this study.

6.2.2 Stage 3 Survey Instrument

The online panel study consisted of an online questionnaire that was created using Qualtrics online survey software. This quantitative instrument contained multiple-choice questions and item sets relating to socio-demographics and cruise travel behaviour variables, push factors (travel motives), pull factors (onboard and onshore cruise destination attributes), and attributes of cruising as a vacation type. Items in the item sets relating to push factors, pull factors (both onboard and onshore), and cruising as a vacation type were rated according to the same seven-point measurement scale used in the CDAS pilot study, ranging from 1) not at all important to 7) extremely important. Several changes were made to the Stage 3 questionnaire following the pilot testing of the instrument in Stage 2. These changes, along with a more detailed description of each section of the survey, are presented in the sub-sections below. The complete Stage 3 questionnaire is reproduced in Appendix D.

6.2.2.1 Socio-demographics and Cruise Travel Behaviour Variables

The questions and answer choices relating to socio-demographics and cruise travel behaviour were developed from the relevant literature and from the previous two stages of research in this thesis. The 20 socio-demographic and cruise travel behaviour questions were similar to the previous stage of data collection, with the exception of several answer choices. To facilitate data analysis, participants were now asked to select an age group range rather than enter their exact age and were also asked to choose between USA, Canada, or Other (with a text entry option for specific country) for their country of residence. Additionally, all questions were to be answered before the
participant could continue, as there were many cases of missing data in Stage 2. Questions pertaining to potentially sensitive subjects now included a “Prefer not to answer” response option rather than the ability to skip the question (e.g., annual household income, highest level of education).

6.2.2.2 Push Factors, Pull Factors, and Attributes of Cruising as a Vacation Type

The LMS (Ryan & Glendon, 1998) was used to measure push factor items (travel motives) as outlined in the literature review of this paper (this item set was not used in Stage 2). Participants were asked to rate the 14 LMS items based on their importance to creating the initial desire to travel—regardless of travel method or destination. Pull factors (onboard and onshore attributes) were measured using the CDAS developed in this thesis. In Stage 2, the onboard attributes in the CDAS were reduced from 43 to 17 items, while the onshore attributes were reduced from 49 to 23 items. Before the Stage 3 study was conducted, one of the onshore items, “The ports to be visited offer warm weather activities (e.g., going to the beach, sun bathing, etc.)”, was modified from a previous item, and “The ports to be visited offer colder weather activities (e.g., glacier sightseeing, glacier trekking, winter sports, etc.)” was added to the retained item set. Another two items were removed from the onshore attribute item set following factor analysis, resulting in a total of 22 onshore destination attributes (see Section 6.3.3).

6.2.2.3 The Relative Importance of Onboard and Onshore Attributes

For the Stage 3 questionnaire, the five questions regarding the relative importance of onboard, onshore, and the cost/value aspects of cruising were removed because the cost/value aspects of cruising items did not contribute to the research aim and objectives of this thesis, while the items that were related to the relative importance of onboard and onshore attributes were improved to provide a more direct comparison of the relative importance of the two sources of pull factors. The new question (Question 6.1) directly asked participants to indicate the percentage weight that onboard and onshore aspects have on their decision to choose a specific cruise. In a slider question format, participants would drag the slider with their computer mouse to indicate a percentage for onboard and onshore aspects, with a forced total equalling 100% across the two aspects. As in Stage 2, the relative importance of onboard and onshore attributes was also measured by comparing the mean score of the two respective item sets.

6.2.3 Stage 3 Data Analysis

The methods that were used to analyse the data collected during Stage 3 are outlined below. This includes the analysis of the four item sets (travel motives, onboard attributes, onshore attributes, and attributes of cruising as a vacation type), the relative importance of onboard and onshore attributes, and the push-pull relationship. Attributes of cruising as a vacation type were
reduced from 26 to 17 items during Stage 2, and one item was removed during the factor analysis in Stage 3 (see Section 6.3.4). The final number of items in each item set for Stage 3 were as follows: 14 travel motives, 17 onboard attributes, 22 onshore attributes, and 16 attributes of cruising as a vacation type.

6.2.3.1 Factor Analysis of Scale Items

Principal axis factor analyses with promax rotations were conducted to identify underlying factor groups within the LMS, the CDAS (onboard and onshore attributes), and the attributes of cruising as a vacation type. Principal axis factor analysis with varimax rotations were initially run, as in Stage 2; however, several items cross-loaded with high factor loadings. Analyses were then conducted using an oblique rotation (promax), resulting in cleaner factor groups without cross-loadings. Both varimax and promax rotations are capable of correctly identifying the underlying factors of an item set; however, promax is better suited to identifying a simple structure solution, where items load highly on only one factor (Finch, 2006). Oblique rotations such as promax have also been found to be more appropriate than an orthogonal rotation such as varimax when factors are correlated (Costello & Osborne, 2005; Fabrigar, Wegener, MacCallum, & Strahan, 1999). Cronbach’s alpha and Guttman’s split-half reliability coefficient were calculated to determine the internal consistency of the item sets, while Cronbach’s alpha was also calculated for each factor group within the four item sets.

6.2.3.2 The Relative Importance of Onboard and Onshore Attributes

The first goal of Stage 3 was to determine the relative importance of onboard and onshore attributes in tourists’ choice of a specific cruise (Research Objective 2). Multiple approaches were taken to quantitatively measure the relative importance of onboard and onshore attributes. These included analysing the question that directly asked participants their preference, comparing the average scores obtained from the onboard and onshore attribute item sets, and various analyses of preference groups that were created from participants’ responses to the direct onboard-onshore importance question.

Procedures similar to Stage 2 were followed when comparing the average scores between the two item sets; however, the single-item measure in Stage 2 was revised for Stage 3, providing a more direct comparison between onboard and onshore attributes. Results from Stage 2 revealed an inconsistency between the relative importance of onboard and onshore attributes, with the direct question showing a greater importance for onshore attributes, while the averages calculated for the item sets revealed a greater preference for onboard attributes.
Preference Groups

Based on responses to the direct importance (slider format) question, participants were grouped into one of three preference groups. Those who weighted onboard aspects 60% or greater were placed into the Onboard Preference Group \((n = 251)\), those who weighted onshore aspects 60% or greater were placed into the Onshore Preference Group \((n = 65)\), and those who weighted both onboard and onshore aspects less than 60% \((i.e., 50\% +/-.10\%)\) were placed in the Neutral Preference Group \((n = 189)\).

With this new independent variable, one-way ANOVAs were conducted with the following dependent variables: the individual items from each item set—onboard attributes (OB), onshore attributes (OS), LMS, cruising as a vacation type (VT)—and the 15 composite variables (factor groups) that were created from the factor analysis of each item set—five OS, three OB, four LMS, three VT. Results of the ANOVA were examined to determine key differences between groups \((p = .01)\), while the top items from each set were examined to determine the most important items and factors within the groups. Cross-tabulations with Chi-square analysis were then conducted with socio-demographic and cruise travel behaviour variables to further understand the unique characteristics of the three preference groups. Summaries of the three groups were created with the results, which indicated key differences between them.

6.2.3.3 Push – Pull Relationship

Because the push-pull relationship had not yet been studied in the context of cruise tourism, two methods were used to explore it. The first method was regression analysis using the “Enter” method. The four push factor groups (travel motives) formed the independent variables, and the eight pull factor groups (three onboard and five onshore) comprised the dependent variables. The second method was canonical correlation analysis (CCA) using the Statistical Package for the Social Sciences (SPSS, v.23)\(^{14}\). It was desirable to use a quantitative online survey to reach a broad sample of participants that represented the many cruise vacation variables \((e.g.,\ different\ cruise\ lines,\ regions,\ ship\ sizes,\ times\ of\ year,\ etc.)\). Therefore, methods such as the means-end approach were not suitable for this thesis. As such, CCA proved most applicable to this study due to its ability to be used in a quantitative questionnaire, to examine the relationship between two item sets containing multiple items within each set \((Uysal \& O’Leary, 1986)\), and its ability to create product bundles based on groups of related attributes identified by canonical variates \((Baloglu \& Uysal, 1996)\). These product bundles can be used to design packaged tours, and for destination management, tourism planning, and promotion \((Pyo\ et\ al.,\ 1989)\). Canonical variates generated

\(^{14}\) In this version of SPSS, canonical correlation could be accessed through the drop down menu under correlate, replacing the need to conduct CCA through the MANOVA procedure using syntax in earlier versions.
through CCA are linear combinations of variables from both variable sets, with the number of functions (canonical variates) that are extracted being equal to the number of items in the smaller of the two variable sets (Pyo et al., 1989). In this study, the predictor variables (independent variables) consisted of 14 push factor items (travel motives), and the criterion variables (dependent variables) consisted of 39 pull factor items (17 onboard attributes, 22 onshore attributes). Thus, there were 14 canonical variates extracted. Several methods are used to evaluate the significance of canonical correlations, including $F$ statistic (or chi-square), eigenvalues, proportion of variance, and redundancy (Thompson, 1985, as cited in Pyo et al., 1989). Eigenvalues are the overlapping variance between pairs of canonical variates and are equal to the squared canonical correlations (canonical roots: $R_S$). The variate pairs produced by CCA are analogous to product bundles because they indicate different combinations of related push and pull items (Baloglu & Uysal, 1996).

6.3 Stage 3 Results and Discussion

The results and discussion of the different sections of Stage 3 are presented in the following order:

1. Push factors (travel motives);
2. Onboard attributes;
3. Onshore attributes;
4. Attributes of cruising as a vacation type;
5. The relative importance of onboard and onshore attributes;
6. Push-pull relationship; and
7. Cruise career and cruise travel behaviour.

6.3.1 Push Factors (Travel Motives)

Principal Axis Factor Analysis with promax rotation of the 14-item LMS identified four factors containing the same items as Ryan and Glendon’s (1998) study; therefore, the same factor group names were applied in this thesis:

1. Stimulus Avoidance motives;
2. Social motives;
3. Competence Mastery motives; and
4. Intellectual motives.

All items loaded greater than .400, ranging from 0.525 to 0.844, with no cross-loadings (Table 6.1). The reliability of the LMS item set was measured using Cronbach’s alpha, producing an acceptable alpha of .922. Split-half reliability was also calculated, producing an acceptable Guttman split-half coefficient of 0.867. Cronbach’s alphas for the LMS factor groups were .910,
.906, .914, and .776 respectively for the Stimulus Avoidance, Social, Competence Mastery, and Intellectual motive factors.

Table 6.1 reveals that the Stimulus Avoidance factor was the highest-rated of the four factor groups (mean of items = 5.66 out of 7.00) followed by Intellectual motives (5.53), Social motives (5.02), and Competence Mastery motives (4.57).

Table 6.1 Leisure Motivation Scale Items and Factor Groups

<table>
<thead>
<tr>
<th>Travel Motive Factor/ Item</th>
<th>Factor Loading</th>
<th>Mean</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factor 1: Stimulus Avoidance</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To mentally relax</td>
<td>0.844</td>
<td>5.75</td>
<td>.910</td>
</tr>
<tr>
<td>To avoid the hustle and bustle of daily life</td>
<td>0.843</td>
<td>5.62</td>
<td></td>
</tr>
<tr>
<td>To physically relax</td>
<td>0.799</td>
<td>5.68</td>
<td></td>
</tr>
<tr>
<td>To be in a calm atmosphere</td>
<td>0.736</td>
<td>5.60</td>
<td></td>
</tr>
<tr>
<td><strong>Factor 2: Social</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To build friendships with others</td>
<td>0.815</td>
<td>4.95</td>
<td>.906</td>
</tr>
<tr>
<td>To develop close friendships</td>
<td>0.791</td>
<td>4.92</td>
<td></td>
</tr>
<tr>
<td>To be with others</td>
<td>0.727</td>
<td>5.05</td>
<td></td>
</tr>
<tr>
<td>To have a good time with friends</td>
<td>0.706</td>
<td>5.34</td>
<td></td>
</tr>
<tr>
<td>To gain a feeling of belonging</td>
<td>0.554</td>
<td>4.82</td>
<td></td>
</tr>
<tr>
<td><strong>Factor 3: Competence Mastery</strong></td>
<td></td>
<td>4.57</td>
<td>.914</td>
</tr>
<tr>
<td>To challenge my abilities</td>
<td>0.798</td>
<td>4.68</td>
<td></td>
</tr>
<tr>
<td>To use my physical abilities or skills in sport</td>
<td>0.796</td>
<td>4.47</td>
<td></td>
</tr>
<tr>
<td><strong>Factor 4: Intellectual</strong></td>
<td></td>
<td>5.53</td>
<td>.776</td>
</tr>
<tr>
<td>To increase my knowledge</td>
<td>0.730</td>
<td>5.44</td>
<td></td>
</tr>
<tr>
<td>To discover new places and things</td>
<td>0.537</td>
<td>5.96</td>
<td></td>
</tr>
<tr>
<td>To use my imagination</td>
<td>0.525</td>
<td>5.18</td>
<td></td>
</tr>
</tbody>
</table>

Note: Scale runs from 1 to 7, with 7 being the highest score

Table 6.2 lists the travel motives in order of most importance based on mean scores. The individual item rated as having the most importance for deciding on a cruise vacation was an Intellectual motive, followed by four Stimulus Avoidance motives completing the top five:

1. To discover new places and things;
2. To mentally relax;
3. To physically relax;
4. To avoid the hustle and bustle of daily life; and
5. To be in a calm atmosphere.

The high importance placed on Stimulus Avoidance items was reinforced by the lower importance placed on the opposing Competence Mastery motives. In fact, the two Competence Mastery items were the two lowest-rated.
<table>
<thead>
<tr>
<th>Travel Motive</th>
<th>Mean</th>
<th>Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>To discover new places and things</td>
<td>5.96</td>
<td>Intellectual</td>
</tr>
<tr>
<td>To mentally relax</td>
<td>5.75</td>
<td>Stimulus Avoidance</td>
</tr>
<tr>
<td>To physically relax</td>
<td>5.68</td>
<td>Stimulus Avoidance</td>
</tr>
<tr>
<td>To avoid the hustle and bustle of daily life</td>
<td>5.62</td>
<td>Stimulus Avoidance</td>
</tr>
<tr>
<td>To be in a calm atmosphere</td>
<td>5.60</td>
<td>Stimulus Avoidance</td>
</tr>
<tr>
<td>To increase my knowledge</td>
<td>5.44</td>
<td>Intellectual</td>
</tr>
<tr>
<td>To have a good time with friends</td>
<td>5.34</td>
<td>Social</td>
</tr>
<tr>
<td>To use my imagination</td>
<td>5.18</td>
<td>Intellectual</td>
</tr>
<tr>
<td>To be with others</td>
<td>5.05</td>
<td>Social</td>
</tr>
<tr>
<td>To build friendships with others</td>
<td>4.95</td>
<td>Social</td>
</tr>
<tr>
<td>To develop close friendships</td>
<td>4.92</td>
<td>Social</td>
</tr>
<tr>
<td>To gain a feeling of belonging</td>
<td>4.82</td>
<td>Social</td>
</tr>
<tr>
<td>To challenge my abilities</td>
<td>4.68</td>
<td>Competence Mastery</td>
</tr>
<tr>
<td>To use my physical abilities or skills in sport</td>
<td>4.47</td>
<td>Competence Mastery</td>
</tr>
</tbody>
</table>

In the literature, the LMS has been used to measure motives in several travel-related studies and one cruise-specific study. The cruise-specific study, conducted by Jones (2011), used the same 14-item LMS to measure differences in cruise motivation between first-time and repeat cruisers. Jones’ participants recorded responses on a seven-point scale that measured the influence to cruise, similar to the seven-point importance rating scale of this thesis. Repeat cruisers from Jones’ study rated all four factors in the same order as the participants of Stage 3 in this thesis. Although first-time cruisers rated the four factors in a slightly different order, the Stimulus Avoidance factor was still the highest-rated, while the Competence Mastery factor was the lowest-rated in both studies (Table 6.3).

In non-cruise-specific travel studies, the LMS has produced comparable results. In the original study for which the LMS was adapted to travel motives, Ryan and Glendon (1998) developed and used it to measure the travel motives of UK holiday-makers. Participants in the Ryan and Glendon study rated the factors in the same order as in this study, with Stimulus Avoidance motives receiving the highest ratings, followed by Intellectual motives, Social motives, and Competence Mastery motives. In Moshin & Ryan (2007), the four factors were again rated in the same order; however, the factors were rated much more closely.
Table 6.3 Leisure Motivation Scale: Comparison with Related Literature

<table>
<thead>
<tr>
<th>Factor/ Items</th>
<th>Item Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Current</td>
</tr>
<tr>
<td></td>
<td>cruisers</td>
</tr>
<tr>
<td>Factor 1: Stimulus Avoidance motives</td>
<td>5.66(^1)</td>
</tr>
<tr>
<td>To mentally relax</td>
<td>5.75(^2)</td>
</tr>
<tr>
<td>To avoid the hustle and bustle of daily life</td>
<td>5.62(^3)</td>
</tr>
<tr>
<td>To physically relax</td>
<td>5.68(^2)</td>
</tr>
<tr>
<td>To be in a calm atmosphere</td>
<td>5.60(^5)</td>
</tr>
<tr>
<td>Factor 2: Social Motives</td>
<td>5.02(^3)</td>
</tr>
<tr>
<td>To build friendships with others</td>
<td>4.95(^10)</td>
</tr>
<tr>
<td>To develop close friendships</td>
<td>4.92(^11)</td>
</tr>
<tr>
<td>To be with others</td>
<td>5.05(^9)</td>
</tr>
<tr>
<td>To have a good time with friends</td>
<td>5.34(^7)</td>
</tr>
<tr>
<td>To gain a feeling of belonging</td>
<td>4.82(^12)</td>
</tr>
<tr>
<td>Factor 3: Competence Mastery motives</td>
<td>4.57(^4)</td>
</tr>
<tr>
<td>To challenge my abilities</td>
<td>4.68(^13)</td>
</tr>
<tr>
<td>To use my physical abilities or skills in sport</td>
<td>4.47(^14)</td>
</tr>
<tr>
<td>Factor 4: Intellectual Motives</td>
<td>5.53(^2)</td>
</tr>
<tr>
<td>To increase my knowledge</td>
<td>5.44(^9)</td>
</tr>
<tr>
<td>To discover new places and things</td>
<td>5.96(^1)</td>
</tr>
<tr>
<td>To use my imagination</td>
<td>5.18(^8)</td>
</tr>
</tbody>
</table>

Note: Superscript numerals denote item rank in the respective study; scale runs from 1 to 7, with 7 being the highest score.

*Moshin and Ryan (2007) used an additional two items, which are omitted above: “To see new cultures” (5.54\(^2\)) and “To rest” (4.62\(^14\)); some items were also worded differently in Moshin and Ryan.

The presence of similar results in the literature (see Table 6.3) reinforces the idea that travel motives are developed irrespective of the travel type or destination (Crompton, 1979; Dann, 1977). This is further reinforced by studies that employ comparable cruise motivation measurement scales. Hung and Petrick (2011b) developed their own cruise travel motivation scale and, although the items and factor groups within their scale were not identical to the LMS, the results confirm the strength of cruise travel motives that are similar to the Stimulus Avoidance and Intellectual motives found in the LMS. Elliot and Choi (2011) studied the motivation of cruise travellers in North America, segmenting participants by generation. The items and factors within this study were again not identical to the LMS; however, the relaxation factor was similar to the Stimulus Avoidance factor in the LMS and was found to be the most important factor for three of the four generational cohorts and the second-most important for the fourth cohort.
6.3.2 **Onboard Attributes**

Principal Axis Factor Analysis with promax rotation identified three onboard factors, each containing the same items from the previous stage of research:

1. Onboard Environment;
2. Onboard Social Interaction; and
3. Onboard Recreation.

All items loaded greater than .400, ranging from .422 to .964, with no cross-loadings (Table 6.4). Reliability of the onboard attribute item set was measured using Cronbach’s alpha, producing an acceptable alpha of .940 with no improvement to alpha when items were removed individually; therefore, no further items were removed. Split-half reliability produced an acceptable Guttman split-half coefficient of 0.932. Cronbach’s alphas for the onboard factor groups were .944, .906, and .824 respectively for Onboard Environment, Onboard Social Interaction, and Onboard Recreation factors.

The Onboard Environment factor was the highest rated of the three onboard factors (mean = 5.92 out of 7.00), followed by Onboard Recreation (5.54) and Onboard Social Interaction (5.31). The three factors were rated in the same order as in Stage 2; however, the difference between the means was not as great in this stage (see Table 6.4). The top five individual items with the greatest importance rating were all from the Onboard Environment factor:

1. The ship will provide a safe environment while onboard (6.08);
2. The ship and its facilities are clean and in good appearance (6.05);
3. The ship provides a comfortable environment (6.01);
4. The ship’s food and restaurants are of high quality (5.93); and
5. The ship's accommodation facilities are of high quality (5.91).

The three lowest rated onboard attribute items were all from the Onboard Social Interaction factor:

1. The ship provides opportunities to meet new people while onboard (5.25);
2. The cruise line/ ship is known for having a diverse group of passengers (5.25); and
3. The ship will provide opportunities to socialize with other passengers (5.29).

These items were three of the four lowest-rated items from Stage 2. These items were three of the four lowest rated items from the CDAS Pilot Study.
Table 6.4 Onboard Destination Attributes and Factor Groups (Stage 3)

<table>
<thead>
<tr>
<th>Factor/ Items</th>
<th>Factor Loading</th>
<th>Stage 3 Mean</th>
<th>Stage 2 Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factor 1: Onboard Environment</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The ship and its facilities are clean and in good appearance</td>
<td>0.964</td>
<td>6.05</td>
<td>6.29</td>
</tr>
<tr>
<td>The ship provides a comfortable environment</td>
<td>0.890</td>
<td>6.01</td>
<td>6.10</td>
</tr>
<tr>
<td>The ship will provide a safe environment while onboard</td>
<td>0.886</td>
<td>6.08</td>
<td>5.87</td>
</tr>
<tr>
<td>The ships food and restaurants are of high quality</td>
<td>0.872</td>
<td>5.93</td>
<td>6.11</td>
</tr>
<tr>
<td>The ship will provide a relaxing/ stress-relieving atmosphere</td>
<td>0.781</td>
<td>5.90</td>
<td>5.83</td>
</tr>
<tr>
<td>The ships accommodation facilities are of high quality</td>
<td>0.757</td>
<td>5.91</td>
<td>5.98</td>
</tr>
<tr>
<td>The ship will have places available to enjoy your personal space</td>
<td>0.723</td>
<td>5.86</td>
<td>5.91</td>
</tr>
<tr>
<td>The ship has a variety of food and restaurants available onboard</td>
<td>0.722</td>
<td>5.88</td>
<td>6.24</td>
</tr>
<tr>
<td>The ship will not feel overly crowded or busy</td>
<td>0.592</td>
<td>5.70</td>
<td>5.86</td>
</tr>
<tr>
<td><strong>Factor 2: Onboard Social Interaction</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The ship provides opportunities to meet new people while onboard</td>
<td>0.923</td>
<td>5.25</td>
<td>4.94</td>
</tr>
<tr>
<td>The ship will provide opportunities to socialize with other passengers</td>
<td>0.858</td>
<td>5.29</td>
<td>4.96</td>
</tr>
<tr>
<td>The cruise line/ ship is known for having a diverse group of passengers</td>
<td>0.838</td>
<td>5.25</td>
<td>4.64</td>
</tr>
<tr>
<td>(e.g., passengers of different ages, nationalities, places of residence, etc.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The cruise line/ ship is known for having friendly passengers</td>
<td>0.738</td>
<td>5.45</td>
<td>5.00</td>
</tr>
<tr>
<td><strong>Factor 3: Onboard Recreation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The ship has good swimming pools/ hot tubs</td>
<td>0.838</td>
<td>5.55</td>
<td>5.05</td>
</tr>
<tr>
<td>The ship has good onboard health &amp; fitness facilities and amenities</td>
<td>0.743</td>
<td>5.37</td>
<td>5.23</td>
</tr>
<tr>
<td>(e.g., gym, spa, lap pools, sports facilities, etc.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The ship will provide an exciting atmosphere</td>
<td>0.457</td>
<td>5.61</td>
<td>4.91</td>
</tr>
<tr>
<td>The ship has good onboard entertainment facilities and amenities</td>
<td>0.422</td>
<td>5.61</td>
<td>5.13</td>
</tr>
<tr>
<td>(e.g., casino, bars, night clubs, lounges, show rooms, etc.)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Scale runs from 1 to 7, with 7 being the highest score

Although the literature contains a limited amount of comparable material, several studies do contain results that support the findings of this research. Xie et al. (2012) are the only other researchers to have specifically studied the influence of onboard attributes in the decision-making process. Of 28 onboard items, food, restaurants, and cabin were three of the four most important attributes for both groups in their study. Accommodation and comfort were also two of the top three items from Jones’ (2011) study for both first-time and repeat cruisers; however, the 12 items in Jones’ study were a mix of onboard and onshore items, many of which could not be clearly defined as onboard or onshore attributes.

In a study conducted by CLIA (2011c), one question sought to determine which factor had the most influence in cruise line choice. Although there were a small number of items listed, the study found that, in choosing a cruise vacation, accommodation was the most important, followed by cuisine, entertainment, spa/ wellness (facilities) and shore excursions; however, it was not stated whether other items were included in the question or how participants answered the questions. Additionally, this survey was conducted with CLIA member agents, who were surveyed “…according to their knowledge of client preferences…” (p.2), rather than directly asking the
consumers. This is an example of an industry-driven research focus that this study aims to avoid. Onboard and onshore attributes were developed from the repertory grid analysis (RGA) conducted in Stage 1. As mentioned above, one of the key benefits of RGA is its ability to elicit responses from the perspectives of cruise passengers without influence from outside sources.

6.3.3 Onshore Attributes

Principal Axis Factor Analysis with promax rotation identified five underlying onshore factor groups:

1. Onshore Activities;
2. Learning and Exploration;
3. Visual Surroundings;
4. Safety and Comfort; and
5. Destination Development.

Five items failed to load greater than .400; therefore, the criterion was reduced to .350 in order to maintain at least three items in each factor. This resulted in the removal of two additional items from the Visual Surroundings factor, the local people at the ports to be visited are friendly towards tourists and the ports to be visited are safe to explore on your own or without a guide. Both of these were placed in different factor groups during factor analysis in Stage 2, which suggests weak associations with the new factor group. The final list of onshore attributes consisted of 22 items.

Factor loadings ranged from .358 to .907, with no cross-loadings. The five factor groups share the same group names as in Stage 2; however, the items within the groups differ slightly from the previous stage (Table 6.5). The reliability of the onshore attribute item set was measured using Cronbach’s alpha, producing an acceptable alpha of .945 with no improvement to alpha when items were removed individually; therefore, no further items were removed. Split-half reliability produced an acceptable Guttman split-half coefficient of 0.935. Cronbach’s alphas for the onshore factor groups were .902, .889, .874, .845, and .837 respectively for the Onshore Activities, Learning and Exploration, Visual Surroundings, Safety and Comfort, and Destination Development factors.

The onshore attribute factor group with the greatest influence on participants’ cruise decisions was the Visual Surroundings factor (mean = 5.68 out of 7) followed by Safety and Comfort (5.65), Learning and Exploration (5.55), Destination Development (5.22), and Onshore Activities (4.91). The top five individual onshore attribute items that were most important when deciding which cruise to take were:
1. The ports to be visited have acceptable standards of hygiene and cleanliness (5.83, Safety and Comfort);
2. The ports to be visited offer beautiful scenery (5.71, Visual Surroundings);
3. The ports to be visited are likely to have good weather at the time of the cruise (5.71, Visual Surroundings);
4. It is easy to get to/ from the cruise terminal at the start/ end of the cruise (5.65, Safety and Comfort); and
5. The ports to be visited offer varied or diverse scenery (5.64, Visual Surroundings).

Table 6.5 Onshore Destination Attributes and Factor Groups (Stage 3)

<table>
<thead>
<tr>
<th>Factor 1: Onshore Activities</th>
<th>Factor Loading</th>
<th>Stage 3 Mean</th>
<th>Stage 2 Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>The ports to be visited offer water-based activities (e.g., swimming, snorkelling, scuba-diving, surfing, fishing, water sports, etc.)</td>
<td>.855</td>
<td>5.04</td>
<td>3.73</td>
</tr>
<tr>
<td>The ports to be visited have good bars or nightclubs onshore</td>
<td>.828</td>
<td>4.64</td>
<td>3.34</td>
</tr>
<tr>
<td>The ports to be visited offer colder weather activities (e.g., glacier sightseeing, glacier trekking, winter sports, etc.)</td>
<td>.791</td>
<td>4.53</td>
<td>**</td>
</tr>
<tr>
<td>The ports to be visited offer activities that are compatible with my interests (e.g., hiking, golf, tennis, horse back riding, etc.)</td>
<td>.723</td>
<td>5.01</td>
<td>4.35</td>
</tr>
<tr>
<td>The ports to be visited offer music and performances while onshore</td>
<td>.698</td>
<td>4.98</td>
<td>4.14</td>
</tr>
<tr>
<td>The ports to be visited offer warm weather activities (e.g., going to the beach, sun bathing, etc.)</td>
<td>.697</td>
<td>5.28</td>
<td>**</td>
</tr>
</tbody>
</table>

| Factor 2: Learning and Exploration | 5.55 | *** |
| The ports to be visited offer opportunities to learn about the local culture | .907 | 5.61 | 5.27 |
| The ports to be visited offer opportunities to learn new things | .840 | 5.58 | 5.31 |
| The ports to be visited have historical sites and attractions to visit | .701 | 5.61 | 5.32 |
| The ship stops at multiple ports of call | .542 | 5.62 | 5.30* |
| The ports to be visited are places you have never been before | .536 | 5.56 | 5.17 |
| The ports to be visited are not all similar | .399 | 5.34 | 4.70* |

| Factor 3: Visual Surroundings | 5.68 | *** |
| The ports to be visited offer beautiful scenery | .744 | 5.71 | 5.28 |
| The ports to be visited are likely to have good weather at the time of the cruise | .700 | 5.71 | 5.13 |
| The ports to be visited offer varied or diverse scenery | .658 | 5.64 | 5.06 |
| The ports to be visited have natural features (e.g., mountains, waterfalls, parks, forests, beaches, lakes, rivers, etc.) | .389 | 5.64 | 5.10* |

| Factor 4: Safety and Comfort | 5.65 | *** |
| It is easy to get to/ from the cruise terminal at the start/ end of the cruise | .855 | 5.65 | 5.59 |
| The ports to be visited have well marked signage and finding locations is not difficult | .732 | 5.46 | 5.31 |
| The ports to be visited have acceptable standards of hygiene and cleanliness | .624 | 5.83 | 5.68 |

| Factor 5: Destination Development | 5.22 | 4.45 |
| The ports to be visited are well-known and popular places to visit | .770 | 5.08 | 4.29 |
| The ports to be visited have well-known/ popular landmarks and attractions | .722 | 5.32 | 4.62 |
| The ports to be visited are well developed (e.g., infrastructure, economy, government, environment, education, health, etc.) | .358 | 5.27 | 4.43 |

Note: Scale runs from 1 to 7, with 7 being the highest score; Stage 2 means for individual item for comparison only, as items may not be in same factor group for both stages
*Items were in a different factor in Stage 2
**The previous item “The ports to be visited offer sun & sand activities (e.g., going to the beach, warm weather activities, etc.)” was replaced by the current two items
***Factors contained different items in Stage 2, so no factor mean is provided

The three lowest rated onshore attribute items were all from the Onshore Activities factor:
1. The ports to be visited offer colder weather activities (4.53);
2. The ports to be visited have good bars or nightclubs onshore (4.64); and
3. The ports to be visited offer music and performances while onshore (4.98).

Two of these items were among the three lowest rated items from the CDAS Pilot Study, with the exception of *the ports to be visited offer colder weather activities*, which was an item not included in that study.

### 6.3.4 Attributes of Cruising as a Vacation Type

Principal Axis Factor Analysis with promax rotation revealed three factors related to the attributes of cruising as a vacation type. As with the onshore attributes, not all items loaded greater than .400. The criterion was reduced to .350, which maintained three items per factor group. This resulted in the removal of one item, “Cruising allows you to experience the feeling of being on a ship”. The final item set contained 16 items. Factor loadings ranged from .377 to .954, with no cross-loadings (Table 6.6). Reliability was measured using Cronbach’s alpha, producing an acceptable alpha of .948—with no improvements to alpha with the removal of individual items—and split-half reliability, producing an acceptable Guttman split-half coefficient of 0.859. Cronbach’s alphas for the attributes of cruising as a vacation type factor groups were .946, .908, and .832 respectively for the three factor groups:

1. Ease of Travel;
2. Opportunities for Social Engagement; and
3. Ease of Planning.

The Ease of Travel factor (mean = 5.82 out of 7) had the greatest influence on participants’ cruise decisions, followed by Ease of Planning (5.47) and Opportunities for Social Engagement (5.20)—the same order as Stage 2. The five highest-rated items were all from the Ease of Travel factor:

1. Cruising provides you with everything you need in one place (5.89);
2. Cruising provides a high level of safety and security (5.89);
3. Cruising provides an easy way to travel (5.87);
4. Cruising provides a worry-free/ carefree experience (5.86); and
5. Cruising allows you to stay in the same room every night while still visiting multiple places (5.85).

The three items from the Opportunities for Social Engagement factor group were the lowest rated of all 16 items:

1. Cruising provides the opportunity to meet and get to know new people (5.15);
2. Cruising provides a close social environment (5.22); and
3. Cruising appeals to people with common interests to yourself (5.24).

Table 6.6 Attributes of Cruising as a Vacation Type and Factor Groups (Stage 3)

<table>
<thead>
<tr>
<th>Factor/ Items</th>
<th>Factor Loading</th>
<th>Stage 3 Mean</th>
<th>Stage 2 Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cruising provides a high level of comfort</td>
<td>.887</td>
<td>5.82</td>
<td>5.73</td>
</tr>
<tr>
<td>Cruising provides a worry-free/ carefree experience</td>
<td>.880</td>
<td>5.86</td>
<td>5.89</td>
</tr>
<tr>
<td>Cruising provides you with everything you need in one place (e.g., accommodation, restaurants, entertainment, activities, transportation, etc.)</td>
<td>.877</td>
<td>5.89</td>
<td>5.88</td>
</tr>
<tr>
<td>Cruising provides a high level of safety and security</td>
<td>.826</td>
<td>5.89</td>
<td>5.82</td>
</tr>
<tr>
<td>Cruising provides an easy way to travel</td>
<td>.805</td>
<td>5.87</td>
<td>5.71</td>
</tr>
<tr>
<td>Cruising allows you to stay in the same room every night while still visiting multiple places</td>
<td>.789</td>
<td>5.85</td>
<td>6.29</td>
</tr>
<tr>
<td>Cruising allows you to visit multiple destinations</td>
<td>.757</td>
<td>5.78</td>
<td>5.99</td>
</tr>
<tr>
<td>Cruising provides a relaxing and stress-relieving vacation</td>
<td>.740</td>
<td>5.83</td>
<td>5.57</td>
</tr>
<tr>
<td>Cruising allows you to sample destinations for possible return visits</td>
<td>.588</td>
<td>5.70</td>
<td>5.53</td>
</tr>
<tr>
<td>Cruising provides a high level of luxury</td>
<td>.524</td>
<td>5.67</td>
<td>5.97</td>
</tr>
<tr>
<td>Cruising provides the opportunity to meet and get to know new people</td>
<td>.954</td>
<td>5.15</td>
<td>4.63</td>
</tr>
<tr>
<td>Cruising provides a close social environment</td>
<td>.857</td>
<td>5.22</td>
<td>4.58</td>
</tr>
<tr>
<td>Cruising appeals to people with common interests to yourself</td>
<td>.816</td>
<td>5.24</td>
<td>4.53</td>
</tr>
<tr>
<td>Cruising does not require a lot of pre-trip planning</td>
<td>.878</td>
<td>5.42</td>
<td>4.53</td>
</tr>
<tr>
<td>Cruising does not require much effort once on vacation</td>
<td>.714</td>
<td>5.60</td>
<td>5.07</td>
</tr>
<tr>
<td>Cruising has a pre-set schedule</td>
<td>.377</td>
<td>5.40</td>
<td>4.70</td>
</tr>
</tbody>
</table>

Note: Scale runs from 1 to 7, with 7 being the highest score

6.3.5 THE RELATIVE IMPORTANCE OF ONBOARD AND ONSHORE ATTRIBUTES

This section presents the results of the two methods that were used to measure the relative importance of onboard and onshore attributes (directly and indirectly) and comparisons of the onboard-onshore preference groups.

6.3.5.1 Direct Analysis of the Importance of Onboard and Onshore Attributes

Table 6.7 presents the results from the slider format question that directly asked participants to indicate the relative importance of onboard and onshore cruise destination attributes when booking a cruise vacation. The table reveals that participants attributed greater importance to onboard aspects over onshore aspects when planning a cruise vacation, with onboard aspects receiving an average score of 59.27% while onshore attributes received an average score of 40.73%. Although the results show that significantly greater importance is given to the onboard aspects of cruising, individual responses varied greatly, with the ratio of onboard to onshore ranging from 9/91 to 100/0, and a standard deviation of 16.532.
Accompanying the slider question were two open-ended questions that asked the participants to list any circumstances in which either onboard or onshore aspects would have greater influence on the choice of cruise. Individual responses to the open-ended questions were grouped by common wording and themes. This provided a more detailed account of the deciding factors that are involved in selecting a specific cruise. A summary of the key circumstances is in Table 6.8.

### Table 6.8 Potential to Change Onboard/Onshore Importance

<table>
<thead>
<tr>
<th>Circumstances with the Potential to Increase the Importance of Onboard Attributes</th>
<th>Circumstances with the Potential to Increase the Importance of Onshore Attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Destinations that passengers have visited before</td>
<td>• Destinations that passengers haven’t visited before</td>
</tr>
<tr>
<td>• Longer cruise itineraries</td>
<td>• Shorter cruise itineraries</td>
</tr>
<tr>
<td>• More days spent at sea</td>
<td>• Fewer days spent at sea</td>
</tr>
<tr>
<td>• Fewer total ports of call on itinerary</td>
<td>• More ports of call on itinerary</td>
</tr>
<tr>
<td>• Limited time spent at individual ports of call</td>
<td>• Longer time spent at individual ports of call</td>
</tr>
<tr>
<td>• Safety concerns at ports of call</td>
<td>• Destinations with historical/cultural significance</td>
</tr>
<tr>
<td>• Positive past experience with cruise line/ship</td>
<td>• Well-known/significant destinations</td>
</tr>
<tr>
<td>• Size of the ship (preferring smaller)</td>
<td>• Interesting regions (as a collective of ports of call)</td>
</tr>
<tr>
<td>• Quality, size, availability, and variety of staterooms</td>
<td>• Availability, accessibility, quality, variety, and cost of shore excursions</td>
</tr>
<tr>
<td>• Quality and variety of food and dining options</td>
<td>• Themed cruises</td>
</tr>
<tr>
<td>• Travelling with children or large groups</td>
<td>• Cost of cruise and onboard extras</td>
</tr>
</tbody>
</table>

### Specific Destinations & Ports of Call

Many responses to the open-ended questions stated that the relative importance of onboard and onshore aspects depended on specific destinations or ports of call. According to some participants, onboard aspects are more important for cruises that travel to less significant ports of call or to specific destinations such as the Bahamas. Conversely, onshore attributes become more important when ports of call are of historical or cultural significance, or if there is a specific destination they wish to visit. Participants also noted that onshore aspects are more important when considering a cruise to specific destinations such as Alaska, the Mediterranean, Europe, or the Antarctic.

“[I]f I was really interested in certain ports/itinerary, I would accept a lesser-rated ship or cruise line if there wasn't another option for me/us.”

### First Time vs. Repeat Visits

Another commonly reported circumstance that would affect the relative importance of onboard and onshore aspects was whether the cruise itinerary contained completely new ports of call or one or more that had been previously visited by the participant (whether on a cruise or land-

---

<table>
<thead>
<tr>
<th>Onboard aspects</th>
<th>Min Value</th>
<th>Max Value</th>
<th>Average Value</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Onboard aspects</td>
<td>9.00%</td>
<td>100.00%</td>
<td>59.27%</td>
<td>16.532</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Onshore aspects</th>
<th>Min Value</th>
<th>Max Value</th>
<th>Average Value</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Onshore aspects</td>
<td>0.00%</td>
<td>91.00%</td>
<td>40.73%</td>
<td>16.532</td>
</tr>
</tbody>
</table>
based vacation). Onboard aspects were more important when visiting places where they had been before, while onshore attributes were more important when visiting new places.

“If I have been to the port before it is nice to have activities onboard to do as well.”

Cruise Itineraries

Specific details of a cruise itinerary also influenced the importance of onboard and onshore attributes. Participants responded that cruises with longer itineraries, fewer ports of call, more days at sea or limited time spent at individual ports would increase the importance of onboard aspects. The opposite was also stated: shorter itineraries, more ports of call, less days at sea, or longer time spent at individual ports of call would increase the importance of onshore aspects when choosing a cruise. Participants also noted that when choosing between similar itineraries, onboard attributes become more important in making the final decision about which cruise to take.

“On a longer cruise with more at-sea days onboard facilities and services become more important.”

Safety, Comfort, & Cleanliness

Participants expressed their concerns for safety, comfort, and the cleanliness of both the onboard and onshore environments of cruise vacations. This was reflected in the high ratings given to individual items from the respective onboard and onshore attribute item sets. Onboard safety, cleanliness, and comfort were the three highest-rated onboard attributes, while cleanliness and safety at the ports of call were the two highest-rated onshore attributes.

“The only time the onshore aspects would matter more to me is if there is a possibility that we might be docking somewhere unsafe.”

Other Onboard Influencers

Participants mentioned several other circumstances that would increase the importance of the onboard portion of a cruise. These included past experience with a certain cruise line or ship, the size of available ships—many preferring ships with fewer passengers—the quality, size, availability, and variety of staterooms, the quality and variety of food and dining options, the onboard activities and entertainment—including themed cruises and cruises based around special events—the ability of the ship’s facilities, amenities, services, and environment to meet all requirements for their vacation—whether they were travelling with children or in larger groups—and the cost of the cruise and onboard extras.

“Past experience with a cruise line and food are quite important, also clientele to a lesser extent, so there are some cruise lines we are not interested in.”
Other Onshore Influencers

Another major influence that affected the importance of onshore attributes were onshore activities and excursions, specifically the availability, accessibility, quality, variety, and—especially—the cost of these activities and excursions.

“[D]estinations that I haven't seen before or that I'd really like to return to, and which have superior and well-priced excursions or other personal opportunities.”

The responses to the slider format question produced the opposite findings of the direct question presented to participants in Stage 2 (see Section 5.5 of Chapter 5). In Stage 2, participants were asked about the importance of onboard and onshore attributes using a single-item measure for each aspect, rated on a seven-point scale. Results revealed a higher mean score for onshore attributes (5.78 compared to 5.67 for onboard items); however, it did not directly compare the two sources of pull factors as one versus the other, leading to the changes made for Stage 3.

Although the slider format question returned a simple and clear result, it is problematic to rely on a single-item measure to evaluate a complex topic such as decision-making (Jacoby, 1978); therefore, multiple methods of analysing the relative importance of onboard and onshore attributes were conducted before final conclusions were drawn. This second method analysed the findings from the 17 onboard and 22 onshore attributes to further explore the relationship between onboard and onshore attributes.

6.3.5.2 Indirect Analysis of the Importance of Onboard and Onshore Attributes

Using ANOVA, the average score for the 17 onboard items (5.69 out of 7) was found to be significantly greater ($p < .01$) than the average score for the 22 onshore items (5.37). This indicates that onboard attributes are of greater importance than onshore attributes when deciding on a cruise vacation. Similar results were found in Stage 2, with the average score of the 43 onboard items (5.27 out of 7) being significantly greater than the average score of the 49 onshore items (4.86). These results are consistent with the findings from the slider question above, which also found onboard attributes to be more important than onshore attributes in the cruise decision-making process.

To ensure that there were no effects from differing numbers of items in the two item sets, average scores were calculated with different ranges of items (Table 6.9). This also accounted for the inclusion or exclusion of potentially high- or low-rated items and did not skew results. Table 6.9 shows that the average scores for onboard attributes were markedly greater than onshore attributes across all ranges.
6.3.5.3 Summary of the Relative Importance of Onboard and Onshore Attributes

Both direct and indirect methods of analysing the relative importance of onboard and onshore attributes found onboard attributes to be more important than onshore attributes in the cruise decision-making process (Figure 6.1).

In Stage 2, indirect analysis found onboard attributes to be more important than onshore attributes; however, direct analysis in Stage 2 found the opposite. As a result, the direct question was re-examined and improved for Stage 3, providing a more comparative method for determining the relative importance of onboard and onshore attributes. As with Stage 2, the post hoc analysis of item sets found in the literature (see Section 2.5.4) provided both supporting and conflicting results; however, none of the studies in the literature were designed to measure the relative importance of the two sources of attributes, nor did any of the studies utilize comprehensive lists of items that were clearly labelled as onboard and onshore attributes. Therefore, the results of Stage 3 provide the strongest argument that the attributes related to the cruise ship are more important than the attributes related to the port destinations when tourists’ are deciding on a specific cruise vacation.

![Figure 6.1: Relative Importance of Onboard and Onshore Attributes](image-url)
(Research Objective 2). This finding supports the cruise industry’s strategy of marketing and developing cruise ships as the focal point of cruise vacations (Weaver, 2005c) and is evidence that the cruise ship is the primary destination of a cruise vacation, with ports of call being seen as secondary or, at best, co-destinations. Future research can further support or refute these findings and be applied to specific cruise destinations.

To further explore these findings, participants were separated into groups based on preferences for onboard or onshore attributes, indicated by their responses to the slider format question. These groups were then analysed to identify potential differences regarding the individual items and factor groups of the onboard and onshore attribute item sets, the cruising as a vacation type item set, and the socio-demographic and cruise travel behaviour variables.

6.3.5.4 Preference Groups: Onboard, Onshore, and Neutral Preferences

Results from the preference group analysis are presented for each of the following sections, followed by summaries of the three groups:

1. Pull factors (onboard and onshore cruise destination attributes);
2. Push factors (travel motives);
3. Cruising as a vacation type; and
4. Socio-demographics and cruise travel behaviour variables.

**Pull Factors (Onboard and Onshore Cruise Destination Attributes)**

Results from ANOVA identified significant differences between the three preference groups on 11 of the 39 cruise destination attribute items (five onboard attributes and six onshore attributes). The Onboard Preference Group gave the highest ratings to nine of the items, while the Neutral Preference Group gave the highest ratings to the remaining two (Table 6.10). Furthermore, there were significant differences between these groups regarding two factor groups, one from each the onboard and onshore attribute item sets. The Neutral Preference Group rated the Onboard Recreation factor (OB-F3) significantly higher than the other two groups, while the Onboard Preference Group rated the Onshore Activities factor (OS-F1) significantly higher than the other two groups. Although the Onboard Preference Group stated a clear preference for the onboard aspects of cruising, it appears that some onshore attributes still play a significant role in decision-making, specifically those related to onshore activities.

Table 6.10 reveals that the Onboard Preference Group gave significantly higher ratings to several items relative to the other groups, while the Onshore Preference Group did not rate any of the items significantly higher than the other groups. In fact, based on the average score for all attributes, the Onboard Preference Group gave significantly higher ratings overall, followed by the
Neutral Preference Group, and finally the Onshore Preference Group (Table 6.11). ANOVA also revealed that the onboard and neutral preference groups rated the LMS items significantly higher than the Onshore Preference Group, while the Onboard Preference Group rated onboard items and the combined onboard-onshore items (the combined average of all onboard and onshore items) significantly higher than the Onshore Preference Group. In other words, the Onboard Preference Group generally rated items the highest, followed by the Neutral Preference Group and, finally, the Onshore Preference Group, regardless of the item set.

Table 6.10 Preference Groups: Cruise Destination Attributes

<table>
<thead>
<tr>
<th>Item</th>
<th>Group</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Onboard Items</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The cruise line/ship is known for having a diverse group of passengers (e.g., passengers of different ages, nationalities, places of residence, etc.) (OB-F2)</td>
<td>Onboard</td>
<td>5.38</td>
<td>1.41</td>
<td>.008</td>
</tr>
<tr>
<td>The ship has good onboard entertainment facilities and amenities (e.g., casino, bars, night clubs, lounges, show rooms, etc.) (OB-F3)</td>
<td>Onboard</td>
<td>5.82</td>
<td>1.09</td>
<td>.000</td>
</tr>
<tr>
<td>The ship has good swimming pools/hot tubs (OB-F3)</td>
<td>Onboard</td>
<td>5.82</td>
<td>1.55</td>
<td>.000</td>
</tr>
<tr>
<td>The ship has good onboard health &amp; fitness facilities and amenities (e.g., gym, spa, lap pools, sports facilities, etc.) (OB-F3)</td>
<td>Onboard</td>
<td>5.57</td>
<td>1.34</td>
<td>.000</td>
</tr>
<tr>
<td>The ship will provide an exciting atmosphere (OB-F3)</td>
<td>Onboard</td>
<td>5.73</td>
<td>1.16</td>
<td>.000</td>
</tr>
<tr>
<td><strong>Onshore Items</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The ports to be visited offer warm weather activities (e.g., going to the beach, sun bathing, etc.) (OS-F1)</td>
<td>Onboard</td>
<td>5.50</td>
<td>1.31</td>
<td>.000</td>
</tr>
<tr>
<td>The ports to be visited offer water-based activities (e.g., swimming, snorkelling, scuba-diving, surfing, fishing, water sports, etc.) (OS-F1)</td>
<td>Onboard</td>
<td>5.21</td>
<td>1.55</td>
<td>.000</td>
</tr>
<tr>
<td>The ports to be visited offer music and performances while onshore (OS-F1)</td>
<td>Onboard</td>
<td>5.13</td>
<td>1.48</td>
<td>.001</td>
</tr>
<tr>
<td>The ports to be visited offer colder weather activities (e.g., glacier sightseeing, glacier trekking, winter sports, etc.) (OS-F1)</td>
<td>Onboard</td>
<td>4.78</td>
<td>1.82</td>
<td>.001</td>
</tr>
<tr>
<td>The ports to be visited have good bars or nightclubs onshore (OS-F1)</td>
<td>Onboard</td>
<td>4.80</td>
<td>1.81</td>
<td>.000</td>
</tr>
<tr>
<td>The ports to be visited are well-known and popular places to visit (OS-F5)</td>
<td>Onboard</td>
<td>5.21</td>
<td>1.36</td>
<td>.007</td>
</tr>
<tr>
<td><strong>Factor Groups</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Onboard Recreation (OB-F3)</td>
<td>Onboard</td>
<td>4.74</td>
<td>0.92</td>
<td>.000</td>
</tr>
<tr>
<td>Onshore Activities (OS-F1)</td>
<td>Onboard</td>
<td>5.09</td>
<td>1.30</td>
<td>.000</td>
</tr>
</tbody>
</table>

Significant at $p < .01$
Onboard Group, $n = 251$; Onshore Group, $n = 65$; Neutral Group, $n = 189$; Total, $n = 505$
The consistently higher ratings given by the onboard group masked the unique characteristics of each group; therefore, the top ten items from each group were used to examine the relative importance of onboard and onshore items within the groups. The within-group examination revealed that the four highest-rated cruise attributes further masked the unique characteristics of each group, as all three groups ranked these items extremely highly. These four items, all from the Onboard Environment factor (OB-F1), were:

1. The ship will provide a safe environment while onboard;
2. The ship and its facilities are clean and in good appearance;
3. The ship provides a comfortable environment; and
4. The ship’s food and restaurants are of high quality.

Because these items were ranked so highly by all participants, it is possible to view them as cruise necessities that must be present, or assumed to be present, in order for one to consider booking a cruise vacation. Removing these cruise necessities from the top-ten lists revealed unique characteristics for each group, allowing a clearer examination of the relative importance of onboard and onshore attributes (see Figures 6.2 to 6.4).

Excluding the four “cruise necessities” items, the top ten combined cruise destination attributes for the Onboard Preference group had a 60/40 onboard-onshore proportion (Figure 6.2), supporting the 60/40 preferences for onboard aspects from the results of the slider format question that was originally used to classify these groups. The Onboard Preference Group gave the highest importance to four items from the Onboard Environment factor (OB-F1) and two from the Onboard Recreation factor (OB-F3), while three Visual Surroundings (OS-F3) items and one Safety and Comfort (OS-F4) item represented the onshore attributes.

The top ten combined cruise destination attributes of the Onshore Preference Group revealed a 30/70 onboard-onshore ratio (Figure 6.3), which again confirmed the classifications based on the results of the slider format question and further indicates the importance of the onshore aspects of cruising to this group. The top onshore attributes included four items from the Learning and Exploration factor (OS-F2), two items from the Visual Surroundings factor (OS-F3), and one item from the Safety and Comfort factor (OS-F4). The onboard items important to this
group were all from the Onboard Environment factor (OB-F1) and were related to high quality accommodation facilities, and a relaxing and stress-relieving environment that is not overly crowded or busy.

**Figure 6.2 Top 10 Items by Factor: Onboard Preference Group**

The Neutral Preference Group consisted of participants who indicated a 50/50 (+/- 10%) onboard-onshore preference in the slider question. This was reflected in their top ten combined cruise destination attributes, with a 60/40 onboard-onshore ratio, which slightly favoured the onboard aspects of cruising (Figure 6.4). As with the Onboard Preference Group, the Onboard Environment factor was the most represented in the Neutral Preference Group’s top ten, with five items, followed by the onshore factor, Visual Surroundings (OS-F3), with three items. The onshore factor Safety and Comfort (OS-F4), and the onboard factor Onboard Recreation (OB-F3), were represented by one item each. The Neutral Preference Group differed from the Onboard Preference Group by giving greater importance to the Onboard Environment factor over the Onboard Recreation factor, and giving greater importance to onshore attributes, particularly items from the Visual Surroundings factor.

---

**Top 10 Cruise Attribute Items**

1. The ship has a variety of food and restaurants available onboard (OB-F1)
2. The ships accommodation facilities are of high quality (OB-F1)
3. The ship will have places available to enjoy your personal space (OB-F1)
4. The ship will provide a relaxing/stress-relieving atmosphere (OB-F1)
5. The ports to be visited have acceptable standards of hygiene and cleanliness (OS-F4)
6. The ship has good onboard entertainment facilities and amenities (e.g., casino, bars, night clubs, lounges, show rooms, etc.) (OB-F3)
7. The ship has good swimming pools/hot tubs (OB-F3)
8. The ports are safe to explore on your own without a guide (OS-F3)
9. The ports to be visited are likely to have good weather at the time of the cruise (OS-F3)
10. The ports to be visited offer beautiful scenery (OS-F3)
**Figure 6.3 Top 10 Items by Factor: Onshore Preference Group**

- **Top 10 Cruise Attribute Items**
  1. The ports to be visited offer opportunities to learn new things (OS-F2)
  2. The ship stops at multiple ports of call (OS-F2)
  3. The ports to be visited are safe to explore on your own or without a guide (OS-F3)
  4. The ports to be visited offer beautiful scenery (OS-F3)
  5. The ports to be visited have historical sites and attractions to visit (OS-F2)
  6. The ports to be visited offer opportunities to learn about the local culture (OS-F2)
  7. The ship’s accommodation facilities are of high quality (OB-F1)
  8. The ports to be visited are places you have never been before (OS-F2)
  9. The ship will provide a relaxing/stress-relieving atmosphere (OB-F1)
  10. The ship will not feel overly crowded or busy (OB-F1)

**Figure 6.4 Top 10 Items by Factor: Neutral Preference Group**

- **Top 10 Cruise Attribute Items**
  1. The ship will provide a relaxing/stress-relieving atmosphere (OB-F1)
  2. The ships accommodation facilities are of high quality (OB-F1)
  3. The ports to be visited have acceptable standards of hygiene and cleanliness (OS-F4)
  4. The ship will have places available to enjoy your personal space (OB-F1)
  5. The ship has a variety of food and restaurants available onboard (OB-F1)
  6. The ports to be visited are safe to explore on your own or without a guide (OS-F3)
  7. The ports to be visited offer varied or diverse scenery (OS-F3)
  8. The ship will provide an exciting atmosphere (OB-F3)
  9. The ship will not feel overly crowded or busy (OB-F1)
  10. The ports to be visited have natural features (OS-F3)
**Pull Factors (Travel Motives)**

A significant difference was found between the three preference groups on 11 of the 14 LMS, as well as on three of the four LMS factors (Table 6.12). The Onboard Preference Group had the highest rating on all of these items and factors.

Although the Onboard Preference Group had significantly higher ratings for the majority of the LMS items and factors, these were ranked in a similar order within the groups. The major difference was that the Onshore Preference Group rated Intellectual motives (LMS-F4) as the most important factor, followed by Stimulus Avoidance motives (LMS-F1), with their top five LMS items consisting of two Intellectual motives followed by three Stimulus Avoidance motives. The Onboard and Neutral Preference Groups gave the highest importance to Stimulus Avoidance motives, followed by Intellectual motives, with their top five LMS items consisting of four Stimulus Avoidance motives and one Intellectual motive. All three groups rated Social motives (LMS-F2) and Competence Mastery motives (LMS-F3) as the third and fourth most important.

The LMS results suggest that the most important motives for cruising are related to needs and desires that are associated with the ability to relax—mentally and physically—in a calm atmosphere, free from the stresses of daily life, while also gaining knowledge by visiting new destinations and being exposed to different ways of life.
### Table 6.12 Preference Groups: Travel Motives

<table>
<thead>
<tr>
<th>Item</th>
<th>Group</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Leisure Motivation Scale Items</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To physically relax</td>
<td>Onboard</td>
<td>5.88</td>
<td>1.05</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Onshore</td>
<td>5.08</td>
<td>1.35</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Neutral</td>
<td>5.69</td>
<td>1.40</td>
<td></td>
</tr>
<tr>
<td>To mentally relax</td>
<td>Onboard</td>
<td>5.93</td>
<td>1.34</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Onshore</td>
<td>5.12</td>
<td>1.26</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Neutral</td>
<td>5.76</td>
<td>1.45</td>
<td></td>
</tr>
<tr>
<td>To avoid the hustle and bustle of daily life</td>
<td>Onboard</td>
<td>5.82</td>
<td>1.12</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Onshore</td>
<td>4.75</td>
<td>1.73</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Neutral</td>
<td>5.70</td>
<td>1.32</td>
<td></td>
</tr>
<tr>
<td>To be in a calm atmosphere</td>
<td>Onboard</td>
<td>5.79</td>
<td>1.04</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Onshore</td>
<td>4.91</td>
<td>1.53</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Neutral</td>
<td>5.58</td>
<td>1.27</td>
<td></td>
</tr>
<tr>
<td>To gain the feeling of belonging</td>
<td>Onboard</td>
<td>5.00</td>
<td>1.64</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Onshore</td>
<td>4.00</td>
<td>1.85</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Neutral</td>
<td>4.90</td>
<td>1.65</td>
<td></td>
</tr>
<tr>
<td>To be with others</td>
<td>Onboard</td>
<td>5.14</td>
<td>1.54</td>
<td>.005</td>
</tr>
<tr>
<td></td>
<td>Onshore</td>
<td>4.45</td>
<td>1.68</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Neutral</td>
<td>5.12</td>
<td>1.55</td>
<td></td>
</tr>
<tr>
<td>To build friendship with others</td>
<td>Onboard</td>
<td>5.10</td>
<td>1.56</td>
<td>.004</td>
</tr>
<tr>
<td></td>
<td>Onshore</td>
<td>4.38</td>
<td>1.65</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Neutral</td>
<td>5.04</td>
<td>1.49</td>
<td></td>
</tr>
<tr>
<td>To have a good time with friends</td>
<td>Onboard</td>
<td>5.49</td>
<td>1.37</td>
<td>.001</td>
</tr>
<tr>
<td></td>
<td>Onshore</td>
<td>4.74</td>
<td>1.67</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Neutral</td>
<td>4.98</td>
<td>1.42</td>
<td></td>
</tr>
<tr>
<td>To develop close friendships</td>
<td>Onboard</td>
<td>5.11</td>
<td>1.65</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Onshore</td>
<td>4.14</td>
<td>1.78</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Neutral</td>
<td>5.01</td>
<td>1.56</td>
<td></td>
</tr>
<tr>
<td>To use my physical abilities or skills in sport</td>
<td>Onboard</td>
<td>4.73</td>
<td>1.86</td>
<td>.003</td>
</tr>
<tr>
<td></td>
<td>Onshore</td>
<td>3.83</td>
<td>1.81</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Neutral</td>
<td>4.46</td>
<td>1.92</td>
<td></td>
</tr>
<tr>
<td>To challenge my abilities</td>
<td>Onboard</td>
<td>4.85</td>
<td>1.65</td>
<td>.003</td>
</tr>
<tr>
<td></td>
<td>Onshore</td>
<td>4.05</td>
<td>1.82</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Neutral</td>
<td>4.72</td>
<td>1.73</td>
<td></td>
</tr>
<tr>
<td><strong>Factor Group</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stimulus Avoidance motives (LMS-F1)</td>
<td>Onboard</td>
<td>5.86</td>
<td>0.92</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Onshore</td>
<td>4.97</td>
<td>1.33</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Neutral</td>
<td>5.68</td>
<td>1.21</td>
<td></td>
</tr>
<tr>
<td>Social motives (LMS-F2)</td>
<td>Onboard</td>
<td>5.17</td>
<td>1.31</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Onshore</td>
<td>4.34</td>
<td>1.51</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Neutral</td>
<td>5.10</td>
<td>1.31</td>
<td></td>
</tr>
<tr>
<td>Competence Mastery motives (LMS-F3)</td>
<td>Onboard</td>
<td>4.79</td>
<td>1.69</td>
<td>.002</td>
</tr>
<tr>
<td></td>
<td>Onshore</td>
<td>4.59</td>
<td>1.75</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Neutral</td>
<td>3.94</td>
<td>1.76</td>
<td></td>
</tr>
</tbody>
</table>

Significant at $p < .01$

Onboard Group, $n = 251$; Onshore Group, $n = 65$; Neutral Group, $n = 189$; Total, $n = 505$

**Cruising as a Vacation Type**

Significant differences were found in the cruising as a vacation type item set (VT) between the three preference groups on six of the 17 items and two of the three factor groups (Table 6.13). The Onboard Preference Group was again responsible for the majority of these, having the highest importance rating on five of the six significant VT items and on both of the significant VT factors.
<table>
<thead>
<tr>
<th>Item</th>
<th>Group</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cruising provides a high level of luxury</td>
<td>Onboard</td>
<td>5.83</td>
<td>1.31</td>
<td>.001</td>
</tr>
<tr>
<td></td>
<td>Offshore</td>
<td>5.22</td>
<td>1.46</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Neutral</td>
<td>5.60</td>
<td>1.20</td>
<td></td>
</tr>
<tr>
<td>Cruising Provides a close social environment</td>
<td>Onboard</td>
<td>5.29</td>
<td>1.44</td>
<td>.005</td>
</tr>
<tr>
<td></td>
<td>Offshore</td>
<td>4.68</td>
<td>1.23</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Neutral</td>
<td>5.31</td>
<td>1.35</td>
<td></td>
</tr>
<tr>
<td>Cruising allows you to experience the feeling being on a ship</td>
<td>Onboard</td>
<td>5.55</td>
<td>1.25</td>
<td>.003</td>
</tr>
<tr>
<td></td>
<td>Offshore</td>
<td>4.94</td>
<td>1.41</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Neutral</td>
<td>5.51</td>
<td>1.28</td>
<td></td>
</tr>
<tr>
<td>Cruising does not require a lot of pre-trip planning</td>
<td>Onboard</td>
<td>5.55</td>
<td>1.21</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Offshore</td>
<td>4.78</td>
<td>1.28</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Neutral</td>
<td>5.46</td>
<td>1.35</td>
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</tr>
<tr>
<td>Cruising does not require much effort once on vacation</td>
<td>Onboard</td>
<td>5.76</td>
<td>1.19</td>
<td>.003</td>
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<tr>
<td></td>
<td>Offshore</td>
<td>5.17</td>
<td>1.31</td>
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<tr>
<td></td>
<td>Neutral</td>
<td>5.52</td>
<td>1.37</td>
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<tr>
<td>Cruising has a pre-set schedule</td>
<td>Onboard</td>
<td>5.61</td>
<td>1.20</td>
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<tr>
<td></td>
<td>Offshore</td>
<td>4.83</td>
<td>1.42</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Neutral</td>
<td>5.32</td>
<td>1.29</td>
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</table>

**Composite Variables**

<table>
<thead>
<tr>
<th>Item</th>
<th>Group</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opportunities for Social Engagement (VT-F2)</td>
<td>Onboard</td>
<td>5.29</td>
<td>1.33</td>
<td>.010</td>
</tr>
<tr>
<td></td>
<td>Offshore</td>
<td>4.75</td>
<td>1.18</td>
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<tr>
<td></td>
<td>Neutral</td>
<td>5.24</td>
<td>1.20</td>
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</tr>
<tr>
<td>Ease of Planning (VT-F3)</td>
<td>Onboard</td>
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<td>1.01</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Offshore</td>
<td>4.93</td>
<td>1.10</td>
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</tr>
<tr>
<td></td>
<td>Neutral</td>
<td>5.43</td>
<td>1.19</td>
<td></td>
</tr>
</tbody>
</table>

Significant at $p < .01$

Onboard Group, $n = 251$; Offshore Group, $n = 65$; Neutral Group, $n = 189$; Total, $n = 505$

Despite significant differences between the three groups on a number of items and factors, they returned similar results in the ordering of the VT items and factors. The most important factor to all three groups was Ease of Travel (VT-F1), followed by Ease of Planning (VT-F3), and Opportunities for Social Engagement (VT-F2). The Ease of Travel factor was the largest of the three, containing ten of the 16 VT items. All of these items were in the top ten highest-rated VT items for both the Offshore and Neutral Preference Group, while nine of the items were in the top ten of the Onboard Preference Group.

The similarity between the groups on this item set demonstrates that participants, regardless of their preference for the onboard or onshore aspects of cruising, agreed that the most important aspects that are unique to cruise vacations are those related to the convenient and semi-structured nature of the trips, thereby providing an easy, worry-free cruise with minimal effort required for day-to-day planning, scheduling, and transportation.

**Socio-demographics and Cruise Travel Behaviour Variables**

To examine differences in the socio-demographic and cruise travel behaviour variables between the preference groups, and to develop passenger profiles, cross-tabulations (crosstabs and chi-square) were calculated. Results of the crosstabs revealed several variables that were significant.
(p < .05). Table 6.14 provides a summary of the significant results, with the exception of the results that related to the different cruise regions, which are discussed later.

<table>
<thead>
<tr>
<th>Table 6.14 Summary of Significant Chi-square Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender (Males)</td>
</tr>
<tr>
<td>OS Preference Group</td>
</tr>
<tr>
<td>OB Preference Group</td>
</tr>
<tr>
<td>Neutral Preference Group</td>
</tr>
<tr>
<td>Age Group (Over 50)</td>
</tr>
<tr>
<td>OS Preference Group</td>
</tr>
<tr>
<td>OB Preference Group</td>
</tr>
<tr>
<td>Neutral Preference Group</td>
</tr>
<tr>
<td>Education (College/ Graduate/ Trade Degree)</td>
</tr>
<tr>
<td>OS Preference Group</td>
</tr>
<tr>
<td>OB Preference Group</td>
</tr>
<tr>
<td>Neutral Preference Group</td>
</tr>
<tr>
<td>Employment Status (Retired)</td>
</tr>
<tr>
<td>OS Preference Group</td>
</tr>
<tr>
<td>OB Preference Group</td>
</tr>
<tr>
<td>Neutral Preference Group</td>
</tr>
<tr>
<td>Number of Previous Cruises (5+)</td>
</tr>
<tr>
<td>OS Preference Group</td>
</tr>
<tr>
<td>OB Preference Group</td>
</tr>
<tr>
<td>Neutral Preference Group</td>
</tr>
<tr>
<td>Length of Most Recent Cruise (9+ Days)</td>
</tr>
<tr>
<td>OS Preference Group</td>
</tr>
<tr>
<td>OB Preference Group</td>
</tr>
<tr>
<td>Neutral Preference Group</td>
</tr>
<tr>
<td>Length of Next Cruise (9+ Days)</td>
</tr>
<tr>
<td>OS Preference Group</td>
</tr>
<tr>
<td>OB Preference Group</td>
</tr>
<tr>
<td>Neutral Preference Group</td>
</tr>
</tbody>
</table>

Significant at p < .05
Onboard Group, n = 251; Onshore Group, n = 65; Neutral Group, n = 189; Total, n = 505

Chi-square results revealed that a greater percentage of the Onboard Preference Group was male (56.6%) compared to the two other groups, while the Onshore Preference Group had a greater percentage of participants who were over the age of 50, had attained higher levels of education, were retired, had been on more previous cruise vacations, and took longer cruises (9+ days) based on their most recent and next planned cruise vacations. Caution must be exercised when interpreting these results because many factors may be related, such as older participants being more likely to be retired, and having more time to experience cruising and complete higher levels of education. Retired participants may also have more leisure time for longer cruise vacations. When developing passenger profiles, it is safe to include these results as a means of understanding group differences.

In addition to the above socio-demographic and cruise travel behaviour variables, several cruise regions indicated significant differences between the three groups in terms of participants’ first cruise vacation, most recent cruise vacation, and next cruise vacation (planned or already booked). Results for the participants’ first cruise vacation were very similar among the three groups, with the exception of the Onshore Preference Group, who were more likely to have visited the West Coast of Mexico and less likely to have visited the Caribbean (including Eastern Mexico). Results for participants’ most recent cruise vacations were more varied, with the Onshore Preference Group more likely to have visited the Mediterranean (including Greece and Turkey), the South Pacific, and South America, and less likely to have visited the Bahamas. The Onboard Preference Group was more likely to have sailed in the Caribbean and Eastern Mexico on their most recent cruise vacation, while the Neutral Preference Group was again similar to the Onboard group; however, the Neutral group was less likely than the Onboard group to have sailed most recently in the Caribbean and Eastern Mexico (having similar results to the Onshore group for this region) and was more likely than the other groups to have sailed US coastal routes.
For participants’ upcoming cruise vacations, the Onshore Preference Group was more likely to have indicated plans to travel to the Mediterranean (including Greece and Turkey), Europe, European river cruises, or South America, and less likely to visit the Caribbean (including Eastern Mexico), the Bahamas, or Hawaii. The Onboard and Neutral Preference Groups were again very similar, although the Onboard Preference Group was more likely to have plans to cruise in the Caribbean (including Eastern Mexico).

**Group Summaries**

Analysing the differences between and within the three preference groups helped to develop a more complete understanding of the individual groups, as well as allowing for a more detailed description of each group. Although the three groups had similar results for several of the item sets, the Onshore Preference Group was the most distinct.

The Onboard Preference Group was the largest of the three groups \((n = 251)\), returning significantly higher ratings on a large number of items and factors from the different item sets, with a particular focus on the onboard aspects of cruising. The onboard group consisted of more men (56.6%) than women and, with 61.5% of the participants being under the age of 40, they were younger than the Onshore Preference Group. The Onboard group was well educated (but less so than the Onshore Preference Group): 69.3% had a college or graduate degree and it had the largest percent of the three groups for a technical-trade degree (6.8%). The group had the largest percentage of full-time workers (62.9%) and the smallest percentage of retirees (13.9%), with the majority (64.1%) having annual household incomes ranging from $60,000 to $200,000.

The Onboard Preference Group had a large percentage of participants who had been on three or fewer cruises (57.3%), although nearly a third (30.7%) had been on five or more cruises. The Onboard group indicated having taken or planning to take cruises in the more common cruise regions (Caribbean, Alaska, Bahamas, and Hawaii), as well as to other regions, such as Europe. Nearly three quarters of the group (74.1%) had taken a cruise of between three and eight days on their most recent cruise vacation. The Onboard group’s typical travel party for their most recent and upcoming cruise vacations consisted of two to four people (including the participant). The Onboard group was the most likely to cruise with a spouse, partner, or companion, and the least likely to cruise with friends.

Onboard Environment and Onboard Recreation were the most important onboard aspects of cruising for the Onboard Preference Group, although the group also valued onshore items relating to Safety and Comfort, and Visual Surroundings. The group was mostly motivated to cruise by Stimulus Avoidance, as well as by Intellectual motives. Furthermore, in comparison with the other groups, higher importance was placed on the Ease of Planning factor from the cruising as a vacation
type item set. The significantly higher ratings given to a variety of cruise-related aspects identify the Onboard Preference Group as *Cruise Enthusiasts*, who not only find the unique onboard aspects of cruise travel to be an important way of satisfying the need to relax but also feel strongly about all aspects of cruise vacations, whether they are onboard the ship or onshore at the ports of call.

The Onshore Preference Group was the smallest of the three groups (*n* = 65), representing a small niche of participants who assigned a relatively higher importance to the onshore aspects of cruising. Participants in this group were slightly more likely to be female (55.4%) and, with roughly half the group being over the age of 50 (50.7%), there was a significant number who were retired (32.3%); nevertheless, the largest percentage were employed full-time (44.6%). The group was very well educated and had a significant level of income, with 86.1% having a college or graduate degree and 40% having an annual household income greater than $100,000. This group had travelled widely on cruise vacations, with nearly half (44.6%) having been on five or more cruises. The Onshore Preference Group tended to take longer cruises than the other groups, and preferred a wide variety of cruise regions such as Europe, the Mediterranean, South America, and European rivers, as well as traditional cruise regions (Caribbean, Alaska, Bahamas, and Hawaii).

For the most recent and upcoming cruise vacations, the travel party of the Onshore Preference Group mostly consisted of just one other person, usually a spouse, companion, or partner. Larger groups were still common: the Onshore group had the largest percentage of the three groups who travelled with friends. The Onshore group was the least likely to sail with children under 18—presumably because of the group’s age—and thus less likely to have children in that age group; however, the Onshore group still was less likely to cruise with children of any age (under 18 or adult) on their most recent, or upcoming cruise vacations.

The Onshore Preference Group attached greater importance to the Learning and Exploration factor compared to the other groups, and also placed high importance on Visual Surroundings. A high rating of Intellectual motives for travel reinforced the importance of Learning and Exploration attributes. Similar to the other groups, and despite favouring onshore aspects, the Onboard Environment was still of great importance, particularly the quality of accommodation facilities and having a relaxing and stress free environment. These results identify the Onshore Preference Group as *Cruise Explorers*—experienced cruisers who use cruise vacations as a way to satisfy their desire to learn about and explore new destinations when onshore at the ports of call, while being able to return to a comfortable and relaxing environment onboard the ship.

The Neutral Preference Group was truly neutral across the three groups, in more ways than just their relatively equal preference for onboard and onshore aspects, as indicated by the results of the slider format question. The group fell in the middle in terms of group size (*n* = 189). Overall
scores for all item sets fell below the Onboard Preference Group but above the Onshore Preference Group. There were more female (56.6%) than male participants in this group, with 59.2% of the group under the age of 40. The Neutral group tended to be slightly less educated than the other groups—even though a similar age to the Onboard group—with a third (33.8%) of participants having obtained the level of Some College or High School or Less, and 62.4% having a college or graduate degree. The majority of these participants (59.8%) earned an annual household income between $60,000 to $200,000, with 72% being employed full (56.1%) or part-time (15.9%).

The Neutral Preference Group were the least experienced cruisers, with the majority having been on three or fewer cruises (62.4%). They had cruised or planned to cruise in the traditional cruise regions (Caribbean, Alaska, Bahamas, and Hawaii) but also the Mediterranean (including Greece and Turkey), and tended to choose cruises between three and eight days in length (73.0%) on their most recent cruise vacation. As with the other groups, the majority travelled with one other person on their most recent or upcoming cruise vacations but groups of three or four (including the participant) were also common. The neutral group most often travelled with a spouse, partner or companion, and children under 18.

The Neutral Preference Group was similar to the Onboard Preference Group, having rated as most important the items from the Onboard Environment factor, followed by onshore items from the Safety and Comfort, and Visual Surroundings, factors; however, the Neutral Preference Group attached greater importance to the Onboard Environment factor than the Onboard Recreation factor, as well as onshore attributes in general. The Neutral Preference Group ranked the LMS and VT factors in the same order as the Onboard Preference Group, with Stimulus Avoidance motives rated the highest for both of these groups, followed by Intellectual, Social, and Competence Mastery motives. For the VT factors, Ease of Travel was the highest rated, followed by Ease of Planning, and Opportunities for Social Engagement. This mix of results reveals the Neutral Preference Group to be Cruise Comfort-Seekers—looking to experience both the onboard and onshore aspects of cruise vacations to relax and unwind during a comfortable and easygoing holiday.

6.3.6 PUSH – PULL RELATIONSHIP

The second goal of Stage 3 was to explore the relationship between push and pull factors in the decision to cruise: that is, the relationship between travel motives and cruise destination attributes, both onboard and onshore (Research Objective 3). The push-pull relationship was explored using regression analysis and canonical correlation analysis.
6.3.6.1 Regression Analysis

Regression analysis was conducted separately for each of the dependent variables, producing coefficients of determination ($R^2$) greater than .400 for seven of the eight pull factors, with Safety and Comfort (OS-F2) being the only factor under that level (.336). In fact, four of those factors had $R^2$ values greater than .500 (Onboard Environment, Onboard Social Interaction, Onboard Recreation, and Onshore Activities). Thus, more than 50% of the variance in those four pull factors, or more than 40% of the variance in seven of the eight pull factors, could be explained by the push factors.

Beta coefficients indicate that the Stimulus Avoidance motives had the strongest relationship with the Onboard Environment factor and the weakest with the Onboard Social Interaction factor. The opposite was the case with Social motives, which had the strongest relationship with the Onboard Social Interaction factor—generating the largest beta coefficient in the regression analysis (.602)—and the weakest relationship with the Onboard Environment factor. Competence Mastery motives had the strongest relationship with the Onshore Activities factor and the weakest relationship with the Learning and Exploration factor, which had the smallest beta coefficient from the regression analysis (.008). Competence Mastery motives also had the largest negative effect found in the analysis (-.310), associated with the Onboard Environment factor. The final push factor, Intellectual motives, had the strongest relationship with the Learning and Exploration factor and the weakest relationship with the Onboard Recreation factor (Table 6.15).

<table>
<thead>
<tr>
<th>Pull Factor Group (Attributes)</th>
<th>Push Factor Group (Motives)</th>
<th>Stimulus Avoidance</th>
<th>Social</th>
<th>Competence Mastery</th>
<th>Intellectual</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Onboard Factors</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Onboard Environment</td>
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<td>.537*</td>
<td>.016</td>
<td>-.310*</td>
<td>.385*</td>
</tr>
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<td>$R^2 = .533$</td>
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<td>Onboard Recreation</td>
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<td>.177*</td>
<td>.194*</td>
<td>.050</td>
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<td><strong>Onshore Factors</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Onshore Activities</td>
<td></td>
<td>.144*</td>
<td>.341*</td>
<td>.457*</td>
<td>-.057</td>
</tr>
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<td>$R^2 = .590$</td>
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</tr>
<tr>
<td>Learning and Exploration</td>
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<td>.066</td>
<td>.008</td>
<td>.504*</td>
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<tr>
<td>Visual Surroundings</td>
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<td>.109</td>
<td>-.143*</td>
<td>.341*</td>
</tr>
<tr>
<td>$R^2 = .494$</td>
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<tr>
<td>Safety and Comfort</td>
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<td>.362*</td>
<td>.239*</td>
<td>-.109</td>
<td>.166*</td>
</tr>
<tr>
<td>$R^2 = .336$</td>
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<tr>
<td>Destination Development</td>
<td></td>
<td>.164*</td>
<td>.368*</td>
<td>.127</td>
<td>.136</td>
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<tr>
<td>$R^2 = .428$</td>
<td></td>
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</tbody>
</table>

*Significant Beta coefficients at $p < 0.001
Regression analysis revealed that a number of cruise destination attribute factors have significant relationships with multiple travel motives ($p < .001$). These relationships are summarized in Table 6.16 with their associated beta coefficients.

<table>
<thead>
<tr>
<th>Push Factors (IVs)</th>
<th>Beta</th>
<th>Pull Factors (DVs)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Motive Factors</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competence Mastery motives</td>
<td>.457</td>
<td>Onshore Activities</td>
</tr>
<tr>
<td>Social motives</td>
<td>.341</td>
<td></td>
</tr>
<tr>
<td>Stimulus Avoidance motives</td>
<td>.144</td>
<td></td>
</tr>
<tr>
<td>Intellectual motives</td>
<td>.504</td>
<td>Learning &amp; Exploration</td>
</tr>
<tr>
<td>Stimulus Avoidance motives</td>
<td>.172</td>
<td></td>
</tr>
<tr>
<td>Stimulus Avoidance motives</td>
<td>.452</td>
<td>Visual Surroundings</td>
</tr>
<tr>
<td>Intellectual motives</td>
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<tr>
<td>Competence Mastery motives</td>
<td>-.143</td>
<td></td>
</tr>
<tr>
<td>Social motives</td>
<td>.362</td>
<td>Safety &amp; Comfort</td>
</tr>
<tr>
<td>Intellectual motives</td>
<td>.239</td>
<td></td>
</tr>
<tr>
<td>Stimulus Avoidance motives</td>
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<td>Destination Development</td>
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<tr>
<td>Stimulus Avoidance motives</td>
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<td>Onboard Recreation</td>
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<tr>
<td>Competence Mastery motives</td>
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<tr>
<td>Social motives</td>
<td>.177</td>
<td></td>
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<tr>
<td><strong>Cruising as a Vacation Type Factors</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competence Mastery motives</td>
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<td>Ease of Travel</td>
</tr>
<tr>
<td>Intellectual motives</td>
<td>.363</td>
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</tr>
<tr>
<td>Social motives</td>
<td>.613</td>
<td>Opportunities for Social Engagement</td>
</tr>
<tr>
<td>Intellectual motives</td>
<td>.169</td>
<td></td>
</tr>
<tr>
<td>Stimulus Avoidance motives</td>
<td>.412</td>
<td>Ease of Planning</td>
</tr>
<tr>
<td>Social motives</td>
<td>.258</td>
<td></td>
</tr>
</tbody>
</table>

The Stimulus Avoidance factor had significant positive relationships with more pull factor groups (9 out of 11) than any of the other push factor groups. This indicates a strong suitability of both the onboard and onshore attributes of cruise vacations to satisfy the desire to avoid or escape mental or physical stimulation. Interestingly, the Competence Mastery motive had significant negative relationships with three of the factor groups (Visual Surroundings, Onboard Environment, and Ease of Travel) and significant positive relationships with two of the factor groups (Onshore Activities and Onboard Recreation). This indicates that, although many aspects of cruising may potentially satisfy the need to escape and relax, fewer aspects provide opportunities to challenge abilities and skills. Table 6.15 also identifies strong positive relationships between Social motives and the social aspects of cruising (Onboard Social Interaction, Opportunities for Social Engagement), as well as between Intellectual motives and the Learning and Exploration and Onboard Environment, factors.
6.3.6.2 Canonical Correlation Analysis

Canonical correlation analysis of the push and pull cruise motivation items yielded 14 canonical variates, equal to the number of items in the smaller item set (i.e., the Leisure Motivation Scale), of which nine were found to be significant ($p < .001$). Canonical correlations for the nine significant variates ranged from .850 to .379, with eigenvalues ranging from .168 to 2.608. The proportion of variance extracted from the push item set was 88.4%, while the proportion of variance extracted from the pull item set was 63.7%. The push item variance that could be recovered from the pull items was 50.7% (redundancy), while 38.7% (redundancy) of pull item variance could be recovered from the push item variance (Table 6.17).

<table>
<thead>
<tr>
<th>Canonical Variates</th>
<th>Correlation</th>
<th>Eigenvalue</th>
<th>Set 1 by Self (Push Items)</th>
<th>Set 1 by Set 2</th>
<th>Set 2 by Self (Pull Items)</th>
<th>Set 2 by Set 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.850</td>
<td>2.608</td>
<td>.438</td>
<td>.317</td>
<td>.276</td>
<td>.199</td>
</tr>
<tr>
<td>2</td>
<td>.807</td>
<td>1.872</td>
<td>.187</td>
<td>.122</td>
<td>.234</td>
<td>.153</td>
</tr>
<tr>
<td>3</td>
<td>.594</td>
<td>.545</td>
<td>.072</td>
<td>.025</td>
<td>.041</td>
<td>.014</td>
</tr>
<tr>
<td>4</td>
<td>.556</td>
<td>.447</td>
<td>.067</td>
<td>.021</td>
<td>.026</td>
<td>.008</td>
</tr>
<tr>
<td>5</td>
<td>.507</td>
<td>.345</td>
<td>.024</td>
<td>.006</td>
<td>.014</td>
<td>.004</td>
</tr>
<tr>
<td>6</td>
<td>.479</td>
<td>.298</td>
<td>.028</td>
<td>.006</td>
<td>.016</td>
<td>.004</td>
</tr>
<tr>
<td>7</td>
<td>.390</td>
<td>.179</td>
<td>.027</td>
<td>.004</td>
<td>.011</td>
<td>.002</td>
</tr>
<tr>
<td>8</td>
<td>.383</td>
<td>.171</td>
<td>.016</td>
<td>.002</td>
<td>.010</td>
<td>.002</td>
</tr>
<tr>
<td>9</td>
<td>.379</td>
<td>.168</td>
<td>.025</td>
<td>.004</td>
<td>.009</td>
<td>.001</td>
</tr>
<tr>
<td>Total</td>
<td>-</td>
<td>-</td>
<td>0.884</td>
<td>0.507</td>
<td>0.637</td>
<td>0.387</td>
</tr>
<tr>
<td>10</td>
<td>.346</td>
<td>.136</td>
<td>.026</td>
<td>.003</td>
<td>.011</td>
<td>.001</td>
</tr>
<tr>
<td>11</td>
<td>.306</td>
<td>.103</td>
<td>.027</td>
<td>.003</td>
<td>.011</td>
<td>.001</td>
</tr>
<tr>
<td>12</td>
<td>.272</td>
<td>.080</td>
<td>.019</td>
<td>.001</td>
<td>.010</td>
<td>.001</td>
</tr>
<tr>
<td>13</td>
<td>.238</td>
<td>.060</td>
<td>.019</td>
<td>.001</td>
<td>.009</td>
<td>.000</td>
</tr>
<tr>
<td>14</td>
<td>.199</td>
<td>.041</td>
<td>.024</td>
<td>.001</td>
<td>.010</td>
<td>.000</td>
</tr>
<tr>
<td>Total</td>
<td>-</td>
<td>-</td>
<td>.999</td>
<td>.516</td>
<td>.688</td>
<td>.390</td>
</tr>
</tbody>
</table>

With low redundancy, little variation in one variate can be accounted for by the other variate (Baloglu & Uysal, 1996); therefore, variate pairs with a redundancy index greater than 2% for both push and pull variables were used for further analysis. This resulted in two variate pairs (Table 6.18).
Table 6.18 Canonical Correlation Analysis

<table>
<thead>
<tr>
<th>Canonical Correlations</th>
<th>Variate 1</th>
<th>Variate 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canonical correlation</td>
<td>.850</td>
<td>.807</td>
</tr>
<tr>
<td>Eigenvalue</td>
<td>2.608</td>
<td>1.872</td>
</tr>
<tr>
<td>Wilks statistic</td>
<td>.010</td>
<td>.037</td>
</tr>
<tr>
<td>F statistic</td>
<td>4.368</td>
<td>3.335</td>
</tr>
<tr>
<td>Numerator D.F.</td>
<td>574.000</td>
<td>520.000</td>
</tr>
<tr>
<td>Denominator D.F.</td>
<td>6081.920</td>
<td>5683.813</td>
</tr>
<tr>
<td>Sig.</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>Percentage of Variance Explained (%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pull items (cruise attributes)</td>
<td>27.6</td>
<td>23.4</td>
</tr>
<tr>
<td>Cumulative %</td>
<td>27.6</td>
<td>51.0</td>
</tr>
<tr>
<td>Push items (motives)</td>
<td>43.8</td>
<td>18.7</td>
</tr>
<tr>
<td>Cumulative %</td>
<td>43.8</td>
<td>62.5</td>
</tr>
<tr>
<td>Redundancy (%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pull items (cruise attributes)</td>
<td>31.7</td>
<td>12.2</td>
</tr>
<tr>
<td>Cumulative %</td>
<td>31.7</td>
<td>43.9</td>
</tr>
<tr>
<td>Push items (motives)</td>
<td>19.9</td>
<td>15.3</td>
</tr>
<tr>
<td>Cumulative %</td>
<td>19.9</td>
<td>35.2</td>
</tr>
</tbody>
</table>

Canonical loadings were then used to identify the most important variables (push and pull items) with each of the two canonical variate pairs. Because both variates loaded strongly, only items with canonical loadings greater than 0.700 were retained and used for the interpretation of the variates and the development of product bundles (Tables 6.19 and 6.20).

Table 6.19 Canonical Loadings: Push Factor Items

<table>
<thead>
<tr>
<th>Push Items</th>
<th>Variate 1</th>
<th>Variate 2</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>To physically relax (LMS-F1)</td>
<td>-</td>
<td>0.673</td>
<td>5.68</td>
</tr>
<tr>
<td>To mentally relax (LMS-F1)</td>
<td>-</td>
<td>0.719</td>
<td>5.75</td>
</tr>
<tr>
<td>To avoid the hustle and bustle of daily life (LMS-F1)</td>
<td>-</td>
<td>0.646</td>
<td>5.62</td>
</tr>
<tr>
<td>To be in a calm atmosphere (LMS-F1)</td>
<td>-</td>
<td>-</td>
<td>5.60</td>
</tr>
<tr>
<td>To gain a feeling of belonging (LMS-F2)</td>
<td>-0.831</td>
<td>-</td>
<td>4.82</td>
</tr>
<tr>
<td>To be with others (LMS-F2)</td>
<td>-0.718</td>
<td>-</td>
<td>5.05</td>
</tr>
<tr>
<td>To build friendships with others (LMS-F2)</td>
<td>-0.821</td>
<td>-</td>
<td>4.95</td>
</tr>
<tr>
<td>To have a good time with friends (LMS-F2)</td>
<td>-0.689</td>
<td>-</td>
<td>5.34</td>
</tr>
<tr>
<td>To develop close friendships (LMS-F2)</td>
<td>-0.832</td>
<td>-</td>
<td>4.92</td>
</tr>
<tr>
<td>To discover new places and things (LMS-F4)</td>
<td>-</td>
<td>0.796</td>
<td>5.96</td>
</tr>
<tr>
<td>To use my imagination (LMS-F4)</td>
<td>-0.699</td>
<td>-</td>
<td>5.18</td>
</tr>
<tr>
<td>To increase my knowledge (LMS-F4)</td>
<td>-</td>
<td>-</td>
<td>5.44</td>
</tr>
<tr>
<td>To use my physical abilities or skills in sport (LMS-F3)</td>
<td>-0.799</td>
<td>-</td>
<td>4.47</td>
</tr>
<tr>
<td>To challenge my abilities (LMS-F3)</td>
<td>-0.820</td>
<td>-</td>
<td>4.68</td>
</tr>
</tbody>
</table>

LMS-F1: Stimulus Avoidance; LMS-F2: Social; LMS-F3: Competence Mastery; LMS-F4: Intellectual

The first variate had strong canonical loadings for push items that related to the Social and Competence Mastery motive factor groups. This first variate also had high canonical loadings for pull items related to the Onshore Activities and Destination Development factor groups, and the Onboard Social Interaction and Onboard Recreation factor groups. This first “product bundle” was labelled Social Activity Seekers, as they were oriented towards social aspects as well as physical activities.
<table>
<thead>
<tr>
<th>Variables</th>
<th>Variate 1</th>
<th>Variate 2</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Onshore Items</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The ports to be visited are likely to have good weather at the time of the cruise (OS-F3)</td>
<td>-</td>
<td>0.601</td>
<td>5.71</td>
</tr>
<tr>
<td>The ports to be visited offer beautiful scenery (OS-F3)</td>
<td>-</td>
<td>0.722</td>
<td>5.71</td>
</tr>
<tr>
<td>The ports to be visited offer varied or diverse scenery (OS-F3)</td>
<td>-</td>
<td>-</td>
<td>5.64</td>
</tr>
<tr>
<td>The ship stops at multiple ports of call (OS-F2)</td>
<td>-</td>
<td>-</td>
<td>5.62</td>
</tr>
<tr>
<td>The ports to be visited are not all similar (OS-F2)</td>
<td>-</td>
<td>-</td>
<td>5.34</td>
</tr>
<tr>
<td>The ports to be visited have well-known/ popular landmarks and attractions (OS-F5)</td>
<td>-0.743</td>
<td>-</td>
<td>5.08</td>
</tr>
<tr>
<td>The ship to be visited are well developed (e.g., infrastructure, economy, government, environment, education, health, etc.) (OS-F5)</td>
<td>-0.636</td>
<td>-</td>
<td>5.27</td>
</tr>
<tr>
<td>The ports to be visited offer water-based activities (e.g., swimming, snorkelling, scuba-diving, surfing, fishing, water sports, etc.) (OS-F1)</td>
<td>-0.731</td>
<td>-</td>
<td>5.04</td>
</tr>
<tr>
<td>The ports to be visited offer warm weather activities (e.g., going to the beach, sun bathing, etc.) (OS-F1)</td>
<td>-0.669</td>
<td>-</td>
<td>5.28</td>
</tr>
<tr>
<td>The ports to be visited offer activities that are compatible with my interests (e.g., hiking, golf, tennis, horse back riding, etc.) (OS-F1)</td>
<td>-0.654</td>
<td>-</td>
<td>5.01</td>
</tr>
<tr>
<td>The local people at the ports to be visited are friendly towards tourists (OS-F3)</td>
<td>-</td>
<td>-</td>
<td>5.65</td>
</tr>
<tr>
<td>The ships to be visited are places you have never been before (OS-F2)</td>
<td>-</td>
<td>-</td>
<td>5.56</td>
</tr>
<tr>
<td>The ports to be visited are safe to explore on your own or without a guide (OS-F3)</td>
<td>-</td>
<td>0.642</td>
<td>5.79</td>
</tr>
<tr>
<td>The ports to be visited have historical sites and attractions to visit (OS-F2)</td>
<td>-</td>
<td>-</td>
<td>5.61</td>
</tr>
<tr>
<td>The ports to be visited offer opportunities to learn the local culture (OS-F2)</td>
<td>-</td>
<td>-</td>
<td>5.61</td>
</tr>
<tr>
<td>The ports to be visited offer opportunities to learn new things (OS-F2)</td>
<td>-</td>
<td>-</td>
<td>5.58</td>
</tr>
<tr>
<td>The ports to be visited have good bars or nightclubs onboard (OS-F1)</td>
<td>-0.824</td>
<td>-</td>
<td>4.64</td>
</tr>
<tr>
<td>The ports to be visited offer music and performances while onboard (OS-F1)</td>
<td>-0.763</td>
<td>-</td>
<td>4.98</td>
</tr>
<tr>
<td>The ports to be visited have well marked signage and finding locations is not difficult (OS-F4)</td>
<td>-</td>
<td>-</td>
<td>5.46</td>
</tr>
<tr>
<td>It is easy to get to/ from the cruise terminal at the start/ end of the cruise (OS-F4)</td>
<td>-</td>
<td>-</td>
<td>5.65</td>
</tr>
<tr>
<td>The ports to be visited have acceptable standards of hygiene and cleanliness (OS-F4)</td>
<td>-</td>
<td>-</td>
<td>5.83</td>
</tr>
<tr>
<td>The ports to be visited have natural features (e.g., mountains, waterfalls, parks, forests, beaches, lakes, rivers, etc.) (OS-F3)</td>
<td>-</td>
<td>-</td>
<td>5.64</td>
</tr>
<tr>
<td>The ports to be visited offer colder weather activities (e.g., glacier sightseeing, glacier trekking, winter sports, etc.) (OS-F1)</td>
<td>-0.794</td>
<td>-</td>
<td>4.53</td>
</tr>
<tr>
<td><strong>Onboard Items</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The ship has good onboard health &amp; fitness facilities and amenities (e.g., gym, spa, lap pools, sports facilities, etc.) (OB-F3)</td>
<td>-0.658</td>
<td>-</td>
<td>5.37</td>
</tr>
<tr>
<td>The ship has good onboard entertainment facilities and amenities (e.g., casino, bars, night clubs, lounges, show rooms, etc.) (OB-F3)</td>
<td>-</td>
<td>-</td>
<td>5.61</td>
</tr>
<tr>
<td>The ship has a variety of food and restaurants available onboard (OB-F1)</td>
<td>-</td>
<td>0.694</td>
<td>5.91</td>
</tr>
<tr>
<td>The ships accommodation facilities are of high quality (OB-F1)</td>
<td>-</td>
<td>-</td>
<td>5.61</td>
</tr>
<tr>
<td>The ship has a variety of food and restaurants available onboard (OB-F1)*</td>
<td>-</td>
<td>0.699</td>
<td>5.88</td>
</tr>
<tr>
<td>The ships food and restaurants are of high quality (OB-F1)*</td>
<td>-</td>
<td>0.738</td>
<td>5.93</td>
</tr>
<tr>
<td>The ship and its facilities are clean and in good appearance (OB-F1)*</td>
<td>-</td>
<td>0.735</td>
<td>6.05</td>
</tr>
<tr>
<td>The ship provides a comfortable environment (OB-F1)*</td>
<td>-</td>
<td>0.740</td>
<td>6.01</td>
</tr>
<tr>
<td>The ship provides opportunities to meet new people while onboard (OB-F2)</td>
<td>-0.733</td>
<td>-</td>
<td>5.25</td>
</tr>
<tr>
<td>The cruise line/ ship is known for having friendly passengers (OB-F2)</td>
<td>-0.651</td>
<td>-</td>
<td>5.45</td>
</tr>
<tr>
<td>The cruise line/ ship is known for having a diverse group of passengers (e.g., passengers of different ages, nationalities, places of residence, etc.) (OB-F2)</td>
<td>-0.734</td>
<td>-</td>
<td>5.25</td>
</tr>
<tr>
<td>The ship will not feel overly crowded or busy (OB-F1)</td>
<td>-</td>
<td>0.610</td>
<td>5.70</td>
</tr>
<tr>
<td>The ship will provide opportunities to socialize with other passengers (OB-F2)</td>
<td>-0.705</td>
<td>-</td>
<td>5.29</td>
</tr>
<tr>
<td>The ship will have places available to enjoy your personal space (OB-F1)</td>
<td>-</td>
<td>0.743</td>
<td>5.86</td>
</tr>
<tr>
<td>The ship will provide a relaxing/ stress-relieving atmosphere (OB-F1)</td>
<td>-</td>
<td>0.809</td>
<td>5.90</td>
</tr>
<tr>
<td>The ship will provide an exciting atmosphere (OB-F3)</td>
<td>-0.623</td>
<td>-</td>
<td>5.61</td>
</tr>
</tbody>
</table>
The ship will provide a safe environment while onboard (OB-F1)*

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>The ship has good swimming pools/ hot tubs (OB-F3)</td>
<td>-0.601</td>
<td>-</td>
<td>5.55</td>
</tr>
</tbody>
</table>

OS-F1: Onshore Activities; OS-F2: Learning and Exploration; OS-F3: Visual Surroundings; OS-F4: Safety & Comfort; OS-F5: Destination Development; OB-F1: Onboard Environment; OB-F2: Onboard Social Interaction; OB-F3: Onboard Recreation

*Items labelled as Cruise Necessities from the onboard-onshore attribute analysis

The second variate had more concentrated results, with strong canonical loadings for push items from the Stimulus Avoidance factor group, and pull items from the Visual Surroundings and Onboard Environment factor groups. This second “product bundle” was labelled Relaxed Pleasure Seekers, as they were oriented towards relaxation within beautiful surroundings while having access to the comfort afforded by the ship’s environment.

These variates, or product bundles, help identify the attributes of cruise vacations associated with specific motives for travelling. This allows cruise lines to more effectively market and develop product offerings by creating links between push and pull factors within promotional material or in the development of new product offerings.

6.3.6.3 Summary of the Push – Pull Relationship

The push-pull relationship has not previously been explored in the context of cruise tourism; therefore, two separate methods were conducted to analyse the relationship. These two methods of measuring the push-pull relationship generated complementary results, identifying key relationships between travel motives and cruise destination attributes. Table 6.21 summarizes the strongest relationships found between the push and pull factors that were measured in Stage 3.

<table>
<thead>
<tr>
<th>Table 6.21 Push-Pull Relationship Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Push Factors</strong></td>
</tr>
<tr>
<td>(Travel Motives)</td>
</tr>
<tr>
<td><strong>Canonical Correlation Analysis</strong></td>
</tr>
<tr>
<td>Variate 1</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Variate 2</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Regression Analysis</strong></td>
</tr>
<tr>
<td>Combination 1</td>
</tr>
<tr>
<td>Combination 2</td>
</tr>
<tr>
<td>Combination 3</td>
</tr>
<tr>
<td>Combination 4</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

*Competence Mastery motives also had a strong negative relationship with Onboard Environment attributes

The first variate from the canonical correlation analysis identified two push factors—the Social and the Competence Mastery motives—to be strongly correlated with four pull factors—Onshore Activities, Destination Development, Onboard Social Interaction, and Onboard Recreation. These same relationships were found in the regression analysis: Social motives had the strongest relationship with the Onboard Social Interaction factor and a slightly weaker relationship...
with Onshore Activities, while Competence Mastery motives had the strongest relationship with the Onshore Activities factor and a weaker relationship with Onboard Recreation. Additionally, Competence Mastery motives had strong negative relationships with the Onboard Environment factor.

The second variate from the canonical correlation analysis identified a single push factor, Stimulus Avoidance motives, which strongly correlated with the Visual Surroundings and Onboard Environment factors. These relationships were also found in the regression analysis, with the Stimulus Avoidance factor having the strongest relationship with Onboard Environment, but also the strongest relationship of the travel motives with the Onboard Recreation, Visual Surroundings, and Safety and Comfort factors. Stimulus Avoidance also had less significant relationships with the Learning and Exploration, and Onshore Activities, factors.

The positive relationships that were found between the Stimulus Avoidance factor and several onboard and onshore attribute factors are indicative of its high importance in the decision to cruise. Stimulus Avoidance was the highest rated motive factor (see Section 6.3.1) and it is no surprise that many aspects of cruising effectively cater for this desire. The relationships found during the canonical correlation and the regression analyses identify the cruise destination attributes, both onboard and onshore, that have the most potential to satisfy the specific needs and desires of cruise travellers (Research Objective 3). These combinations of attributes and motives can be used by cruise lines and destinations to develop the cruise experience by reinforcing the links between specific motives and the ability of cruise destinations to satisfy them. Likewise, marketing materials can target the aspects of cruise vacations that satisfy the travel needs of specific target markets. Using the regression and canonical correlation analysis results, marketing segments or product bundles can be developed to differentiate between these target markets.

6.3.7 Cruise Career and Cruise Travel Behaviour

Several incidental findings were made while analysing responses related to participants’ first cruise vacation, most recent cruise vacation and next intended cruise vacation. Although these findings are not directly related to the research aim and objectives of this study, they provide insight into cruise behaviour that may affect the choice of cruise as individuals progress through their cruise career (i.e., gain cruise experience). Although a study specifically designed to measure changes over an individual’s “cruise career” would be more useful in this regard (e.g., a longitudinal study), the current results can serve as a proxy for participants’ progression through their cruise career by indicating the changes in cruise travel behaviour as experience of it increases. This analysis is not intended to be comprehensive or to definitively identify changes associated with cruise experience; however, it reveals areas for future research where such relationships may
potentially exist. These relationships include cruise behaviors such as choice of cruise destination and length of cruise.

Table 6.22 displays 22 cruise regions in order of popularity (CLIA, 2011b) along with the number (and percentage) of Stage 3 participants who reported visiting those regions on their first, most recent, and next planned cruise vacations. As expected, the most popular regions were also the most commonly-identified regions that were visited during all three points in participants’ cruise careers (e.g., Caribbean, Alaska, Bahamas, and Hawaii); however, several destinations showed a change in the percentage of participants who identified them during the three points in the cruise career.

<table>
<thead>
<tr>
<th>Q.8 Region of first cruise</th>
<th>Q. 10 Region of most recent cruise</th>
<th>Q.15 Region of next cruise</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caribbean/ E. Mexico</td>
<td>172 (34%)</td>
<td>130 (26%)</td>
</tr>
<tr>
<td>Alaska</td>
<td>41 (8%)</td>
<td>48 (10%)</td>
</tr>
<tr>
<td>Bahamas</td>
<td>87 (17%)</td>
<td>89 (18%)</td>
</tr>
<tr>
<td>Hawaii</td>
<td>51 (10%)</td>
<td>42 (8%)</td>
</tr>
<tr>
<td>Bermuda</td>
<td>11 (2%)</td>
<td>14 (3%)</td>
</tr>
<tr>
<td>Med./ Greece/ Turkey</td>
<td>16 (3%)</td>
<td>20 (4%)</td>
</tr>
<tr>
<td>Europe</td>
<td>21 (4%)</td>
<td>34 (7%)</td>
</tr>
<tr>
<td>Panama Canal</td>
<td>5 (1%)</td>
<td>7 (1%)</td>
</tr>
<tr>
<td>Canada/ New England</td>
<td>6 (1%)</td>
<td>12 (2%)</td>
</tr>
<tr>
<td>Western Mexico</td>
<td>26 (5%)</td>
<td>16 (3%)</td>
</tr>
<tr>
<td>Coastal US</td>
<td>13 (3%)</td>
<td>14 (3%)</td>
</tr>
<tr>
<td>South Pacific</td>
<td>7 (1%)</td>
<td>16 (3%)</td>
</tr>
<tr>
<td>South America</td>
<td>11 (2%)</td>
<td>7 (1%)</td>
</tr>
<tr>
<td>Baltic/ Scandinavia</td>
<td>1 (&lt;1%)</td>
<td>4 (1%)</td>
</tr>
<tr>
<td>Africa</td>
<td>3 (1%)</td>
<td>4 (1%)</td>
</tr>
<tr>
<td>European rivers</td>
<td>7 (1%)</td>
<td>11 (2%)</td>
</tr>
<tr>
<td>Around the world</td>
<td>1 (&lt;1%)</td>
<td>2 (&lt;1%)</td>
</tr>
<tr>
<td>Transatlantic</td>
<td>3 (1%)</td>
<td>9 (2%)</td>
</tr>
<tr>
<td>China/ Japan</td>
<td>1 (&lt;1%)</td>
<td>7 (1%)</td>
</tr>
<tr>
<td>US rivers</td>
<td>11 (2%)</td>
<td>12 (2%)</td>
</tr>
<tr>
<td>Southeast Asia</td>
<td>8 (2%)</td>
<td>5 (1%)</td>
</tr>
<tr>
<td>Other/ Don’t know</td>
<td>1 (&lt;1%)</td>
<td>0</td>
</tr>
</tbody>
</table>

By looking at the change in the number of participants who reported each cruise region as being the region of their first, most recent, and next cruise vacation, a trend can be identified for destination popularity which is based on cruise experience. The Caribbean (including Eastern Mexico) is the clearest example, with a significant decrease in the number of participants reporting the Caribbean as being the region of their first cruise (34%) to their most recent cruise (26%) and to their next cruise (25%). A similar but larger decline for the Caribbean was found in the Stage 2 study (47% first cruise; 37% most recent cruise; and 26% next cruise). This could suggest a decrease in appeal of a destination, as reflected by a lower number of repeat visitors. In the above table, the Bahamas and Western Mexico also decreased in trend, although less significantly than the Caribbean. Slightly increasing trends were found in this stage of research, as well as in Stage 2, for
the Mediterranean (including Greece and Turkey) and Europe. The shift from the more popular regions to ones further down the list suggests that participants’ preferences for cruise destinations change as they go on more cruises (i.e., as they gain more cruise experience). This shift may also reflect the increasing market share of emerging markets. Capacity has been rerouted in recent years from the US ports of embarkation to regions such as Europe, Asia, Australia and the Pacific, and South America (BREA, 2014).

When comparing the differences between participants’ first, most recent, and next cruise vacations, another trend became apparent regarding cruise length (Table 6.23). In a similarity to the previous findings of Stages 1 and 2, it was found that cruise length tended to increase as the participants progressed from their first to most recent, and from their most recent to their next-planned cruise vacation.

<table>
<thead>
<tr>
<th>Cruise Length</th>
<th>Length of first cruise (n = 503)</th>
<th>Length of last cruise (n = 503)</th>
<th>Length of next cruise (n = 454)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 3 days</td>
<td>17 (3%)</td>
<td>19 (4%)</td>
<td>11 (2%)</td>
</tr>
<tr>
<td>3–5 days</td>
<td>166 (33%)</td>
<td>139 (28%)</td>
<td>95 (21%)</td>
</tr>
<tr>
<td>6–8 days</td>
<td>248 (49%)</td>
<td>219 (44%)</td>
<td>202 (44%)</td>
</tr>
<tr>
<td>9–15 days</td>
<td>60 (12%)</td>
<td>107 (21%)</td>
<td>128 (28%)</td>
</tr>
<tr>
<td>16+ days</td>
<td>12 (2%)</td>
<td>19 (4%)</td>
<td>18 (4%)</td>
</tr>
</tbody>
</table>

Note: For those participants who have only been on one cruise, their first and last cruise were to the same destination.

Approximately the same number of participants took the popular six to eight-day segment in their previous cruise, or plan to on their next cruise compared to their first cruise; however, shorter cruises (less than six days) were more popular for participants’ first cruise, while their most recent, and next planned cruise were more likely to be longer (greater than nine days). The trend of participants to take longer cruises as their cruise experience increases has also been observed in the related literature (CLIA, 2011b; Jones, 2011; Mancini, 2004, as cited in Perucic, 2007).

<table>
<thead>
<tr>
<th>Group Size</th>
<th>Size of travel party on last cruise (n = 502)</th>
<th>Size of travel party on next cruise (n = 454)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sailing alone</td>
<td>26 (5%)</td>
<td>27 (6%)</td>
</tr>
<tr>
<td>2</td>
<td>216 (43%)</td>
<td>205 (45%)</td>
</tr>
<tr>
<td>3</td>
<td>80 (16%)</td>
<td>77 (17%)</td>
</tr>
<tr>
<td>4</td>
<td>95 (19%)</td>
<td>79 (17%)</td>
</tr>
<tr>
<td>5 or more</td>
<td>85 (17%)</td>
<td>66 (15%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Travel Party</th>
<th>Travel party on last cruise (n = 502)</th>
<th>Travel party on next cruise (n = 454)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sailing alone</td>
<td>37 (7%)</td>
<td>43 (9%)</td>
</tr>
<tr>
<td>Spouse</td>
<td>304 (61%)</td>
<td>288 (63%)</td>
</tr>
<tr>
<td>Partner/ Companion</td>
<td>78 (16%)</td>
<td>61 (13%)</td>
</tr>
<tr>
<td>Children under 18</td>
<td>133 (26%)</td>
<td>105 (23%)</td>
</tr>
<tr>
<td>Adult children</td>
<td>44 (9%)</td>
<td>32 (7%)</td>
</tr>
<tr>
<td>Other family members</td>
<td>99 (20%)</td>
<td>74 (16%)</td>
</tr>
<tr>
<td>Friends</td>
<td>88 (18%)</td>
<td>84 (19%)</td>
</tr>
<tr>
<td>Members of group/ organization</td>
<td>5 (1%)</td>
<td>5 (1%)</td>
</tr>
</tbody>
</table>

Note: Slightly conflicting responses, as “sailing alone” options should be equal for both group size and travel party.
The size and composition of the travel party did not show any significant changes between the most recent and next cruise vacations (Table 6.24). Although data was not collected for participants’ first cruise vacation, it appears, in the short term at least, that individuals tend to travel with relatively the same number of people, and the same groups of people.

6.4 Summary of Findings

Chapter 6 presented the methodology, analysis, and results of the online panel survey conducted for Stage 3 of this thesis. Just over 500 participants \( n = 503 \) completed the online survey. These participants were North American (80% US and 20% Canadian) and had taken at least one cruise vacation in the 12 months prior to completing the survey. The survey sample showed similar socio-demographic and cruise behaviour characteristics as the participants in Stage 1 (Identifying Cruise Destination Attributes) and Stage 2 (CDAS pilot study) of this thesis, as well as those in previous CLIA market profile studies (CLIA, 2011b, 2015b). The most noticeable difference between the participants in Stage 3 and those in the CLIA reports was that this study’s participants had more cruise experience, having been on more previous cruise vacations.

Factor analysis was conducted on the four item sets covering travel motives, onboard attributes, onshore attributes, and cruising as a vacation type. Factor analysis of the Leisure Motivation Scale identified the same four travel motive factor groups as Ryan and Glendon (1998). In order of highest overall importance, the four factor groups were:

1. Stimulus Avoidance;
2. Intellectual;
3. Social; and

Factor analysis identified three onboard factor groups, each containing the same items from Stage 2, with the same order in terms of highest rated importance:

1. Onboard Environment;
2. Onboard Recreation; and

Factor analysis identified five onshore attribute factor groups with the following order-of-importance ratings:

1. Visual Surroundings;
2. Safety & Comfort;
3. Learning and Exploration;
4. Destination Development; and
5. Onshore Activities.

These factors have the same five factor group names as Stage 2; however, the exact items within the factor groups differ slightly in Stage 3. In the final item set—cruising as a vacation type—factor analysis identified three factor groups:

1. Ease of Travel;
2. Ease of Planning; and
3. Opportunities for Social Engagement.

These factor groups were rated in the same order as in Stage 2; although, with less significant differences between the ratings of the three factor groups.

In Stage 3, two methods were used to measure the relationship between onboard and onshore attributes. The first was to simply compare the results from the question that directly asked the relative importance of onboard and onshore attributes when deciding on a cruise vacation. The result was 59.27% to 40.73% in favour of onboard aspects over onshore aspects. The second method compared the relative importance by calculating the mean score of all items within each of the respective item sets. The results of this test reinforced the findings from the direct comparison, with onboard attributes having a higher mean score (5.69 out of 7.00) than onshore attributes (5.37). The results of the two methods that measure the relative importance between onboard and onshore attributes revealed that participants found onboard attributes to be of greater importance than onshore attributes when choosing a cruise vacation (Research Objective 2). Participants also indicated (through open-ended questions) that the relative importance of onboard and onshore attributes could be affected by changes to several factors, most notably to specific destinations and ports of call, first time or repeat visits to a destination, various details of the cruise itinerary, and the safety, comfort, and cleanliness of both the onboard and onshore environment.

To further analyse the relative importance of onboard and onshore attributes, preference groups were created that were based on responses to the slider format question that directly asked the relative importance of the two aspects of cruising. The three groups created were:

1. The Onboard Preference Group ($n = 251$);
2. The Onshore Preference Group ($n = 65$); and
3. The Neutral Preference Group ($n = 189$).

Results from ANOVA identified significant differences between these three groups in regards to several items and factor groups from the four item sets (travel motives, onboard attributes, onshore attributes, and cruising as a vacation type), and relating to socio-demographic and cruise travel behaviour variables. The development of these preference groups also lent more
credence to the findings that onboard attributes of cruising have greater importance than onshore attributes, as the size of the Onboard Preference Group was much larger than the size of the Onshore Preference Group.

Two methods were used to measure the relationship between push factors (travel motives) and pull factors (onboard and onshore cruise destination attributes)—the push-pull relationship. The two methods, regression analysis and canonical correlation analysis, provided complementary results. Regression analysis identified specific push-pull relationships, the strongest of which were between:

1. Stimulus Avoidance motives and the Onboard Environment factor;
2. Social motives and the Onboard Social Interaction factor;
3. Competence Mastery motives and the Onshore Activities factor; and
4. Intellectual motives and the Learning and Exploration factor (onshore).

Canonical correlation analysis identified two significant variates that indicated potential “product bundles”. The first product bundle was labelled *Social Activity Seekers*, as the variate identified strong relationships between Social and Competence Mastery motives and the Onshore Activities, Destination Development, Onboard Social Interaction, and Onboard Recreation factor groups. The second product bundle was labelled *Relaxation Pleasure Seekers*, as the variate identified strong relationships between the Stimulus Avoidance motive factor and the Visual Surroundings (onshore) and Onboard Environment factor groups.

Although they are beyond the scope of this study, two major trends were identified regarding cruise travel behaviour when responses were compared to questions related to participants’ first, most recent, and next planned cruise vacations. The first trend identified several destinations that had a decrease in visitation as passengers progressed from their first, to most recent, to next planned cruise vacations. This trend may identify markets that decrease in popularity as cruise experience grows. The Caribbean and Eastern Mexico was the cruise region that showed the largest decline. This trend was also identified in Stage 2. In the second trend, participants reported a significant change in cruise length when progressing from their first, to their most recent, and to their next planned cruise vacation. This same trend was also present in Stages 1 and 2 of this thesis. This supports results found in the literature that cruise travellers tend to take shorter cruises when first beginning to cruise, then take longer cruises as they gain more cruise experience (CLIA, 2011b; Jones, 2011; Mancini, 2004, as cited in Perucic, 2007). Although these questions were not designed to identify changes in cruise behaviour over time, the results can serve as a proxy of participants’ progression through their cruise career, identifying areas for future research.
CHAPTER 7: CONCLUSIONS

7.1 Introduction

The principal aim of this research has been to re-examine the push and pull motivational factors that influence the decisions of tourists to take a cruise vacation. This was accomplished by achieving three research objectives over the course of three sequential stages of research. In Stage 1, three exercises were conducted to elicit the onboard and onshore cruise destination attributes that contribute to participants’ personal constructs of cruise destination image (Research Objective 1). These include the functional (tangible/physical) and psychological (intangible/abstract) characteristics that form an individual’s mental depiction of a cruise vacation. In Stages 2 and 3, a newly developed cruise destination attribute scale (CDAS) was tested, refined, and used to determine the relative importance of onboard and onshore attributes in tourists’ choices of specific cruise vacations (Research Objective 2) and to explore the relationship between push factors (travel motives) and pull factors (cruise destination attributes)—including both onboard and onshore attributes—in the decision to cruise (Research Objective 3).

This final chapter presents the major conclusions of this thesis and its implications for academic research and the cruise industry (Section 7.2). The limitations of this research and potentials for future research are discussed in Section 7.3. The chapter concludes with several final remarks regarding cruise tourism research (Section 7.4).

7.2 Summary and Implications of Major Contributions

This thesis made four major research contributions:

1. Exploration of destination image in the cruise tourism context;
2. Re-conceptualization of the cruise destination;
3. Measurement of the relative importance of onboard and onshore attributes; and
4. Exploration of the push-pull relationship in the context of cruise tourism.

These contributions have helped to identify a number of theoretical and methodological implications for academic research in the field of cruise tourism and some practical implications for the cruise industry.

7.2.1 Exploring Destination Image in the Cruise Tourism Context

Cruise destination image—the application of destination image research in the context of cruise tourism—has received limited attention in the literature. Furthermore, traditional destination image research cannot be directly applied to cruise research due to the unique features of cruise
vacations, particularly the cruise ship’s role as a co-destination with the ports of call. Study of destination image in the cruise context requires research methods that separately and jointly examine the onboard and onshore aspects of cruise vacations. This thesis identified the personal constructs that contribute to tourists’ perceptions of cruise destination image. Repertory grid analysis (RGA) and open-ended questions were used to elicit personal constructs of cruise destination image. These responses were made in the participants’ own terms without researcher or industry bias. These personal constructs represent the onboard and onshore cruise destination attributes that are used by tourists to compare and differentiate between cruise lines, cruise ships, and cruise destinations when deciding on a cruise vacation. The use of RGA also allowed the concept of the cruise destination to extend beyond land-based destinations to include the cruise ship itself as a co-destination with the ports of call.

An understanding of how travellers differentiate and choose between competing options provides cruise lines and destinations with information that can be used to improve competitiveness. This information can be applied through marketing material that focuses on the key deciding attributes that a cruise line or destination already exhibits, by designing new services, or by improving existing services in order to incorporate important attributes not currently offered. For example, some of the most commonly-reported constructs of cruise destination image that cruise lines can influence include the quality, variety, and availability of onboard accommodation and dining. Making the different accommodation and dining options for each ship—as well as any other attributes—easy to locate in informational sources such as websites can aid the decision-making process of travellers by decreasing the time they require to research options. When updating or designing new ships, consideration should be given to the number of dining options (e.g., casual/formal dining, fixed/ flexible dining hours, different types of cuisines and dietary requirements, etc.) and accommodation options (e.g., adjoining rooms, suites for families/larger groups, varying options for outside cabins with windows/balconies, etc.). Another construct that continually emerged during the research was the ease and convenience that are associated with cruising. This included attributes such as not having to worry about things like getting from one destination to the next, planning meals or locating restaurants, or packing and unpacking at each destination. It also included the pre-paid nature of cruising, as well as the feeling of being looked after and pampered. It is important to highlight these attributes in promotional material, especially to families, groups, and those with mobility issues.

Many of the responses about cruise destinations were related to safety and ease of getting around town (e.g., transportation options, signage, information, language barriers, etc.). These attributes can be developed by creating a reassuring—though not intimidating—police or security
presence, especially at the port and near shops or money exchanges. They can also be developed by investment in transportation infrastructure, and by information and signage in multiple languages.

The use of RGA has a strong potential for future research in cruise and tourism related studies, especially in regards to multi-method or multi-stage research, as well as in the development of new measurement scales. This thesis explored travellers’ personal constructs of cruise destination image, and was the first to successfully use RGA to explore the concept of destination image in relation to cruise travel. One other cruise-specific study had previously attempted to use RGA (Park, 2006), but it abandoned RGA for a different data collection method. Unlike Park’s study, which used images collected by participants to represent their general image of cruising, this thesis used triad cards to explore destination image. It did this by comparing a variety of specified cruise destinations and by comparing cruising to a variety of competing forms of leisure travel. This resulted in a detailed account of participants’ perceptions of cruise destination image, represented in over eighteen hundred unique construct statements.

Researchers can benefit from the use of RGA because it provides a semi-structured, yet adaptable approach to qualitatively and quantitatively study destination image in a systematic manner. It has been shown to provide a significant amount of relevant data with a small sample size, all while minimizing interviewer bias and external pressure to focus on economically benefiting priorities of the cruise and travel industry. The use of RGA also benefits from the common approach of fixed-response questionnaires that are developed without significant research into the relevance of the items under study (Botterill, 1989; Botterill & Crompton, 1987; Coshall, 2000; Embacher & Buttle, 1989; Hankinson, 2004; Pearce, 1982; Pike, 2003, 2007).

7.2.2 RE-CONCEPTUALIZING THE CRUISE DESTINATION

Cruise tourism has a number of unique characteristics that differentiate the cruise destination from traditional travel destinations. For example, a cruise ship can be a destination in itself, with a separate source of pull factors that attract potential visitors. Cruise vacations are also unique because they generally stop at multiple ports of call, which may include private islands or destinations that are owned or operated by the cruise lines. Additionally, cruise passengers have the option to skip ports of call altogether by staying aboard the ship when in dock. These unique characteristics identify cruise ships as co-destinations with ports of call and have the potential to significantly influence the decision-making process of travellers. However, the importance of these unique characteristics has not been adequately examined in previous research.

The study of cruise destination image in Stage 1 helped to initiate re-conceptualization of the cruise destination and to recognize the importance of the cruise ship as a co-destination with the ports of call. This led to a deeper understanding of travellers’ perceptions of the cruise destination
by identifying how they compare cruise ships as a destination with ports of call. It also researched cruise vacations as a distinct vacation type. Several studies in the literature have researched different aspects of cruise vacations that influence the decision to cruise; however, this research did not thoroughly examine cruise-related pull factors. Push and pull factors were often grouped together without distinction, and few researchers have distinguished between onboard and onshore sources of pull factors. Because cruise ships offer unique attractions and act as co-destinations with ports of call, there are actually two sources of pull factors that need to be separately measured and compared. This failure to separately examine onboard and onshore attributes neglects the influence of the cruise ship and, consequently, the unique aspects of cruising that attract people.

Because no previous instruments had quantitatively measured onboard and onshore cruise destination attributes, a new measurement scale was needed to measure the two sources of pull factors, and to measure their relative importance in the choice of a cruise vacation. This led to the creation of the CDAS. This scale contained three onboard and five onshore attribute factor groups:

**Onboard factor groups**

- **Onboard Environment**—clean facilities, comfortable environment, safety, high quality and varied dining options, relaxing atmosphere, accommodation facilities, personal space and passenger density;
- **Onboard Social Interaction**—meeting new people, socializing, friendly and diverse passengers; and
- **Onboard Recreation**—pools and hot tubs, health and fitness centers, exciting atmosphere, entertainment.

**Onshore factor groups**

- **Onshore Activities**—water-based activities, colder weather activities, warm weather activities, bars and nightclubs, music and performances, other activities compatible with the interests of travellers;
- **Learning and Exploration**—local culture, learning new things, historical sites and attractions, multiple ports of call, new destinations, variety of destinations;
- **Visual Surroundings**—beautiful and varied scenery, weather, natural features;
- **Safety and Comfort**—getting around, signage, hygiene and cleanliness; and
- **Destination Development**—popular destinations, landmarks and attractions, general development (e.g., infrastructure, economy, government, etc.).

The CDAS is a comprehensive method that allows researchers to measure the importance of the two different sources of pull factors, allowing study of the relative importance of onboard and
onshore attributes. When combined with a push factor measurement scale, it permits a detailed analysis of the push-pull relationship. The CDAS can also be used by the cruise industry to identify the most important onboard and onshore aspects that travellers consider when booking a cruise vacation. This can inform the development of more cost-effective marketing materials that will highlight the key decision-making attributes of a cruise ship or port of call. It can also guide the development of new products and services that are based on the factors that are most important for cruise travellers, thus increasing the attractiveness of the cruise vacation or cruise destination.

Cruise vacations have been described as “social cocoons” (Vogel, 2009, as cited in Papathanassis & Beckmann, 2011) or as operating inside of a “tourist bubble” (Weaver, 2005d). Results throughout this study have identified that the properties of the currently envisioned cruise destination provide travellers with a safe, comfortable, and convenient way to sample destinations; however, the industry stands to benefit by expanding the current concept of the cruise destination, while retaining the core values of cruise travel that have made it so successful. The co-destination of the ship within a geographical region needs to be further developed. Currently the onboard experience has been integrated with the ports of call through the use of private islands and destinations; however, more can be done in the way of integrating the unique onshore aspects of the local ports of call with the onboard experience—an experience that could otherwise take place anywhere on the ocean. Improving the onboard-onshore connection will allow passengers to more than merely sample a destination, but provide them with a more rich and memorable vacation experience that fully immerses them in a local destination in a way that only cruising can provide.

This will be no easy feat due to a number of factors inherent in cruising that prevent this from currently happening. These include the limited time spent ashore, the relatively short distances travelled from the ship (also a factor of time constraints), the inundation of cruise passengers into smaller ports, and the commercialized nature of mass cruise tourism providing an inauthentic experience. To overcome these challenges, a number of changes need to take place or are already beginning to take place, including the use of smaller capacity ships with fewer passengers, physically smaller ships to reach smaller ports, and an increase in overnight stops to allow greater and further exploration.

### 7.2.3 Measuring the Relative Importance of Onboard and Onshore Attributes

The literature has suggested that the cruise ship has become the focus of cruise vacations (Jones, 2011; Teye & Paris, 2011; Weaver, 2005c; Weeden et al., 2011; Wood, 2000), with a recent CLIA report (2016) proclamation that “Ships Are The Destination” (p. 25). Although cruise lines market cruise vacations and design new ships to be the centre of the vacation experience, no research previously examined how cruise travellers view the relative importance of the cruise ship...
in comparison with the ports of call. By re-conceptualizing the cruise destination and developing the CDAS, this study could separately measure and compare the relative importance of onboard and onshore attributes (ship vs. shore). Two methods were used in this regard and both resulted in significantly greater ratings for onboard over onshore attributes. This indicates that the majority of participants consider onboard aspects of more importance when deciding on a cruise vacation.

These results confirm the cruise industry’s efforts to build new ships that are all-inclusive destinations, and to promote the ship as the primary destination. It also highlights the potential for an increased number of cruises to nowhere or cruises with fewer ports of call. Although cruises to nowhere\textsuperscript{15} are no longer allowed to depart from the United States (Cruise Critic, 2015), the combination of a single stop in a foreign port or of a private island destination is another option for cruise lines to explore. Consequently, destination marketing and development teams in port destinations need to differentiate their destination from competing cruise destinations in order to attract more cruise passengers; however, because cruises typically stop at multiple ports of call, individual ports of call have less control over the overall attractiveness of a cruise itinerary. This highlights the benefits for destinations to develop partnerships with other ports to create a more attractive collective package on a multi-port or regional level while also working with cruise lines to complement the onboard experience. Furthermore, destinations need to develop shore excursions and attractions that can attract passengers off the ships and into the ports of call. It is also essential for port destinations to capture the interest of cruise tourists during their short time ashore. This can increase the potential for repeat visitation, whether aboard another cruise or on a stay-over vacation. One method of developing stronger connections between the onboard and onshore aspects of cruise vacations, and to potentially increase the likelihood of passengers coming ashore, is to work with cruise lines to increase the amount of information they provide to passengers about ports of call while they are onboard the cruise ship (e.g., seminars, workshops, educational presentations, etc.).

7.2.3.1 Onboard-Onshore Preference Groups

Although the results revealed that, on average, onboard attributes were more important than onshore attributes in the decision to cruise, this was not the case for all participants. Three groups were identified that were based on preferences for either the onboard or the onshore aspects of cruising, or a more equal combination of the two. A number of significant differences were identified between the groups regarding socio-demographic and cruise travel behaviour variables, travel motivation, and preferred cruise destination attributes.

\textsuperscript{15} Cruises to nowhere are when ships sail into international waters and return to the port of disembarkation without stopping at any other ports (Lee & Collin, 2013)
The Onboard Preference Group was the largest of the three groups (\(n = 251\)), providing the highest ratings for nearly all items measured in the study. This group was strongly affected by Stimulus Avoidance motives to travel, and attracted to cruising based on the Onboard Environment and Onboard Recreation factors. This group can be seen as representing the bulk of the cruise market, which travel to traditional cruise destinations such as the Caribbean and are looking to relax and unwind while cruising.

The Neutral Preference Group was similar to the Onboard Preference Group but with a slightly greater preference for onshore attributes. This group provided responses to the different item sets that were greater than the onshore group but lower than the onboard group and was of median size (\(n = 189\)).

The Onshore Preference Group was the smallest (\(n = 65\)) and most distinct group, having the most cruise experience (number of previous cruises) and taking the longest cruises. This group travelled for Intellectual motives and was attracted to cruising by attributes that relate to the Learning and Exploration, and Visual Surroundings, factors. This group also consistently returned the lowest response ratings throughout the study, which may indicate a harder-to-please customer base or a group with more defined preferences. Catering to this group would involve offering longer, more unique, and educational cruises to destinations outside of the traditional markets. It is also possible that the small size of this group is due to its members being underrepresented among current cruise travellers. In other words, it is possible that travellers who prefer the onshore aspects of cruise vacations are not currently cruising, and instead travelling by other means. If this interpretation is correct, it identifies an untapped market for cruise lines to explore.

Further research into the differences between these potential market segments can allow cruise lines and cruise destinations to develop promotional material, products, and services that cater for different market segments, such as those with preferences for onboard or onshore aspects of cruising (or an equal preference for the two), and those with different levels of cruise experience.

7.2.3.2 Circumstances with the Potential to Change the Relative Importance of Onboard and Onshore Attributes

As well as indicating the relative importance of onboard and onshore attributes when deciding on a cruise vacation, participants were asked to indicate which circumstances could increase or decrease the relative importance of onboard or onshore attributes in the decision-making process (see Section 6.3.5.1 and Table 6.8). Cruise lines have direct control over many of the circumstances that were reported, such as itineraries and scheduling (e.g., the length of the cruise, the number of days at sea, the total number of ports of call, time spent at port, themed cruises), ship design (e.g., ship size, quality and variety of dining options, quality, size, and availability of
staterooms), and service quality (e.g., past experience with cruise line/ ship). Other circumstances depend, to some extent, on the destination (e.g., safety, historical/ cultural attractions/ significance, shore excursions, popular landmarks/ attractions), while others depend on travellers themselves (e.g., places they have/ have not visited before, places of personal importance/ interest).

The ability of cruise lines to control many of the circumstances that can increase or decrease the importance of the onboard and onshore aspects of cruise vacations allows them to adapt itineraries to different regions and types of passengers. For example, large ships with a variety of onboard recreation and entertainment facilities can be deployed in traditional cruise regions with itineraries that do not change much over time. This type of cruise would appeal to a large number of cruisers, particularly new cruisers and those who prefer the onboard aspect of cruising. For experienced cruisers and those who prefer the onshore aspect of cruising, smaller, more intimate ships can be deployed to new cruise regions and ports of call where the large cruise lines have little presence. The focus aboard these cruises would be more to “bring the destination onboard” through information and education, rather than by catering to a mass leisure environment. These suggestions align with the onboard-onshore preference groups that were identified and described in this thesis, as mentioned in the previous section.

It is important for destinations to highlight the core resources and attractions of the destination if they are to attract potential visitors, continually improve and upgrade the destination to attract both new and repeat visitors, and develop shore excursions that meet the needs of potential visitors. As many of the factors that can increase the importance of the onshore aspect of a cruise vacation are related to the cruise itinerary, it is important for destinations to work closely with cruise lines to develop a mutually beneficial arrangement.

7.2.4 EXPLORING THE PUSH-PULL RELATIONSHIP IN THE CRUISE TOURISM CONTEXT

Although other cruise-specific studies have measured both push and pull factors in the same study (Jones, 2011), the relationship between push and pull factors had not previously been explored in the cruise tourism context, and is often neglected in tourism research in general. This thesis went beyond measuring the importance of push and pull factors and became the first study to explore the push-pull relationship in the cruise context. Measuring the push-pull relationship was possible due to the development of the CDAS, which ensured that pull factors were the sole focus of the measurement scale and that motives (push factors) were not included. This was necessary because many motivation measurement scales in the literature often mix push and pull factors (Dann, 1981). This clear separation allowed for an exploration of the push-pull relationship by combining the CDAS with the Leisure Motivation Scale (Ryan & Glendon, 1998).
Of importance to researchers, the success of measuring the push-pull relationship in the cruise context should serve as an indication for future research to take the extra step and identify more than the separate importance or influence of push and pull factors. Of importance to the cruise industry, a number of potential market segments were identified to examine the push-pull relationship. Regression analysis identified four potential market segments that are based on combinations of strongly related travel motives and cruise destination attributes:

- **Relaxation** – Stimulus Avoidance motives with Onboard Environment attributes;
- **Socializing** – Social motives with Onboard Social Interaction attributes;
- **Activities** – Competence Mastery motives with Onshore Activities attributes; and
- **Knowledge** – Intellectual motives with Learning and Exploration attributes.

Canonical correlation analysis identified variate pairs that represent product bundles (i.e., groups of related motives and attributes). These product bundles were used to create two market segments:

- **Social Activity Seekers** – Social and Competence Mastery motives with Onshore Activities, Destination Development, Onboard Social Interaction, and Onboard Recreation attributes; and

These potential product bundles and market segments can be used to develop product offerings that satisfy the travel motives of different customer segments, that promote the cruise ship and cruise destinations in ways that demonstrate the ability of onboard and onshore attributes to satisfy the travel motives of the target audience, and that assist in destination development (Baloglu & Uysal, 1996; Oh et al., 1995; Uysal & Jurowski, 1994).

### 7.3 Limitations and Directions for Future Research

This thesis faces several limitations but provides direction for future research. Participants in this study had previously cruised all 21 of the most appealing cruise regions identified by CLIA (2011b); however, the majority were residents of the United States and Canada. Although North Americans have traditionally been the largest source market for cruise passengers worldwide—and thus the primary focus of many studies such as this one—the global share of cruise passengers residing in North America has declined from 70% in 2010 (CLIA, 2011a) to just under 55% in 2014 (CLIA, 2015a). Therefore, future research will benefit from studies that measure the relative importance of onboard and onshore attributes and the push-pull relationship in specific cruise regions, as well as in source markets outside of North America. As this was the first study to
explore the push-pull relationship and the relative importance of onboard and onshore attributes in the context of the cruise industry, similar motivation research should be conducted both within and outside of North America. Future research will help identify the unique aspects of cruising in specific markets as well as identify cross-cultural differences related to push and pull factors. Dodd (2016) discusses some of the changes to the cruise industry and the need to address the nuances of new markets such as the Asian cruise market through purpose built cruise ships—ships made for specific markets.

This study was conducted within the push-pull framework, exploring both the motives that drive travel behaviour and the cruise destination attributes that attract tourists to a specific cruise line, cruise ship, or cruise region. Motivation is generally considered one of the most important variables to study because it is the key driving force behind human behaviour (Baloglu & Uysal, 1996; Crompton, 1979; Fodness 1994; Iso-Ahola, 1982; Maslow, 1943a; Oh et al., 1995). Without a proper understanding of the motivational factors that influence consumer behaviour (i.e., push and pull factors), it is not possible to market tourism services effectively (Fodness, 1994; Goossens, 2000). However, motivation is only one of many variables that can help to explain tourist behaviour. Therefore, future research should explore other areas, in conjunction with motivation, to develop a deeper understanding of the decision-making process of cruise travellers.

While conducting this research, several trends were identified that were beyond the scope of this project. Trends were identified in the three stages of this thesis across participants’ first, most recent, and next planned cruise vacations. These three stages served as a proxy for the progression through a cruise travel career (i.e., cruise experience or number of previous cruise vacations) and helped to identify several variables that may change as one progresses through the cruise travel career; including the length of cruise and destination choice. Future research can explore these trends, and other changes that occur, as travellers gain more cruise experience through the study of a “cruise career”.

The development of the new CDAS in this thesis requires further application and refinement, as this scale has not otherwise been tested. Furthermore, Cronbach’s alpha levels for the item sets in Stage 2 and 3 are above 0.90, indicating that redundant items may be present (Tavakol & Dennick, 2011). This suggests that it may be possible to reduce item sets further, thus improving the efficiency of data collection and analysis while still maintaining internal consistency and measuring the desired attributes.
7.4 Concluding Remarks

The cruise industry has demonstrated its strength and adaptability by maintaining a steady growth rate and by increasing its popularity among travellers over the past decades. As traditional cruise markets begin to show signs of maturity, and as cruise lines venture into new markets, it is becoming increasingly important to fine-tune the cruise product to the needs and desires of both experienced cruise travellers and new cruisers. This thesis has demonstrated that there are several benefits to understanding the personal constructs that relate to cruise destination image, and the importance of identifying the travel motives and cruise destination attributes that influence the decision-making process of cruise travellers. The cruise industry is a relatively new sub-sector of tourism, so cruise related research is also in its infancy. There are currently no permanent specialised cruise research publications, and only a limited number of special issues of other journals have yet been published that combine cruise-related articles in a single location. There is, likewise, little in the way of university-level programs related to the field and few academics that specialise in cruise tourism research (Luković, 2013; Papathanassis & Klein, 2015). This thesis has identified the need for future research, conducted with sound theoretical and methodological rigor, that extends beyond the needs and desires of the cruise industry. It has contributed to the theoretical basis for such research and has provided new tools and methods to support this endeavour. These advances will facilitate the continuing study of the cruise travel phenomenon on both a global and regional level, and will thus contribute to shaping the future of the industry.
REFERENCES


Huang, Y. (2009).


Hung, K., & Petrick, J.F. (2011b). Wh


### Table A.1 Balanced Incomplete Block Design for Triads \((n = 10, \lambda = 2)\)

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<thead>
<tr>
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<th>2</th>
<th>3</th>
<th>1</th>
<th>2</th>
<th>4</th>
<th>1</th>
<th>3</th>
<th>5</th>
</tr>
</thead>
<tbody>
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<td>8</td>
<td>2</td>
<td>3</td>
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<td>7</td>
<td>6</td>
</tr>
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<td>3</td>
<td>4</td>
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<td>4</td>
<td>2</td>
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<td>8</td>
<td>7</td>
<td>5</td>
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</tr>
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<td>8</td>
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<td>8</td>
</tr>
<tr>
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<td>9</td>
<td>1</td>
<td>7</td>
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</tr>
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<td>4</td>
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</table>

Source: Cochran & Cox, 1957, as cited in Burton & Nerlove, 1976, p. 262

### Table A.2 Example of Cruise Destination Repertory Grid

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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<th></th>
<th></th>
</tr>
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<tr>
<td>Contrast</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Hot</td>
<td>Ø</td>
<td>Ø</td>
<td>Ø</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Cold</td>
</tr>
<tr>
<td>2. Beaches</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Glaciers</td>
</tr>
<tr>
<td>3. Laid-back</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Adventurous</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
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### Table A.3 Example of Vacation Type Repertory Grid

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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Contrast</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Pre-paid</td>
<td>Ø</td>
<td>Ø</td>
<td>Ø</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Exciting</td>
</tr>
<tr>
<td>2. Relaxing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Exclusive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Crowded</td>
</tr>
<tr>
<td>...</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table A.4 Socio-demographics & Cruise Travel Behavior (Stages 1, 2, & 3)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Stage 1</th>
<th>Stage 2</th>
<th>Stage 3</th>
<th>Variables cont.</th>
<th>Stage 1</th>
<th>Stage 2</th>
<th>Stage 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>45%</td>
<td>52%</td>
<td>50%</td>
<td>Annual household income</td>
<td>$20k–$39k</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>55</td>
<td>48</td>
<td>50</td>
<td>$39k–$50k</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td>Age group</td>
<td>18–24</td>
<td>-</td>
<td>&lt;1%</td>
<td>13%</td>
<td>$50k–$60k</td>
<td>-</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>25–29</td>
<td>20%</td>
<td>3%</td>
<td>18</td>
<td>$60k–$75k</td>
<td>-</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>30–39</td>
<td>10</td>
<td>12</td>
<td>12</td>
<td>$75k–$100k</td>
<td>-</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>40–49</td>
<td>5</td>
<td>23</td>
<td>11</td>
<td>$100k–$200k</td>
<td>-</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>50–59</td>
<td>0</td>
<td>34</td>
<td>15</td>
<td>$200k–$300k</td>
<td>-</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>60–69</td>
<td>70–79</td>
<td>0</td>
<td>19</td>
<td>5</td>
<td>$300k+</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>80+</td>
<td>0</td>
<td>4</td>
<td>&lt;1</td>
<td>Single/ never married</td>
<td>35%</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Married</td>
<td>55</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Nationality/ Residence*</td>
<td>American/ US</td>
<td>20</td>
<td>80%</td>
<td>80%</td>
<td>Previous cruises</td>
<td>1</td>
<td>40%</td>
</tr>
<tr>
<td></td>
<td>Canadian/ Canada</td>
<td>70%</td>
<td>15</td>
<td>20</td>
<td>2</td>
<td>15</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>10</td>
<td>6</td>
<td>&lt;1</td>
<td>3</td>
<td>15</td>
<td>9</td>
</tr>
<tr>
<td>Education</td>
<td>High school or less</td>
<td>25%</td>
<td>8%</td>
<td>8%</td>
<td>4</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Some college</td>
<td>10</td>
<td>11</td>
<td>18</td>
<td>5</td>
<td>**</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>College degree</td>
<td>35</td>
<td>32</td>
<td>33</td>
<td>6+</td>
<td>20</td>
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</tr>
<tr>
<td></td>
<td>Graduate degree</td>
<td>25</td>
<td>45</td>
<td>35</td>
<td>[5\times 4 \times 5]</td>
<td>Less than 6 months</td>
<td>15%</td>
</tr>
<tr>
<td></td>
<td>Technical/ trade school</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>6–12 Months</td>
<td>30</td>
<td>16</td>
</tr>
<tr>
<td>Employment status</td>
<td>Employed full-time</td>
<td>50%</td>
<td>47%</td>
<td>58%</td>
<td>1–2 Years</td>
<td>5</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>Employed part-time</td>
<td>10</td>
<td>12</td>
<td>13</td>
<td>3–5 Years</td>
<td>40</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Unemployed</td>
<td>0</td>
<td>4</td>
<td>7</td>
<td>5+ Years</td>
<td>10</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Retired</td>
<td>40</td>
<td>37</td>
<td>17</td>
<td>Future cruising plans</td>
<td>Booked an upcoming cruise</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Student</td>
<td>0</td>
<td>1</td>
<td>5</td>
<td>Not booked, but planning an upcoming cruise</td>
<td>40</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Not booked/ Not planning</td>
<td>60</td>
<td>45</td>
<td>10</td>
</tr>
</tbody>
</table>

*In Stage 1 participants were asked their nationality as shown on their passport; in Stages 2 & 3 they were asked their country of residence

**Stage 1 did not contain separate responses for four or five previous cruises, thus 4–5 cruises = 10%
<table>
<thead>
<tr>
<th>Cruise region/ n</th>
<th>First cruise</th>
<th>Most recent cruise</th>
<th>Next cruise</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caribbean/ E. Mexico</td>
<td>20</td>
<td>249</td>
<td>503</td>
</tr>
<tr>
<td>Alaska</td>
<td>10</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>Bahamas</td>
<td>5</td>
<td>7</td>
<td>18</td>
</tr>
<tr>
<td>Hawaii</td>
<td>-</td>
<td>10</td>
<td>-</td>
</tr>
<tr>
<td>Bermuda</td>
<td>-</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Med./ Greece/ Turkey</td>
<td>25</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>Europe</td>
<td>10</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Panama Canal</td>
<td>-</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Canada/ New England</td>
<td>5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Western Mexico</td>
<td>-</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Coastal US</td>
<td>10</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>South Pacific</td>
<td>-</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>South America</td>
<td>-</td>
<td>&lt;1</td>
<td>2</td>
</tr>
<tr>
<td>Baltic/ Scandinavia</td>
<td>-</td>
<td>-</td>
<td>&lt;1</td>
</tr>
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<td>Africa</td>
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<td>-</td>
<td>1</td>
</tr>
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<td>European rivers</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Around the world</td>
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<td>-</td>
<td>&lt;1</td>
</tr>
<tr>
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</tr>
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<td>China/ Japan</td>
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<td>-</td>
<td>&lt;1</td>
</tr>
<tr>
<td>US rivers</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Southeast Asia</td>
<td>-</td>
<td>&lt;1</td>
<td>2</td>
</tr>
<tr>
<td>Other/ Don’t know</td>
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<td>-</td>
<td>&lt;1</td>
</tr>
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<td>Cruise length/ n</td>
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<td>503</td>
</tr>
<tr>
<td>Under 3 Days</td>
<td>5%</td>
<td>5%</td>
<td>3%</td>
</tr>
<tr>
<td>3–5 Days</td>
<td>10</td>
<td>24</td>
<td>33</td>
</tr>
<tr>
<td>6–8 Days</td>
<td>55</td>
<td>56</td>
<td>49</td>
</tr>
<tr>
<td>9–15 Days</td>
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</tr>
<tr>
<td>16+ Days</td>
<td>0</td>
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</tr>
<tr>
<td>Don’t know</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Travel party size/ n</td>
<td>n = 20</td>
<td>292</td>
<td>502</td>
</tr>
<tr>
<td>1 Sailed alone*</td>
<td>-</td>
<td>-</td>
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<td>5+</td>
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<tr>
<td>Travel party composition/ n =</td>
<td>n = 20</td>
<td>291</td>
<td>502</td>
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<tr>
<td>Sailed alone*</td>
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<tr>
<td>Spouse</td>
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<td>Partner/ Companion</td>
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<td>Adult children</td>
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<td>Other family members</td>
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<td>Friends</td>
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<td>Organization/group</td>
<td>-</td>
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*Slightly conflicting numbers: responses within groups for the two “sailed alone” should be equal*
APPENDIX B: STAGE 1 QUESTIONNAIRE

Please answer the following questions about yourself:

1. Gender
   a. Male
   b. Female

2. Age: _____

3. Nationality: ____________

4. Marital status
   a. Single/ never married
   b. Married
   c. Divorced/ separated/ widowed

5. Highest level of education obtained
   a. High School or less
   b. Some college
   c. College degree
   d. Graduate degree
   e. Technical-trade degree

6. Employment status
   a. Employed full-time
   b. Employed part-time
   c. Unemployed
   d. Retired
   e. Student

Please answer the following questions related to your previous/ future cruise vacations:

7. How many cruise vacations have you been on?
   a. 1
   b. 2
   c. 3
   d. 4-5
   e. 6+
   f. Don’t Know

8. In which cruise region did you sail on your first cruise?
   a. Caribbean/ E. Mexico
   b. Mediterranean/ Greece/ Turkey
   c. Europe
   d. Bahamas
   e. Alaska
   f. Other, please specify

9. What was the length of your first cruise (cruise portion only)?
   a. Under 3 Days
   b. 3-5 Days
   c. 6-8 Days
   d. 9-15 Days
   e. 16+ Days
   f. Don’t Know

10. How long has it been since your last cruise?
    a. Less than 6 months
    b. 6-12 Months
    c. 1-2 Years

11. What was the length of your last cruise (cruise portion only)?
    a. Under 3 Days
    b. 3-5 Days
    c. 6-8 Days
    d. 9-15 Days
    e. 16+ Days
    f. Don’t Know

12. Including yourself, how many people did you travel with on your last cruise?
    a. 1
    b. 2
    c. 3
    d. 4
    e. 5+

13. With whom did you travel with on your last cruise? (Please circle all that apply)
    a. Spouse
    b. Partner/ Companion
    c. Children under 18
    d. Adult children
    e. Other family members
    f. Friends
    g. Members of an organization or group to which you belong
    h. Sailed alone
14. In which cruise region did you sail on your last cruise?
   a. Caribbean/ E. Mexico
   b. Mediterranean/ Greece/ Turkey
   c. Europe
   d. Bahamas
   e. Alaska
   f. Other, please specify

15. Choose the following that best applies to you:
   a. I have booked an upcoming cruise
   b. I have not booked an upcoming cruise, but I have begun planning an upcoming cruise
   c. I have not booked, and I am not planning an upcoming cruise (If so, you have completed this questionnaire)

16. What is the expected length of your next cruise?
   a. Under 3 Days
   b. 3-5 Days
   c. 6-8 Days
   d. 9-15 Days
   e. 16+ Days
   f. Don’t Know

17. Including yourself, how many people will be travelling with you on your next cruise?
   a. 1
   b. 2
   c. 3
   d. 4
   e. 5+
   f. Don’t Know

18. With whom are you traveling (planning to travel) with on your next cruise? (Please circle all that apply)
   a. Spouse
   b. Partner/ Companion
   c. Children under 18
   d. Adult children
   e. Other family members
   f. Friends
   g. Members of an organization or group to which you belong
   h. Sailing alone
   i. Don’t Know

19. In which cruise region is your next cruise?
   a. Caribbean/ E. Mexico
   b. Mediterranean/ Greece/ Turkey
   c. Europe
   d. Bahamas
   e. Alaska
   f. Other, please specify
   g. Don’t Know

RGA

Cruise Destinations
• If you were considering a cruise vacation, in what important ways are two of these destinations alike, yet different from the third?
• Which of the other 7 destinations are also similar to the two, yet different from the third?

Vacation Types
• If you were considering a vacation, in what important ways are two of these vacation types alike, yet different from the third?
• Which of the other 7 vacation types are also similar to the two, yet different from the third?

Open-ended Questions
1. What images or characteristics come to mind when you think of a cruise vacation?
   a. Can you think of anything else?
      i. What images or characteristics come to mind when you think specifically about the cruise ship?
      ii. What images or characteristics come to mind when you think specifically about the ports of call

2. How would you describe the atmosphere or mood that you would expect to experience on a cruise vacation?
1. Can you think of anything else?
   i. How would you describe the atmosphere or mood aboard the cruise ship?
   ii. How would you describe the atmosphere or mood at the ports of call?

3. Please list any distinctive or unique tourist attractions or features of a cruise vacation, for example, how does a cruise vacation differ from other types of vacation?
   a. Can you think of anything else?
      i. What unique attractions or features does the ship provide?
      ii. What unique attractions or features do the ports of call provide?

4. When you are thinking of taking a cruise vacation, what are the things that most influence your decision about which cruise to take?
   a. Can you think of anything else?
      i. What are the things related to the ship that influence your decision?
      ii. What are the things related to the ports of call that influence your decision?
APPENDIX C: STAGE 2 QUESTIONNAIRE

EXPLORING THE DECISION TO TAKE A CRUISE

PARTICIPANT INFORMATION
You are invited to participate in the following research study being conducted as part of a PhD project through the UQ School of Business, at the University of Queensland (Brisbane, Australia).

Research Title: Exploring the decision to take a cruise PhD
Research Student: Lincoln James Whyte

Background and purpose of the study
This study is designed to explore the decision-making factors of cruise tourists. Briefly, it aims to understand:
1. Why people choose to cruise in general;
2. Why people choose to take a cruise instead of other vacation types; and
3. What factors influence the decision to choose one cruise over another, including both the onboard and onshore aspects of cruise vacations.

Details of participation
You will be asked to complete a web-based survey, which will take approximately 20 to 30 minutes to complete.

Consent and withdrawal
Participation in this project is entirely voluntary. Completion of the survey is accepted as an indication of your consent to participate in this project. Should you decide to withdraw from the study you may do so at any time by exiting the survey.

Confidentiality
All responses will be strictly confidential. Information provided will be stored in a secure environment and access to the data will be made available only to the members of the research team for the purposes of this study. To protect your anonymity, potential identifying information will not be retained or used in the final report or any publications.

Feedback and results
Feedback will only be available regarding a summary of the results. No individual responses or information will be made available. A summary of the main findings will be emailed to all interested participants upon completion of this project.

You are welcome to discuss your participation in this study with the research student, Lincoln James Whyte (email: lincoln.whyte@uqconnect.edu.au) or his academic advisers, Professor Roy Ballantyne (email: r.ballantyne@uq.edu.au, tel: +617 3346 9261) and Dr. Jan Packer (email: j.packer@uq.edu.au, tel: +617 3346 7789) or to impose conditions, or withdraw from the study at any time. If you would like to speak to an officer of the University not involved in this study, you may contact the University’s Ethics Officer on +617 336 53924.

If you would like to print this Participant Information sheet before beginning the survey please click the 'Print' button below.

Q3.1 Please answer the following questions about yourself and those related to your previous and future cruise vacations.

Q2.2 Gender
☐ Male (1)
☐ Female (2)

Q2.3 Age, please enter:
Q2.4 Place of residence
- USA, please enter State: (1)
- Canada, please enter Province: (2)
- Other, please name: (3)

Q2.5 Highest level of education obtained
- High School or less (1)
- Some college (2)
- College degree (3)
- Graduate degree (4)
- Technical-trade degree (5)

Q2.6 Employment status
- Employed full-time (1)
- Employed part-time (2)
- Unemployed (3)
- Retired (4)
- Student (5)

Q2.7 Annual household income
- $20,000 to $39,999 (1)
- $40,000 to $49,999 (2)
- $50,000 to $59,999 (3)
- $60,000 to $74,999 (4)
- $75,000 to $99,999 (5)
- $100,000 to $199,999 (6)
- $200,000 to $299,999 (7)
- $300,000 or greater (8)
- Prefer not to answer (9)

Q2.8 How many previous cruise vacations have you taken?
- None (1)
- 1 (2)
- 2 (3)
- 3 (4)
- 4 (5)
- 5 (6)
- 6 or more (7)

Q2.9 In which region did you sail on your first cruise vacation?
- Caribbean/ Eastern Mexico (1)
- Mediterranean/ Greece/ Turkey (2)
- Europe (3)
- Bahamas (4)
- Alaska (5)
- Other, please specify: (6)

Q2.10 What was the length of your first cruise vacation? (Cruise portion only)
- Under 3 days (1)
- 3-5 Days (2)
- 6-8 Days (3)
- 9-15 Days (4)
- 16+ Days (5)
- Don’t know (6)

Q3.1 What was the length of your most recent cruise vacation? (Cruise portion only)
- Under 3 days (1)
- 3-5 Days (2)
- 6-8 Days (3)
- 9-15 Days (4)
- 16+ Days (5)
- Don’t know (6)

Q3.2 How many previous cruise vacations have you taken?
- None (1)
- 1 (2)
- 2 (3)
- 3 (4)
- 4 (5)
- 5 (6)
- 6 or more (7)

Q3.3 In which region was your most recent cruise vacation?
- Caribbean/ Eastern Mexico (1)
- Mediterranean/ Greece/ Turkey (2)
- Europe (3)
- Bahamas (4)
- Alaska (5)
- Other, please specify (6)

Q3.4 What was the length of your most recent cruise vacation? (Cruise portion only)
- Under 3 days (1)
- 3-5 Days (2)
- 6-8 Days (3)
- 9-15 Days (4)
- 16+ Days (5)
- Don’t know (6)

Q3.5 How long has it been since your most recent cruise vacation?
- Less than 6 months (1)
- 6-12 Months (2)
- 1-2 Years (3)
- 3-5 Years (4)
- 5 Years or longer (5)

Q3.6 In which region was your most recent cruise vacation?

Q3.7 What was the length of your most recent cruise vacation?

Q3.8 Including yourself, how many people did you travel with on your most recent cruise vacation?
- Sailed alone (1)
- 2 (2)
- 3 (3)
- 4 (4)
- 5 or more (5)

Q3.9 With whom did you travel with on your last cruise? Please circle all that apply.
- Sailed alone (1)
- Spouse (2)
- Partner/ Companion (3)
- Children under 18 (4)
- Adult children (5)
- Other family members (6)
- Friends (7)
- Members of an organization or group to which you belong (8)

Q3.10 Please choose the following that best applies to you.
- I have booked an upcoming cruise vacation (1)
- I am planning an upcoming cruise vacation, but have not yet made a booking (2)
- I have not booked, and I am not planning an upcoming cruise vacation (3)

If I have not booked, and am n... Is Selected, Then Skip To End of Block
Q3.11 In which region will your next cruise vacation be?
- Caribbean/ Eastern Mexico (1)
- Mediterranean/ Greece/ Turkey (2)
- Europe (3)
- Bahamas (4)
- Alaska (5)
- Other. Please specify: (6)
- Undecided (7)

Q3.12 What is the expected length of your next cruise vacation?
- Sailing alone (1)
- 2 (2)
- 3 (3)
- 4 (4)
- 5 or more (5)

Q3.13 Including yourself, how many people will be traveling with you on your next cruise vacation?
- Sailing alone (1)
- 2 (2)
- 3 (3)
- 4 (4)
- 5 or more (5)

Q3.14 With whom are you traveling/ planning to travel with on your next cruise? Please select all that apply.
- Sailing alone (1)
- Spouse (2)
- Partner/ Companion (3)
- Children under 18 (4)
- Adult children (5)
- Other family members (6)
- Friends (7)
- Members of an organization or group to which you belong (8)
- Don't know (9)

Q4.2 The following questions and item sets are related to the factors that influence your decision of which specific cruise to take when you are in the process of booking an upcoming cruise vacation. The first set of items are specifically related to the ONSHORE aspects of a potential cruise vacation.

When choosing which cruise you will take, how important to you are each of the following onshore aspects of the ports to be visited?

All items were rated on a 7-point scale: 1) Not at all important; 2) Very unimportant; 3) Somewhat unimportant; 4) Neither important nor unimportant; 5) Somewhat important; 6) Very important; 7) Extremely important.

1. The ports to be visited are likely to have good weather at the time of the cruise
2. The ports to be visited offer beautiful scenery
3. The ports to be visited offer varied or diverse scenery
4. The ship stops at multiple ports of call
5. The ports to be visited are not all similar
6. The ports to be visited are well-known and popular places to visit
7. The ports to be visited have well-known/ popular landmarks and attractions
8. The ports to be visited are well developed (e.g., infrastructure, economy, government, environment, education, health, etc.)
9. The ports to be visited offer a variety of food and restaurants while onshore
10. The ports to be visited offer a high level of quality of food and restaurants while onshore
11. The ports to be visited offer water-based activities (e.g., swimming, snorkeling, scuba-diving, surfing, fishing, water sports, etc.)
12. The ports to be visited offer sun & sand activities (e.g., going to the beach, warm weather activities, etc.)
13. The ports to be visited offer activities that are compatible with my interests (e.g., hiking, golf, tennis, horse back riding, etc.)
14. The ports to be visited have guided tours and excursions available
15. The ports to be visited have self-guided tours available
16. The ports to be visited offer a variety of activities and sightseeing opportunities while onshore
17. The ports to be visited offer good shopping while onshore
18. The local people at the ports to be visited are friendly towards tourists
19. The local businesses at the ports to be visited are friendly towards tourists
20. The ports to be visited are not overcrowded or busy from cruise ship passengers (from your ship or multiple ships being in the same port)
21. The ports to be visited offer opportunities to meet new people
22. The ports to be visited offer a relaxed and laid back atmosphere
23. The ports to be visited do not feel overly commercialized or touristy
24. The ports to be visited are places you have never been before
25. The ports to be visited are places you have been before
26. The ship will stay long enough at each port of call so that you will have enough time to see and do all the things you desire
27. The ship will stay overnight at key destinations, giving you more time onshore
28. The ports to be visited are safe to explore on your own or without a guide
29. The ports to be visited offer opportunities to experience foreign languages
30. The ports to be visited will not likely have any difficulties caused by language barriers
31. The ports to be visited have historical sites and attractions to visit
32. The ports to be visited offer opportunities to learn about the local history
33. The ports to be visited offer opportunities to experience a variety of cultures different from one's own
34. The ports to be visited offer opportunities to learn about the local culture
35. The ports to be visited offer opportunities to learn new things
36. The ports to be visited offer activities for the whole family while onshore
37. The ports to be visited have good bars or nightclubs onshore
38. The ports to be visited have festivals/special events at the time of your cruise
39. The ports to be visited offer music and performances while onshore
40. The ports to be visited have good quality and easily accessible local transportation
41. The ports to be visited have well marked signage and finding locations is not difficult
42. It is easy to get to/from the cruise terminal at the start/end of the cruise
43. The ports to be visited have an acceptable level of environmental quality (e.g., air, water, and soil quality)
44. The ports to be visited have acceptable standards of hygiene and cleanliness
45. The ports to be visited have a low crime rate
46. The ports to be visited have an acceptable level of tourist information provided while onshore
47. The ports to be visited offer wildlife and nature viewing
48. The ports to be visited have natural features (e.g., mountains, waterfalls, parks, forests, beaches, lakes, rivers, etc.)
49. The ports to be visited have reasonably priced food and drinks while onshore

Q5.2 The second set of items are specifically related to the ONBOARD aspects of a potential cruise vacation, or those specifically related to the cruise line.

When choosing which cruise you will take, how important to you are each of the following onboard aspects of the cruise ship?

All items were rated on a 7-point scale: 1) Not at all important; 2) Very unimportant; 3) Somewhat unimportant; 4) Neither important nor unimportant; 4) Somewhat important; 5) Very important; 7) Extremely important.

1. The ship has good onboard health & fitness facilities and amenities (e.g., gym, spa, lap pools, sports facilities, etc.)
2. The ship provides onboard entertainment (e.g., shows, performances, presentations, demonstrations, etc.)
3. The ship has good onboard entertainment facilities and amenities (e.g., casino, bars, nightclubs, lounges, show rooms, etc.)
4. The ship’s accommodation facilities are of high quality
5. The ship has different cabin types/ sizes to choose from
6. The ship has a variety of food and restaurants available onboard
7. The ship’s food and restaurants are of high quality
8. The ship’s food and restaurants are easily accessible (e.g., room service, open dining hours, late night menus, etc.)
9. The cruise line you prefer offers cruises where and when you want to cruise
10. The cruise line you book has loyalty programs
11. There are different size ships available to choose from for the same itinerary
12. The ship and its facilities are clean and in good appearance
13. The ship provides the feeling of a high level of luxury
14. The ship takes measures to reduce its environmental impact
15. The ship provides a comfortable environment
16. The ship offers Internet/ Wi-Fi access while onboard
17. The ship provides a variety of onboard activities to choose from
18. The ship provides opportunities to meet new people while onboard
19. The cruise line/ ship is known for having friendly passengers
20. The cruise line/ ship is known for having a diverse group of passengers (e.g., passengers of different ages, nationalities, places of residence, etc.)
21. The ship will not feel overly crowded or busy
22. The ship will provide opportunities to socialize with other passengers
23. The ship will have places available to enjoy your personal space
24. The ship will provide a relaxing/ stress-relieving atmosphere
25. The ship will provide an exciting atmosphere
26. The onboard extras not included in the cruise fare are reasonably priced
27. The ship has reasonably priced onboard retail
28. The ship allows you to purchase extras using your room key, allowing you to not have to carry cash or credit cards
29. There are cruises of different lengths available during the dates you wish to travel
30. There are itineraries available with more or less days at sea
31. The cruise line takes care of planning and scheduling onboard activities for you
32. The ship will provide a safe environment while onboard
33. The ship has cabins available that offer high quality room amenities
34. The ship has dry cleaning/ laundry services available onboard
35. The cruise line/ ship is known for having friendly staff/ crew-members
36. The ship has babysitting/ childcare services and facilities available onboard
37. The ship provides onboard activities for the whole family
38. The ship provides educational classes while onboard
39. The ship has a business/ conference center available onboard
40. The ship has a library available onboard
41. The ship has good health services/ medical facilities onboard
42. The ship has good scenery and wildlife viewable from onboard
43. The ship has good swimming pools/ hot tubs

Q6.1 The third set of items are related to an upcoming cruise vacation in general. When choosing which cruise you will take, how important to you are each of the following?

All items were rated on a 7-point scale: 1) Not at all important; 2) Very unimportant; 3) Somewhat unimportant; 4) Neither important nor unimportant; 5) Somewhat important; 6) Very important; 7) Extremely important.

The ports of call and all they have to offer while onshore?
The specific cruise ship/ cruise line and all it has to offer while onboard?
The overall experience of the vacation provided by the ports of call and the cruise ship?
The cost/ value of the cruise? (Cruise fare only)
The cost of getting to and from the cruise?

Q7.2 The final set of items is related to the factors that influence your decision to take a cruise vacation instead of another type of vacation. Examples of other vacation types include: All-inclusive resorts, rail or bus tours, amusement parks and theme parks, road trips or RV trips, city/ urban vacations, beach vacations, eco-tours, backpacking, camping/ outdoors vacations, etc.

When choosing to take a cruise vacation instead of another vacation type, how important to you are each of the following aspects of cruise vacations compared to other vacation types?

All items were rated on a 7-point scale: 1) Not at all important; 2) Very unimportant; 3) Somewhat unimportant; 4) Neither important nor unimportant; 5) Somewhat important; 6) Very important; 7) Extremely important.

1. Cruising allows you to visit multiple destinations
2. Cruising makes it easier to travel between destinations
3. Cruising provides an easy way to travel
4. Cruising allows you to travel to multiple destinations without having to pack/ unpack
5. Cruising allows you to stay in the same room every night, while still visiting multiple places
6. Cruising allows you to not have to plan where to go or how to get there

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7. Cruising allows you to see a lot in a short amount of time
8. Cruising provides you with everything you need in one place (e.g., accommodation, restaurants, entertainment, activities, transportation, etc.)
9. Cruising provides a high level of comfort
10. Cruising provides a high level of luxury
11. Cruising provides a high level of safety and security
12. Cruising provides a worry-free/ carefree experience
13. Cruising allows you to sample destinations for possible return visits
14. Cruising is all inclusive/ pre-paid
15. Cruising’s all inclusive pre-paid nature will help avoid any unexpected/ hidden costs
16. Cruising provides a variety of activities for different tastes
17. Cruising provides a close social environment
18. Cruising provides the opportunity to meet and get to know new people
19. Cruising appeals to people with common interests to yourself
20. Cruising provides a relaxing and stress-relieving vacation
21. The ship’s crew will look after you and take care of everything for you
22. Cruising allows you to experience the feeling of being on a ship
23. Cruising is something you have always wanted to do but have not yet done
24. Cruising does not require a lot of pre-trip planning
25. Cruising does not require much effort once on vacation
26. Cruising has a pre-set schedule

Q57 Thank you for completing this survey. Would like to receive feedback for the results of this study?

☐ Yes, I would like to receive feedback on the survey results. Please enter your email address below. (1) __________________

☐ No, I do not wish to receive feedback about the study. (2)
APPENDIX D: STAGE 3 QUESTIONNAIRE

EXPLORING THE DECISION TO TAKE A CRUISE VACATION

PARTICIPANT INFORMATION
You are invited to participate in the following research study being conducted as part of a PhD project through the UQ School of Business, at the University of Queensland (Brisbane, Australia).

Research Title: Exploring the decision to take a cruise. PhD
Research Student: Lincoln James Whyte

Background and purpose of the study
This study is designed to explore the decision-making factors of cruise tourists. Briefly, it aims to understand: 1. Why people choose to cruise in general; 2. Why people choose to take a cruise instead of other vacation types; and 3. What factors influence the decision to choose one cruise over another, including both the onboard and onshore aspects of cruise vacations.

Details of participation
You will be asked to complete a web-based survey consisting of multiple-choice questions. The survey will take approximately 15 to 30 minutes to complete.

Consent and withdrawal
Participation in this project is entirely voluntary. Completion of the survey is accepted as an indication of your consent to participate in this project. Should you decide to withdrawal from the study you may do so at any time by exiting the survey.

Confidentiality
All responses will be strictly confidential. Information provided will be stored in a secure environment and access to the data will be made available only to the members of the research team for the purposes of this study. To protect your anonymity, potential identifying information will not be retained or used in the final report or any publications.

Feedback and results
Feedback will only be available regarding a summary of the results. No individual responses or information will be made available. A summary of the main findings will be emailed to all interested participants upon completion of this project.

You are welcome to discuss your participation in this study with the research student, Lincoln James Whyte (email: lincoln.whyte@uqconnect.edu.au) or his academic advisers, Professor Roy Ballantyne (email: r.ballantyne@uq.edu.au, tel: +617 3346 9261) and Dr. Jan Packer (email: j.packer@uq.edu.au, tel: +617 3346 7789) or to impose conditions, or withdraw from the study at any time. If you would like to speak to an officer of the University not involved in this study, you may contact the University’s Ethics Officer on +617 336 53924.

If you would like to print this Participant Information sheet before beginning the survey please click the link button below.

Please confirm if you consent to take part in this study by choosing the appropriate option below.

☐ I consent to take part in this survey (1)
☐ I do not consent to take part in this survey (2)

Q2.1 Before we begin this survey, we would like to know if you have been on a cruise vacation in the previous 12 months?

☐ Yes (8)
☐ No (9)

If No Is Selected, Then Skip To End of Block

Q2.2 Thank you, we will now begin the survey. Please answer the following questions about yourself and those related to your previous and future cruise vacations.

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Q2.3 Gender  
- Male (1)  
- Female (2)

Q2.4 Place of residence  
- USA (1)  
- Canada (2)  
- Other, please specify: (3)

Q2.5 Age group  
- Under 18 (1)  
- 18-24 (2)  
- 25-29 (3)  
- 30-39 (4)  
- 40-49 (5)  
- 50-59 (6)  
- 60-69 (7)  
- 70-79 (8)  
- 80+ (9)

If Under 18 Is Selected, Then Skip To End of Block

Q2.6 Highest level of education obtained  
- High School or less (1)  
- Some college (2)  
- College degree (3)  
- Technical-trade degree (9)  
- Graduate degree (4)  
- Prefer not to answer (6)

Q2.7 Employment status  
- Employed full-time (1)  
- Employed part-time (2)  
- Unemployed (3)  
- Retired (4)  
- Student (5)  
- Prefer not to answer (6)

Q2.8 Annual household income  
- $20,000 to $39,999 (1)  
- $40,000 to $49,999 (2)  
- $50,000 to $59,999 (3)  
- $60,000 to $74,999 (4)  
- $75,000 to $99,999 (5)  
- $100,000 to $199,999 (6)  
- $200,000 to $299,999 (7)  
- $300,000 or greater (8)  
- Prefer not to answer (9)

Q2.9 How many previous cruise vacations have you ever taken?  
- None (1)  
- 1 (2)  
- 2 (3)  
- 3 (4)  
- 4 (5)  
- 5 (6)  
- 6 or more (7)

If None Is Selected, Then Skip To End of Block

Q2.10 In which region did you sail on your first cruise vacation?  
- Caribbean/ Eastern Mexico (1)  
- Alaska (2)  
- Bahamas (3)  
- Hawaii (4)  
- Bermuda (5)  
- Mediterranean/ Greece/ Turkey (6)  
- Europe (7)  
- Panama Canal (8)  
- Eastern Canada/ New England (9)  
- West Coast of Mexico (10)  
- Coastal U.S. (11)  
- South Pacific (12)  
- South America (13)  
- Baltic/ Scandinavia (14)  
- Africa (15)  
- European Rivers (16)  
- Around the world (17)  
- Transatlantic (18)  
- China/ Japan (19)  
- U.S. Rivers (20)  
- Southeast Asia (21)  
- Other, please specify: (22)

Q2.11 What was the length of your first cruise vacation? (Cruise portion only)  
- Under 3 days (1)  
- 3-5 Days (2)  
- 6-8 Days (3)  
- 9-15 Days (4)  
- 16+ Days (5)

Q2.12 In which region was your most recent cruise vacation?  

Q2.13 What was the length of your most recent cruise vacation (cruise portion only)?
Q2.14 Including yourself, how many people did you travel with on your most recent cruise vacation?
- Sailed alone (1)
- 2 (2)
- 3 (3)
- 4 (4)
- 5 or more (5)

Q2.15 With whom did you travel with on your last cruise? Please select all that apply.
- Sailed alone (1)
- Spouse (2)
- Partner/Companion (3)
- Children under 18 (4)
- Adult children (5)
- Other family members (6)
- Friends (7)
- Members of an organization or group to which you belong (8)

Q2.16 Please choose the following that best applies to you.
- I have booked an upcoming cruise vacation (1)
- I am planning an upcoming cruise vacation, but I have not yet made a booking (2)
- I have not booked, and I am not planning an upcoming cruise vacation (3)

If I have not booked, and I am... Is Selected, Then Skip To End of Block

Q2.17 In which region will your next cruise vacation be?

Q2.18 What is the expected length of your next cruise vacation (cruise portion only)?

Q2.19 Including yourself, how many people will be traveling with you on your next cruise vacation?
- Sailed alone (1)
- 2 (2)
- 3 (3)
- 4 (4)
- 5 or more (5)

Q2.20 With whom are you traveling/ planning to travel with on your next cruise? Please select all that apply.
- Sailed alone (1)
- Spouse (2)
- Partner/Companion (3)
- Children under 18 (4)
- Adult children (5)
- Other family members (6)
- Friends (7)
- Members of an organization or group to which you belong (8)

Q3.1 In general, how important are the following items, as a reason for taking a cruise vacation?

All items were rated on a 7-point scale: 1) Not at all important; 2) Very unimportant; 3) Somewhat unimportant; 4) Neither important nor unimportant; 4) Somewhat important; 5) Very important; 7) Extremely important.

1. To physically relax
2. To mentally relax
3. To avoid the hustle and bustle of daily life
4. To be in a calm atmosphere
5. To gain a feeling of belonging
6. To be with others
7. To build friendships with others
8. To have a good time with friends
9. To develop close friendships
10. To discover new places and things
11. To use my imagination
12. To increase my knowledge
13. To use my physical abilities or skills in sport
14. To challenge my abilities

Q4.1 The following questions and item sets are related to the factors that influence your decision of which specific cruise to take while you are in the process of booking an upcoming cruise vacation. The first set of items is specifically related to the ONSHORE aspects of a potential cruise vacation.
When choosing which cruise you will take, how important to you are each of the following onshore aspects of the ports to be visited?

All items were rated on a 7-point scale: 1) Not at all important; 2) Very unimportant; 3) Somewhat unimportant; 4) Neither important nor unimportant; 5) Somewhat important; 6) Very important; 7) Extremely important.

1. The ports to be visited are likely to have good weather at the time of the cruise
2. The ports to be visited offer beautiful scenery
3. The ports to be visited offer varied or diverse scenery
4. The ship stops at multiple ports of call
5. The ports to be visited are not all similar
6. The ports to be visited are well-known and popular places to visit
7. The ports to be visited have well-known/ popular landmarks and attractions
8. The ports to be visited are well developed (e.g., infrastructure, economy, government, environment, education, health, etc.)
9. The ports to be visited offer water-based activities (e.g., swimming, snorkeling, scuba-diving, surfing, fishing, water sports, etc.)
10. The ports to be visited offer warm weather activities (e.g., going to the beach, sun bathing, etc.)
11. The ports to be visited offer activities that are compatible with my interests (e.g., hiking, golf, tennis, horse back riding, etc.)
12. The local people at the ports to be visited are friendly towards tourists
13. The ports to be visited are places you have never been before
14. The ports to be visited are safe to explore on your own or without a guide
15. The ports to be visited have historical sites and attractions to visit
16. The ports to be visited offer opportunities to learn about the local culture
17. The ports to be visited offer opportunities to learn new things
18. The ports to be visited have good bars or nightclubs onshore
19. The ports to be visited offer music and performances while onshore
20. The ports to be visited have well marked signage and finding locations is not difficult
21. It is easy to get to/ from the cruise terminal at the start/ end of the cruise
22. The ports to be visited have acceptable standards of hygiene and cleanliness
23. The ports to be visited have natural features (e.g., mountains, waterfalls, parks, forests, beaches, lakes, rivers, etc.)
24. The ports to be visited offer colder weather activities (e.g., glacier sightseeing, glacier trekking, winter sports, etc.)

Q5.1 The second set of items are specifically related to the ONBOARD aspects of a potential cruise vacation, or those specifically related to the cruise line.

When choosing which cruise you will take, how important to you are each of the following onboard aspects of the cruise ship?

All items were rated on a 7-point scale: 1) Not at all important; 2) Very unimportant; 3) Somewhat unimportant; 4) Neither important nor unimportant; 5) Somewhat important; 6) Very important; 7) Extremely important.

1. The ship has good onboard health & fitness facilities and amenities (e.g., gym, spa, lap pools, sports facilities, etc.)
2. The ship has good onboard entertainment facilities and amenities (e.g., casino, bars, night clubs, lounges, show rooms, etc.)
3. The ship’s accommodation facilities are of high quality
4. The ship has a variety of food and restaurants available onboard
5. The ship’s food and restaurants are of high quality
6. The ship and its facilities are clean and in good appearance
7. The ship provides a comfortable environment
8. The ship provides opportunities to meet new people while onboard
9. The cruise line/ ship is known for having friendly passengers
10. The cruise line/ ship is known for having a diverse group of passengers (e.g., passengers of different ages, nationalities, places of residence, etc.)
11. The ship will not feel overly crowded or busy
12. The ship will provide opportunities to socialize with other passengers
13. The ship will have places available to enjoy your personal space
14. The ship will provide a relaxing/stress-relieving atmosphere
15. The ship will provide an exciting atmosphere
16. The ship will provide a safe environment while onboard
17. The ship has good swimming pools/hot tubs

Q6.1 When planning a cruise vacation there are many things to consider. These include aspects related to the cruise ship you will be traveling on and aspects related to the ports of call you will be visiting during the cruise.

Please use the sliding bar below to indicate the percentage weight that each aspect has on influencing your decision to choose a specific cruise (Responses must total 100%):
1) The cruise ship itself and all the facilities and activities it has to offer while onboard
2) The ports of call and all the facilities and activities they have to offer while onshore

______ 1) Onboard aspects (1)
______ 2) Onshore aspects (2)

Q6.2 Are there any circumstances you can think of in which ONBOARD aspects would have more influence on your decision of which cruise to take?

Q6.3 Are there any circumstances you can think of in which ONSHORE aspects would have more influence on your decision of which cruise to take?

Q7.1 The final set of items is related to the factors that influence your decision to take a cruise vacation rather than another type of vacation.

Examples of other vacation types include: All-inclusive resorts, rail or bus tours, amusement parks and theme parks, road trips or RV trips, city/urban vacations, beach vacations, eco-tours, backpacking, camping/outdoors vacations, etc.

When choosing to take a cruise vacation instead of another vacation type, how important to you are each of the following aspects of cruise vacations compared to other vacation types?

All items were rated on a 7-point scale: 1) Not at all important; 2) Very unimportant; 3) Somewhat unimportant; 4) Neither important nor unimportant; 5) Somewhat important; 6) Very important; 7) Extremely important.

1. Cruising allows you to visit multiple destinations
2. Cruising provides an easy way to travel
3. Cruising allows you to stay in the same room every night, while still visiting multiple places
4. Cruising provides you with everything you need in one place (e.g., accommodation, restaurants, entertainment, activities, transportation, etc.)
5. Cruising provides a high level of comfort
6. Cruising provides a high level of luxury
7. Cruising provides a high level of safety and security
8. Cruising provides a worry-free/carefree experience
9. Cruising allows you to sample destinations for possible return visits
10. Cruising provides a close social environment
11. Cruising provides the opportunity to meet and get to know new people
12. Cruising appeals to people with common interests to yourself
13. Cruising provides a relaxing and stress-relieving vacation
14. Cruising allows you to experience the feeling of being on a ship
15. Cruising does not require a lot of pre-trip planning
16. Cruising does not require much effort once on vacation
17. Cruising has a pre-set schedule
Q8.1 Thank you for completing this survey. Before we finish, would you like to receive feedback for the results of this study?
☑ Yes, I would like to receive feedback on the survey results. Please enter your email address below.
   (1) ____________________
☒ No, I do not wish to receive feedback about the study. (2)